

Integrated Live Energy Management Project Fayette County Public Schools

Project Description

Fayette County Public Schools (FCPS) is installing a live energy metering project that will result in sustained electricity savings of 20 percent annually, over \$1,179,000 annually in taxpayer savings, and annual reduction of 22.6 million pounds of carbon dioxide emissions.

Savings will be realized through installation of live (real-time) energy monitoring equipment, live data analysis software, and the development of a district-wide, public-facing energy and sustainability education portal. The innovative and custom integration of building automation systems into energy management combined with a public education portal will create a unique solution for FCPS to use in taking control of its nearly \$8 million annual energy budget, second largest in the state.

FCPS was awarded \$335,000 to be matched with \$601,497 of FCPS and other partner funds (including Kentucky Utilities and Siemens Corp.) for a total project cost of \$936,497.

Project Objectives

- FCPS will reduce overall Energy Utilization Index (EUI) from the weather normalized base year (FY2012) by an average of 20 percent for each participating district facility.
- This will be measured by comparing the data of the EUI schools active in the baseline year to the energy use 2 years after Green Building Monitoring (GBM) live data monitoring is installed.
- Fayette County Public Schools will engage students in experiential learning regarding environmental & sustainability issues through the “Education leads to Understanding Sustainability, Energy and the Environment” (E=USE²) teams at each school. This will be measured by: Meetings of the E=USE² teams; Sustainability educational activities at each school; and, Awarding of mini-grants at each school to promote sustainability education and reduction of energy consumption.

Time-line

The project has three phases from inception through December 2015.

Phase 1 – (May 2013 – June 2014) Installation of equipment, integrating data. Form E=USE² teams.

Phase 2 – (July 2014 – June 2015) Complete submetering, award mini-grants, update plans.

Phase 3 – (July 2015 – December 2015) Complete system integration, update school plans.