New Resources to Support Climate and Energy Planning with Energy Efficiency

Opportunity

Energy efficiency could save consumers and businesses approximately 1 billion MWh of electricity between 2013 and 2030,[1] providing cost savings, air quality improvements, economic development, increased energy system reliability, and other benefits across the United States.

Electricity Savings Potential from Energy Efficiency

State and local governments across the U.S. are increasingly focused on how clean energy can help them meet a variety of climate, energy, and environmental goals. An early step for most energy efficiency planning efforts involves identifying and quantifying savings opportunities, followed by understanding how to access this potential.

A recent Energy Department review[2] of nearly 80 energy efficiency potential studies published between 2007 and 2015 shows that the majority (60%) found an average potential electricity savings rate of 1 to 2.5% per year. This consistency across studies performed by diverse authors for both states and utilities suggests a high level of agreement about available energy efficiency potential.

The 10 states leading on energy efficiency are already achieving 1.25 to 3.5% in annual electricity savings.[3] These savings come from many types of energy efficiency programs and activities across residential, commercial, public, and industrial buildings. They

[1] U.S. Department of Energy, 2016, How energy efficiency programs can support state climate and energy planning.

[2] U.S. Department of Energy, 2016, Energy efficiency potential studies catalog.

[3] American Council for an Energy-Efficiency Economy (ACEEE), 2015, State Energy Efficiency Scorecard.

are from a mix of ratepayer-funded (typically utility-administered) programs, private sector initiatives, and state or local government-run programs.

New Resources for States

The Energy Department offers numerous new resources to help state and local governments and their stakeholders understand the wide range of energy efficiency opportunities that could support their climate and energy goals. Visit energy.gov/eere/slsc/EEopportunities to find:

Economic energy efficiency potential

Catalog of State-Level Energy Efficiency Potential Studies

Compilation of approximately 80 energy efficiency potential studies published by states, utilities, and non-governmental organizations since 2007 that identify potential electricity savings available within their jurisdictions.

Information that speaks to diverse audiences about energy efficiency opportunities and benefits

State and Local Energy Efficiency Action Network (SEE Action) Guide for States: Energy Efficiency as a Least-Cost Strategy to Reduce Greenhouse Gases and Air Pollution, and Meet Energy Needs in the Power Sector

A practical document that presents five established policy and program "pathways" to advance demand-side

energy efficiency. The guide presents case studies of successful regional, state, and local approaches to energy efficiency with sources for more information, resources to understand the range of expected savings from energy efficiency, and common evaluation, measurement, and verification (EM&V) protocols for documenting savings.

Overview Presentation: How Energy Efficiency Can Support State Climate and Energy Planning
Provides an overview of seven energy efficiency strategies that offer high impact opportunities, including building energy codes, city-led efficiency programs, combined heat and power, energy savings performance contracting, industrial energy efficiency, low income energy efficiency, and ratepayer-funded energy efficiency programs. Describes potential 2030 energy and carbon savings, program leads, how savings are achieved, EM&V resources, and relevant DOE technical assistance.

Pathways Presentations: How Specific Energy Efficiency Opportunities Can Support State Climate and Energy Planning
Provides states and their stakeholders with a short synopsis of features and benefits associated with including each type of energy efficiency opportunity in their climate and energy plans, including current activity at the national and state levels, best practices, energy savings examples, cost-effectiveness, EM&V, and DOE support. Opportunities include:

- Building energy codes
- City-led energy efficiency efforts
- Combined heat and power
- Energy savings performance contracting
- Industrial energy efficiency
- Ratepayer-funded energy efficiency program
- Low income energy efficiency program *(forthcoming)*

State and Local Solution Center
Provides hundreds of documents, tools, and templates to support successful, high-impact clean energy policies, programs, and projects --- from saving energy in our buildings to generating clean and reliable electricity to promoting sustainable transportation.

Technical resources to document the electricity savings from efficiency

SEE Action Evaluation, Measurement, and Verification (EM&V) Portal
An EM&V resource compendium for energy efficiency program administrators and project managers. Includes tools and approaches that can be applied nationwide, address EM&V consistency, and are recognized by the industry.

Technical assistance

Presentation: Accessing DOE's Many Energy Efficiency Resources and Technical Assistance
Briefly describes current DOE partnership programs and key resources (documents, tools), grouped by building sector, that can support program administrators and planners interested in pursuing energy efficiency.

State, Local, and Tribal Technical Assistance Gateway
Provides an access point to DOE's technical assistance activities in support of state and local officials.

More resources are being added regularly.
For more information, visit:
energy.gov/eere/slsc/EEopportunities
or contact:
stateandlocal@ee.doe.gov. ■