



**Eaton School District** In 2005, Eaton, a small rural school district in Weld County, began looking for ways to improve the comfort level of their facilities. With the help of the Governor's Energy Office (GEO), Eaton was able to use performance contracting to undertake a comprehensive facilities improvement project that would increase comfort, reduce utility costs, and improve the learning environment. Best of all, they did it without having to dip into their limited financial capital.

## Turning Energy Savings into a Better Learning Environment

### Starting Down the Path Toward Savings

At nearly \$45,000 per month Eaton's utility costs were second only to salaries as the district's greatest expense. In spite of this burden, and in the face of rising resource costs, Superintendent Randy Miller, and Assistant Superintendent Tim Unrein, recognized a need to improve the comfort of their facilities.

While looking for a way to add cooling to a school building, Tim learned of GEO's Performance Contracting Program. At first Tim was skeptical. Was it really possible to pay for facility improvements with savings generated by the improvements themselves? After learning more about performance contracting and speaking with other small school districts that had gone through the process, Tim realized that performance contracting would allow him to go far beyond Eaton's goal of simply improving student comfort.

What started as a simple cooling upgrade soon became a \$3.5 million facilities improvement project that required zero capital funds from the district.

### Working Together: The Key to Success

A performance contract uses energy and water savings to fund capital equipment purchases. An energy service company (ESCO) helps determine which measures are cost-effective, then arranges financing and installs the new equipment, all at no capital cost for the school. In addition to funding improvements with efficiency savings, Eaton's ESCO was able to leverage millions of dollars in grant funding from two separate state agencies.

**"Every Dollar we save on utility expenses is a dollar we can put towards improving the education of our students."**

—Tim Unrein, Assistant Superintendent,  
Eaton School District



*Eaton's solar hot water system is used to heat their swimming pool and is the first of its kind to be incorporated into a performance contract at a Colorado school.*

The Colorado Department of Education awarded Eaton five Capital Construction Grants totaling \$2.2 million. The Department of Local Affairs provided \$500k in Energy & Mineral Impact Assistance Grant funding. Eaton also received \$50k in rebates from Xcel Energy for their lighting upgrades. This supplemental funding allowed Eaton to increase the scope of the project dramatically and incorporate additional efficiency measures such as new windows, several boiler replacements, and a solar hot water system for their swimming pool.



GEO was a valuable resource throughout the entire process. GEO's third party advisors were able to help Tim and Eaton's relevant board members understand the performance contracting model and feel comfortable engaging in the process. Once the decision to move forward was made, GEO was able to assist in every step of the process from analyzing utility bills and verifying the potential for savings, to ESCO selection and the evaluation of project proposals. "GEO's unbiased third party assistance gave us the confidence and technical resources we needed to move forward with this project. Without GEO's help we would never have been able to do this," said Tim Unrein, Assistant Superintendent.

### Swimming in Savings!

Eaton is the first school district in Colorado to incorporate renewable energy into their performance contract.

Prior to this project, Eaton's indoor swimming pool was heated with an inefficient boiler. The boiler ran year round in order to maintain a constant temperature. In addition to replacing the boiler with a new, more efficient system, Eaton installed a small solar hot water system that uses energy from the sun to heat the pool water. This system greatly reduced the demand on the boiler; in fact, it hardly runs in the summer time. Even on a sunny yet cool February morning, the pool can maintain a comfortable temperature of 85 degrees with no assistance from the boiler.

GEO now offers a Renewables in Performance Contracting Grant to help projects follow Eaton's lead and incorporate renewable technology into their performance contracts.

### How Can You Take Advantage of Performance Contracting?

GEO is currently working with schools, municipalities, counties, higher education, and state agencies throughout Colorado to implement performance contracts. More information about performance contracting can be found on GEO's website at [www.colorado.gov/energy](http://www.colorado.gov/energy) or by calling GEO's Commercial Buildings Program at 303.866.2204.

## Eaton School District Performance Contract

### Highlights, Benefits & Facts

#### Energy Efficiency Features

- Lighting retrofits
- Plumbing fixture upgrades
- Building automation systems
- Well and pump retrofits
- 12 boiler replacement
- Duct work retrofit
- Solar hot water system for swimming pool
- Window upgrades
- Vending machine plug load (lowering)
- Asbestos mitigation/removal

#### Operations and Maintenance

- Ongoing building commissioning/tune-up
- Ongoing building measurement and verification
- Operational savings by reduced lighting replacement requirements

#### Fast Facts

- 8 buildings; 297,433 square feet
- 1,700 Students
- Total project cost of \$3.5 million
- Guaranteed annual savings: \$95,889
- Pay back period: 12 years

#### Benefits

- Improved comfort for students and staff
- More efficient operation
- Improved quality of interior lighting
- Improved learning environment
- Better interior comfort
- Reduced maintenance needs
- Acquisition of needed infrastructure upgrades
- Reduced carbon footprint
- Improved health and safety

#### Energy Service Company

- Siemens Building Technology