Let's Save Energy

School Energy Managers Project

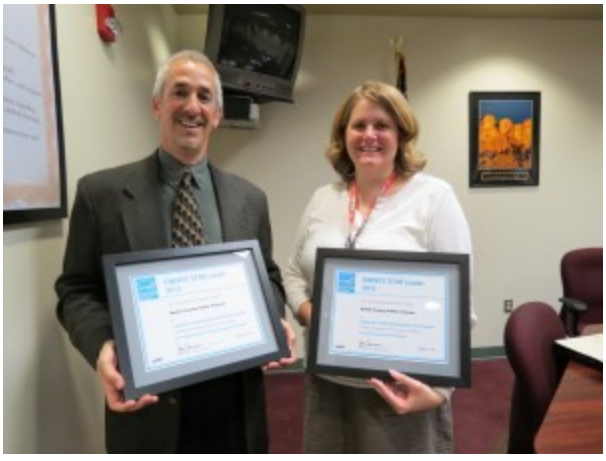
August, 2013

Is your District Missing Out on Energy Savings?

Since March 2010 the average retail price of electricity for schools in Kentucky has risen by 33%! In an effort to address these expected rising costs the Kentucky General Assembly in 2009 enacted KRS 160.325 that required mandatory enrollment by boards of education in the Kentucky Energy Efficiency Program for Schools offered by the Kentucky Pollution Prevention Center and annual reporting by KPPC on the development and implementation of energy management plans by Boards. Beginning in July 1010 KSBA's School Energy Managers Project (SEMP) facilitated the employment of skilled energy specialists and as a result many districts have NOT seen their utility costs increase, because of their energy management efforts.

To provide continued support for Board energy management initiatives KSBA–SEMP has received funds from a program through the Louisville Gas & Electric and Kentucky Utilities Companies, as well from a Kentucky Energy and Environment Cabinet program funded by a settlement agreement between the U.S. Environmental Protection Agency and the Tennessee Valley Authority. To date 56 of 84 eligible school districts with nearly 350 K-12 schools served by LGE-KU and 19 of 43 eligible TVA school districts with 118 schools K-12 schools are using the available funding. There is still funding available for districts to receive through KSBA from these funding sources. In addition, KSBA continues to pursue funding for other districts currently not eligible for the present funds.

Whether or not your District is receiving funding, compliance with KRS 160.325 and Board Policy 05.23 is required. For questions contact ron.willhite@ksba.org



Bullitt Co Board Chairperson Tim Wiseheart and Energy Manager Kimberly Joseph with ENERGY STAR Recognitions.

Bullitt Co Public Schools save $2.2 M

When it comes to energy management, Bullitt Co Public School has been a true leader. Since 2006, the district has saved over $2.2 million dollars and reduced energy consumption by over 23% district wide. BCPS has continued to see these reductions and cost savings, even after increasing overall building square footage in the district by about 600,000 sqft during that same time period. This does not happen by chance, but takes planning throughout the school year.

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In preparing for the start of a new year, Kimberly Joseph, District Energy Manager has been coordinating and working with administrators, faculty and staff to get everything ready for the 2013/2014 school year. Several years ago, BCPS invested in a building automation system (BAS) to provide HVAC and lighting controls for the district. The BAS facilitates equipment scheduling and diagnosing HVAC issues. Using the building controls and monitoring system BCPS has been able to catch and correct many problems over the past several months, avoiding them turning into larger, more costly problems.

In preparation for the school year, Kimberly has ensured that buildings are scheduled properly for the first day of school, open houses, sporting events, and other activities. "Communication is the key to energy management. We continue to see success by letting everyone in the district know that they play a part in the district's energy conservation program." Superintendent Keith Davis also supports the involvement of school energy teams in every school. Additionally, Kimberly says that working with the custodial staff is also key to a successful program. "Energy managers cannot be in every building, every minute of every day. Our custodians help out with filter changes in the HVAC system, they report minor and major issues that they notice, and they often help with controlling the lighting used in the schools – especially after hours."

Focus on Operations

By: Jeremy Smith, *PE, LEED AP, CxA, HBDP, CGD*

The "energy triangle" of a building refers to three items affecting a building's energy consumption: DESIGN, CONSTRUCTION, AND OPERATION. All items are interlinked and if one suffers, the others will suffer and the energy performance of the building as a whole will be negatively affected. Once a building is turned over to an owner the remaining piece of the puzzle and arguably the most important is the OPERATIONS piece of the puzzle.

The most successful districts in terms of energy conservation have a wide reaching attitude of empowerment for conservation and management. For example, some districts elect to aggressively cool their school buildings all summer long for the comfort of maintenance work occurring in the facilities. Others tend to turn their buildings back or off, as much as possible, during the summer. There is a happy medium between energy efficiency and comfort of maintenance staff that can be achieved with advanced planning of activities. Cooling the facilities to "regular" temperature ranges of ~72 F during the summer should be limited to short periods of time. Maintenance and building operators should be aware of the need for advanced planning and the potential money the district will save as a result.

We have seen numerous examples of operational changes drastically improving the energy consumption of a facility. Rosa Parks Elementary in Lexington is a shining example of well documented results, where energy reduction of 47% was achieved at an annual savings of $50,000 with no capital construction.

Energy Management Project Manager Named

Jon Nipple, former Energy Manager for the Grant County Energy Cohort was recently named as Project Manager for the KSBA – Energy Management Group. His primary responsibilities will be oversight of the KU/LGE Demand-Side Management program for schools, being administered by KSBA. He has over 30 years experience in engineering and executive management and is a Certified Energy Manager.