

LET'S SAVE ENERGY

School Energy Efficiency News

KSBA-SEMP ... Cultivating energy efficiency,
best practices in Kentucky school districts



October 2015

When is losing really gaining?

... When you're in the

Kentucky Battle of the School Buildings!

Many times losing is negative. In the Kentucky Battle of the School Buildings Competition, losing means winning for a school.

The national competition has produced an average savings of approximately 8 percent, amounting to \$20,000 per building per year for commercial buildings. Some competing buildings have reduced energy use by 35 percent and as much as more than 50 percent.


In Kentucky's Battle, schools from across the state will measure and track their monthly energy use for calendar year 2016 using ENERGY STAR Portfolio Manager, an online measurement and tracking tool. Comparisons will be made with the schools' 2015 energy use. KSBA-SEMP will recognize the Top Kentucky School Building, determined by the greatest percentage

-based reduction in energy use achieved from 2015 to 2016. KSBA-SEMP will also recognize schools that reduce energy use by 20 percent or more from 2015 to 2016.

Any K-12 public school can participate by:

- Completing the competition form.
- "Sharing the property" from Portfolio Manager with the SEMP Team.
- Reporting energy usage on a monthly basis.


To enroll in this competition, complete the Competition Form on the next page. Schools that participate in this competition will also qualify to participate in the "National Battle for the Buildings." For more information, contact martha.casher@ksba.org



KSBA-School Energy Managers Project Presents

Kentucky's Battle of the School Buildings

An ENERGY STAR®
Battle of the Buildings™ Competition





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COMPETITION REGISTRATION FORM

The Kentucky Battle of the School Buildings is to recognize:

- The Top School Building that reduces its energy use on a percentage basis over calendar year 2016, as compared with calendar year 2015.
- Any school that reduces its energy use as measured by the weather normalized source EUI (kBtu/sq ft) by at least 20% over calendar year 2016, as compared with calendar year 2015.

Here's all you need to do to participate:

- Complete the competition form below
- "Share the property" from Portfolio Manager with the SEMP Team
- Report the following by dates listed:
 - ◇ 2/15/2016 Benchmark FY 15 data into Portfolio Manager,
 - ◇ 3/1/2016 Listing of energy projects/practices that will contribute to reduction
 - ◇ 5/15/2016 Report 1st Quarter energy usage into Portfolio Manager,
 - ◇ 8/15/2016 Report 2nd Quarter energy usage into Portfolio Manager,
 - ◇ 11/15/2016 Report 3rd Quarter energy usage into Portfolio Manager,
 - ◇ 3/15/2017 Report 4th Quarter energy usage into Portfolio Manager,
 - ◇ 5/15/2017 KSBA-SEMP to communicate and recognize final results.

Complete this form and email to martha.casher@ksba.org by 2/1/2016

School Name: _____ District _____

Sq. Ft. _____ Year built _____ Number of students _____

Address: _____ City _____ Zip code _____

Principal _____ Energy Manager _____

We the understand that we are responsible for tracking all energy used in our school and will enter that information into Portfolio Manager in order for our energy data to show our progress.

Different districts, different needs

Energy manager takes individualized approach in serving seven districts

The basics of energy management are the same for every district. They include appointing a district energy committee, assessing facilities, developing the energy management plan (EMP), and then reporting the status of those efforts annually. When it comes to implementation of the EMP, differences may come into play.

"I have to be flexible to meet the differing needs of my districts," says Terry Anderson, energy manager for the Fleming County Partnership, which encompasses Fleming, Bath, Mason, Menifee, Robertson and Rowan county districts and Augusta Independent.

In one district, the school board chose a performance contract to implement mechanical, HVAC and lighting upgrades to improve existing facilities. Anderson worked with Bath County Facilities Director Burnsy Stewart to help educate others in the district on decisions being made about these energy projects.

In Augusta Independent Schools, Anderson began working with Superintendent Lisa McCane and Facilities Director Barry Caskey to plan the replacement of older gym lighting with new, high-efficient LED lighting. Savings are estimated at 21,709 kWh or \$2,062 annually.

The Mason County district had other energy management needs. As the district looked to expand academic programming to include a STEAM (science, technology, engineering, agriculture and medicine)

Academy, it had an opportunity to renovate a factory building that it had been using as a sports and agriculture facility. One-third of the 81,000-square-foot building now has been renovated, with improvements made to its envelope, to become part of the high school facilities. Classrooms to serve the STEAM classes have been built to include an efficient HVAC system and LED lighting. Another energy project in Mason County resulted in Straub Elementary School reducing energy consumption to become an ENERGY STAR-Labeled School.

The Fleming County school district has also focused on implementing projects to reduce energy consumption. From optimizing HVAC controls to developing shutdown procedures for breaks and implementing occupancy sensors to control the lighting systems, the district has made daily decisions to reduce energy use. The impact of these decisions are reflected in the district having three ENERGY STAR-labeled schools with excellent ENERGY STAR ratings. They are:

- Ewing Elementary School – 83 Rating
- Fleming County High School - 95 Rating
- Hillsboro Elementary School – 83 Rating

Anderson's utility company background led him to identify potential cost savings for his districts. He recognized that four of his districts could benefit by changing their mercury vapor security lighting to updated high-pressure sodium fixtures that would provide better lighting for a reduced cost, so he decided to complete an inventory of the outdoor lights being leased from the utility company. Besides changing the fixtures, Anderson also found out the district had three fixtures on the books that were no longer in existence. Those savings alone amounted to:

- \$972 annually
- \$4,114.76 in refunds for overbilling of nonexistent lights

Having an energy manager who is able to be flexible and responsive to the individual needs of each district is paying off – by both saving money for the districts and reducing demand for utility companies.



Jon Nipple from KSBA-SEMP presents the Governor's Certificate for ENERGY STAR-Labeled School recognition to Ewing Elementary School Principal Michelle Hunt. Also pictured from left are Fleming County Superintendent Brian Creasman, CIO Denise Brown, Energy Manager Terry Anderson and Maintenance Director Greg Dunaway.

