



KEEPS Status Report

July 1, 2008 – December 31, 2009





In accordance with Kentucky House Bill 2, Section 16, this report has been prepared for the Kentucky Legislative Research Commission and the Kentucky Department for Energy Development and Independence as a summary of activities and funding sources of KEEPS – Kentucky Energy Efficiency Program for Schools from July 1, 2008 to December 31, 2009.

What is KEEPS?

KEEPS – the Kentucky Energy Efficiency Program for Schools helps Kentucky school districts reduce energy consumption and lower operating expenses.

KEEPS is funded by Kentucky's State Energy Program, the Kentucky Department for Energy Development and Independence (DEDI) and administered by KPPC – the Kentucky Pollution Prevention Center, University of Louisville J.B. Speed School of Engineering.

Kentucky House Bill 2, Section 16, was signed into law on April 24, 2008 and requires all boards of education (174 public school districts) to enroll in KEEPS by January 1, 2010. Boards of education are also required to report data on energy usage, costs and energy saving measures to KPPC through KEEPS.

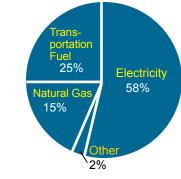
Why is KEEPS Important to Kentucky Schools?

KEEPS was created to help school districts analyze and understand their energy consumption. The program provides regional workshops, webinars, online training modules and resources that address everything from light usage and heating/air conditioning issues to natural gas usage and best energy management practices.

The Rising Cost of Energy

For the 2006-2007 school year, the top three energy expenses for Kentucky schools were:

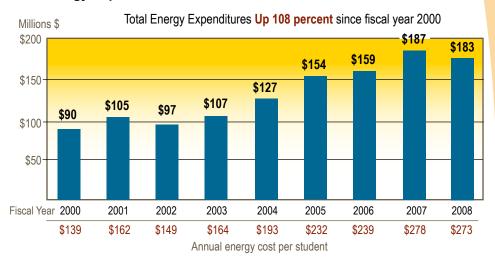
- · electricity (58%);
- transportation fuel (25%); and
- natural gas (15%).



Since the 2000-2001 school year:

- electricity expenditures have increased by \$34 million (60%);
- transportation fuels by \$25 million (173%); and
- natural gas by \$11 million (84%).

K-12 Energy Expenditures



How does KEEPS Work?

Developing an energy management plan is crucial to each school district's budget. The goal of KEEPS is to reduce energy usage by all of Kentucky's school districts through development of a systematic program at the school district level. KEEPS encourages successful districts to serve as mentors to new members. Both Bullitt County and Kenton County Public School districts participated in the KEEPS pilot program and now serve as mentors.

Savings

- The Bullitt County Public School district realized energy cost savings of \$686,000 in fiscal years 2006 through 2009.
- The Kenton County Public School district has demonstrated commitment to continuous improvement and has reported a total of avoided costs for fiscal years 2005 – 2009 at \$1,005,082.

Meeting KEEPS goals will assist the State Energy Program with their objective of reducing per capita energy consumption by at least 25 percent of the Commonwealth's 1990 per capita energy use by 2012.

Membership in KEEPS

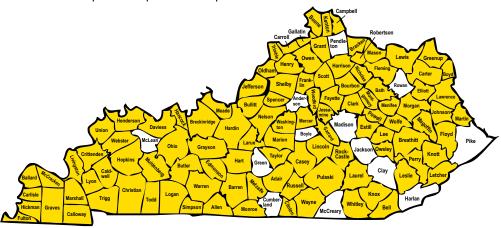
Enrolling school districts in KEEPS is a two-step process.

- Step One complete an online application form.
- Step Two complete and submit an Energy Management Program (EMP) Survey.

The EMP Survey is used to gather baseline information that will help KEEPS assist school districts' energy managers and teams and track their progress toward goals.

Step One

As of December 31, 2009, KEEPS enrolled **139** of Kentucky's 174 school districts (80%) in the program. The map below indicates those counties where school districts have enrolled and completed Step One of the process.



Step Two

A total of 70 EMP's were submitted during this report period. This represents 50% of the school districts that have completed Step One. Because of the differing levels of energy management knowledge within the districts, many of the surveys are incomplete.

The following list breaks down the status of the 70 surveys returned to KEEPS as of December 31, 2009:

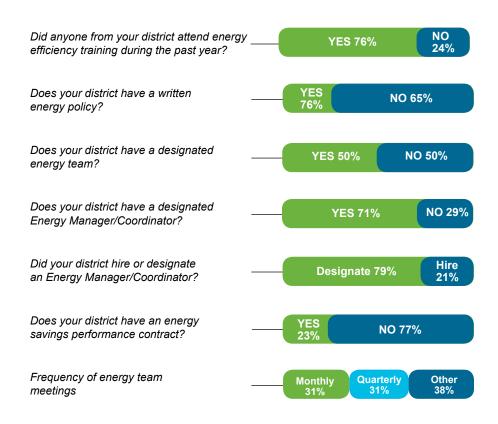
- 7 districts (10%) completed surveys with all questions answered;
- 52 districts (74%) partially completed surveys leaving some questions unanswered:
- 11 districts (16%) answered approximately half the questions in the survey.

KEEPS will work with all districts that need help in completing the survey.

The KEEPS awards and recognition program provides a certificate of enrollment and an electronic version of the KEEPS logo for a district's Web site and/or other communication materials.

Energy Management Program Survey Results

The following charts represent some of the responses of the 70 school districts that have submitted the Energy Management Program Survey. The EMP Survey questions were designed to provide KEEPS with an accurate baseline on each district's current level of energy management efforts.



The following list shows the number of school districts that made or planned for specific energy efficiency upgrades during the report period.

E2 Upgrade	Completed FY 08-09	Planned for FY 09-10
T-12s to T-8s/T-5s	21	15
HVAC Upgrades	21	13
Timers/Programs	19	14
Exit LEDs	16	14
CFLs	15	14
Policies	8	18

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KEEPS Seven-Step Energy Management Process

KEEPS online training is based on the ENERGY STAR® program and incorporates additional information designed for KEEPS participants. The modules will help energy managers, facilities personnel and other Energy Team representatives learn the process of energy management as well as educate their school district on how an effective energy management program benefits their organization and the environment.



KEEPS members will benchmark their efforts using ENERGY STAR®'s Portfolio Manager. The database provides standard, clear, and quantifiable activity and outcome metrics and accomplishments for energy use reductions and cost savings, "green jobs" created, and associated reductions in greenhouse gas emissions (in CO₂ equivalents).

KEEPS Web-Based Resources

KEEPS Web site – www.kppc.org/KEEPS – provides online registration, tools and other resources to assist KEEPS participants in developing and tracking effective energy management programs, as well as a web-based self-reporting mechanism that will allow KPPC to collect, quantify, track, assess, and report energy usage and savings both as identified and as implemented.

The ENERGY STAR® Challenge

KEEPS encourages members to take the Environmental Protection Agency's (EPA) ENERGY STAR® Challenge. EPA is challenging school administrators and building managers to improve energy efficiency throughout their facilities. Kentucky now has 47 high-performance ENERGY STAR® schools in 14 districts. Kentucky's average school energy use index is approximately 76 kBtu per square foot. ENERGY STAR® schools can do much better and can reduce their average energy costs by \$35,000 – \$45,000 per year in both new and existing schools.

KEEPS Workshops and Webinars

KEEPS held two webinars and four energy management workshops in this report period.

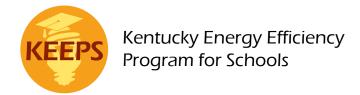
Webinars:

Overview of Energy Management – May 14, 2009 Understanding Your Utility Bills – June 11, 2009

Energy Management Workshops:

Georgetown, KY – February 14, 2009 Cave City, KY – February 26, 2009 Morehead, KY (Morehead State University) – September 15, 2009 Kentucky Dam Village – September 22, 2009

Number attending webinars and workshops: 406, representing 125 districts



KEEPS Funding Sources

Report period: July 1, 2008 to December 31, 2009

Funding source:

Kentucky Department for Energy Development and Independence(July 1, 2008 to June 30, 2009)	\$89,348
KREC – Kentucky Renewable Energy Consortium*(July 1, 2008 to December 31, 2009)	\$149,625
American Recovery and Reinvestment Act**(December 1 to 31, 2009)	\$16,230
Total funding for period	\$255,203

^{*}Federal appropriation to KPPC. KREC provided workshops, Web site and outreach and communications support.

The KEEPS Moving Forward e-newsletter is sent to 420 subscribers throughout the Commonwealth.

www.kppc.org/KEEPS

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^{**}ARRA funding of \$4.758 million has been received for KEEPS through April 30, 2012.

KEEPS is administered by



KPPC

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KPPC – the Kentucky Pollution Prevention Center is Kentucky's primary resource to help businesses, industries and other organizations develop environmentally sustainable, cost-saving solutions for improved efficiency. Based at the University of Louisville J.B. Speed School of Engineering, KPPC provides technical information and assistance that is free, confidential and non-regulatory.

KEEPS Partner Organizations

The Kentucky NEED Project
Kentucky Green and Healthy Schools
Kentucky School Plant Management Association
Kentucky School Boards Association









KEEPS is funded by the American Recovery and Reinvestment Act, through the combined efforts of the following organizations: Kentucky Department for Energy Development and Independence, the U.S. Department of Energy and KPPC – Kentucky Pollution Prevention Center, University of Louisville J.B. Speed School of Engineering.