

# ADVANCED ENERGY INFRASTRUCTURE

A ROADMAP FOR IMPLEMENTATION

By Advanced Energy Economy

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# ABOUT ADVANCED ENERGY ECONOMY

Advanced Energy Economy (AEE) is a national association of businesses that are making the energy we use secure, clean, and affordable. We work to accelerate the move to 100% clean energy and electrified transportation in the U.S. Advanced energy encompasses a broad range of products and services that constitute the best available technologies for meeting energy needs today and tomorrow. These include energy efficiency, demand response, energy storage, solar, wind, hydro, nuclear, electric vehicles, biofuels, and smart grid. AEE represents more than 100 companies in the \$238 billion U.S. advanced energy industry, which employs 3.2 million U.S. workers.



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# ADVANCED ENERGY INFRASTRUCTURE: A ROADMAP FOR STATE IMPLEMENTATION

## Overview

With the passage of the Infrastructure Investment and Jobs Act (IIJA), funds will be available to state, local, and tribal governments for a variety of advanced energy infrastructure. The bill provides funding to address some of state and local policymakers' top energy priorities, such as ensuring a reliable electric grid, lowering energy bills, and supporting advanced energy jobs. This document outlines key federal funding streams for supporting these priorities, as well as information about how to access the funds.

## ELECTRIFYING TRANSPORTATION

### Electric School Buses

The IIJA establishes a \$5 billion grant and rebate program for the replacement of existing school buses with clean and zero-emission buses, with 50% of the funds reserved for zero-emission buses and 50% for clean and zero-emission buses.

- **Relevant agency:** Environmental Protection Agency (EPA)
- **Eligible to receive funds:** States, tribal governments, local governments, nonprofit school transportation associations, or eligible contractors
- **Type of funding:** Competitive grant (or rebate) funding
- **Match requirement:** Awards can be for up to 100% of costs

### Electric Transit Buses

The IIJA provides \$234 billion for Bus and Bus Facilities Competitive Grants and \$375 million for the Low- and No-Emissions (Low-No) Program and specifies that entities receiving funding for projects related to zero-emission vehicles must submit a zero-emission fleet transition plan.

- **Relevant agency:** Department of Transportation (DOT)
- **Eligible to receive funds:** States, tribal governments, local governments
- **Type of funding:** Competitive grant funding
- **Match requirement:** 15% non-federal match for buses and 10% non-federal match for other equipment or facilities for the Low-No Program, 20% non-federal match otherwise



## Electric Vehicle (EV) Charging Infrastructure

The IIJA provides \$2.5 billion for installation of “alternative fueling” infrastructure, including EV charging infrastructure, along interstate highways and public roads and in other publicly accessible locations.

- **Relevant agency:** DOT
- **Eligible to receive funds:** States and territories, tribal governments, metropolitan planning organizations, local governments, public transportation authorities (such as port authorities), or a group of any of the above
- **Type of funding:** Competitive grant funding
- **Match requirement:** 20% non-federal match

## EV Charging Infrastructure

The IIJA establishes a \$5 billion grant program, the National Electric Vehicle Formula Program, that provides funding to states for deploying EV charging infrastructure.

- **Relevant agency:** DOT
- **Eligible to receive funds:** States and territories
- **Type of funding:** Formula funding
- **Match requirement:** 20% non-federal match

## EV Charging Infrastructure

The IIJA creates a new Carbon Reduction Program as part of the state apportionment

from the Highway Trust Fund. The funding is for projects that will reduce transportation emissions, including installation of EV charging infrastructure.

- **Relevant agency:** DOT
- **Eligible to receive funds:** States and territories
- **Type of funding:** Formula funding
- **Match requirement:** 20% non-federal match

## ENERGY EFFICIENCY

### State Energy Program

The IIJA provides \$500 million for the program, which provides state energy offices with funds to enhance energy security, advance state-led energy initiatives, and maximize the benefits of energy efficiency. The program also adds transportation electrification and transmission and distribution planning to the list of mandatory features to be included in state energy conservation plans. Learn more [here](#).

- **Relevant agency:** Department of Energy (DOE)
- **Eligible to receive funds:** States and territories
- **Type of funding:** Formula funding, additional competitive grant funding may also be available
- **Match requirement:** 20% non-federal match



## Energy Efficiency Revolving Loan Capitalization Grants

The IIJA establishes a \$250 million program to provide capitalization grants to states for commercial and residential energy audits. 40% of the funding is distributed to all states, and 60% is prioritized for the 15 states with the highest per capita energy consumption.

- ⦿ **Relevant agency:** DOE
- ⦿ **Eligible to receive funds:** States and territories
- ⦿ **Type of funding:** Base formula funding, additional funding can be competitively applied for
- ⦿ **Match requirement:** No match required

## Energy Efficiency and Conservation Block Grant Program

The IIJA provides \$550 million to develop, promote, implement, and manage energy efficiency, renewable energy, and zero-emission transportation projects. Learn more about the program [here](#).

- ⦿ **Relevant agency:** DOE
- ⦿ **Eligible to receive funds:** States and territories, tribal governments, local governments
- ⦿ **Type of funding:** Formula funding, additional competitive grant funding may also be available
- ⦿ **Match requirement:** None specified

## Weatherization Assistance Program

The IIJA provides \$3.5 billion to reduce energy costs for low-income households by increasing the energy efficiency of their homes. Learn more about the program [here](#).

- ⦿ **Relevant agency:** DOE
- ⦿ **Eligible to receive funds:** States, who disburse to community action agencies
- ⦿ **Type of funding:** Formula funding
- ⦿ **Match requirement:** No match required

## Energy Efficient Schools

The IIJA provides \$500 million for energy efficiency and renewable energy improvements in public schools.

- ⦿ **Relevant agency:** DOE
- ⦿ **Eligible to receive funds:** Local educational agencies in partnership with individual schools or organizations that can assist with energy improvements
- ⦿ **Type of funding:** Competitive grant funding
- ⦿ **Match requirement:** None specified

## Energy Efficient Nonprofits

The IIJA provides \$50 million for nonprofit organizations to make energy efficiency improvements.

- ⦿ **Relevant agency:** DOE
- ⦿ **Eligible to receive funds:** 501(c)(3) nonprofit organizations
- ⦿ **Type of funding:** Competitive grant funding
- ⦿ **Match requirement:** None specified



## Building Codes

The IIJA provides \$225 million to implement updated building codes. Suggested building performance standards from the Institute for Market Transformation can be found [here](#).

- ◉ **Relevant agency:** DOE
- ◉ **Eligible to receive funds:** States and tribal governments, either alone or in partnership with local building code agencies, codes and standards developers, relevant professional organizations, local and utility energy efficiency programs, or consumer advocates
- ◉ **Type of funding:** Competitive grant funding
- ◉ **Match requirement:** None specified

## Energy Efficiency Workforce

The IIJA provides \$40 million under the State Energy Program for states to train energy auditors.

- ◉ **Relevant agency:** DOE
- ◉ **Eligible to receive funds:** States and territories
- ◉ **Type of funding:** Competitive grant funding
- ◉ **Match requirement:** Likely 20% non-federal match

## Energy Efficiency Workforce

The IIJA provides \$10 million for energy efficiency career skills training.

- ◉ **Relevant agency:** DOE
- ◉ **Eligible to receive funds:** Nonprofit partnerships that include public or private employers and labor organizations, and may also include entities such as state and local veterans' agencies, small businesses, workforce investment boards, or educational institutions
- ◉ **Type of funding:** Competitive grant funding
- ◉ **Match requirement:** 50% of the total cost of the project

## GRID INFRASTRUCTURE

### Grid Resilience

The IIJA provides \$5 billion to reduce the likelihood of "disruptive events", defined as "an event in which operations of the electric grid are disrupted, preventively shut off, or cannot operate safely due to extreme weather, wildfire, or a natural disaster."

- ◉ **Relevant agency:** DOE
- ◉ **Eligible to receive funds:** States, tribal governments, grid operators, electricity generators, storage operators, transmission owners or operators, distribution providers, or fuel suppliers
- ◉ **Type of funding:** Formula funding for states and tribal governments, otherwise competitive grant funding
- ◉ **Match requirement:** 15% non-federal match for states and tribal governments, otherwise 100%





## Grid Resilience

The IIJA provides \$5 billion to demonstrate innovative approaches to transmission, storage, and distribution infrastructure that enhance resilience, or new approaches to regional grid resilience.

- ⦿ **Relevant agency:** DOE
- ⦿ **Eligible to receive funds:** States (either alone or in partnership), tribal governments, local governments, or public utility commissions
- ⦿ **Type of funding:** Competitive grant funding
- ⦿ **Match requirement:** 50% of the total cost of the project

## Rural Energy Infrastructure

The IIJA provides \$1 billion to improve the cost-effectiveness of energy systems, site or upgrade transmission and distribution lines, reduce emissions from energy generation, develop microgrids, and increase energy efficiency in rural areas.

- ⦿ **Relevant agency:** DOE
- ⦿ **Eligible to receive funds:** Cities, towns, or unincorporated areas with fewer than 10,000 people
- ⦿ **Type of funding:** Not specified
- ⦿ **Match requirement:** Not specified

## Smart Grid

The IIJA provides \$3 billion for the Smart Grid Investment Matching Grant Program.

- ⦿ **Relevant agency:** DOE
- ⦿ **Eligible to receive funds:** Electric utilities
- ⦿ **Type of funding:** Competitive grant funding
- ⦿ **Match requirement:** No less than 50% of the total cost of the project

## Transmission

The IIJA creates a \$2.5 billion revolving loan fund for new electric power transmission lines and amends section 216 of the Federal Power Act, relating to the designation of National Interest Electric Transmission Corridors.

- ⦿ **Relevant agency:** DOE
- ⦿ **Eligible to receive funds:** Transmission developers or microgrid owners and operators
- ⦿ **Type of funding:** Competitive loans or capacity contracts
- ⦿ **Match requirement:** Not applicable

## Demand Response and EV Charging Rates

The IIJA creates new requirements under section 111(d) of the Public Utility Regulatory Policies Act (PURPA) to 1) promote the use of demand response and demand flexibility, and 2) promote transportation electrification, including through establishing affordable rates for EV charging.



# ADVANCED ENERGY MANUFACTURING

## Battery Manufacturing

The IIJA provides \$3 billion for battery material processing grants and \$3 billion for battery manufacturing and recycling grants.

- **Relevant agency:** DOE
- **Eligible to receive funds:** States, local governments, institutions of higher education, nonprofit and for-profit private entities, National Laboratories, or a group of any of the above
- **Type of funding:** Competitive grant funding
- **Match requirement:** 50% of the total cost of the project

## Battery Recycling

The IIJA provides \$50 million for state and local battery collection, recycling, and reprocessing programs.

- **Relevant agency:** DOE
- **Eligible to receive funds:** States and local governments
- **Type of funding:** Competitive grant funding
- **Match requirement:** 50% of the total cost of the project

## Manufacturing Facilities

The IIJA provides \$750 million to support advanced energy manufacturing facilities or reduce emissions at manufacturing facilities,

provided the facility receiving support is located in or adjacent to a census tract with a recent coal mine or coal plant closure.

- **Relevant agency:** DOE
- **Eligible to receive funds:** Manufacturing firms with gross annual sales less than \$100 million, fewer than 500 employees at the plant site, and annual energy bills between \$100,000 and \$2,500,000
- **Type of funding:** Competitive grant funding
- **Match requirement:** Not specified

## Industrial Energy Savings

The IIJA provides \$150 million for Industrial Research and Assessment Centers and \$10 million for Building, Training, and Assessment Centers. These centers, located at institutions of higher education, provide assessments of small- and medium-sized manufacturing plant sites and of buildings to identify opportunities for energy savings, including in partnership with energy service providers.

## Department of Energy Loan Programs

The IIJA makes domestic production of critical minerals eligible under the DOE Loan Program and medium- and heavy-duty electric vehicles eligible under the Advanced Technology Vehicle Manufacturing Program.



# WAGE AND CONTENT REQUIREMENTS

## Prevailing Wage

Projects funded by programs described in the Energy Efficiency, Grid Infrastructure, and Advanced Energy Manufacturing sections of this document are subject to prevailing wage requirements in accordance with the Davis-Bacon Act.

## Build America, Buy America

Infrastructure projects supported by Federal financial assistance must use iron, steel, manufactured products, and/or construction materials produced in the United States. "Infrastructure" includes transportation, water, utilities, broadband, electrical transmission, and buildings.

