

ENERGY EFFICIENCY AND RENEWABLE ENERGY RESOURCES

FOR STATE & LOCAL LEADERS



Clean energy is a WIN-WIN for states, local governments, and K-12 schools.

Clean energy technologies and infrastructure provide a reliable source of energy for homes and businesses, support underserved communities, mitigate the threat of climate change, and catalyze well-paying local jobs. As key decision makers for clean energy investments, state and local governments are valued partners to the U.S. Department of Energy (DOE). State and local leaders are an essential part of the national effort to build modern, sustainable infrastructure and deliver an equitable clean energy future.

The Weatherization and Intergovernmental Programs Office (WIP) is part of **DOE's Office of Energy Efficiency and Renewable Energy** (EERE) and supports DOE's mission to **achieve a 100% clean energy economy** by 2050, catalyze the **creation of American jobs**, and **advance energy justice** in underserved communities. WIP's mission is to enable strategic investments in energy efficiency and renewable energy technologies using innovative practices across the United States in partnership with a wide range of stakeholders, including state and local organizations and community-based nonprofits. WIP supports DOE's strategic objective to address the threat of climate change, create well-paying jobs, and address historic environmental injustices through the Weatherization Assistance Program (WAP) and State Energy Program (SEP). For example:

- WAP has weatherized more than 7 million homes and annually supports 8,500 jobs across the country. Through these
 weatherization improvements, households save an average of \$283 every year. Learn more at: energy.gov/eere/wap/
 weatherization-assistance-program.
- 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 48,070 public buildings** (218 million square feet) through energy efficiency upgrades. Learn more at: energy.gov/eere/wipo/state-energy-program.

WIP also helps states, local governments, and K-12 schools meet their clean energy goals by developing tools and solutions that address pervasive barriers, convening peer exchanges to showcase replicable models, and providing technical assistance and information from leading experts.

State and local leaders successfully leveraged resources to achieve:

WEATHERIZATION ASSISTANCE PROGRAM

\$9.9 million in first-year home energy savings

STATE ENERGY PROGRAM

\$4.50 in energy savings for every \$1 dollar of federal investment

FINANCING INVESTMENTS

ESPC Accelerator: \$2.1 billion

C-PACE Working Group: **\$70 million**

INFRASTRUCTURE SAVINGS

Sustainable Wastewater Infrastructure of the Future (SWIFt) Initiative:

131 million kWh

Outdoor Lighting
Accelerator:
\$48 million per year

BUILDINGS SAVINGS

Better Buildings Challenge Public-Sector Partners:
\$790 million; 83 trillion BTU; 5 million metric tons of CO₂ equivalent

Find more information and resources

State and Local Solution Center: energy.gov/eere/slsc/state-and-local-solution-center Better Buildings Solution Center: betterbuildingssolutioncenter.energy.gov/

Partner With Us

For a full list of available partnership opportunities, visit energy.gov/eere/slsc/partner-us or contact us at stateandlocal@ee.doe.gov.



Sustainable Wastewater Infrastructure of the Future (SWIFt) Initiative

- Wastewater treatment facility upgrades can reduce total facility energy consumption by up to 50%.
- Join Phase 2 of the SWIFt Initiative: participate in a SWIFt Toolkit training to achieve 5% short-term and 25% long-term energy savings or become a partner in the SWIFt Energy Recovery Accelerator to implement advanced energy technologies (e.g., renewable energy, resource recovery, and advanced data analytics).

Sign up or find resources: energy.gov/eere/slsc/wastewater-infrastructure.



Sustainable Corrections Infrastructure Partnership (SCIP) Accelerator

- With comprehensive energy efficiency upgrades, the public correctional sector can save \$710 million in energy and water costs annually.
- Join the SCIP Accelerator: strive for portfolio-wide energy savings of 20%, enhance facility resilience, and engage in workforce development.

Sign up or find resources: energy.gov/eere/slsc/public-correctional-facilities.



Technology Action Groups (TAGs) for State Energy Offices

- SEP is launching a multiyear initiative to facilitate collaboration among DOE and the 56 State Energy Offices (SEOs) of the states, territories, and the District of Columbia in two topic areas: (1) developing on-site energy systems at critical facilities and (2) Main Street revitalization.
- Participation in the TAGs is voluntary but will benefit states through enhanced coordination opportunities and the delivery of targeted technical assistance from DOE and the national laboratories.

Sign up or find more resources: energy.gov/eere/wipo/state-energy-program-guidance.



Weatherization Enhancement and Innovation

- Public Law 116-260 reauthorized DOE's Weatherization Assistance Program through 2025 and directed DOE to provide financial assistance for Weatherization Enhancement and Innovation through a competitive award process.
- DOE has reserved \$18.6 million for Enhancement and Innovation and plans to announce the opportunity in late 2021.

Sign up for notifications about future funding opportunities or find more resources: energy.gov/eere/wap/weatherization-assistance-program.

Explore DOE's Featured Toolkits

Toolkits include best practices and replicable models developed by and for state and local partners.

Energy Savings Performance Contracting (ESPC) Toolkit

Wastewater Energy Management Toolkit Clean Energy for Low-Income Communities Accelerator (CELICA) Toolkit

Outdoor Lighting Toolkit Commercial Property Assessed Clean Energy (C-PACE) Toolkit

Energy Efficiency Leadership

WIP strategically plans its technical assistance to showcase the clean energy leadership best practices and replicable models that help maximize energy and cost savings, combat climate change, and help achieve energy justice in communities. WIP helps states, local governments, and K-12 school districts:



Develop Plans and Programs

Craft an energy plan and/or create a program or initiative to achieve energy goals.

Resources include:

State and Local Planning for Energy (SLOPE) Platform

Integrates and delivers data on energy efficiency, renewable energy, and sustainable transportation into an easy-to-access online platform to enable data-driven state and local energy planning.

Resilience in the Public Sector

Features DOE and other federal tools and resources to support state and local governments with integrating resilient, clean energy technologies into public-sector facilities.

Hawaii's HAVEN Use Case

Offers a use case on two compatible energy system modeling tools: Engage and the Hawaii Advanced Visualization Environment Nexus (HAVEN). These tools, available to all states, helped Hawaii energy planners navigate complex energy system data; develop an economy-wide perspective on energy system transitions; and expand accessibility to more stakeholders.

WAP Home Energy Professionals Competency Models

Improves the quality of residential retrofits and increases energy savings in the residential market by supporting improved curricula, training, and certification of Home Energy Professionals.



Empower Organizations

Optimize workforce development, organizational expertise, and culture to achieve energy goals.

Resources include:

Building Your Energy Team

Features a list of national fellowship or partnership programs and energy management position description templates that states, local governments, and K-12 school districts can use to build their energy teams.

Rural K-12 School Facility Workforce Development and Training

Includes materials, trainings, and certification courses designed to provide building operators of rural K-12 school facilities with actionable steps to improve their energy efficiency knowledge and create comfortable, cost-saving, and energy-efficient schools.

State Energy Program Implementation Models

Describes state approaches to overcoming an energy barrier. Implementation models serve as "how-to" guides for other states who wish to replicate programs that are achieving energy savings. Implementation Models from Washington and North Carolina are available as part of a broader set of state resources.

WAP Trainings and Toolkits

Includes resources designed to enhance quality of work and service delivery such as the Standard Work Specifications (SWS) and Administrative Trainings. Both are consensus-based resources developed in partnership with weatherization providers and in accordance with industry best practices.

Find WIP Projects in Your State

The interactive WIP Project Map allows users to click each state and open a new web page summarizing that state's SEP and WAP projects, recently published WIP success stories, and voluntary partnerships including Better Buildings Initiatives. Learn more and find resources: energy.gov/eere/wipo/weatherization-and-intergovernmental-program-office-projects-map.

Advancing Equity

Energy and environmental justice are core to DOE's mission. DOE is working to address the disproportionate health, environmental, economic, and climate impacts on the communities too often left behind, including low-income rural and urban communities, and communities of color. DOE is dedicated to helping communities overcome barriers to energy justice by pairing meaningful community engagement with the latest science and technology through programs such as the Weatherization Assistance Program and the State Energy Program. DOE-developed resources, including the Low-Income Energy Affordability Data (LEAD) Tool and Clean Energy for Low-Income Communities Accelerator (CELICA) Toolkit, are available to help state and local partners make sure low-income communities benefit from energy efficiency and renewable energy. Learn more and find resources: energy.gov/eere/slsc/low-income-community-energy-solutions.



Establish Financing

Access and use financing mechanisms to achieve energy goals.

Resources include:

eProject eXpress

Helps state and local governments permanently track and preserve their ESPC project data, including measured and verified energy savings and other achieved benefits.

- ESPC for Small Projects
 - Offers strategies and case studies for implementing ESPC in smaller towns, rural counties, and small school districts to complete energy upgrades and maximize energy and cost savings.
- Achieving Energy Savings in Small- and Medium-Sized Public Facilities: A Strategic Approach to Prioritizing and Financing Provides best practices for state, local government, and K-12 school staff managing small and medium facilities so they can make more informed and strategic decisions about using financing to complete energy upgrades.
- C-PACE Toolkit

Compiles resources and tools developed by DOE, national labs, and others to address C-PACE program design and implementation barriers facing state and local governments.



Implement Data Management

Collect, analyze, monitor, and use energy and operational data to achieve energy goals.

Resources include:

- Energy Data Management Guide
 - Presents a seven-step framework for establishing a robust and sustainable energy data management program in the public sector that, once implemented, can lead to sustained energy savings of 2% a year.
- Benchmarking and Transparency:
 Resources for State and Local Governments
 Provides state and local leaders with streamlined access to key existing resources for developing and implementing high-impact building energy benchmarking and transparency programs in their jurisdictions.
- Smart Energy Analytics Campaign Toolkit
 Collects the best resources from DOE's Smart
 Energy Analytics Campaign to help facility
 owners and managers take advantage of savings
 opportunities and performance improvements from
 energy management and information systems
 (EMIS) and ongoing monitoring practices.
- Online Weatherization Assistant

Helps states and local weatherization agencies implement the Weatherization Assistance Program by providing four energy audit tools: the National Energy Audit Tool (NEAT), Manufactured Home Energy Audit (MHEA), Multifamily Tool for Energy Audits (MulTEA), and a Health and Safety Audit.

Engaging With EERE

EERE's mission is to accelerate the research, development, demonstration, and deployment of technologies and solutions to equitably transition America to net-zero greenhouse gas emissions economy-wide by no later than 2050, and ensure the clean energy economy benefits all Americans, creating good paying jobs for the American people—especially workers and communities impacted by the energy transition and those historically underserved by the energy system and overburdened by pollution.

EERE funding opportunities are available at the EERE Exchange: eere-exchange.energy.gov/. For other federal funding opportunities, visit grants.gov.

Find EERE career opportunities here: energy.gov/eere/eere-job-vacancies.

Examples of EERE initiatives and resources for state and local governments in the areas of energy efficiency, renewable energy, and sustainable transportation are shown below. To learn more, visit the State and Local Solution Center: energy.gov/eere/slsc/other-state-and-local-resources.

ENERGY EFFICIENCY



INTER-GOVERNMENTAL The WIP Project Map

enables users to explore recent

SEP and WAP projects, WIP success stories, and voluntary partnerships including Better Buildings Initiatives.

The Performance Contracting National Resource Center (PCNRC) centralizes DOE's best practice resources and solutions for ESPC in the Federal and municipal, university, school, and hospital (MUSH) markets. The goal of the PCNRC is to expand the use of ESPC nationwide.

COMMERCIAL BUILDINGS

The Standard Energy Efficiency Data Platform streamlines the process for cities and states to manage and standardize portfolio-scale building energy and attribute data. Users can leverage, combine, clean, store, analyze, and share building performance, audit, and other relevant data using this open-source database.

Technology Validation offers states the opportunity to host technology field validation demonstration projects in public-sector facilities to assess energy-savings technologies in real-world settings.



RESIDENTIAL HOMES

Home Improvement Expert Checklists help homeowners ensure their contractors get the job done right, which is essential to securing the energy savings homeowners invested in.



ADVANCED MANUFACTURING The Industrial Assessment

Centers Program provides smalland medium-sized manufacturers with no-cost energy assessments conducted by university-based teams of engineering students and faculty to identify opportunities to improve productivity and competitiveness, reduce waste, and save energy.

RENEWABLE POWER



SOLAR

SolSmart helps communities across

the country become "open for solar businesses" through no-cost technical assistance and national recognition.



GEOTHERMAL

The GeoVision Scenario Viewer is a powerful

suite of interactive tools to visualize deployment potential of geothermal electricity generation, district heating, and heat pumps at state and county levels through 2050.



WIND

WINDExchange provides resources to help communities weigh the

benefits and costs of wind energy and get data, analysis tools, and information about each step in the wind energy development process.



WATER

Hydropower Vision is a firstof-its-kind comprehensive

analysis to evaluate future pathways for hydropower in the United States. It is focused on continued technical evolution, increased energy market value, and environmental sustainability.

SUSTAINABLE TRANSPORTATION



VEHICLES

Clean Cities coalitions bring together cities and other key stakeholders to drive

the development and use of affordable, domestic transportation fuels, technologies, and energyefficient mobility solutions.



BIOENERGY Integrated Biorefineries

Interactive Map showcases

biorefineries by state at prepilot, pilot, demonstration, and pioneer scales.



HYDROGEN AND FUEL CELLS

H2@Scale envisions clean, affordable, and reliable production,

storage, transport, and use of hydrogen in the United States, adding value across sectors in the economy.

BETTER BUILDINGS is a DOE initiative designed to improve the lives of the American people by driving leadership in energy innovation. Through Better Buildings, DOE partners with leaders in the public and private sectors to make the nation's homes, commercial buildings, and industrial plants more energy efficient by accelerating investment and sharing of successful best practices. Visit betterbuildingssolutioncenter.energy.gov.





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