U.S. State Energy Program -- Promoting Energy Innovation and Economic Development

SEP Targets State-Identified Energy Opportunities



The U.S. State Energy Program (SEP), established over 30 years ago, is a cost-shared (federal, state, private) program that helps to strengthen America's competitive position and energy security. The 56 State and Territory Energy Offices have leveraged each dollar in SEP funds by nearly \$11 in state and non-federal funds over the program's history, according to the Oak Ridge National Laboratory. Further, each dollar of SEP funds is associated with annual energy costs savings of \$7.22. With the SEP funds and the resources leveraged by them, the State Energy Offices develop and manage strategic programs that support the private sector in increasing energy efficiency, developing alternative energy sources, promoting energy-related economic development, mitigating the impact of energy emergencies, and reducing reliance on imported oil.

Groundbreaking Efforts Supported by the States with SEP Funds -----

Through SEP, states have created innovative programs that deliver cost-effective results with major impacts:



Alaska established the \$250 million Alaska Energy Efficiency Revolving Loan Fund (AEERLF) to finance public facility energy efficiency improvements, using SEP funds to benchmark 1,300 public facilities in order to identify high-energy use buildings and provide an Investment Grade Audit. SEP funding was also used to develop the Alaska Retrofit Information System (ARIS) database that holds 60,000 records of residential energy audits and benchmark data from the 1,300 public facilities.

Delaware's SEP funds have supported rebates and loans for residential efficiency measures through which 3,000 homeowners have improved their home's energy

efficiency. Through the same program, 96 solar electric systems, 14 geothermal system installations, one wind system, and one solar thermal hot water system have been supported with SEP funding since 2010.

Louisiana's Energy Office manages an SEP-funded Home Energy Rebate Option Program (HERO) that offers cash rebates for energy retrofits and provides training and quality control for the energy raters who certify efficiency projects. During the past two years, more than 1,100 existing homes were retrofitted, resulting in a 30 percent average increase in energy efficiency per home completed. SEP funding also supported energy efficiency designs in 565 new homes, resulting in a 35 percent average increase in energy efficiency per home compared to International Energy Conservation Code (IECC) 2004 standards. For the commercial portion of the program, 89 energy retrofits were completed, resulting in a 25% average increase in energy efficiency.

Massachusetts' Department of Energy Resources is utilizing SEP funds to implement a real-time energy management program, the Enterprise Energy Management System (EEMS), which will result in the installation of nearly 1,200 real-time energy meters across over 400 state buildings, totaling more than 17 million square feet. Real-time building level energy data will allow state facility, project management, and finance personnel to identify cost-effective opportunities to make both short- and long-term energy improvements and reduce taxpayer burdens.

In **Minnesota**, 36 facilities across the state are realizing more than \$3 million in permanent, ongoing annual energy savings through a one-time, \$4.1 million energy upgrade grant program administered by the Division of Energy Resources. The grants, funded in 2010 through SEP, were completed during the past year and are contributing significant energy-savings to commercial, industrial, and nonprofit facilities across Minnesota.



Nebraska's Energy Office has operated the Dollar and Energy Saving Loan Program for more than 21 years, which finances energy efficient improvements in homes, farms, ranches, businesses, industrial facilities, schools, and other buildings. SEP funds are leveraged with utility and other funds for a total loan pool of \$36 million. Between 1990 and 2011, 27,339 projects totaling more than \$258.7 million have been financed with low-interest loans from the Energy Office and the state's 894 participating lender locations. Although the overwhelming majority of loans are for residential projects, in the summer of 2011 the first two public compressed natural gas stations in Omaha were financed with low-interest loans. Defaults of only \$106,000 on the \$258 million in loans has occurred since the program began.

North Dakota operates a cost-shared training initiative implemented by North Dakota State University that helps farmers adopt conserving farming practices to lower production cost. To date, 43 workshops have been held with 861 participants. Another SEP-supported program has provided 23 grants to state agencies, cities and towns to incorporate energy efficiency equipment into their facilities to reduce energy usage. The SEP funding provides for energy efficiency measures that have a payback of less than ten years.

Ohio's Energy Efficiency Program for Manufacturers (EEPM), which provides facilitation services and financial assistance to Ohio manufacturers to diagnose, plan, and implement cost-effective energy improvements at their facilities, estimates energy savings of 28,331,432 kwh/year (electric) and 876,349 MMBTU/year (gas, oil, other) through \$21 million in grants supported by SEP.

In **Oregon** in 2010, the State Energy Office issued nearly 77,000 Residential Energy Tax Credits with SEP funding, saving more than \$4 million in energy costs for Oregonians. SEP has also helped fund more than \$11 million of projects in 60 urban and rural school districts across Oregon in the past two years providing for

lighting upgrades, window replacements, HVAC improvements, and biomass boiler installations, resulting in enhanced learning environments, reduced energy bills, and contractor jobs. SEP also provided for energy audits that provided work for audit firms and students in the local college energy management program in 101 rural Eastern Oregon school districts participating in the Governor's School Energy Audit Initiative.



SEP's Economic Impact -----

From the approximately \$50 million in federal appropriations in each of the past few years, on an annual basis the states utilize SEP funds to leverage \$585 million for energy-related economic development; produce \$333 million in sustained annual energy cost savings for households, businesses, and state and local governments; support energy efficiency retrofits of 153 million square feet of state and local buildings; and provide 300,000 energy efficiency technical assistance contacts with consumers and small businesses to aid them in implementing cost-effective energy efficiency actions. Further, the SEP funds support energy emergency preparedness and response to bring businesses and consumers back online following electricity and liquid fuel disruptions saving hundreds of millions of dollars in power and fuel disturbance costs each year.

Objectives of SEP Legislation -----

The states' proven success with leveraging SEP funds to promote economic development and save consumers and businesses money is evidence of SEP's significant and positive impact. The program must continue to allow each state to address targeted energy priorities and opportunities while contributing to national energy goals. The National Association of State Energy Officials (NASEO), the Governor-designated energy offices, and NASEO's public and private sector partners encourage the following:

- Reauthorize and extend the SEP through 2018;
- Deliver a formula-based grant program to continue the State Energy Offices record of success; and
- Explore additional opportunities that build and strengthen SEP.