ENERGY EFFICIENCY & RENEWABLE ENERGY RESOURCES
FOR STATE & LOCAL LEADERS

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Energy efficiency and renewable energy are a [WIN-WIN] for state and local governments and K-12 schools.

Energy infrastructure investments create vibrant and healthy communities, provide a secure, reliable source of energy for homes and businesses, and produce well-paying, local jobs. As centers for American competitiveness, state and local governments are valued partners to the U.S. Department of Energy (DOE). Their energy innovations help power the nation's economy.

The Weatherization and Intergovernmental Programs (WIP) Office is part of the DOE **Office of Energy Efficiency and Renewable Energy** (EERE)'s "all of the above" national energy strategy to create greater energy affordability, security, and resiliency. WIP's mission is to **enable strategic investments**, including emerging technologies such as energy efficiency and renewable energy, and to **support innovative practices** across the U.S. by a wide range of government, community, and business stakeholders, in partnership with state and local organizations. WIP supports DOE's strategic objective to **lower energy bills while expanding cost-effective energy choices** for all Americans through the Weatherization Assistance Program (WAP), State Energy Program (SEP), Partnerships & Technical Assistance Team, and Strategic and Interagency Initiatives Team.

- WAP has provided weatherization to more than **7 million homes** and **annually supports 8,500 jobs** across the country. Through the weatherization improvements, these households save on average $283 every year.
- States use SEP funds to implement their energy security, economic development, resiliency, and emergency preparedness plans. Since 2010, SEP has supported states in **reducing energy waste** in more than 20,000 public buildings (125 million square feet) through energy efficiency upgrades.

WIP also helps state and local governments meet their energy goals by **developing tools and solutions to barriers**; convening and creating peer exchanges to showcase public sector leadership and effective private-public partnerships; and providing information from leading technical experts.

STATE AND LOCAL LEADERS
SUCCESSFULLY LEVERAGED RESOURCES TO

CATALYZE
$2 BILLION
IN PUBLIC-SECTOR ENERGY
EFFICIENCY INVESTMENTS VIA

**ENERGY SAVINGS PERFORMANCE
CONTRACTING (ESPC)**

ACHIEVE A COMMITMENT TO
UPGRADE
1.3 MILLION
STREET LIGHTS

**WITH AN EXPECTED ANNUAL
SAVINGS OF $48 MILLION**

DEMONSTRATED BEST PRACTICES FROM THE
ESPC TOOLKIT

https://betterbuildingssolutioncenter.energy.gov/espc/home

DEMONSTRATED BEST PRACTICES FROM THE
OUTDOOR LIGHTING TOOLKIT

https://betterbuildingssolutioncenter.energy.gov/outdoor-lighting

Visit the State and Local Solution Center to find resources with valuable lessons learned and replicable solutions.
ENERGY.GOV/EERE/SLSC

TAKE A CLOSER LOOK

SUSTAINABLE WASTEWATER INFRASTRUCTURE

TYPICAL MUNICIPAL ENERGY
BUDGETS SPEND 30-40%
ON WATER AND WASTEWATER UTILITIES

RETROFITS CAN SAVE UP TO 50%

LEARN MORE: energy.gov/eere/slsc/wastewater-infrastructure

BUILDING ENERGY USE BENCHMARKING

BENCHMARKED BUILDINGS SAVE
ON AVERAGE 2.4% ANNUALLY

POTENTIAL IMPACT TO STATE AND LOCAL GOVERNMENTS IS ~$700 MILLION IN SAVINGS PER YEAR

LEARN MORE: http://energy.gov/eere/slsc/benchmarking

LOWERING COSTS FOR LOW-TO-MODERATE INCOME HOUSEHOLDS

LOW-TO-MODERATE INCOME HOUSEHOLDS SPEND A LARGER
PERCENTAGE OF INCOME ON ENERGY BILLS

ENERGY EFFICIENCY MEASURES AND DISTRIBUTED RENEWABLES CAN REDUCE THE BURDEN

LEARN MORE: energy.gov/eere/slsc/low-moderate-income-communities

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Better Communities®
U.S. DEPARTMENT OF ENERGY

BETTER COMMUNITIES ALLIANCE (BCA)

provides local governments with integrated expertise,
resources, and peer-networking opportunities to help them
achieve their energy efficiency and renewable energy goals.

betterbuildingsinitiative.energy.gov/bca

REMOTE ALASKAN COMMUNITIES ENERGY EFFICIENCY (RACEE) COMPETITION

partners with Alaskan communities and native Alaskan
villages to develop effective tools to advance the use of
reliable, affordable, and energy efficient solutions that are
replicable throughout Alaska and other remote regions.

energy.gov/AlaskaCompetition

KEEP THE CONVERSATION GOING

Subscribe to Updates: energy.gov/eere/slsc/subscribe
Explore Resources: energy.gov/eere/slsc/explore
Contact Us: stateandlocal@ee.doe.gov

TAKE ACTION

The State and Local Solution Center provides resources to support the energy priorities of state and local governments. These resources and WIP's near-term activities produce almost immediate results, saving taxpayer dollars, making full use of domestic energy resources, boosting local economic development and job creation, cutting energy waste, improving energy independence and security, and furthering the development of energy infrastructure. The resources are organized into four lead-by-example actions public sector leaders can take:

DEVELOP AN ENERGY PLAN

The development of a long-term energy plan is a foundational step for improving and sustaining state and local energy performance. Effective planning can significantly increase capital and energy savings, job growth, and public health benefits.

AVAILABLE RESOURCES INCLUDE:

- **State-by-State Energy Efficiency Potential** – Shows economic energy efficiency potential in residential, commercial, and industrial buildings, plus a catalog of all state and utility energy efficiency potential studies.
- **Guide to Community Energy Strategic Planning** – Introduces a step-by-step process for creating a robust strategic energy plan and offers tools and tips to complete each step.
- **National Association of State Energy Offices (NASEO)'s Clearinghouse of Comprehensive State Energy Plans** – Provides energy plans from 40 states and D.C., and a report outlining energy planning processes, plan elements, and market implications.

DESIGN AND IMPLEMENT ENERGY PROGRAMS

State and local governments are uniquely positioned to identify and achieve their energy efficiency and renewable energy goals through programs that leverage their roles as both governing bodies and facility or infrastructure owners.

AVAILABLE RESOURCES INCLUDE:

- **TOOLKIT: Outdoor Lighting** – Leverages the Outdoor Lighting Accelerator (OLA) which garnered a commitment to upgrade 1.3 million street lights estimated to save partners $48 million/year. The Outdoor Lighting Toolkit is a compilation of the replicable models, tools and resources to help municipalities with street lighting conversion planning, decision-making, and implementation. **Example:** Outdoor Lighting Decision Tree, an interactive tool to help with decision-making.
- **Leveraging Federal Renewable Energy Tax Credits Guide** – Outlines the array of DOE resources available to state and local governments interested in leveraging federal tax credits for their renewable energy investments.
- **State Energy Program Competitive Implementation Models** – Detail state approaches to overcoming an energy barrier. Implementation models serve as "how-to" guides for other states who wish to replicate the programs that are achieving energy efficiency savings.

PAY FOR ENERGY INITIATIVES

An important component of a successful strategy is finding a way to pay for key energy initiatives. Many state and local governments have found ways to use both innovative financing mechanisms as well as traditional finance tools to support their energy goals. Some mechanisms include bonding tools, Energy Savings Performance Contracting (ESPC), Property Assessed Clean Energy (PACE), Qualified Energy Conservation Bonds (QECBs), and on-bill financing.

AVAILABLE RESOURCES INCLUDE:

* **TOOLKIT: Energy Savings Performance Contracting (ESPC)** – Capitalizes on the ESPC Accelerator that achieved public-sector energy efficiency investments of more than $2 billion in three years. The ESPC Toolkit provides decision-making resources that were developed in collaboration with state and local partners from the ESPC Accelerator. **Example:** Virtual Technical Assistant, an interactive resource that guides users through the ESPC process.

* **Best Practice Guidelines for Residential PACE Financing Programs** – Establishes best practices for state and local governments as they explore implementing residential PACE programs in their communities.

* **Current Practices in Efficiency Financing: An Overview of State and Local Governments** – Provides guidance to state and local governments as they determine which financing programs best suit their community's needs.

ACCESS AND USE ENERGY DATA

Whether for a single building, campus, or municipality, any energy efficiency improvement or energy data management program should include activities such as benchmarking, establishing an energy baseline, and verifying and measuring results to identify impacts and effectiveness. The foundation for all of these actions is having access to your energy data.

AVAILABLE RESOURCES INCLUDE:

* **TOOLKIT: Energy Data Access: A Blueprint for Action** – Showcases a collection of best practices that enabled cities, utilities, and other stakeholders to overcome whole-building data access barriers.

* **Benchmarking and Transparency Policy and Program Impact Evaluation Handbook** – Provides both a strategic planning framework and standard methodologies to determine the energy and non-energy benefits of benchmarking and transparency policies and programs.

* **Benefits of Evaluation, Measurement, and Verification** – Provides resources on the benefits of performing evaluation, measurement, and verification activities.

STATE AND LOCAL SOLUTION CENTER: **ENERGY.GOV/EERE/SLSC**

ENGAGING WITH EERE

The Office of Energy Efficiency and Renewable Energy (EERE) has an "all of the above" national energy strategy to create greater energy affordability, security, and resiliency.

Below are a few examples of EERE initiatives and resources for state and local governments in the areas of energy efficiency, renewable energy, and sustainable transportation. To learn more, visit the State and Local Solution Center.

RENEWABLE POWER

SOLAR
SolSmart spurs communities across the country to become more solar-friendly through a national recognition and no-cost technical assistance program.

GEOTHERMAL
Regulatory and Permitting Information Desktop Toolkit is a suite of tools to facilitate efficient permitting of new geothermal, solar, and transmission projects at the federal, state, and local levels.

WIND
WINDExchange is a hub designed to help communities weigh the benefits and costs of wind energy, understand the deployment process, and make wind development decisions.

WATER
Hydropower Vision is a first-of-its-kind comprehensive analysis to evaluate future pathways for hydropower in the United States, focused on continued technical evolution, increased energy market value, and environmental sustainability.

ENERGY-SAVING HOMES, BUILDINGS, & MANUFACTURING

BUILDINGS
Standard Energy Efficiency Data (SEED) Platform allows cities and states to streamline the complex process of managing and standardizing disparate building energy data. Users can combine, manage, clean, store, compare, and share data using this free open source database.

HOMES
Home Energy Score is a quick and simple tool to help homeowners and homebuyers gain useful information about a home's energy use.

ADVANCED MANUFACTURING
Industrial Assessment Centers conduct assessments and provide site-specific recommendations to small manufacturers on opportunities to improve productivity, reduce waste, and save energy.

SUSTAINABLE TRANSPORTATION

VEHICLES
Clean Cities supports public-private coalitions that partner with stakeholders—including state and local governments—that are dedicated to minimizing petroleum use in transportation.

BIOENERGY
Integrated Biorefineries Interactive Map showcases biorefineries by state at pilot, demonstration, and pioneer scales.

HYDROGEN AND FUEL CELLS
H2USA is a public-private collaboration focused on overcoming the barriers to hydrogen infrastructure and increasing the widespread adoption of fuel cell electric vehicles.

EERE CROSS-CUTTING INITIATIVES provide state and local decision-makers technical assistance and resources to lead innovation and achieve their energy efficiency and renewable energy priorities. For information about EERE Funding Opportunities, visit EERE Exchange.

SEE Action
STATE & LOCAL ENERGY EFFICIENCY ACTION NETWORK

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Cities-LEAP