

## An Energy Performance Contracting Success Story

**Colorado Springs School District 11** has redefined their approach to facility management in order to access energy savings and implement capital improvement projects across their schools. This district has generated a savings stream from their utility and operational costs through execution of an Energy Performance Contract. As a focal point for the community these schools not only educate the minds of tomorrow, but provide a meeting space for local residents and organizations. Colorado Springs D11 is an enthusiastic proponent of environmental stewardship along with the kind of fiscal responsibility to its taxpayers and students that is noteworthy with the current economic conditions. Saving \$455,000 annually from energy efficient facility improvements while fostering a better learning environment is the embodiment of the districts mission statement, "School District 11 is meeting the demands of the 21<sup>st</sup> century by developing 21<sup>st</sup> century learners....and civic responsibility equips students to navigate and influence a shifting world."

### An Exemplary School District with a Successful Performance Contract

#### *First Steps in a District Dedicated To Energy Management*

School districts across Colorado are faced with ever increasing energy costs and aging building systems. Colorado Springs District 11 chose to address their facility energy needs by creating a district energy manager position. This kind of foresight has allowed the district to not only track their energy usage, but develop comprehensive energy improvements that leverage existing capital funds with utility rebates and government grants. One of the tools utilized by the district is Energy Performance Contracting due to the fact that facilities can take advantage of energy

**"As our first Energy Performance Contract this project was challenging and good for the school district."**

*Mark Ferguson, District Energy Manager,  
Colorado Springs D11*



savings over time. Their first Performance Contract led to half a million dollars worth of annual energy cost savings and more precise control of district buildings.

#### *The Future of Energy Improvements*

The district energy manager, Mark Ferguson has been able to consider additional facility upgrades now that the initial improvements have been completed. New controls strategies, renewable technologies, and fleet improvements are possible now that the district understands their historical energy consumption and the impact that efficiency improvements have already made.

improvements today while paying for them with energy



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## *Effective Use of Demand Limiting*

One of the primary focuses of the Performance Contract executed at Colorado Springs D11 was limiting facility demand at 4 sites to ensure that the schools could take advantage of the lower rate class. The real-time energy monitoring upgrades on-site allow the district energy manager to ensure this strategy is effectively executed. An added benefit of the technology is the ability to better diagnose malfunctioning equipment or maintenance needs in a proactive manner.

## *Building Automation*

Performance Contracting can address complex problems throughout building including Building Automation Systems (BAS). These automation controls allow for more precise operation and diagnosis of mechanical and electrical systems. Updated controls can help maintenance staff finally solve the system problems that have plagued them for decades. Colorado Springs District 11 implemented a combination of technologies to allow for energy savings and also increase the staff's knowledge of how the buildings are operating on a day to day basis.

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

The GEO is currently working with schools, cities, municipalities, and state agencies throughout Colorado to execute energy performance contracts. More information can be found on GEO's website at [rechargecolorado.com](http://rechargecolorado.com) or by calling 303.866.2204

### **Project Details**

- Improvements were financed for a 12 year term
- Annual energy cost savings exceed half a million dollars
- More than 10% of the overall energy savings are due to water saving measures
- Increase in comfort for all district staff, teachers, and students

### **Operations and Maintenance Processes**

- Commitment to Energy Star to measure and track performance
- Real-time Energy Monitoring and demand limiting software at 4 facilities in the district
- Building Automation Systems upgrades with increased HVAC and exhaust fan control
- Demand controlled ventilation on kitchen exhausts and makeup air units

### **Benefits**

- Improved ventilation control and indoor air quality
- Better interior comfort and reduced maintenance
- Increased control of facility systems and ability to limit the electrical demand

### **Fast Facts**

- 58 buildings, 4 million square feet
- Energy savings of 20-25% out of a former energy budget of \$4 million/year
- Total project cost of \$5 million
- Total guaranteed savings of \$455 thousand per year



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