

ALASKA ENERGY AUTHORITY

# ALASKA ENERGY AUTHORITY: DECEMBER 2023 UPDATE

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Wind Working Group  
December 1, 2023



Safe,  
Reliable, and  
Affordable  
Energy  
Solutions

# Renewable Energy Fund Round 16

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- **AEA received 28 applications totaling \$37.8 million**
  - 4 Wind Projects, \$4.0 million
  - 2 Biomass, \$2.6 million
  - 8 Hydro, \$8.5 million
  - 9 Solar, \$17 million
  - 3 Solar, \$5.4 million
  - 1 Natural Gas (CHP), \$150,000
  
- **Schedule:**
  - Technical Review: Complete
  - Project Ranking: December 2023
    - Cost of Energy, Match, Readiness, Public Benefits
  - REFAC Meeting: January 9, 2024
  - Recommendations to Legislature: End January 2024
  - Final Legislative Decision/Appropriation: June 2024



# National Electric Vehicle Infrastructure (NEVI) Program

The National Electric Vehicle Infrastructure (NEVI) Formula Program is a \$5 billion program established by the Bipartisan Infrastructure Law (BIL) to build a national network of 500,000 electric vehicle (EV) charging stations by 2030 along federally designated Alternative Fuel Corridors (AFCs).



Create an interconnected network



New FHWA Federal Aid program apportioned to state DOT's



Designated Alternative Fuel Corridors (AFC's)



Annual Implementation Plan Required





**Build out Alaska's  
Alternative Fuel Corridor**



**Build out Alaska's Highway  
and Marine Highway Systems**

**As funding allows** ▶



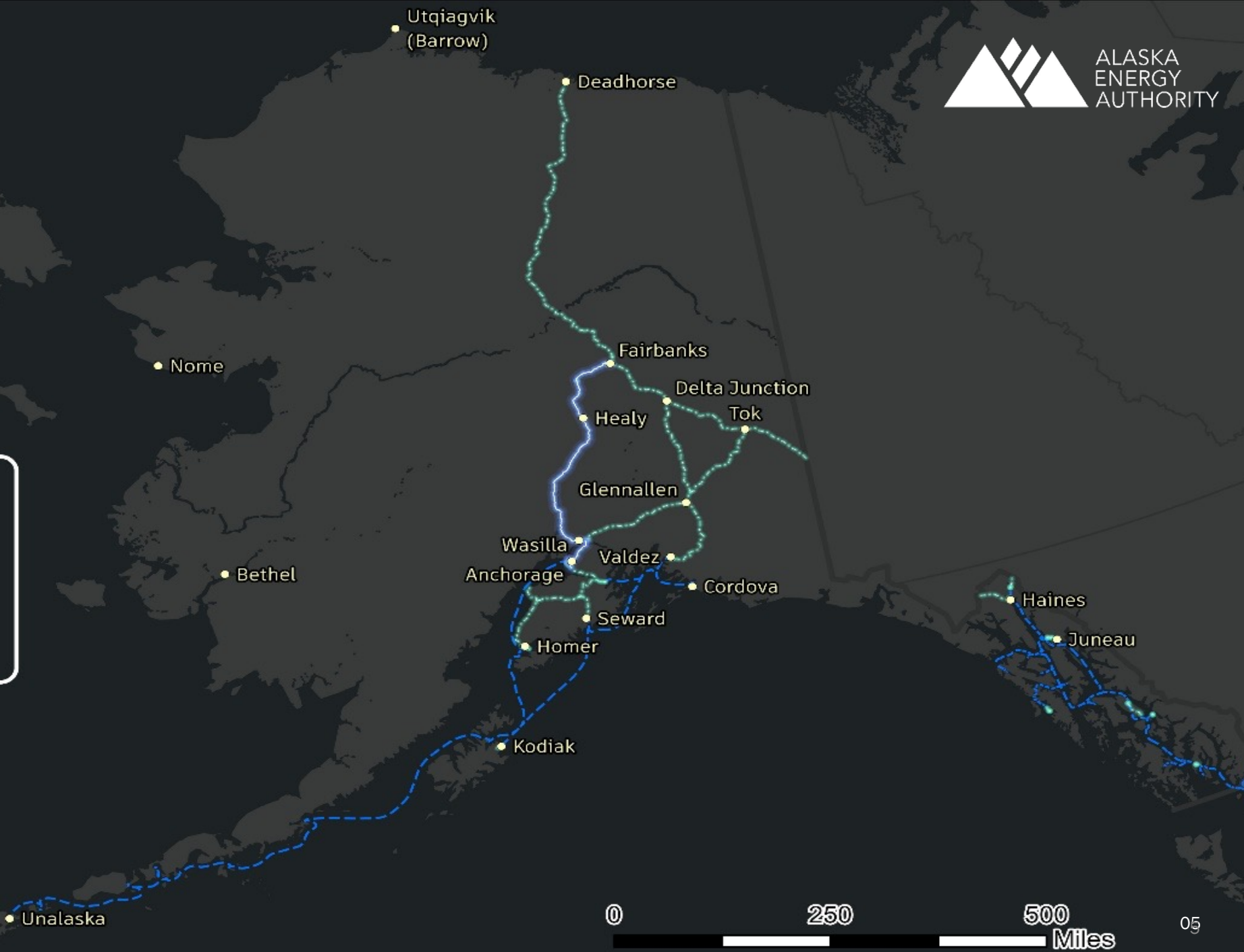
**Install Charging Stations  
in Rural Hub Communities**



**Urban and  
"Destination" Locations**



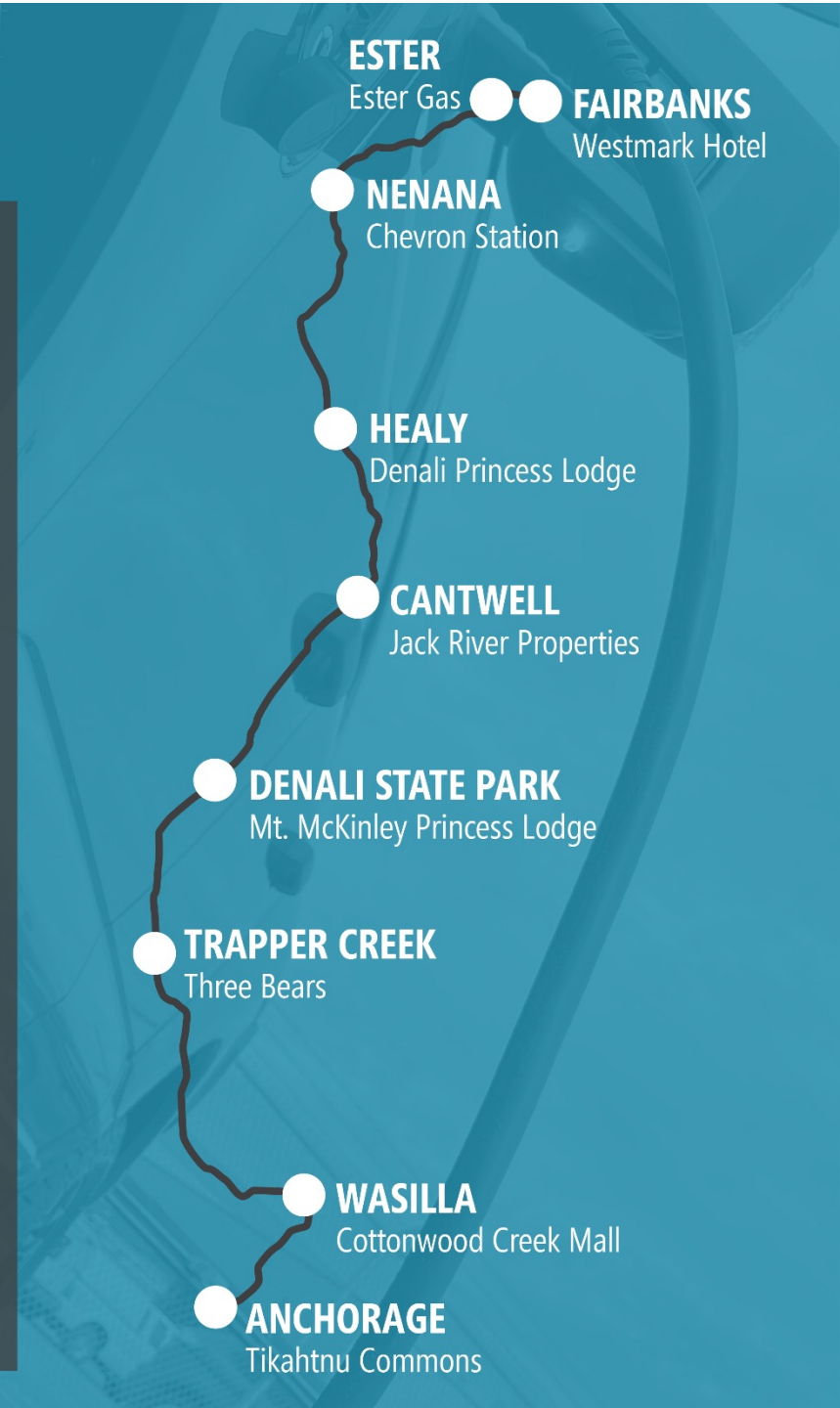
- Community
- Alternative Fuel Corridor
- - - National Highway System
- - - Marine Highway System Route



# Phase One NEVI Awards

PRIORITY SITE	LOCATION	NETWORK PROVIDER	
<b>Fairbanks</b>	Westmark Hotel	Jule	
<b>Ester</b>	Ester Gas	Tesla	→ 10 miles
<b>Nenana</b>	Chevron Station	Tesla	→ 44 miles
<b>Healy</b>	Denali Princess Lodge	Jule	→ 66 miles
<b>Cantwell</b>	Jack River Properties	Tesla	→ 28 miles
<b>Denali State Park</b>	Mt. McKinley Princess Lodge	Jule	→ 78 miles
<b>Trapper Creek</b>	Three Bears	Tesla	→ 20 miles
<b>Wasilla</b>	Cottonwood Creek Mall	FLO	→ 73 miles
<b>Anchorage</b>	Tikahtnu Commons	FLO	→ 37 miles

**DISTANCE BETWEEN STATIONS**



# Alaska Rural EVSE Deployment (ARED)

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**AEA and Partners — Alaska Center for Energy and Power, Ahtna, Inc., Alaska Department of Transportation & Public Facilities, Alaska Municipal League, Launch Alaska, and Yellowstone Teton Clean Cities Coalition**

AEA received **\$1,670,00** through the Office of Energy Efficiency and Renewable Energy Vehicle Technologies Office competitive grant program

## **High Level Project Goals:**

Electrify rural and disadvantaged Alaskan communities in multiple energy regions with the installation of Electric Vehicle Supply Equipment (EVSE).

- At least 40% of the program benefits will be received by Disadvantaged Communities.
- Plan, develop, and implement EVSE installation plans according to community needs.
- Team will designate hub communities and conduct outreach.





# Solar For All Competition

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- **AEA and the Alaska Housing Finance Corporation (AHFC) are collaborating to develop a statewide solar program:**
  - AEA focus on development of community solar projects in disadvantaged communities using a Renewable Energy Fund-style grant program.
  - AHFC focus on residential rooftop solar for low income households.
- **Program benefits:**
  - Energy cost savings
  - Increased resiliency
  - Equitable access to solar
  - Asset ownership benefits low-income and disadvantaged communities
  - Workforce development
  - Reduction in greenhouse gas emissions
- **This is a competitive grant program — no match required.**
- **AEA and AHFC submitted an application for a \$100 million grant.**



# 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.”

- Over the next five years, Alaska will receive **\$60 million in federal formula grants** to catalyze projects to increase grid resilience against disruptive events. In August 2023, **the first two years of allocations, \$22.2 million**, were awarded to AEA. AEA plans to launch a competitive solicitation for the funds later in the year.
- 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**.

# Grid Resilience and Innovation Partnerships (GRIP)

AEA secured \$206.5 million for GRIP Topic Area 3: Grid Innovation through the United States Department of Energy's Grid Deployment Office. A cost share of 100 percent, or \$206.5 million, is required for a total project amount of \$413 million. The Railbelt Innovation Resiliency project will construct a High Voltage Direct Current submarine cable to serve as a parallel transmission route from the Kenai Peninsula to Anchorage, creating a much-needed redundant system in case of disruptive events.



## Anticipated Outcomes and Benefits

- Increases transfer capacity between regions that enables higher renewable energy integration into the electricity system.
- Resilience and reliability improvements for the tribal and disadvantaged communities located in the Railbelt region, and a reduction in reliance on fossil fuel generation and associated emissions.
- Supports the retention of high-quality jobs in the region, including 650 highly paid union jobs with competitive employer-sponsored benefits.
- Creates apprenticeship and internship programs to train a new generation of lineworkers and wireworkers to reinvigorate Alaska's energy workforce.



## RE-VEEP: Renewable Energy – Village Energy Efficiency Program

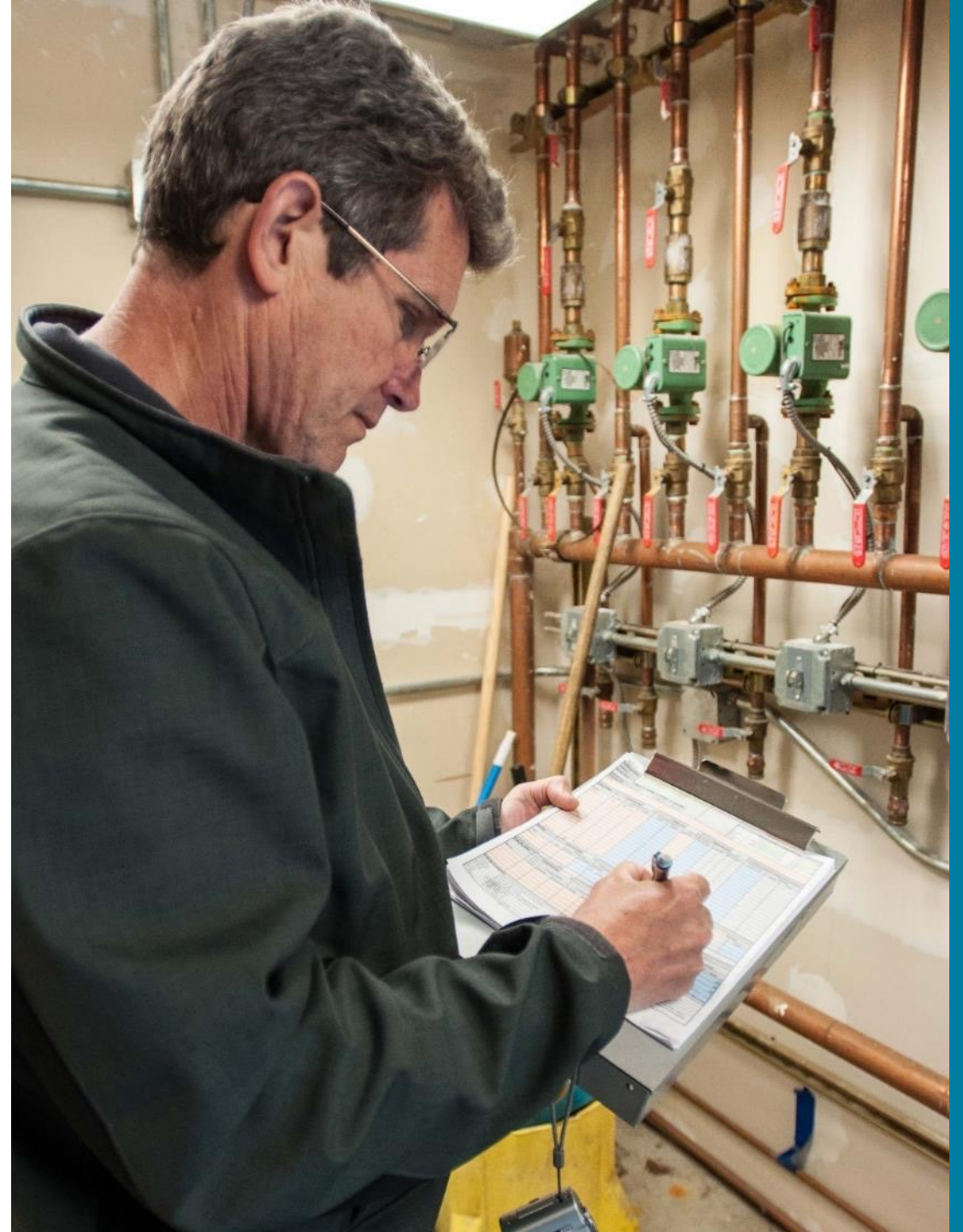
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- AEA will use this funding to establish RE-VEEP, which will **finance building-scale renewable energy, energy efficiency, and conservation projects** in public buildings and facilities in rural Alaska.
- Sub-awards **totaling \$2.6 million** are available through the solicitation.
- **142 city and/or borough governments are eligible for funding.**
- **Request for Applications will be released by the end of the year.**

# Energy Efficiency Revolving Loan Fund (EERLF)

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- The Infrastructure Investment and Jobs Act provides funding for a new **EERLF program**.
- 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.**



# Home Energy Rebate Programs



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**

*\*Note: These funds are not available at this time. It is expected funds will be available late 2024 to early 2025.*