

Progress Update - Spring 2024

U.S. Department of Energy
Bipartisan Infrastructure Law and Inflation Reduction Act Funding

On Track to Supercharge the Clean Energy Economy

The U.S. Department of Energy's (DOE) Office of Infrastructure serves as the demonstration and deployment arm of the Department, tasked with stewarding billions in historic investments from the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA) to renew our nation's infrastructure, rebuild domestic manufacturing, create millions of good-paying jobs, address climate change, and increase American competitiveness. This quarterly progress update summarizes DOE's progress deploying investments for impact from Q2 of 2024.

BY THE NUMBERS

- **\$81.9B+** in funding opportunities announced for clean energy
- **\$46.4B+** in BIL and IRA funding for **900+** competitively selected projects and **4000+** formula funding awardees
- **100%** of BIL and IRA funding opportunities released
- **\$60B+** of private capital in matched federal dollars for selected projects
- **\$21B+** in closed or conditionally committed loans

Our Priorities

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



Building Out a More Resilient Grid

DOE is expanding affordable, reliable, resilient, and secure clean energy for all communities. DOE investments will help bring more than **35 GW** of renewable energy online and build out over **600 miles** of new transmission lines. New investments in grid resilience will help keep the lights on in **33 million** American homes.

To date:

- **\$13.3 billion** has been made available to build out a better grid, the largest-ever direct investment in critical grid infrastructure.
- 61 projects have been selected for **\$4.8 billion** in competitive funding.
- 48 states, Washington D.C., three territories, and 169 Tribes have received **\$800 million** of the announced \$1.5 billion available through Grid Resilience State/Tribal Formula Grants Programs for eligible entities.

Impact Spotlights

Connected Clean PowerCity Project Elk Grove, California

The Clean PowerCity Project was selected for \$50 million in federal funding through BIL for the Sacramento Municipal Utility District to work in partnership with the Wilton Rancheria Tribe of Miwok Indians to deploy an advanced distributed energy resource management system and modernize the utility's outage management. This is one of 34 selected projects under the Grid Deployment Office (GDO) Smart Grid Grants Program to increase the flexibility, efficiency, and reliability of the electric power system.

Louisiana Hubs for Energy Resilient Operations (HERO) Project Louisiana

The Louisiana Department of Natural Resources was selected for \$249 million in federal funding through BIL to create a shared framework to help solve energy security challenges and protect the residents of Louisiana from climate-related threats. This is one of eight selected projects under GDO's Grid Innovation Program to strengthen electric grid resilience and reliability across America.



Reducing Energy Costs through Building and Home Upgrades

DOE has made **\$13.7 billion** available for lowering energy costs and increasing efficiency through upgrades to homes, businesses, school, and nonprofits. **\$3.2 billion** is now available to retrofit thousands of low-incomes homes to make them healthier and more energy efficient while lowering utility bills. **\$8.8 billion** has been announced for DOE's Home Energy Rebates programs, which will put money directly in the hands of American households. These rebates are projected to save households up to **\$1 billion** on energy bills each year and support over **50,000 American jobs**.

Additionally, this includes:

- **\$180.5 million** selected for clean energy projects in schools across 22 states.
- **\$50 million** selected to support hundreds of nonprofits across the country planning and implementing energy efficiency projects.

Impact Spotlights

Charlo School District Charlo, Montana

The Charlo School District was selected for \$1.1 million in federal funding through BIL to replace outdated fuel oil and propane heating systems to improve indoor air quality, reduce greenhouse gas emissions, and create quality jobs for skilled local workers. This is one of 49 selected projects via the Office of State and Community Energy Programs' (SCEP) Renew America's Schools Program to perform energy improvements in high-need K-12 districts across the country.

Nonprofit Retrofits for Health and Housing (NORTHH) Juneau, Alaska

NORTHH was selected for \$3.8 million in federal funding through BIL to improve the energy efficiency and reduce annual operating costs of up to 25 nonprofit buildings in Alaska that serve lower to middle income and disadvantaged populations. This is one of nine selected projects via SCEP's Renew America's Nonprofits Program to support nonprofits across the country in planning and implementing energy efficiency projects.



Securing Key U.S. Clean Energy Supply Chains

DOE has made **\$13.4 billion** available to strengthen domestic clean energy supply chains. **\$1.9 billion** has been awarded to 15 projects that will build, retrofit, and expand commercial-scale battery processing and recycling facilities and demonstrate new manufacturing approaches. In addition, over **\$16 billion** in conditionally committed loans will, if finalized, support battery supply chain and critical materials process and recycling projects in seven states.

Additionally, this includes:

- Funding for forty-eight awarded and 16 selected new or upgraded manufacturing facilities to produce clean energy technologies across 33 states.
- **\$169 million** selected to boost manufacturing of electric heat pumps and key heat pump components at 15 sites across 13 states.

Impact Spotlights

Hydro Temp Corporation Pocahontas, Arkansas

Hydro Temp Corporation was selected for \$10.8 million in federal funding through BIL to fund a ten-fold increase in production of heat pumps in their manufacturing facility based in Pocahontas, Arkansas. This is one of 15 selected facilities across 13 states via the Office of Manufacturing and Energy Supply Chain's (MESC) Heat Pump Defense Production Act Program to fund manufacturers to efficiently develop more electric heat pump systems in the United States.

Anovion: Scaling the Domestic, U.S. Owned and Operated Anode Supply Chain for Synthetic Graphite Bainbridge, Georgia

Anovion was awarded \$117 million in federal funding through BIL to build new manufacturing capacity for lithium-ion batteries used in electric vehicles and critical energy storage applications, creating over 300 high-quality clean energy jobs. This is one of 21 projects across 12 states via MESC's Battery Processing and Manufacturing Grants to support the North American battery supply chain.



CO₂

Supercharging Clean Industrial Innovation

Industrial Decarbonization

DOE has announced **\$6 billion** for projects selected for award negotiations for 33 projects across 20 states that will advance first of a kind commercial scale solutions for many difficult-to-decarbonize industries. These projects are expected to reduce the equivalent of more than **14 million metric tons** of carbon dioxide (CO₂) emissions each year—equivalent to the annual emissions of 3 million gasoline-powered cars.

Clean Hydrogen

\$8.3 billion has been announced for projects selected for award negotiations in support of a clean hydrogen economy, including **\$7 billion** for seven clean hydrogen hubs, which are expected to produce **3 million metric tons** of hydrogen annually and create tens of thousands of good paying jobs.

Carbon Capture and Storage

\$4.5 billion has been made available with **\$700 million** selected for award negotiations to fund carbon capture and storage.¹ DOE has funded 25 projects in 17 states to build out infrastructure to store carbon dioxide in geologic storage, expanding carbon dioxide storage capacity by over **3.3 billion metric tons** of carbon dioxide over 30 years. This will significantly reduce emissions from industrial operations and power plants, as well as from legacy emissions in the atmosphere.

Impact Spotlights

Appalachian Hydrogen Hub

The Appalachian Hydrogen Hub (ARCH2) was selected to receive up to \$925 million in federal funding through BIL to produce low-cost clean hydrogen and permanently store the associated carbon emissions. The Hydrogen Hub will help to lead in the advancement of the hydrogen economy while reducing pollution that has long affected air quality in overburdened communities of Appalachia. This is one of seven hydrogen hubs selected by DOE to support development of networks of clean hydrogen producers, potential consumers, and connective infrastructure.

South Texas DAC Hub

The South Texas DAC Hub was selected to negotiation for federal funding through BIL to develop a Direct Air Capture Hub designed to remove up to 1 million metric tons of CO₂ annually with an associated saline geologic CO₂ storage site. The Regional Direct Air Capture Hubs program will demonstrate the capture, processing, delivery, and sequestration or end-use of captured carbon. The program will also create pathways to develop a regional carbon network to facilitate sequestration or carbon utilization.



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1. A portion of the funding for hydrogen and carbon capture will go to sectors other than industrial emissions reduction.



Creating High-quality, Accessible Careers

DOE investments are creating high-quality, good-paying jobs that will bolster the equitable clean energy transition. It is projected that these investments will create **hundreds of thousands of jobs** with fair wages and benefits and 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, **\$341 million** has been made available to build up a clean energy workforce.

Impact Spotlights

Fayetteville State University Building Training and Assessment Center (BTAC) Fayetteville, North Carolina

Fayetteville State University was selected for \$900,000 through BIL to work with the University of North Carolina at the Charlotte Industrial Assessment Center (IAC) and local community colleges to develop an energy management workforce and deliver energy management services for commercial buildings. The project team at Fayetteville State University, a Historically Black College/University (HBCU), will implement this BTAC in partnership with the state workforce development system, community-based employment support organizations, and local schools and businesses.

Rhode Island Industrial Assessment Center (IAC) Warwick, Rhode Island

The Rhode Island IAC was selected for \$1.8 million through BIL to help small and medium-sized manufacturers by providing no-cost energy assessments while training energy engineering and technician students at the Community College of Rhode Island (CCRI), a designated Hispanic-Serving Institution. CCRI students will serve as interns and participate as members of the faculty-led energy assessment teams.



Investing in Underserved Communities

DOE is ensuring the benefits of BIL and IRA investments flow to communities at risk of being left behind in the clean energy transition. That includes today's energy-producing communities as well as those who have too often borne the downsides of past energy systems without sharing in the economic upsides.

Traditional Energy Producing Communities

- **\$1.2 billion** has been made available for energy communities.
- Seven projects selected for **\$275 million** to revitalize communities affected by coal mine or coal power plant closures focused on clean energy supply chains.

Rural and Remote Communities

- **\$483 million** has been made available to specifically support rural and remote communities.
- **\$366 million** in funding for **17 community driven energy projects** that increase energy affordability and improve the resilience, reliability, and affordability of energy systems in communities across the country with 10,000 or fewer people.

Tribes

- **\$596 million** for Tribes through formula funding.
- An up to **\$72.8 million** partial loan guarantee, if finalized, will help finance the development of a solar-plus long-duration energy storage microgrid on Tribal lands.

Impact Spotlights

Lewis Ridge Project Bell County, Kentucky

The Lewis Ridge Project (Coal-to-Pumped Storage Hydropower) in Kentucky proposes to convert former coal mine land into a pumped-storage hydroelectric (PSH) facility. Due to the decline of the coal industry, Bell County saw nearly a quarter of the community relocate since 1970. As part of its Community Benefits Plan, this project anticipates creating close to 1,500 construction jobs and 30 operations jobs, adding millions in tax revenue to the community over the project's projected 100-year lifetime.

Alaskan Tribal Energy Sovereignty

Nulato, Huslia, Minto, Kaltag, Grayling, Anvik, Shageluk, Holy Cross, Alaska

This project aims to deploy high-penetration solar PV and battery storage systems into existing microgrids in eight remote tribal communities currently relying on diesel for 100% of their electrical production. All eight tribal communities are inaccessible by road and have limited seasonal accessibility by boat or small airplane, which leads to electricity costs that are more than four times higher than the national average.



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Bolstering Clean Energy Generation and Storage

DOE programs funded by BIL and IRA contain critical investments to reach net-zero emissions by 2050. To date, **\$4.7 billion** has been announced for projects selected to support clean energy generation and storage. In addition, a **\$3 billion** virtual power plant loan guarantee will provide loans for clean energy systems for approximately **75,000 to 115,000 homeowners** throughout the United States, including Puerto Rico.

This includes:

- **\$10 million** for eight selected projects to strengthen America's domestic solar supply chain.
- **\$23.6 million** selected for 15 projects to support research and development for deployment of offshore wind energy.
- **\$71.5 million** selected to support upgrading **46 hydroelectric facilities** and **\$16.7 million** to accelerate expansion of pumped storage and other hydropower technologies. This includes three projects to test innovative pumped storage hydropower technologies, currently the largest type of bulk energy storage in the U.S. with more than **20 GW** of capacity deployed.

Impact Spotlights

Children's Hospital Resilient Grid with Energy Storage (CHARGES) Madera, California

The CHARGES project was selected for award negotiations as part of the Long-Duration Energy Storage (LDES) Demonstrations program. This project plans to install a battery system for the Valley Children's Hospital in Madera, California, a key demonstration of critical power backup for the acute care hospital, and will provide resiliency in a region that is increasingly at-risk for significant power outages. This is one of 15 projects across 17 states funded through OCED's LDES Demonstrations program to expand America's global leadership in energy storage.

LongPath Technologies, Inc.

Colorado, Kansas, Oklahoma, New Mexico, North Dakota, Texas

DOE's Loan Programs Office (LPO) announced a conditional commitment to LongPath Technologies, Inc. for an up to \$189 million loan guarantee to support a real-time methane emissions monitoring network. LongPath's Active Emissions Overwatch System project aims to cover 25 million acres of land with large-area remote methane monitors. If finalized, the network is expected to prevent methane emissions equivalent to at least 6 million tons of carbon dioxide annually—that is like taking 1.3 million gasoline powered vehicles off the road—by enabling subscribers to identify and respond to methane leaks quickly.



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State, Local, and Tribal Clean Energy Partnerships

\$868 million has been made available 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. As of February 2024, DOE has awarded a total of **\$118.4 million** in EECBG Program formula funding to **134 communities**.

State Energy Program

DOE is expanding the long-standing State Energy Program to help every state and territory manage their energy resources and accelerate gains in energy efficiency and add more clean energy onto the grid. Through BIL investments, DOE is providing an additional **\$750 million** to the State Energy Program.

Impact Spotlight

Clean Energy Districts of Iowa: Empowering Local Governments and Reducing Energy Burdens in Eastern Iowa and Southwest Wisconsin

\$1.1 million will go to Decorah, Iowa and the Clean Energy Districts of Iowa through BIL to provide vital technical assistance for local governments and schools across eight counties in Eastern Iowa and Southwest Wisconsin. The initiative will accelerate the clean energy transition and reduce energy burden with a focus on serving low-income households in 26 rural and Tribal communities, reaching 180 low-income households. This is one of 12 awards through the Energy Efficiency and Conservation Block Grant (EECBG) Program designed to assist states, local governments, and Tribes in implementing strategies to reduce energy use, to reduce fossil fuel emissions, and to improve energy efficiency.