

ALASKA ENERGY AUTHORITY

# FEDERAL FUNDING OPPORTUNITIES

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June 27, 2023



Safe,  
Reliable, and  
Affordable  
Energy  
Solutions

# Acronyms: IRA and IIJA



ACRONYM	MEANING	ACRONYM	MEANING
BIL	Bipartisan Infrastructure Law	GDO	Grid Deployment Office
CCS	Carbon Capture and Sequestration	GHGRF	Greenhouse Gas Reduction Fund
CFI	Charging and Fueling Infrastructure	GRIP	Grid Resilience and Innovation Partnerships
DOE	Department of Energy	IIJA	Infrastructure Investment and Jobs Act
DOT	Department of Transportation	IRA	Inflation Reduction Act
EA	Energy Audits	ITC	Investment Tax Credit
EEE	Energy Efficient Equipment	NEVI	National Electric Vehicle Infrastructure
EECBG	Energy Efficiency Conservation Block Grant	New ERA	Empowering Rural America (USDA Program)
EI	Energy Efficiency Improvements	PACE	Powering Affordable Clean Energy (USDA Program)
EERLF	Energy Efficiency Revolving Loan Fund	PTC	Production Tax Credit
EIRA	Energy Improvements in Remote Areas	RES	Renewable Energy Systems
EPA	Environmental Protection Agency	RUS	Rural Utilities Service
EV	Electric Vehicle	USDA	United States Department of Agriculture
FHWA	Federal Highway Administration	VTO	Vehicle Technology Office



# INFRASTRUCTURE INVESTMENT AND JOBS ACT

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# Home Energy and High Efficiency Rebate Allocations

AEA collaborating with the Alaska Housing Financing Corporation to distribute Alaska's allocation of \$74 Million

## Home Efficiency Rebates

- Rebates for energy efficiency retrofits range from \$2,000-\$4,000 for individual households and up to \$400,000 for multifamily buildings.
- Grants to states to provide rebates for home retrofits.
- Up to \$2,000 for retrofits reducing energy use by 20% or more, and up to \$4,000 for retrofits saving 35% or more.
- Maximum rebates double retrofits of low-and moderate-income homes.
- **Alaska's Allocation is \$37.4 million**
- **No State match is required**

## Home Electrification and Appliance Rebates

- Develop a high efficiency electric home rebate program.
- Include means testing and will provide 50% of the cost for incomes 80 to 150% of area median income, and 100% of the cost for incomes 80% of area medium income and below and similar tiers for multifamily buildings.
- Includes a \$14,000 cap per household, with an \$8,000 cap for heat pump costs, \$1,750 for a heat pump water heater, and \$4,000 for panel/service upgrade.
- Other eligible rebates include electric stoves, clothes dryers, and insulation/air sealing measures.
- **Alaska's Allocation is \$37.1 million**
- **No State match is required**

# Statewide Grid Resilience and Reliability IJA Formula Grant Program, 40101(d)



Per IJA section 40101(a)(1),<sup>8</sup> a disruptive event is 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.”

- These federal formula grant funds will provide **\$60 million** to Alaska over five years, including **\$22.2 Million** for the first two years allocation, to catalyze projects that **increase grid resilience against disruptive events**.
- Resilience measures include but are not limited to:
  - Relocating or reconductoring powerlines
  - Improvements to make the grid resistant to extreme weather
  - Increasing fire resistant components
  - Integrating distributed energy resources like microgrids and energy storage
- Formula-based funding requires a **15% state match** and a **33% small utility match**.

# State of Alaska Electric Vehicle (EV) Infrastructure Implementation Plan

AEA and the Alaska Department of Transportation & Public Facilities (DOT&PF), submitted their **State of Alaska EV Infrastructure Implementation Plan (The Plan)** to the United States Joint Office of Energy and Transportation, as required by the Infrastructure Investment and Jobs Act's (IIJA) NEVI Formula Program.

- On September 27, 2022, **The Plan was approved.** The announcement unlocks **\$19 million** to expand EV charging infrastructure in Alaska.
- Over the **next five years, AEA anticipates receiving \$52 million.** Funds will be received by DOT&PF and administered by AEA.
- AEA is seeking public comment on its update to the NEVI plan, deadline to submit public comments in July 17, 2023



## State of Alaska Electric Vehicle Infrastructure Implementation Plan



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# Black Rapids Training Site (BRTS) Defense Community Infrastructure Pilot Program

AEA partnered with Golden Valley Electric Cooperative (GVEA) to apply for this grant from the Office of Local Defense Community Cooperation under the Defense Community Infrastructure Pilot Program.

**Federal Receipt Authority of \$12.7 Million. No State match is required.**

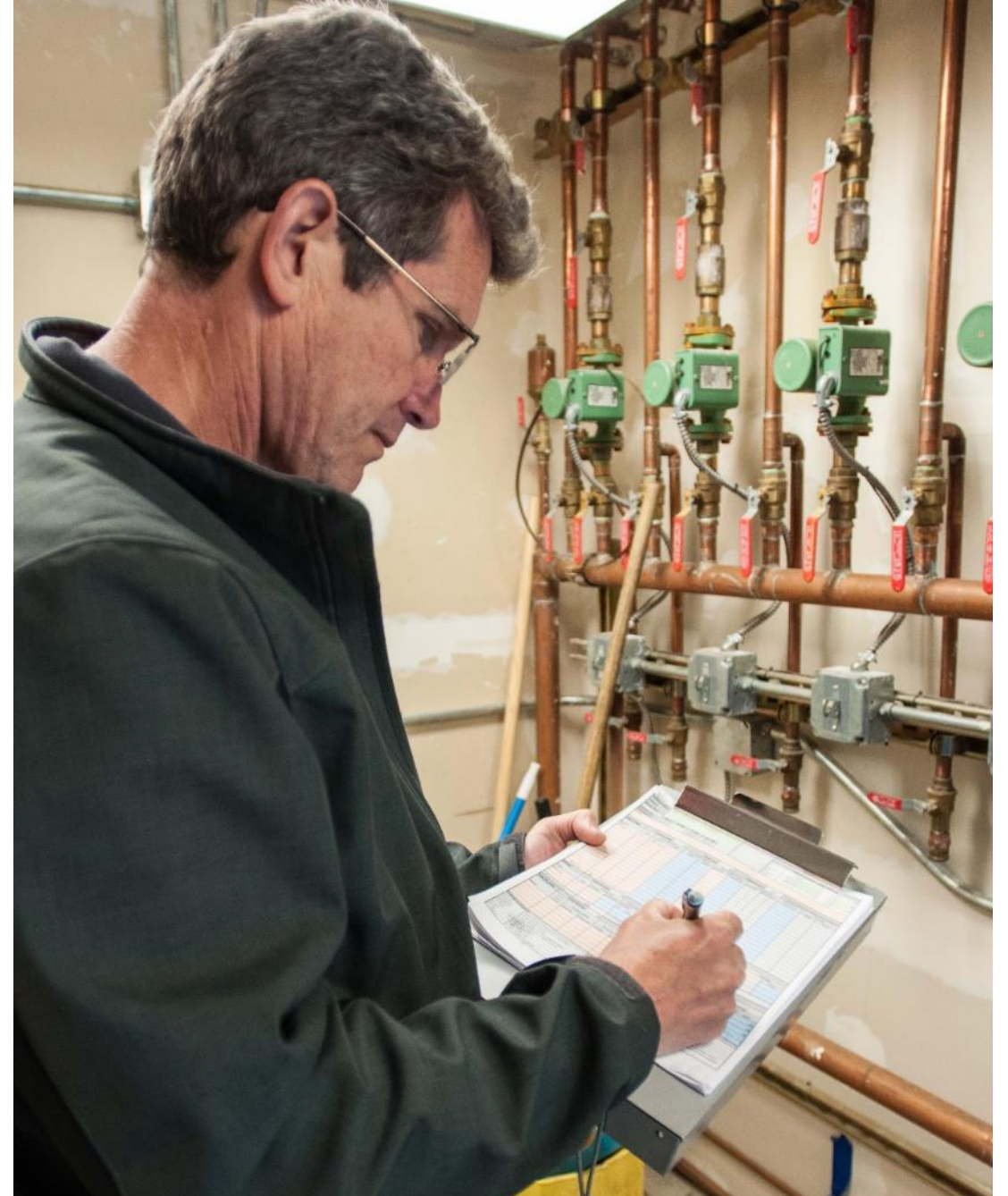
GVEA will use the funds to extend an transmission line 34 miles along the Richardson Highway to BTRS. Currently, BTRS is powered by three diesel generators that are nearing the end of their useful lives. This extension will improve long-term sustainability and reliability for BTRS by tying them into GVEA's power grid.



# Energy Efficiency Revolving Loan Fund (EERLF)

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- The Infrastructure Investment and Jobs Act provides funding for a new **Energy Efficiency Revolving Loan Fund Program (EERLF)**.
- This funding will be used to **establish and capitalize a revolving loan fund**, under which the State shall provide loans and grants for residential energy audits, upgrades, and retrofits to increase energy efficiency, physical conform and air quality of existing building infrastructure.
- In collaboration with the Alaska Housing Finance Corporation, **AEA will administer the EERLF** commercial loans/grants program.
- **Alaska's Allocation is \$4,569,780**





# State Energy Program (SEP)

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- **AEA is developing activities for deployment that include:**
  - Statewide Energy Plan
  - State Energy Security Plan
  - Renewable Energy Fund and Village Energy Efficiency Program construction projects
  - IJJA Required Grid Planning
  - Training and Workforce Development
- **In collaboration with Alaska Housing Finance Corporation:**
  - Update AkWarm Energy Modeling Software to the requirements imposed by the Inflation Reduction Act.
  - Modernize Alaska Retrofit Information Systems database to accept the AkWarm modifications.
- **Alaska's Allocation is \$2,865,930**

# EV Charging Equipment Competitive

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- AEA was awarded funding in the amount of **\$1,670,00** through the Office of Energy Efficiency and Renewable Energy Vehicle Technologies Office, **Area of Interest 9: Community-Driven Electric Vehicle Charging (EV) Deployment in Underserved Communities.**
- **The goals of this project are to:**
  1. increase access to vehicle electrification in multiple rural and underserved communities across Alaska;
  2. demonstrate the benefits of EVs to key decision-makers and the broader public to accelerate clean transportation transition; and
  3. support the development of community charging equipment.
- **A 20% match is required, shared by AEA and project partners.**

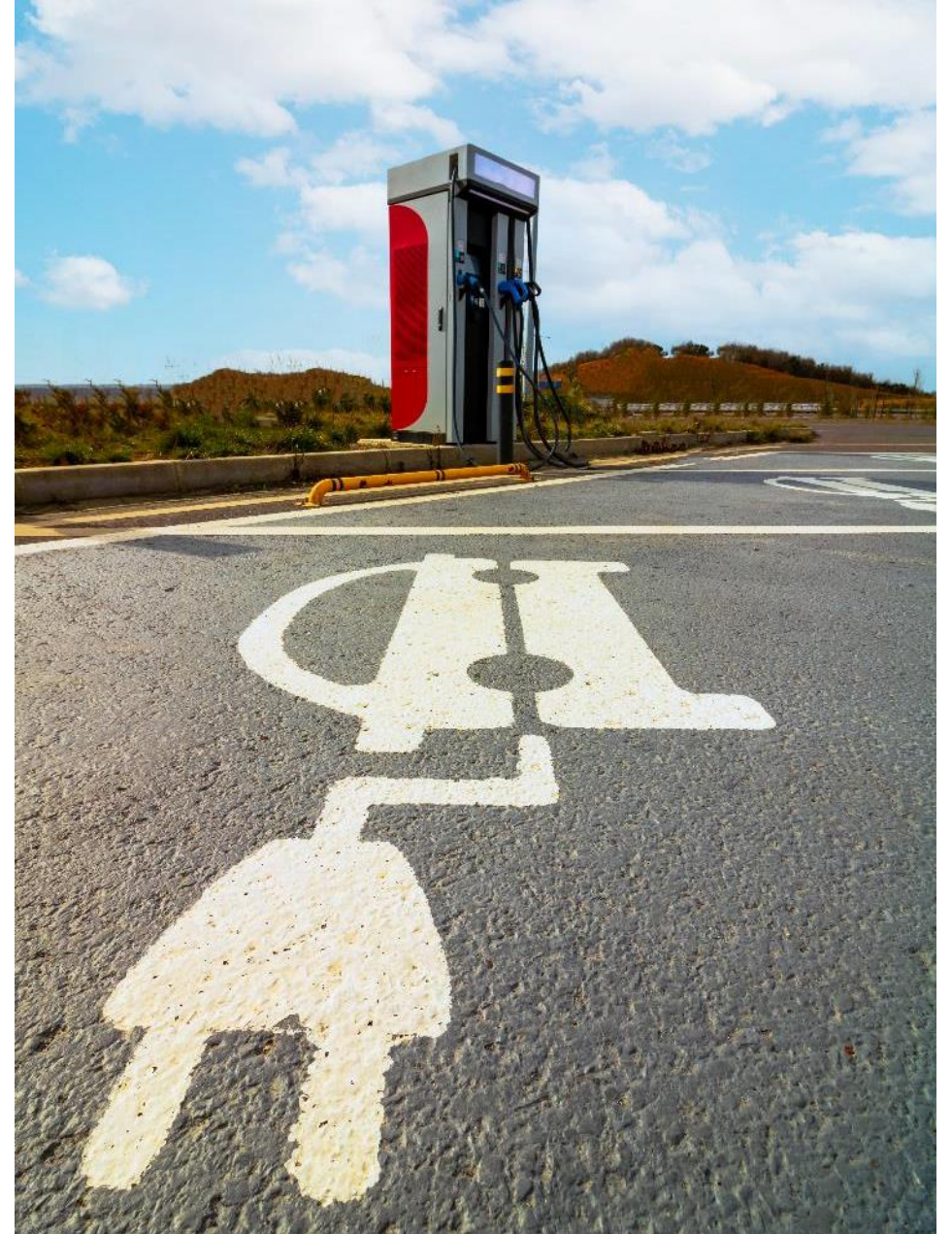
AEA is working with partners across Alaska to support vehicle electrification in rural, low-income, and Tribal communities to ensure an equitable and just transition to clean transportation.



# Energy Efficiency Conservation Block Grant (EECBG)

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- 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.
- **Formula Funding:**
  - States
  - Local Governments
  - Tribes
- **State Application Deadline is July 31, 2023**
- **Local and Tribal Government Deadline is January 31, 2024**
- **Alaska's Allocation is \$1,627,450**
- **No Match Required**



# IJA Competitive: Grid Resilience and Innovation Partnerships (GRIP)

To enhance the power system's resilience to extreme weather and climate change, the Grid Deployment Office is administering a \$10.5 billion GRIP program under the Bipartisan Infrastructure Law.



## 1) Railbelt Backbone Reconstruction Project

\$100 Million\*  
(Requested of DOE;  
submitted April 5, 2023)



## 2) Battery Energy Storage/HVDC Coordinated Control

\$16 Million\*  
(Requested of DOE;  
submitted March 16, 2023)



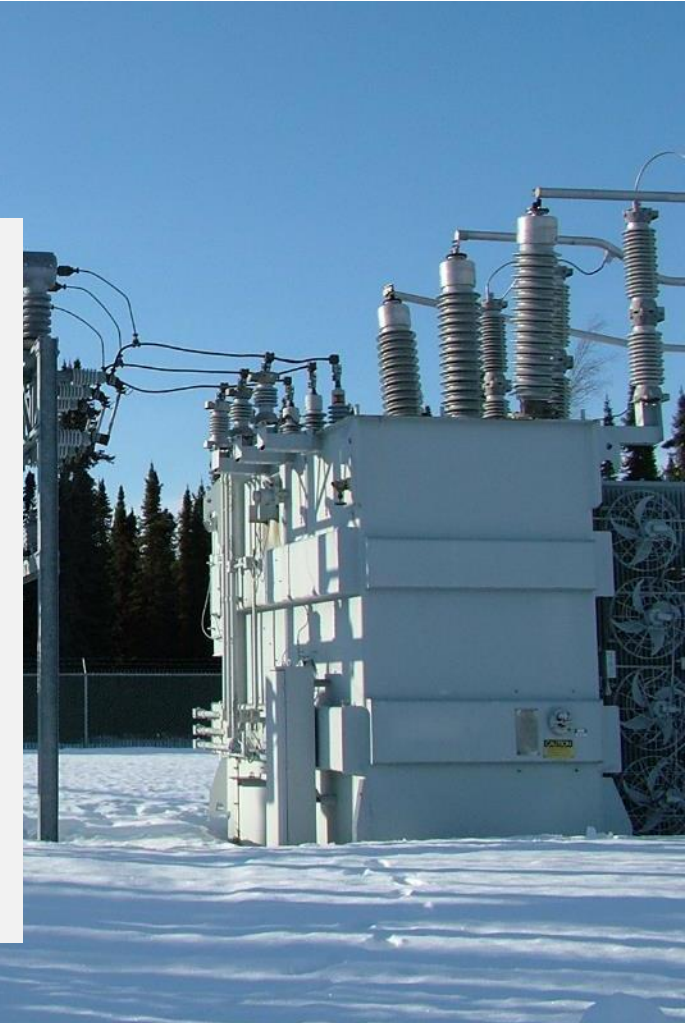
## 3) Railbelt Innovation Resiliency Project

\$411 Million\*  
(Requested of DOE;  
submitted May 18, 2023)



## 3) Rural Alaska Microgrid Transformation

\$250 Million\*  
(Requested of DOE;  
submitted May 18, 2023)




\*All four GRIP programs are in application phase.



# Energy Improvements in Rural and Remote Areas (ERA) – Fixed Grant Award Program

- **ERA will improve the resilience, reliability, and** affordability of energy systems in communities across the country with 10,000 or fewer people.
- **Competitive Grant Program DE-FOA-0003045**
  - 10 – 100 awards between \$500,000 and \$5 million
  - No match required
- **Eligible Applicants:**
  - Institutions of Higher Education
  - Non-Profit Organizations
  - For Profit Entities
  - Local Governmental Entities
  - Tribal Nations
- **Pre-application deadline is July 13, 2023**
- **Full applications are due on October 12, 2023**

The background of the slide is a teal-tinted, halftone-style image of the Alaska State Capitol building. The building features a prominent central dome topped with a statue, and a portico with classical columns on the left side. The text 'INFLATION REDUCTION ACT' is overlaid in large, white, bold, sans-serif capital letters. A thin white horizontal line is positioned below the text.

# INFLATION REDUCTION ACT

# IRA: Clean Energy National Funding Opportunities

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- **Rural Energy Assistance** – \$12 Billion managed by the Department of Agriculture
- **Clean Energy Business Loans** – \$14 Billion managed by the Department of Energy
- **Home Energy Rebates** – \$8.8 Billion managed by the Department of Energy
- **Energy Grid** – \$9 Billion managed by the Department of Energy
- **Energy Code Assistance** – \$1 Billion managed by the Department of Energy
- **Greenhouse Gas Reduction Fund** – \$27 Billion managed by the Environmental Protection Agency
- **Climate Pollution Reduction Grants** – \$5 Billion managed by the Environmental Protection Agency
- **Clean Heavy Duty Vehicles & Clean Ports** – \$4 Billion managed by the Environmental Protection Agency
- **Environmental & Climate Justice Block Grants** – \$3 Billion managed by the Environmental Protection Agency
- **Methane Emissions Reduction Program** – \$1.5 Billion managed by the Environmental Protection Agency
- **Energy Tax Credits** – estimated \$270 Billion managed the Internal Revenue Service
- **Other Programs** – \$20 Billion managed by various agencies including HUD and NOAA

# IRA: New USDA Programs in Rural Utilities Service

	PACE	NEW ERA
<b>Eligible Activities</b>	<ul style="list-style-type: none"> <li>Renewable power generation from: wind, solar, geothermal, hydropower, or biomass</li> <li>Storage for or with renewable energy</li> <li>The project must produce renewable energy for resale and serve at least 50 percent rural customers</li> </ul>	<ul style="list-style-type: none"> <li>Purchase of clean energy systems, the construction of clean energy systems, or the purchase of clean energy power</li> <li>Renewable enabling technologies including storage and distributed clean energy generation as part of a clean energy generation project</li> <li>Zero-emission technologies, including carbon capture and storage (CCS), nuclear, as well as utility-controlled demand side management systems</li> <li>Transmission and renewable generation energy efficiency measures</li> </ul>
<b>Eligible Entities</b>	<ul style="list-style-type: none"> <li>Corporations; States and territories along with their subdivisions and agencies; Municipalities; Utility districts; Cooperatives; Nonprofits; Indian Tribes; Alaska Native, regional, or village corporations; Limited Liability Companies or other for-profit entities.</li> <li>One application from each eligible entity.</li> </ul>	<ul style="list-style-type: none"> <li>Electric cooperatives that are current or former RUS or REA borrowers, electric cooperatives serving predominantly rural areas, or wholly or jointly owned subsidiaries</li> </ul>
<b>Funding</b>	<ul style="list-style-type: none"> <li>Loans at the municipal rate with partial forgiveness:               <ul style="list-style-type: none"> <li>Up to 20 percent for eligible applicants</li> <li>Up to 40 percent for energy dependent or disadvantaged communities</li> <li>Up to 60 percent for Tribal communities, Alaskan villages, Alaska Native Corporations, Hawaiian homelands, US territories, or compact states</li> </ul> </li> <li>PACE program size: \$1 billion</li> </ul>	<ul style="list-style-type: none"> <li>Grants up to 25 percent of total project cost</li> <li>Loans to finance clean energy projects at the Treasury rate or interest rates as low as two percent</li> <li>Zero percent interest refinancing available for stranded assets to invest in eligible projects or for projects serving distressed, disadvantaged, or energy dependent communities</li> <li>New ERA program size: \$9.7 billion</li> </ul>
<b>Deadlines</b>	<ul style="list-style-type: none"> <li>Accepting Letters of Interest July 10-September 29, 2023</li> <li>Not competitive and processed on a rolling basis</li> </ul>	<ul style="list-style-type: none"> <li>Accepting Letters of Interest between July 31-August 31, 2023</li> <li>Competitive scoring based on the greatest reduction in greenhouse gas emissions</li> </ul>



# IRA: Other Potential State Clean Energy Opportunities



## **Assistance for Latest & Zero Building Energy Code Adoption (Competitive grant)**

- \$1 billion to assist states and local governments that have the authority to adopt building codes to adopt codes for residential buildings that meet or exceed the 2021 International Energy Conservation Code; and/or for commercial buildings to meet or exceed the ANSI/ASHRAE/IES Standard 90.1-2019.

## **Greenhouse Gas Reduction Fund (Competitive grant)**

- \$27 billion to assist states, tribes, and municipalities to mobilize financing for clean energy and climate projects that reduce greenhouse gas emissions, emphasis on projects that benefit low-income and disadvantaged communities.

## **Clean Heavy Duty Vehicles (Competitive grant)**

- \$1 billion to provide grants, rebates, and contract support to replace heavy duty vehicles with zero emission alternatives for states, local governments, tribes, and non-profit school associations.

## **Climate Pollution Reduction Fund (Competitive grant)**

- \$5 billion to assist states, air pollution control agencies, tribes, and local governments in developing and implementing strong, local climate pollution reduction strategies.

# IRA: Clean Energy Tax Incentives

- **Investment Tax Credit (48/48E)** – 6% base credit for qualifying renewable energy projects.
- **Production Tax Credit (45/45Y)** – 0.3 cents/kW credit inflation adjusted for energy generated by renewable energy sources.
- **Energy Efficient Commercial Buildings Deduction (179D)** – \$0.50 to \$1.00 per square foot.
- **Energy Efficient Home Improvement Credit (25C)** – up to 30% for improvements in residential homes.
- **Residential Clean Energy Credit (25D)** – credit of up to 30% of cost of clean energy equipment.
- **Clean Vehicle Credit (30D/25E/45W)** – up to \$7,500 for purchasing new qualifying vehicles and up to \$4,000 for used vehicle. Up to 30% credit of the cost of replacing diesel and gas powered commercial vehicles.
- **Alternative Fuel Refueling Property Credit (30C)** – credit for refueling and charging property in low income and rural areas. Eligible for direct pay option for tax exempt agencies.
- **Carbon Oxide Sequestration (45Q)** – \$17/metric ton of carbon dioxide captured and sequestered; \$12/metric ton for carbon dioxide that is injected for enhanced oil recovery or utilized.
- **Clean Hydrogen Production Credit (45V)** – \$0.60/kg multiplied by the applicable percentage.

For more tax incentives, visit AEA's website at <https://www.akenergyauthority.org/ira>

# IRA: Bonus Tax Credits

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- **Prevailing Wage and Registered Apprenticeship**
  - 5 times base credit
  - 1MW threshold
- **Domestic Content**
  - Up to 10 percentage points for ITC and 10 percent for PTC
  - Elective pay requirement for projects larger than 1 MW that begin construction in 2024 or later
- **Energy Communities**
  - Up to 10 percentage points for ITC and 10 percent for PTC
  - Updated map released for 2023 energy communities
- **Low Income Communities (ITC for Solar and Wind Only)**
  - 10 percentage points for low income communities or on tribal land
  - 20 percentage points for projects that are part of certain federally subsidized housing programs or that offer at least 50 percent of the financial benefits of the electricity produced to low-income households.
  - This bonus amount will require an application by the taxpayer, with a cumulative total of 1.8 GW of direct current capacity per year available for allocation.

## What is Elective Pay?

Elective pay allows applicable entities that would otherwise be unable to claim these credits because they do not owe federal income tax, to benefit from some clean energy tax credits by treating the amount of the credit as a payment of tax and refunding any resulting overpayment.



## Elective Pay Eligibility

- Exempt Organizations 501(a) and 115
- State or political subdivision
- Territories and agencies
- Tribal governments and subdivisions
- Alaska Native Corporations
- Rural Electric Cooperatives
- **Partnerships are excluded**

## Eligible Tax Credits

- Energy Credit (48)
- Clean Electricity Investment Credit (48E)
- Renewable Electricity Production Credit (45)
- Clean Electricity Production Credit (45Y)
- Commercial Clean Vehicle Credit (45W)
- Zero-emission Nuclear Power Production (45U)
- Advanced Manufacturing Production (45X)
- Clean Hydrogen Production Credit (45V)
- Clean Fuel Production Credit (45Z)
- Carbon Oxide Sequestration Credit (45Q)
- Vehicle Refueling / Recharging Property (30C)
- Qualifying Advanced Energy Project (48C)

AEA provides  
**energy solutions**  
to meet the  
unique needs of  
Alaska's rural  
and urban  
communities.

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