

Savings from

STATE ENERGY PROGRAM

- **\$0.36–1.8 billion/year*** energy bill savings
- **2.6–13 billion kWh/year** electricity savings (≈ electricity use of 0.2–1 million homes)
- **5–24 million MMBtu/year** natural gas savings (≈ natural gas use of 100,000–600,000 homes)
- **1.6–7.9 MMT CO₂/year** emissions reduction (≈ emissions of 0.3–1.7 million cars)



The State Energy Program (SEP) helps every state advance energy efficiency, renewable energy, and energy emergency preparedness. For over 30 years, states have used SEP funding and technical assistance to train building owners in energy efficiency, develop clean energy policies and programs, reduce state and local government energy waste, create state energy emergency plans, and create public-private partnerships to finance efficiency investments.

How does it help?

States use SEP funding to help institutions, consumers, and businesses reduce energy waste and lower utility bills, save taxpayer dollars, meet air quality requirements, and help keep the lights on and fuel flowing during natural disasters and other emergencies. Each state designs its own program, but most provide a combination of information and financing to overcome key barriers to energy savings. Since 2000, the SEP has helped upgrade 20,000 buildings and educate 2 million people.

How much does it cost?

In 2017 the SEP was funded at \$50 million at the Department of Energy, primarily for formula grants. States must provide at least 20% matching funds, and most projects leverage much larger private investment—one study found the average match to SEP funds is over 10:1.

What is at stake?

If funding is cut, we estimate some or all of the following SEP benefits would be lost:

	2018–30	2018–40
Energy bill savings (present value)	\$0.27–1.9 billion	\$0.58–7.2 billion
Electricity savings	2.9–22 billion kWh	7.8–110 billion kWh

Just as important, the support for state energy emergency preparedness would be lost as well.

Is it cost effective?

The SEP leverages much larger state and private investment. The benefit-cost ratio of estimated savings generated by federal investment in SEP to the federal investment is between 2:1 and 31:1.

* Ranges in this fact sheet are due to different treatment of building energy codes savings. See Methodology and Sources in the collected fact sheets at aceee.org/portal/national-policy.

Energy Education in Tennessee



K-12 teachers discuss plug loads at an energy camp for educators. (Source: Tennessee Department of Environment & Conservation)

The Tennessee Office of Energy Programs runs energy education camps to train K-12 educators how to teach the science of energy and energy conservation. These teaching methods help students learn the Tennessee science curriculum standards through real-world situations, including collection and analysis of data to evaluate and improve the schools' energy use. Participants also receive Electric Circuits KitBooks, a Tennessee-made educational tool that merges a hands-on science kit featuring a built-in circuit board with textbook materials. In 2016 and 2017, 160 educators participated. Their comments included, "Opened my mind to alternative sources of energy as well as how to use energy more efficiently," and "You've really created a workshop that can be applied in the classroom."

Energy Efficiency Loans in Nebraska

The Nebraska Dollar and Energy Saving Loan program helps families and businesses invest in energy efficiency. This revolving loan fund run by the Nebraska Energy Office has invested more than \$300 million in over 28,000 projects since 1990. Over half of the funding is leveraged from private sources, combining market-rate private lending with zero-interest loans from the state, resulting in a low blended interest rate. It helps families buy ENERGY STAR appliances and HVAC equipment, businesses and schools improve lighting, and farms reduce waste in irrigation. Loan payments are returned to the fund to make more loans.