Successful U.S. State Energy Program Activities



The U.S. State Energy Program (SEP) is the only program administered by the U.S. Department of Energy (DOE) that provides cost-shared resources directly to the states for allocation by the governor-designated State Energy Office for use in energy innovation, development, and demonstration activities. The 30-year program is authorized at \$125 million and received \$62.5 million in FY'20 appropriations.

- 30-year, cost-share program authorized by Congress at \$125 million, delivered by the 56 Governor-designated State and Territory Energy Offices (SEOs)
- Congress created SEP to allow each State to address energy priorities and opportunities while contributing to national energy goals
- Provides the fundamental capability for States to design and carry out programs tailored to their specific needs and individual energy goals
- SEP helps build the capacity and capability of the Governor's State Energy Offices to design, manage, and implement efficiency and renewable programs, projects, and initiatives

SEP Mission and Goals

- Support the public and private sectors
- Strengthen America's competitive position and energy security
- Provide high value programs that facilitate the private sector delivery of energy innovation
- Maximize energy, environmental, and economic benefits
- Increase market acceptance of energy efficiency and domestic energy resources
- Utilize innovative approaches to reach market segments and meet policy goals

SAVINGS

Each \$1 of SEP federal funds is associated with annual savings of 1.03 million source BTUs and energy cost savings of \$7.22.

LEVERAGE

Each \$1 of SEP federal funds is typically leveraged by \$10.71 of state and private (non-federal) funds.



The Nation's 56 State and Territory Energy Offices

State Energy Offices are a vital resource for promoting economic development in the clean energy sector, delivering energy savings, meeting energy goals, and coordinating energy-related emergency preparedness across the nation. With SEP funds and the resources leveraged by them, the 56 State and Territory Energy Offices develop and manage strategic programs that support the private sector in increasing energy efficiency, developing renewable and alternative energy sources, promoting energy related economic development, and reducing reliance on imported oil. More recently, State Energy Offices are placing greater focus on technological innovation and economic development and looking beyond energy efficiency and renewable energy to a more comprehensive slate of programs. Examples of SEP-supported work in the states include:

- Support private sector innovation and commercialization through business incubators and job training
- Undertake energy emergency planning activities and exercises to strengthen the cybersecurity and resilience of the energy system
- Work with utilities to establish and implement complementary efficiency programs
- Advise the legislative and executive branches of state government on energy issues
- Advance cost-effective energy efficiency retrofits and energy management in public buildings
- Deliver public energy efficiency education
- Conduct statewide comprehensive and strategic energy planning
- Demonstrate and pilot innovative energy projects with the private sector and universities in the transportation, buildings and other sectors
- Connects at the local community level to enhance impact and improve results

A Few Examples of States' Groundbreaking SEP Actions Over the Past 30 Years

- Illinois, Pennsylvania, and others: Worked with the private sector in the early 1980s to create modern Energy Savings Performance Contracting – now a multi-billion dollar annual business
- Maryland, New York, California, Florida and others: Created plans and responded to energy supply emergencies in the late 1980s which led to today's federal energy emergency (assurance) program
- Texas, Nebraska: Texas' LoanSTAR and Nebraska's Dollar and Energy Saving loan programs were the nation's first – established in 1988 and 1990 – innovative energy efficiency financing programs and continue to operate as best practices examples
- Minnesota: Among the nation's first wind resource mapping efforts in the 1990s which opened opportunities for private investment in wind energy
- Massachusetts: Created the first widespread 400 state buildings wireless energy monitoring and demand response energy efficiency program in the 2000s
- States in the Midwest and Northeast coordinated efforts to address the propane and heating oil supply disruptions of the 2013-2014 winter season

Annual Appropriations: SEP Funding for States

2020: \$62,500,000

2019: \$55,000,000

Economic Impact

According to a DOE Oak Ridge National Laboratory (ORNL) report, \$50 million in SEP dollars:

- Leverages \$585 million for energy related economic development
- Produces \$333 million in sustained, annual energy cost savings for families, businesses, and State and Local Governments
- Supports energy efficient retrofits of 153 million square feet of state and local government buildings
- Provides 300,000 energy efficiency technical assistance contacts with consumers and small businesses to aid them in implementing cost-effective energy efficiency actions

Oak Ridge National Laboratory Reports:

State Energy Program and State, Territory Energy Offices Continue to Deliver Annual Energy and Cost Savings

ORNL found that in just one year the states produced the following results under SEP:

- Energy Audits 15,264 energy audits of residential, commercial, and industrial buildings were performed
- Retrofits 12,896 buildings were retrofitted to be more energy efficient
- Traffic Signals and Controls 92,488 energy-efficient LED traffic lights were installed
- Alternative Energy 6,434 alternative fuel vehicles were purchased or converted
- Loans and Grants \$30,403,388 of loans made; \$12,345,608 of grants given
- School Education 604,050 students taught about energy efficiency
- Energy Emergency Planning 78 energy emergency plan elements were developed

NASEO SEP Website and Additional Resources

NASEO maintains an SEP website, http://naseo.org/sep-success, where you can access hundreds of specific SEP project examples from every state in the nation.

State and Territory Energy Offices have put federal funds to work in a number of ways to reduce energy budgets and create jobs. The projects highlighted in the U.S. State Energy Program Briefing Book are snapshots of SEP projects and provide a sampling of the thousands of energy projects



underway in almost every community across the country. The full text and a summary of the Oak Ridge National Laboratory report are also available from the NASEO SEP website:

SEP Overview, http://naseo.org/sep

SEP Allocations by State, https://www.naseo.org/Data/Sites/1/sep-allocations-03-11-19_final.pdf

About the National Association of State Energy Officials (NASEO)

- Membership includes the 56 Governor-designated energy offices from each state and territory and more than 60 affiliate organizations and companies
- Facilitates peer learning across states to share best practice policies and programs and advance cutting-edge efficiency and renewable energy technologies and services
- Serves as a resource for and about state and territory energy offices
- Advocates on behalf of the state and territory energy offices with Congress and the
 Administration
- Organized through a regional and committee structure

Images: rlmartin