



Infrastructure Funding

# Progress Update Winter 2025

U.S. Department of Energy Office of the Under Secretary for Infrastructure



# Table of Contents

On Track to Put Federal Funding to Work for the American People .....	3
Building Out a More Resilient Grid .....	4
Securing Key U.S. Energy Supply Chains.....	5
Reducing Energy Costs through Building and Home Upgrades .....	6
Supercharging Industrial Innovation .....	7
Creating High-quality, Accessible Careers .....	8
Investing in Underserved Communities.....	9
State, Local, and Tribal Energy Partnerships .....	10
Building a Bridge to Bankability .....	11

## On Track to Put Federal Funding to Work for the American People



The U.S. Department of Energy's (DOE) Office of the Under Secretary for Infrastructure serves as the demonstration and deployment arm of the Department, tasked with stewarding billions in historic investments from the Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA) to renew our nation's infrastructure, rebuild domestic manufacturing, create millions of good-paying, high-quality jobs, address climate change, and increase American economic competitiveness.

### Key Progress Indicators to Date:

- ❖ DOE has committed **over \$170 billion** for grants and loans through funding made available by BIL and IRA.
- ❖ This represents **almost 2,000** competitively selected projects and **nearly 4,500** formula funding awardees.
- ❖ **Approximately \$107.5 billion** in conditionally committed or financially closed loans and loan guarantees.
- ❖ **Nearly \$104 billion** in matched private capital for competitively selected projects.

### Priorities of the Energy Act of 2020 and the Historic Infrastructure Funding

- ❖ Building Out a More Resilient Grid
- ❖ Securing Key U.S. Energy Supply Chains
- ❖ Reducing Energy Costs through Building and Home Upgrades
- ❖ Supercharging Industrial Innovation
- ❖ Creating High-quality, Accessible Careers
- ❖ Investing in Underserved Communities
- ❖ State, Local, and Tribal Energy Partnerships

## Building Out a More Resilient Grid

DOE is expanding affordable, reliable, resilient, and secure energy for communities throughout the United States. Investments made by DOE's **Grid Deployment Office (GDO)** will enable **67 gigawatts** of grid capacity and new resources, equivalent to powering **50 million homes** each year. GDO investments will help build out and upgrade more than **4,375 miles** of new transmission lines by 2031, **more than 11 times** the number of miles developed in 2021.

### To date:

- ❖ **Over \$36.9 billion** in public, private, and non-federal investments to advance a more affordable, reliable, and resilient grid, including substantial leverage of federal funding.
- ❖ **More than 1,120 projects** selected for **\$14.5 billion** in federal competitive funding and formula grants.
- ❖ Expected impact from the Grid Resilience and Innovation Partnerships program of increased grid resilience, reliability, and affordability for **90 million homes and business** across the country.

### Impact Spotlight

GDO has **invested in communities** to grow the economy, expand access to reliable energy, lower consumer energy bills, and create good-paying jobs. So far, **50 states, 264 Tribes, 5 territories, and the District of Columbia** are receiving federal support to launch grid resilience upgrades. Additional impacts GDO is creating for communities include:

- **Over \$500 million** invested directly in communities via jobs, scholarships and apprentice programs, and grants to community organizations
- Reducing power outage frequency and duration in communities across the country by **50% to 94%**



## Securing Key U.S. Energy Supply Chains



Through DOE's **Office of Manufacturing and Energy Supply Chains (MESC)**, the Department is catalyzing American manufacturing and reinvigorating domestic manufacturing while enhancing America's workforce. To date, MESC has announced a **combined \$39.7 billion** in federal and private investments to strengthen domestic energy supply chains and create or retain **over 47,000 high-quality jobs** across the nation.

### To date:

- ❖ **\$12 billion** to transform energy supply chains and support high-quality jobs
- ❖ **Over \$150 million** in direct investments in America's energy workforce
- ❖ **Over 80 energy manufacturing portfolio projects across 31 states** supporting batteries, buildings and energy efficiency, energy generation, critical minerals processing and recycling, grid, materials, and transportation
- ❖ **\$27.7 billion** catalyzed in private sector investment
- ❖ **147 workforce training programs** selected, including non-traditional, community colleges, and vocational schools
- ❖ Support for **over 2,400 students** in training annually
- ❖ IRS, Treasury and MESC allocated **\$10 billion** in tax credits under the **§ 48C Qualifying Advanced Energy Project Tax Credit** Program, including **\$4 billion** in allocations to projects located in designated § 48C energy communities, to approximately **250 projects** across more than **40 states**, with project investments **over \$44 billion dollars**.

## Impact Spotlight

### Daikin Domestic Inverter Heat Pump Manufacturing Project in Waller, Texas

**Daikin Comfort Technologies North America, Inc.** was selected for \$39 million to strategically retrofit a production line to begin a transition towards the production of energy efficient heat pump technology. Daikin will create approximately 275 jobs and actively promote skills training and education opportunities within the surrounding community. This is one of 13 selected projects via the MESC Defense Production Act Program to boost manufacturing of electric heat pumps, heat pump hot water heaters, and components.

## Reducing Energy Costs through Building and Home Upgrades

DOE has selected more than **1,352 competitively selected or formula funding eligible projects** for **approximately \$13.5 billion** to lower energy costs and increase efficiency through upgrades to homes, businesses, schools, and nonprofits – helping make these buildings better places to work, live, and learn.

### Program Highlight: AFFECT Program for Federal Facilities

DOE announced **\$250 million** in IIJA funding for **98 energy conservation and clean energy projects** at federal facilities around the world through the Assisting Federal Facilities with Energy Conservation Technologies (AFFECT) grant program. These projects enhance energy efficiency, reduce water usage, improve resiliency, and save taxpayer dollars. Managed by DOE's **Federal Energy Management Program (FEMP)**, the projects will implement advanced technologies, such as battery energy storage systems and microgrids.



Collectively, projects are expected to:

- ❖ **Leverage more than \$1.8 billion** in private sector investment.
- ❖ **Save taxpayers \$70.7 million** annually in energy and water costs while **saving the energy required to power 65,363 homes** annually.

### Program Highlight: Renew America's Schools Program

Managed by DOE's **Office of State and Community Energy Programs (SCEP)**, the Renew America's Schools Program provides funding to promote the implementation of clean energy improvements at K-12 public schools across the country. The program aims to help school communities make energy upgrades that will decrease energy use and costs, improve indoor air quality, and foster healthier learning environments.

To date, this program has invested **\$372.5 million** in public school districts across America, supporting capacity-building initiatives for energy management at more than two dozen local educational agencies and funding improvement projects at **more than 400 facilities across 36 states**, directly benefitting **approximately 197,000 students** and **14,000 teachers**.

### Program Highlight: Weatherization Assistance Program

Also, a **SCEP** managed program, DOE's **Weatherization Assistance Program (WAP)** reduces energy costs for **low-income households** by increasing the energy efficiency of their homes, while ensuring their health and safety. The program supports **8,500 jobs** and provides weatherization services to **approximately 35,000 homes** every year using annual DOE funds and is now serving more of the extensive number of eligible households with IIJA funding. Through weatherization improvements and upgrades, served households save on average **\$372 or more** every year according to a national evaluation of the program.

Over the past four years, WAP has served **over 123,000 families** with **over 259,000 people** directly impacted. Of that total, **39% (75,774)** were 60 years of age or older and **33% (63,751)** were children.

### Program Spotlight: Home Energy Rebates

DOE is making significant progress implementing the **\$8.8 billion** Home Energy Rebates programs, which support states, territories, and Tribes by putting money directly in the hands of American households and offer up to **\$1 billion in annual energy savings** with substantial savings to low-income households:

- ❖ **55 states and territories** have applied to DOE for funding to plan and launch their programs. **11 states and the District of Columbia** have launched programs with more in development.

## Supercharging Industrial Innovation

DOE's Office of Clean Energy Demonstrations (OCED) has partnered with entities throughout the country to drive U.S. industrial and clean energy competitiveness and facilitate long-term private sector investment.

### Industrial Decarbonization

DOE has selected **more than 30 projects across 20 states** for **up to \$6 billion** in IIJA and IRA funding to advance first-of-a-kind commercial-scale solutions for many critical industries (e.g., food and beverage, metals, iron and steel, glass, chemicals, and cement and concrete). These projects are expected to create **tens of thousands of jobs** and increase U.S. competitiveness while reducing the equivalent of more than **14 million metric tons of carbon dioxide (CO<sub>2</sub>)** emissions each year.



### Clean Hydrogen

**\$8.3 billion** has been announced for projects selected for award negotiations in support of a clean hydrogen economy, including **\$7 billion in IIJA funding for seven regional clean hydrogen hubs**, which are expected to produce millions of metric tons of hydrogen annually and create **tens of thousands of good-paying, high-quality jobs**. The IRA also created a new Hydrogen Production Tax Credit (45V) to incentivize the domestic production of clean hydrogen, making this emerging low-carbon fuel source more cost-competitive in these early stages and creating a bridge to economic viability.



### Carbon Capture and Storage

DOE has funded **25 projects** across **17 states** to build out infrastructure to store carbon dioxide in geologic formations, expanding carbon dioxide storage capacity by over **3.3 billion metric tons of carbon dioxide over 30 years**. This will help significantly reduce emissions from a wide array of industrial operations and power plants, as well as from legacy emissions in the atmosphere.



## Impact Spotlight

### Industrial Demonstrations Program: Mitchell Cement Plant Decarbonization Project – Mitchell, Indiana

The Mitchell Cement Plant Decarbonization Project, led by **Heidelberg Materials US, Inc.** (Heidelberg Materials), plans to construct and operate an integrated carbon capture, transport, and storage system at their newly modernized plant located in **Mitchell, Indiana**. This project would capture at least 95% of the carbon dioxide from one of the largest cement plants in the nation and store it in a geologic formation beneath the plant property. This project expects to prevent two million tons of carbon dioxide per year from entering the atmosphere and would demonstrate a pathway to decarbonize existing cement plants in the U.S. This project builds on the ongoing OCED awarded front-end engineering and design study and sequestration site development and represents one of the first carbon capture and storage projects for cement facilities in the nation.

This project plans to create **20-25 permanent jobs** and **1,000 construction jobs** at peak construction, and the plant is supported by multiple labor unions including the United Steelworkers.

## Creating High-quality, Accessible Careers

DOE investments are creating good-paying, high-quality jobs. It is projected these investments will create **hundreds of thousands of jobs** with fair wages and benefits, many of which will have the free and fair choice to collectively bargain and join a union.

To help ensure America's workers can access high-quality, good-paying jobs, DOE has made **\$325 million** available and helped companies create or retain nearly 50,000 good-paying jobs. Through initiatives like the Industrial Training and Assessment Center (ITAC) Program, DOE's MESC also invested \$100 million in workforce development, funding over 200 projects to help ensure America has the skilled labor force necessary to sustain our newly restored manufactured momentum.

### For example, new investments will:

- ❖ Create over **2,900 new high-quality jobs** and help ensure over **15,000 highly skilled union workers** are retained through funding to support the conversion of **11 shuttered or at-risk auto manufacturing and assembly facilities**.
- ❖ Create **1,700 high-quality, good-paying jobs** in disadvantaged communities through funding to boost manufacturing of electric heat pumps and key heat pump components.

### ITAC Implementation Spotlight

Bench Dogs is a **Denver, Pennsylvania-based** manufacturing company specializing in millwork, woodworking, and commercial cabinetry for major architectural and construction firms. As a custom manufacturer, Bench Dogs is committed to continuous improvement, quality, and precision—not only in their products but also in how they operate. With support from MESC's ITAC Implementation Grant, Bench Dogs was able to replace inefficient HVAC units with state-of-the-art systems, significantly improving energy efficiency and performance at their facility.

The upgrade has already resulted in significant energy savings, leading to a considerable decrease in Bench Dogs' HVAC utility costs and overall energy consumption. By reducing energy expenses, Bench Dogs will allocate more resources toward strategic hiring, entering new markets, and expanding their product line.





## Investing in Underserved Communities

DOE is ensuring the benefits of federal investments flow to communities that have been or are at risk of being left behind as the energy economy evolves. That includes former energy-producing communities as well as those who have too often borne the downsides of past energy systems without sharing in the economic upsides, and those in rural and remote areas that have been the most affected by the energy transition and/or face higher energy costs and poor electrical reliability. **Overall, \$1.15 billion in funding has been announced for energy communities and close to \$900 million for rural and remote communities.**

### Traditional Energy Producing Communities

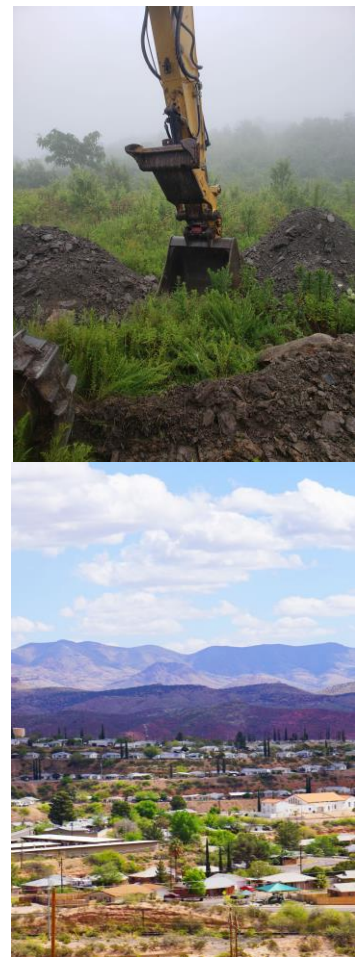
- ❖ **Five projects for \$475 million** were awarded by DOE's OCED to revitalize communities affected by coal mine or coal power plant closures focused on clean energy supply chains.
- ❖ **Fourteen projects for \$428 million** in investments were selected by DOE's MESAC to revitalize **15 communities** affected by coal mine or coal power plant closures and ensure these communities are a core part of the manufacturing needed to meet the energy technology needs of the future.

### Rural and Remote Communities

- ❖ **\$366 million** will fund **17 projects across 20 states and 30 Tribal Nations and communities** through DOE's Energy Improvements in Rural or Remote Areas (ERA) program to help them unlock benefits that come with the deployment of clean energy – lower energy costs, more jobs, and cleaner air.
- ❖ An additional, **\$78 million** grant program will fund **19 projects** to expand access to reliable and affordable energy in rural and remote communities. The grant program used a simplified grant application process, removed cost share requirements, offered technical assistance, and reduced reporting requirements to increase the accessibility of funds.

### Tribes

- ❖ **\$596 million** for Tribes made available through formula funding.



## Impact Spotlight

### Clean Energy Demonstration Program on Current and Former Mine Land: Nicholas County, West Virginia

A Model for Transition: Coal-to-Solar in West Virginia is a 250 MW, utility-scale solar PV project proposed at two former coal mines in **Nicholas County** that would produce enough clean electricity to power approximately 39,000 West Virginia homes. **Project Impacts:**

- ❖ Transform a former coal community that experienced significant job and population loss by creating new employment opportunities, building on the region's energy-producing legacy to lead the clean energy future
- ❖ Establish a national coal transition workforce program to enable displaced workers to build skills needed to access good-paying clean energy jobs
- ❖ Demonstrate an effective renewable energy project with significant community benefits through collaboration with the local decisionmakers and community college

## State, Local, and Tribal Clean Energy Partnerships

DOE's Office of State and Community Energy Programs (SCEP) supports formula funding and competitive grant opportunities for the State Energy Program and Energy Efficiency and Conservation Block Grant Program to support states, Tribes, and communities making progress towards their clean energy goals.

### Energy Efficiency and Conservation Block Grant Program (EECBG)

The EECBG Program funds a wide variety of clean energy projects and programs that align with communities' clean energy goals to meet their local needs. To date, DOE has awarded a total of **more than \$200 million** in EECBG Program formula funding to **443 communities**. Additionally, the EECBG program has provided technical assistance to **1,005 communities**.

### State Energy Program

DOE is expanding the long-standing State Energy Program to help every state and territory to manage their energy resources, accelerate gains in energy efficiency, and secure a reliable and resilient energy future. Through BIL investments, DOE will provide a total of **\$500 million** to the State Energy Program (SEP) and an additional **\$250 million** to establish Energy Efficiency Revolving Loan Funds (RLF) that provide low-cost capital to clean energy infrastructure projects. To date, SEP RLF has made **36 awards totaling over \$172.4 million**.



## Impact Spotlight

### Nashville EECBG Program Formula Award

**\$644,400 million** went to the **city of Nashville** through the IJA funded EECBG program to conduct an energy retrofit at the Metropolitan Courthouse, including replacing incandescent and CFL lamps with LEDs and improving the thermal boundary. They are already tracking their energy savings!

## Building a Bridge to Bankability

Through its Title 17 Clean Energy Financing Program and Advanced Technology Vehicles Manufacturing (ATVM) Loan Program, DOE's Loan Programs Office (LPO) has financed a portfolio of innovative energy projects and advanced technology vehicle manufacturing facilities across the United States. LPO's portfolio has supported job creation and is enhancing American competitiveness in the global economy.

### To date, the impacts created by LPO represent:

- ❖ Over 127 million MWh clean energy produced equivalent to over 11 million homes powered and 56 million metric tons of CO2 displaced.
- ❖ 21.5 million advanced technology vehicles produced equivalent to 26 million metric tons of CO2 displaced.
- ❖ Over 47,300 permanent jobs created.

LPO's investments include emerging clean energy technologies on the path to commercial liftoff such as VPPs and sustainable aviation fuels; domestic manufacturing investments to reshore and rebuild and compete with China, such as a loan guarantee to QCells for solar supply chain manufacturing; and grid modernization investments to help utilities provide affordable, reliable electricity to consumers while meeting rapid demand growth to support continued U.S. economic prosperity, such as conditional commitments to PG&E and Wisconsin Electric Power Company.

### Highlights from 2024 include the following:

- Enabling the first restart of an American nuclear powerplant via a **\$1.52 billion loan guarantee to Holtec Palisades**, supporting restoration and resumption of service of the 800-MW electric nuclear generating station in **Covert Township, Michigan**. This was also LPO's first loan guarantee under the Energy Infrastructure Reinvestment (EIR) title.
- Helping utilities modernize their grids and utilize renewable energy sources to meet load growth. For example, LPO provided a **\$15 billion conditional commitment** to PG&E to enable hydropower generation, battery storage, transmission upgrades, grid-enhancing technologies, and virtual power plants while ensuring 100% of interest savings flow to ratepayers.
- Bolstering Tribal energy sovereignty by closing the first Tribal Energy Financing Program loan to Viejas Microgrid for a solar-plus-storage microgrid on the Tribal lands of the Viejas Band of the Kumeyaay Indians near Alpine, California. The **\$72.8 million loan guarantee** will enable deployment of a 15-MW photovoltaic solar generation system and a 38-MWh long-duration energy storage (LDES) system.
- Strengthening **Puerto Rico's** energy resilience and improving affordability through Project Marahu, an **\$861.3 million loan guarantee** to finance construction of two solar photovoltaic (PV) farms equipped with battery storage and two standalone battery energy storage systems (BESS) in Puerto Rico. LPO also made a conditional commitment to Convergent for a **\$584.5 million loan guarantee** to finance PV and BESS in Puerto Rico.
- Broadening the U.S. manufacturing base through a first conditional commitment for EV manufacturing (rather than for vehicle component manufacturing) since 2010 in November. The **\$6.57 billion conditional commitment** to **Rivian** would support the development and construction of Project Horizon, an EV manufacturing facility located in **Stanton Springs North, Georgia**.
- Rebuilding the U.S. domestic solar manufacturing supply chain through a **\$1.45 billion closed loan guarantee** to **QCells**. The loan guarantee will fund the first fully integrated silicon-based solar manufacturing facility constructed in the United States in over a decade, helping address gaps in the domestic solar manufacturing supply chain.
- Accelerating deployment of high-voltage direct current (HVDC) transmission through a **\$4.9 billion conditional commitment** to **Grain Belt**. The loan guarantee would help finance a 2,500-megawatt transmission line to connect multiple regional grids, strengthen grid resilience, and deliver clean, reliable, and affordable power across the Midwest.