

LET'S SAVE ENERGY

School Energy Efficiency News

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



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Energy Efficiency . . . Funding Education by Eliminating Waste

The annual task of creating a realistic budget for a school district is challenging. It involves making tough choices and sometimes requires being creative in finding income sources. Elimination of waste is an often-overlooked source of income; overspending on energy is a form of waste. In fact, KRS160.325 and Board Policy 05.23 establish expectations for public school districts to aggressively address wasteful spending on energy.

So what is wasteful energy spending? This list can go on and on, but here are a few of the major opportunities for eliminating wasteful spending.

Using more energy than is required.

- School buildings are occupied only about 25 percent of the time. Energy is being wasted if temperature setbacks are not used the rest of the time.
- Temperature set points are equally important in saving energy. Districts should establish reasonable set points and ask staff and students to dress appropriately for the weather.

Being on the wrong electric or gas rate

- Did you know that not everyone pays the same rate for electricity? Multiple rates may be possible for each building. Knowing your usage history allows you to choose the most beneficial rate, but you must request the rate to get it.
- When utility providers do change rates, many customers do not re-evaluate their rate. This may be a missed opportunity to save money.

Not cashing in on utility-provided rebates

- You've done the work to upgrade equipment to a higher level of energy efficiency – now work with the energy provider to get the rebates you are due.
- Many districts leave thousands of dollars on the table by not completing the rebate forms.

Not upgrading when you have the chance

- Make sure that energy efficiency is considered in any renovations or new construction.
- Choosing energy-efficient equipment during renovations or new construction will pay off for years to come in reduced operating and maintenance costs.

- In fact, KRS 157.455 "strongly encourages districts to meet or exceed efficient design standards and utilize life-cycle analysis in evaluating design alternatives."

Not using what you have

- You may not have the latest energy technology in your buildings but make sure you use what you have.
- Make sure doors and windows are closed. Conditioning the open space outside of your buildings is not a good use of your dollars – that chair propping open the gym door is not only an energy waster, but also a security risk.
- If you have a control system, use it; make sure building maintenance personnel are trained and understand its operation.

Since 2010, Kentucky public schools have saved over \$68 million through lower energy use, utility rebates, refunds, rate corrections and rate case adjustments. The opportunity exists to save much more.

The goal for all of us is to provide a healthy and productive environment for students in a building that is efficient to operate. When a district is committed to energy efficiency, opportunities can be found to eliminate waste. Don't miss your chance.



Webster County Schools Superintendent Dr Rachel Yarbrough (center), board members and ESCO representatives were all smiles when receiving a check from David Huff (left of Yarbrough), Director of Energy Efficiency for Kentucky Utilities. The \$34,349 check was a rebate for a variety of energy projects over two years.

District intensifies energy focus, saving \$30,000 in four months

Bourbon County Schools Superintendent Amy Baker and the board of education have seen modest progress in reducing the district's annual energy utilization index (EUI) from 65 to 62.6 since 2010. However, the cost impact of recent electricity rate increases forcefully showed that the speed of their progress was not fast enough to offset rising costs.

"In the past four months we have intensified our efforts as part of our energy management plan," Baker says. "This has resulted in energy, cost, and rebate savings of \$30,000 so far for the 2016 fiscal year."

A district team that included Director of Facilities Jim Cleaver and Energy Manager Jim McClanahan scrutinized the existing energy management plan, doing a walk-through of the facilities to determine how the plan was being implemented.

Results and recommendations were reviewed with district staff. An energy-saving competition began among both schools and non-school buildings (bus garage, central office and warehouse), with new baselines established for each building. Recognition for the first semester went to the Bourbon County Preschool.

The efforts are already paying off with national recognition. North Middletown Elementary and Cane Ridge Elementary have now been verified as ENERGY STAR Labeled Schools, with the former being a "highly-rated" ENERGY STAR school with a rating of 96.



Bourbon County Schools board members and staff were recently recognized for achieving the ENERGY STAR Label for two schools. Shown above (front row) are Chairman Todd Earlywine, Superintendent Amy Baker, (back row) Patty Crider, Randy Sparks, Facilities Director Jim Cleaver, Custodian Clayton Fields, North Middletown Principal Gail Mullins, Thomas Talbot, and Kandice Wells.

"Our district goal is for all of our schools to earn this distinguished award. We owe it to our community of tax-payers to save money when we can by conserving energy. We are also teaching our students the value of energy consumption, which will benefit future generations," Baker says.

"The objective of the Bourbon County Schools Energy Management Plan is to save money on energy consumption so that more money will be available to spend on our students, our primary focus," she adds. "We appreciate the support of our board of education in allowing our district to partner with KSBA for energy manager services. The savings have clearly paid for his work."

The Language of Energy:

Energy efficiency – using less energy to accomplish the same task

ENERGY STAR – a national recognition that requires verified energy performance

ECMs – energy conservation measures that may include energy projects, where a financial investment may be made, AND energy initiatives, where no-cost, low-cost strategies are implemented

EMR – Energy Management Report required annually by KRS160.325

EMP – Energy Management Plan is a plan that focuses a district on eliminating wasteful energy practices.

EUI –Energy utilization index or energy use intensity. Terms are synonymous as a measure of building energy usage. Lower numbers indicate more energy efficient buildings.

kBtu - a measurement of energy

SEMP – KSBA's School Energy Managers Project, implemented in 2010 with federal funding and continuing today with state monies and utility grants

