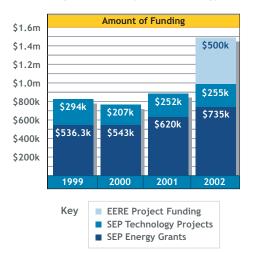
# **State Energy Program**

## The State Energy Program in Kentucky

#### Bringing Federal Resources to Kentucky

The Kentucky Division of Energy (KDOE) seeks a healthier, more prosperous, and sustainable future through the wise use of energy.

DOE Funding to the Kentucky Division of Energy



One of KDOE's primary roles is to apply federal funding from the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) to a portfolio of energy projects in Kentucky. Through EERE's State Energy Program (SEP), KDOE applies funding from SEP energy grants to priorities in the commonwealth. In addition, Kentucky competes with other states for SEP and EERE funding for specific technology projects. Currently, annual SEP funding to Kentucky is about \$1 million, and KDOE garnered another \$500,000 from EERE in 2002 to develop a premium fuel from wood residues and mining wastes.

In recognition of its activities, KDOE received a 2003 Award for Leadership in Energy Efficiency from ENERGY STAR<sup>®</sup>.

### Reducing Energy Expenditures for Schools and Government Buildings

Another important role is to help schools and government agencies reduce utility expenditures. KDOE offers technical advice and supports workshops for building managers, maintenance personnel, builders, and architects. In partnership with the Kentucky Energy Services Coalition, KDOE promotes energy saving performance contracting that finances building energy improvements through utility savings. KDOE has helped state agencies award performance contracts worth \$7 million at Western Kentucky University and in the Kentucky Community and Technical College System. Today there are more than seven other state agencies that have identified potential energy performance contracts worth an additional \$15 million that will reduce energy costs at public facilities.

To help Kentucky students learn about energy, KDOE works closely with the Kentucky National Energy Education Development (NEED) project. Kentucky NEED partners with the Kentucky Coal Council, Cinergy, American Electric Power (AEP), and the Kentucky Oil and Gas Association and other businesses to bring energy-related curricula to Kentucky's primary and secondary classrooms.

KDOE, Kentucky NEED, and AEP are working together to install solarelectric (PV) systems at 10 schools across Kentucky to stimulate a community of solar schools within the commonwealth.



Kentucky Division of Energy

The Kentucky Division of Energy connects local expertise with federal funding for state, regional, and national energy priorities. The energy office is a catalyst for deploying renewable energy and energy efficiency to benefit the state's industries and consumers.



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#### Supporting Kentucky Industries

Kentucky's industrial sector is highly energy-intensive, ranking eighth in the nation for energy intensity on a percapita basis. Kentucky's industrial energy program began in 1999 with an EERE grant that enabled a new research consortium, called Secat, to be established at the University of Kentucky Research Park. Secat, in turn, has won several competitive research and development (R&D) grants to improve energy efficiency and reduce waste in the aluminum industry. These grants, which are cost-shared with industry, are worth over \$15 million. Kentucky's aluminum industry represents 32% of the total U.S. production capacity for aluminum. The technologies being researched, if implemented throughout the nation's aluminum industry, could potentially save 100 trillion Btu (British thermal units) per year.

KDOE is partnering with the Kentucky Pollution Prevention Center to provide an energy audit and assessment capability for industries, small businesses, and public institutions. This blending of energy efficiency and pollution prevention resources provides Kentucky's industries and businesses a unique opportunity to improve their competitiveness while helping protect the environment at the same time.

#### Fostering a Competitive Economy

Many of KDOE energy efficiency and renewable energy projects directly benefit Kentucky's economy, including:

#### Partnership with ENERGY STAR

Beginning in September 2001 KDOE began a partnership with ENERGY STAR to help consumers identify and understand the savings gained from purchasing energy-efficient consumer products as well as the positive effects that energy-efficient products and practices can have on our environment.



During October 2002, consumers could purchase discounted compact fluorescent lights through the "Change a Light" campaign.

Building construction efficiency KDOE conducts workshops for the buildings trades to increase efficiency and comfort in new home construction, and is helping establish a home energy rating system in Kentucky to improve and inform consumers of energy efficiency in homes. KDOE also hosts workshops on high-performance school buildings and sustainable building practices throughout the year.

#### Alternative fuels for transportation KDOE partners with Clean Cities coalitions in Louisville and Northern Kentucky areas that support infrastructure development for alternative fuel vehicles that run on biodiesel, propane, natural gas, or ethanol. Through these coalitions, KDOE supports workshops, studies, and research projects as well as projects that enable Kentucky schools to use alternative fuels in their school fleets.

### Bioenergy for rural economic development

KDOE is working with the University of Kentucky, two coal companies, and two timber companies to research the production of a premium fuel from mining wastes and timber residues. KDOE has also participated in a research project with Alltech, Inc., in Richmond, Kentucky, and Oak Ridge National Laboratory in Tennessee to investigate improved enzymes for ethanol production. Contact: John Davies, Director Kentucky Division of Energy Department of Natural Resources 663 Teton Trail Frankfort, KY 40601 Phone: 502.564.7192 www.energy.ky.gov

### A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

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