

<http://www.kcc.state.ks.us/energy/>

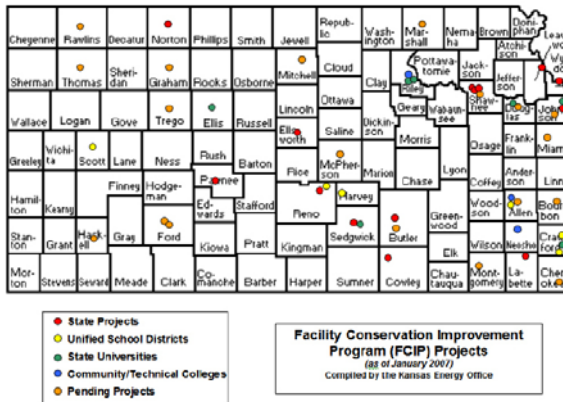


**MISSION:** To address growing concerns over high utility prices, and to achieve sustainable energy resources, the Kansas Energy Office (KEO) continues to promote energy efficiency and renewable energy in the State of Kansas.

### **Facility Conservation Improvement Program**

The Facility Conservation Improvement Program (FCIP) is a streamlined program allowing public entities to quickly and easily use energy services performance contracting (ESPC) to access financing for planning and implementing of energy performance projects.

The Facility Conservation Improvement Program is available to all public buildings in Kansas. Some examples of qualifying entities include: state agencies, cities, counties, public and private universities and colleges, public schools, community and technical colleges, and public hospitals. The FCIP has been in operation since 2000 and has completed over \$110 million dollars in energy improvement work, reducing Kansas public facility utility costs by nearly \$10 million dollars annually.



Through the FCIP, the ESCO partners have replaced older high wattage lights and ballasts with new high efficiency units in scores of public buildings. New lights, and the analysis conducted to determine the appropriate light fixture to serve the specific needs, have brought better lighting to desktops and brighter, more effective lighting to gymnasium floors. We have replaced aging and inefficient boilers with new high efficiency units that take up a fraction of the space in the mechanical room once occupied by the old units. New air conditioning systems have provided additional savings and comfort as well.

FCIP projects have also installed Ground Source Heat Pumps (GSHP) to provide the highest possible efficiency for both heat-ing and cooling. A Ground Source system costs more to install, but GSHP efficiency and reliability are so high that the system will pay for itself during its lifetime, and operate with very low maintenance costs.

The FCIP has experienced great success in the state of Kansas. Thanks to the vision of the individuals who developed the programs and the effective interaction between our contracted ESCOs and State program managers, the state of Kansas has become a recognized national leader in energy services performance contracting in public buildings. We hope to build on our successes and move our program into a future of increased and expanded activity resulting in substantial reductions in energy use and a positive environmental impact in Kansas buildings.

## **Kansas Community Wind**

Over 200 Kansans participated in the Kansas Community Wind Workshop hosted by Cloud County Community College in Concordia on October 31. Numerous legislators, energy industry professionals, county and city economic development officials, farmers, landowners, and others interested in community wind attended.

Planning for the workshop was initiated by several people who had visited community wind projects in southwest Minnesota last summer as part of a joint tour organized by the Kansas Energy Office and the Governor's Rural Life Task Force. Participants on that trip became convinced that locally owned wind projects could greatly benefit our rural economy, if public policies can be changed to help instead of hinder their development.

Organizers brought Jack Keers, a Pipestone County, MN, Commissioner; Lisa Daniels, Founder and Executive Director of Minneapolis, MN, based Windustry; and Tom Wind, a well known community wind project consultant from Jefferson, IA. The three addressed the major policy and technical obstacles presented to those who wish to put together a project.

Commissioner Keers spoke of the benefits to their rural economy and tax revenues from community owned wind. He also discussed a caucus of energy producing counties which has had considerable success in influencing the Minnesota legislature to recognize the value of their wind resource, and to pass legislation which encourages development of locally owned projects.

A legislative panel consisting of Rep. Josh Svaty, Rep. Sharon Schwarz, Rep. Tom Sloan, Rep. Dan Johnson and Rep. Carl Holmes closed out the program. Some participants took a brief tour of the Cloud County Community College Wind Energy Technology Program.

The Kansas Community Wind Tool Kit CD was developed by the Kansas Energy Office and the Kansas Department of Commerce, with funding support by Wind Powering America. CDs are available from the Kansas Energy Office.

## **Other Renewable Energy Initiatives**

### **Solar**

Solar lighting provides a perfect solution for Kansas State Parks in locations that are inaccessible to a power source. The Kansas Energy Office has helped to install solar lights in State Parks that serve to provide increased visibility for resources as well as increased security for park patrons.



Kansas' newest commercial wind farm is the Spearville Wind Energy facility – a 100.5 MW wind farm that went online in September 2006. Photo courtesy of Phil Duncan, KCP&L

# KANSAS

In 2006, six State Parks received assistance to install solar lighting systems. In addition to solar lighting systems, Milford State Park and Wilson State Park installed solar water pumps for filling small fishing ponds. The Kansas Department of Wildlife and Parks plans to increase the use of solar water pumps in the future.

The Kansas Energy Office is also supporting Kansas' first entry into the U.S. Department of Energy's Solar Decathlon 2007. This prestigious, limited entry competition of university-based student teams design and build a small, experimental solar-powered home. The Kansas proposal, a joint effort between Kansas State University (KSU) and University of Kansas (KU) students, was one of 20 submissions to be accepted. This two-year project will educate students of feasible applications of solar energy in homes, and provide education to the public of the benefits of clean, sustainable energy.

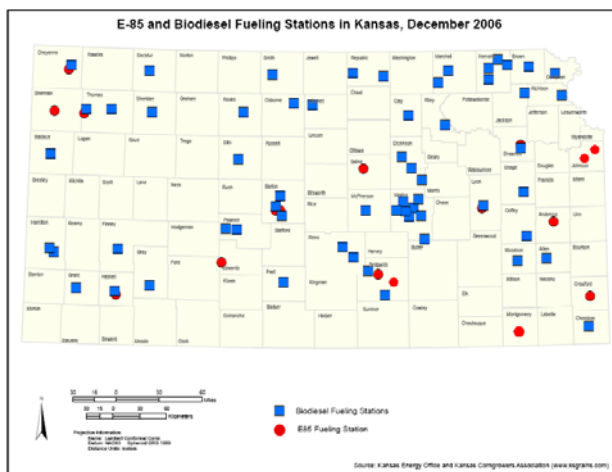
## Hydro

The Bowersock Mills & Power Company is the only and oldest operating hydroelectric generating plant in Kansas. With the help from the Kansas Energy Office, Bowersock was able to upgrade their plant in the summer of 2006 to continue reliable renewable energy production to Kansas.

## Alternative Fuels

The Kansas Corn Commission utilized funding from the Kansas Energy Office to do numerous projects through-out the State of Kansas. One of the major events included an exhibit at the Kansas State Fair, which allowed more than 20,000 attendees to learn more about ethanol-blended fuel, receive printed materials and see ethanol-compatible vehicles on display.

While ethanol may seem commonplace to some Kansans, the education process is far from complete, both at the consumer and station owner levels. This project was designed to address both levels and ultimately bring more ethanol fuel for Kansans to use.



According to the Kansas Department of Revenue, sales of ethanol-blended fuels have increased substantially from the previous year. Part of this success can be attributed to the efforts of this project and the funding received from the state, according to Jere White of the Kansas Corn Grow-ers. "At these times of high fuel prices, it is imperative to continue efforts to promote ethanol, and other forms of alternative energy."

In addition to these efforts, The Kansas Energy Office partnered with the Kansas Department of Commerce to create a "BioProduct Roadmap". This project details the current bioenergy and

bioproduct industry in Kansas. Also, it will help to determine projections for industry growth; the state's best role in assisting and servicing this sectors; and ways in which the state can encourage growth.

The Kansas Energy Office has also provided support to the Kansas Soybean Association to provide information and assistance in siting of Biodiesel plants in Kansas. The Kansas Soybean Association has been

able to provide accurate information on Biodiesel fuel and Biodiesel plant development – including the markets for Biodiesel, technology available and companies who can complete feasibility studies.