

A FIRM FOUNDATION IN ENERGY SAVINGS FOR BIBB COUNTY SCHOOL DISTRICT

Delivered nearly half a million dollars in savings in 9 months.

Industry Landscape

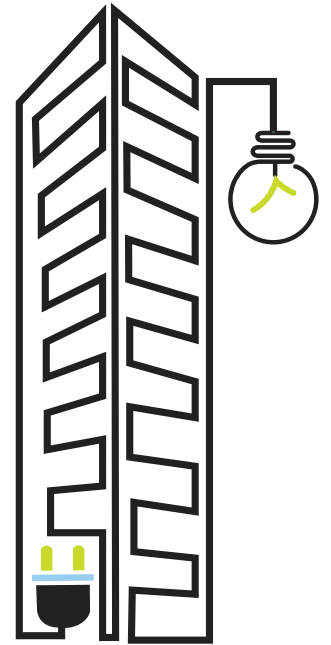
K-12 school districts in the US spend almost \$6 Billion annually on energy - more than is actually spent on computers and textbooks. ENERGY STAR® resources say that around 30% of the district's energy is either used inefficiently or unnecessarily. Moreover, energy costs are the largest operating expense for any school district after salaries and benefits. However, energy is one of the few expenses that can be decreased without negatively affecting classroom instructions. By measuring energy use, setting goals, and tracking energy changes, schools can actually gain control of energy expenses. Energy improvements could also help free up resources to upgrade the enhancement of a student's learning experience (viz., infrastructure developments, promotion of educational standards, etc.) by spending less on utility bills, providing schools with greater incentives to become more energy efficient.

About Bibb County School District

The Bibb County School District (BCSD), located in Macon GA, serves approximately 25,000 students in its twenty five elementary, seven middle and seven high schools - a total of 39 schools. These numbers include three elementary, one middle school and four high school magnet programs, as well as one high school offering career training opportunities. Meanwhile, the district is also committed to expanding its school choice based upon student interests, talent and future needs. BCSD is one of Georgia's original 26 Race to the Top (RT3) partner school districts.

Energy Management Program Objectives

- Studying BCSD's Lighting & Energy Usage Effectiveness
- Measuring, Monitoring & Controlling Energy Consumption
- Maximizing the Efficiency of the District's Energy Consumption and Operating Costs
- Unified View of Energy Performance Data across BCSD School Buildings



Fact Sheet



EcoEnergy has been a great partner to Bibb County School District and exceeded our expectations in the execution of the project. Their processes and procedures helped the district get the best value out of the project. ”

Kelley Castlin-Gacutan

Deputy Superintendent of School Operations



The EcoEnergy team has been thorough in their analysis of our lighting and HVAC systems, and helped us optimize energy consumption without sacrificing comfort. The project helped bring consistency across all systems and was able to save 10% in energy costs after weather and usage normalization. They also helped us achieve significant rebates from the power company. ”

Chris Bryson

Energy Manager

The Engagement

During Bibb County's FY 2011 budget, the committee members planned to execute a comprehensive energy audit on all county owned properties, the results of which would allow Bibb County to move forward with recommendations in order to conserve energy, reduce demands and ultimately increase savings. At the same time, BCSD recognized the growth of technology and the need for a real-time energy monitoring of its school's energy performance for efficient operations.

Based on BCSD's requirements, EcoEnergy collaborated to provide a range of customized energy management & sustainability services suitable for school district operations. Integrating EcoEnergy's Managed Energy Services model enabled BCSD to continuously measure, monitor, control, optimize and report its energy performance on a near real-time basis. EcoEnergy delivered its services in a 'Guaranteed Energy Savings Performance Contract' - a budget-neutral method allowing BCSD to use its energy savings for funding the Energy Management Program. The broad scope of engagement includes: One-time correction in lighting retrofits, HVAC controls & performance optimization, Energy Monitoring & Analytics for savings sustenance based on the ongoing energy usage.

Benefits to BCSD

- Absolute percentage reduction in energy bills & operational expenses through committed savings from EcoEnergy
- Increased asset life ensuring availability & maximizing uptime
- Sustenance of energy savings & related fiscal benefits to Bibb County
- Reliable & foolproof energy performance data acquisition and analysis
- Reporting & benchmarking of consumption patterns, KPI reporting, performance benchmarking

While working in collaboration with 46 buildings at BCSD, we ensured the buildings switched to results achieving an absolute energy consumption savings of \$490,000 which in turn helped the district receive a rebate from the utility provider and vendor programs.

About EcoEnergy

EcoEnergy's award-winning connected services combine the power of its Technology Platform & the agility of its Command Center with the expertise of its industry experts and analysts to deliver desired business outcomes - such as energy efficiency and occupancy comfort. Forever pushing the edge of the learning curve, EcoEnergy has built strong expertise across industries and employs only the latest technologies to deliver transformative results.

EcoEnergy is a part of UTC Climate, Controls & Security, a unit of United Technologies Corp., a leading provider to the aerospace and building systems industries worldwide.

Energy Management Services for
Bibb County School District

Key Performance Highlights

- No. of Schools Integrated: 46 Buildings
- Total Area: >3.7 Million sq ft
- Project Commencement: March, 2013
- EcoEnergy's Approach to Energy Management:

(1) Real-time controls monitoring & optimization RTU temp. & override optimization, schedule optimization, economizer modes

(2) Retrofit measures: Replaced 861 nos. of 250W, 165W & 120W induction lamps and retrofitted 81,676 LED lamps

Adjusted Energy Savings committed during the 1st year of engagement: \$590,000

Absolute Energy Savings achieved in the first 9 months, March 2013 until December 2013: \$490,000

Additionally, BCSD received a rebate of approximately \$263,000 from the utility provider and vendor programs worth \$33,000