



“Working with TAC was different from the start ... [T]he quality of people ... goes above and beyond. From the salesperson to the engineers to the after-project monitoring service ... make this the best experience we could possibly have.”

*Bob Geeslin
Facilities Director*

PROJECT AT A GLANCE

- Location:
Lumpkin, Georgia, USA
- Buildings:
3 schools + administration building
- Project type:
Performance contract
- Financing:
Funds already set aside for improvements
- Guaranteed annual savings:
\$38,496
- EPA recognition:
Energy Star designation
- Energy conservation measures:
 - TAC Vista™ EMS with DDC
 - Centralized workstation to view all EMS
 - Lighting retrofit
 - 7 new HVAC units
 - New ventilation system at high school gym
 - Sub-metering of kitchens/cafeterias
- Installation completed:
June 2005
- Environmental facts:
Stewart County School System annually saves energy that is equivalent to reducing 494 tons of CO₂ from the atmosphere, removing 99 automobiles off of the roadway, or planting 134 acres of trees.

Stewart County School System

This small school district in southwestern Georgia had funds set aside for facility improvements, but it lacked the time, expertise and staff to make those changes. Stewart County Schools chose a performance contract with TAC Energy Solutions to resolve that dilemma.

THE CHALLENGE

The 2000 Census recorded a population of 1,369 for Lumpkin, Georgia, the county seat for Stewart County. And in 2007, Stewart County School System (SCSS) had 697 students in grades K-12 at its elementary, middle and high schools.

By 2004, though, this school district faced a number of challenges at these three facilities and a separate administration building.

Utility costs were high. Heating and air conditioning equipment was antiquated. The high school gym had no air conditioning, and the exhaust system of fans and dampers was not functioning properly. Systems were running 24x7. And all the schools and the administration building needed lighting retrofits.

TAC Energy Solutions proposed a performance contract that would enable SCSS to address these issues while reaping the benefits of more energy-efficient equipment and leveraging energy savings as a financial tool.

A performance contract offers a turnkey solution for making energy-saving improvements within an existing budget by financing them with money saved through reduced utility expenditures. With this contract TAC agreed to guarantee annual energy savings for 15 years and to pay the difference if SCSS did not realize that amount during the term of the contract.

SCSS selected TAC Energy Solutions over another vendor, because TAC had demonstrated its expertise and integrity, offered the district the personal attention it wanted, and proposed a comprehensive solution with guaranteed savings.

CUSTOMER BENEFITS

- Guaranteed energy savings
- Systems interoperability
- Increased energy efficiency
- Decreased operating costs
- Local and remote access



Stewart County School System

THE SOLUTION

TAC Energy Solutions conducted a thorough audit of all facilities. After analyzing the results, TAC recommended that SCSS replace certain systems, add additional equipment, and retrofit others. SCSS agreed to the recommendations and began to see the value right away.

TAC Energy Solutions installed a TAC Vista™ energy management system (EMS) with direct digital controls (DDC). It also installed seven new HVAC units and re-commissioned the exhaust fans in the high school gym to improve airflow and ventilation.

Installation of a new, full-color graphics workstation at the high school makes it possible for the facilities staff to monitor all equipment and system activity – down to the component level. TAC Energy Solutions also provided an interface to the existing EMS at the elementary school, which enables the facilities staff to monitor that system without having to drive to that campus.

SCSS was also able to take advantage of a special tax benefit to pay for this project, because Georgia allows school districts to use funds collected from a special purpose local option sales tax (SPLOST) to make much-needed improvements. (SPLOST funds are outside the normal funding provided by the state.)

TAC Energy Solutions also retrofitted the light fixtures in all three schools and the administration building, installing new lighting that was brighter and more energy-efficient. In the high school gym, TAC replaced single metal halide fixtures with high-bay fluorescent

lighting, improving visibility and providing an “instant strike” capability. TAC also replaced T12 lamps and magnetic ballasts in all the facilities with more energy-efficient T8 lamps and electronic ballasts.

In addition, SCSS now has the ability to sub-meter utilities in the kitchens and cafeterias, delivering another benefit. With an ability to track these specific expenses, the district can access certain state funds set aside specifically for these utilities.

THE BOTTOM LINE

Between June 2005 and May 2007, SCSS realized total savings of \$82,113 – an amount greater than the guaranteed savings specified in the performance contract.

SCSS is the first school system in Georgia to earn the Energy Star designation, the most recognized national symbol for energy efficiency. Working directly with the local electric utility, TAC helped SCSS achieve this designation. Energy Star is only awarded to top energy performers – those scoring in the top 25 percent of their class – that also meet industry standards for indoor air quality.

The district relies on TAC Performance Assurance Support Services (PASS) to provide remote monitoring and technical support, as well as complete analysis and reporting of energy usage. Moreover, PASS guarantees energy savings and project performance after the initial installation.

Today, SCSS points with pride to its energy-efficient systems and an enhanced learning environment for all its students and staff.

EDUCATION PROFILE

Parents and students have high expectations when they select a school, whether it is public or private. They require a quality education and an experience that prepares students for the future. State-of-the-art facilities, safety and security are of primary concern. In order to meet rising expectations within this cost-sensitive market, schools, colleges and universities must invest wisely in their facilities as a strategic asset to keep occupants comfortable and attract faculty and staff.

TAC has proven experience with public schools, private schools and higher educational facilities in providing building management solutions that maximize energy efficiency and performance. This leads to a reduction in operating costs and enables the reallocation of saved resources to new programs for students within the same budget.

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