ALASKA ENERGY AUTHORITY

SOLAR FOR ALL: WORKING TOWARD A BRIGHTER FUTURE

Audrey Alstrom, PE
Director of Renewable Energy and Energy Efficiency

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About AEA

AEA's mission is to reduce the cost of energy in Alaska. To achieve this mission, AEA strives to diversify Alaska's energy portfolio – increasing resiliency, reliability, and redundancy.

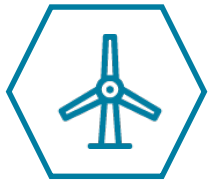
Railbelt Energy – AEA owns the Bradley Lake Hydroelectric Project, the Alaska Intertie, and the Sterling to Quartz Creek Transmission Line – all of which benefit Railbelt consumers by reducing the cost of power.

Power Cost Equalization (PCE) – In rural Alaska, PCE reduces the cost of electricity for residential customers as well as community facilities, thus ensuring its sustainability.

Rural Energy – AEA constructs bulk fuel tank farms, diesel powerhouses, and electrical distribution grids in rural villages. AEA supports the operation of these facilities through circuit rider and emergency response programs.

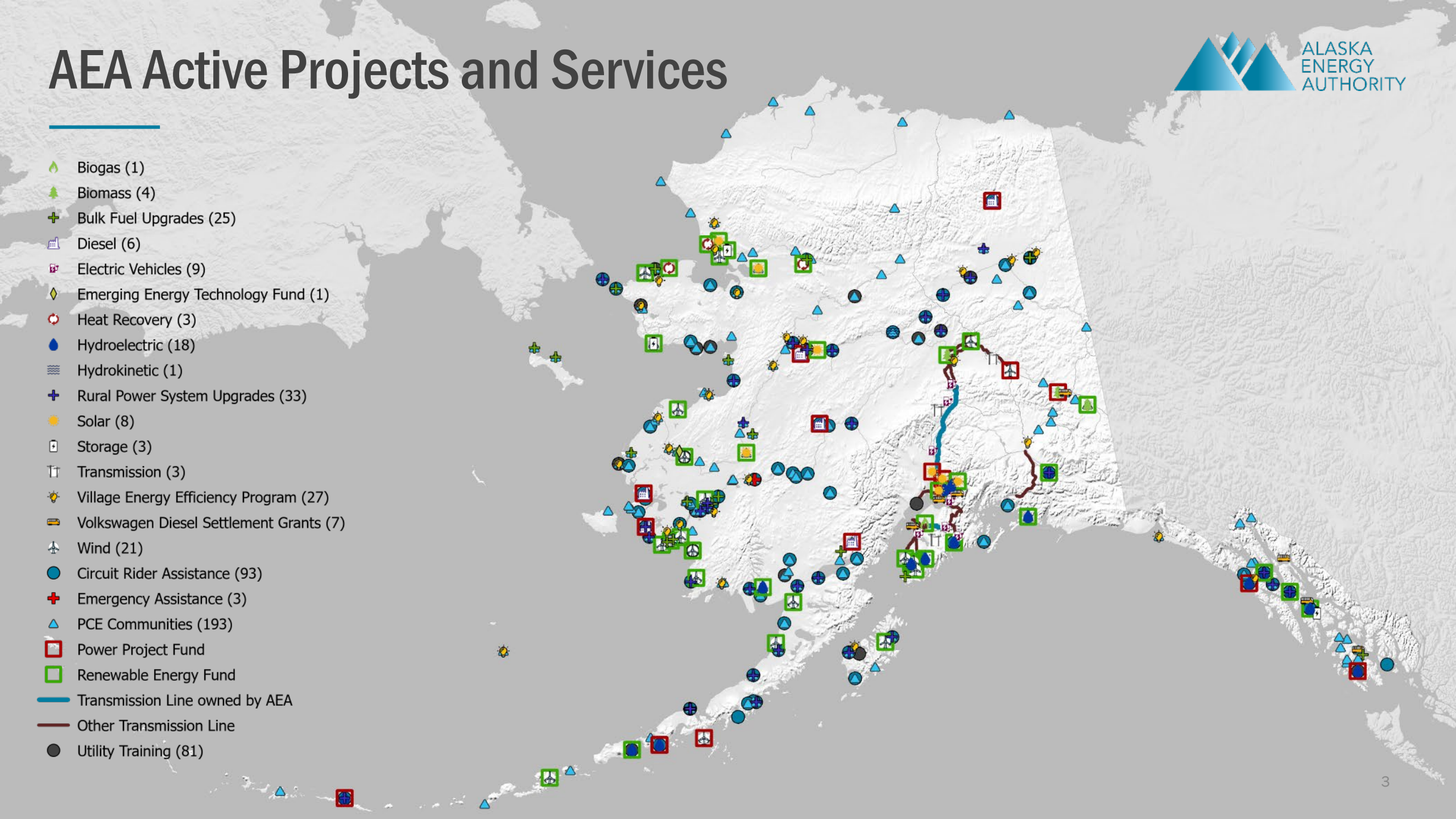
Renewable Energy and Energy Efficiency – AEA provides funding, technical assistance, and analysis of renewable energy technologies such as biomass, electric vehicles, geothermal, hydroelectric, solar, and wind.

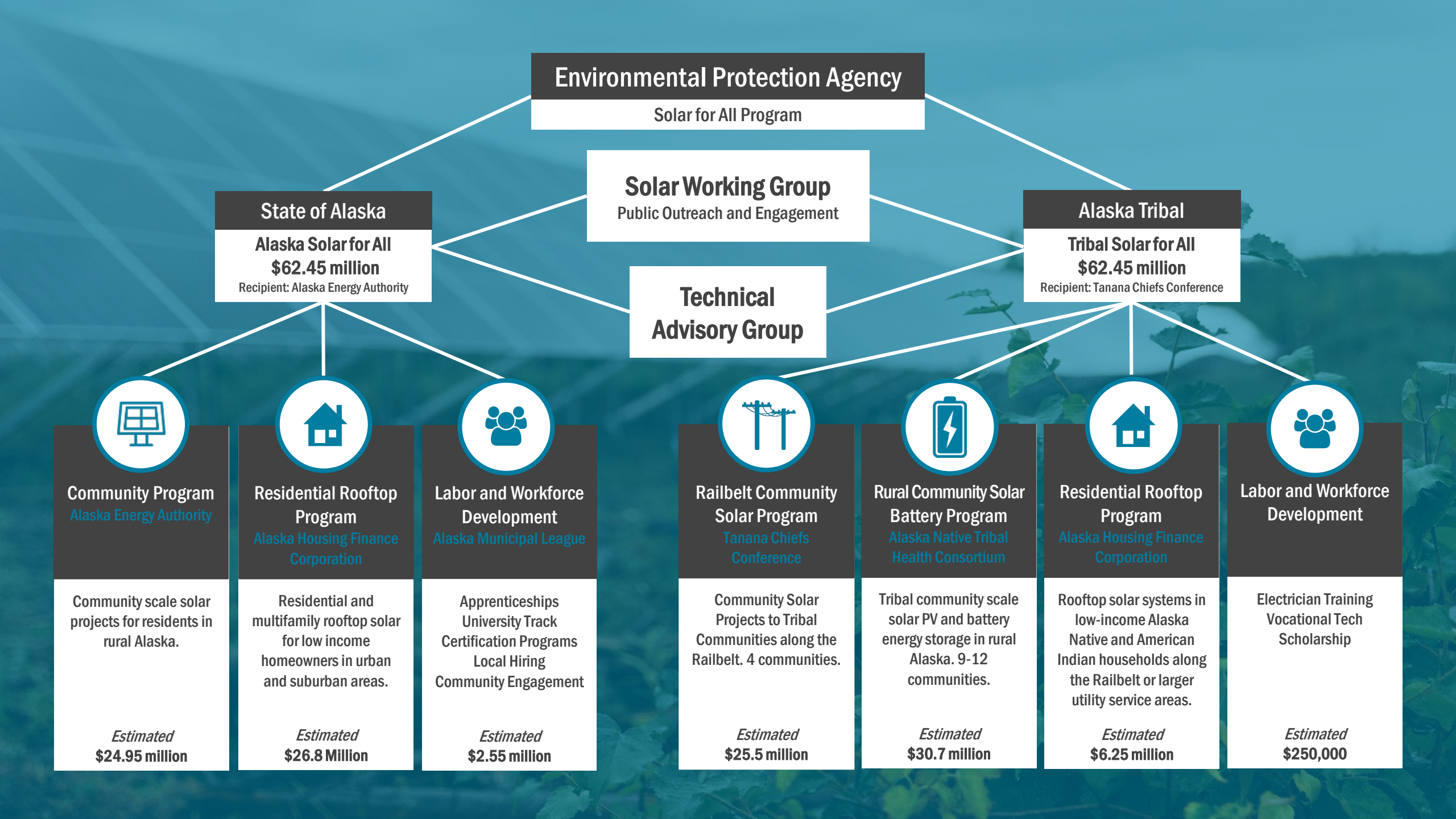
Grants and Loans – AEA offers loans to local utilities, local governments, and independent power producers for the construction or upgrade of power generation and other energy facilities.

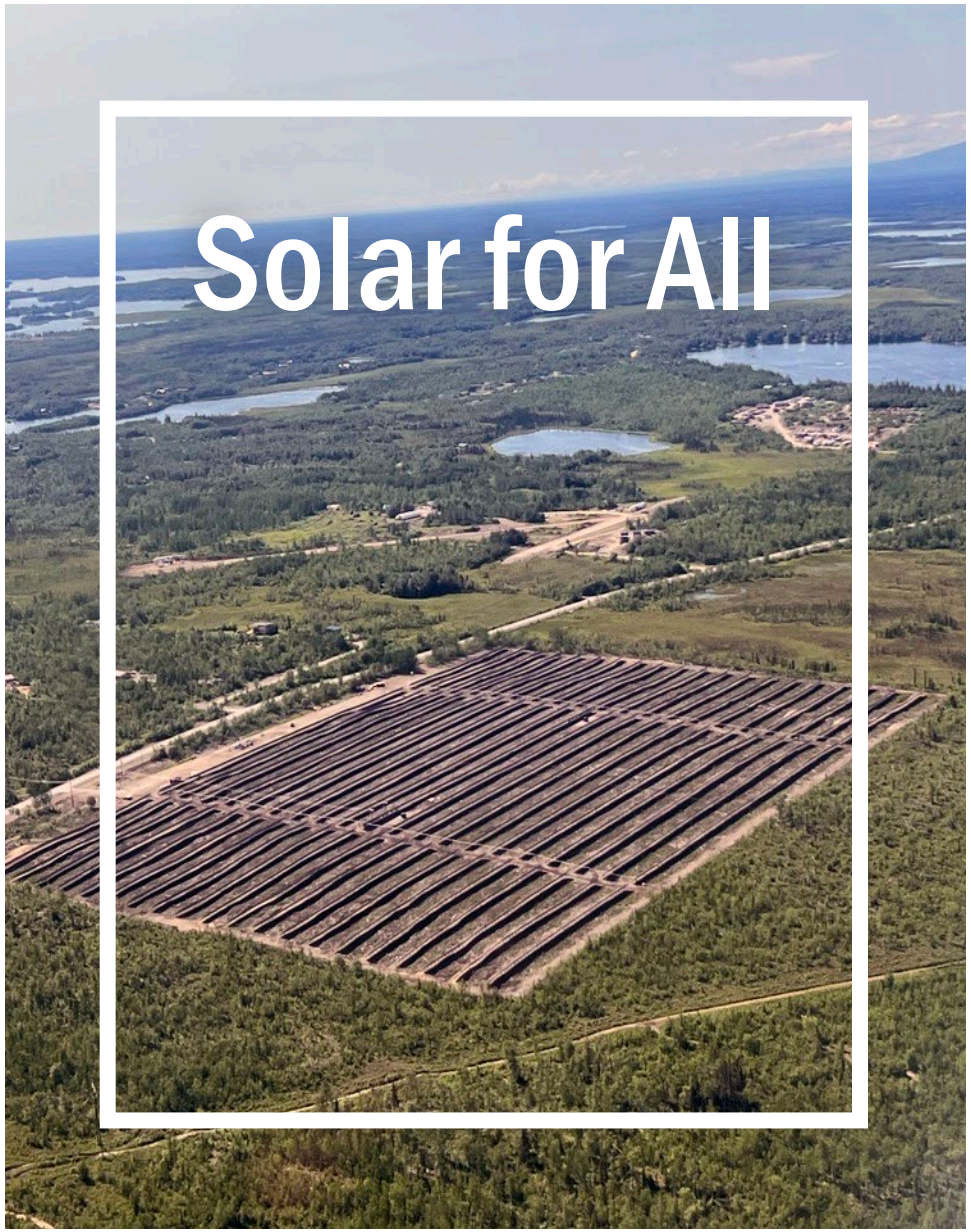


Energy Planning – In collaboration with local and regional partners, AEA provides economic and engineering analysis to plan the development of cost-effective energy infrastructure.

AEA Active Projects and Services




Environmental Protection Agency
Solar for All Program
Solar Working Group
Public Outreach and Engagement
Technical Advisory Group
State of Alaska
Alaska Solar for All
$62.45 million
Recipient: Alaska Energy Authority
Alaska Tribal
Tribal Solar for All
$62.45 million
Recipient: Tanana Chiefs Conference
Community Program
Alaska Energy Authority
Community scale solar projects for residents in rural Alaska.
Estimated
$24.95 million
Residential Rooftop Program
Alaska Housing Finance Corporation
Residential and multifamily rooftop solar for low income homeowners in urban and suburban areas.
Estimated
$26.8 Million
Labor and Workforce Development
Alaska Municipal League
Apprenticeships
University Track
Certification Programs
Local Hiring
Community Engagement
Estimated
$2.55 million
Railbelt Community Solar Program
Tanana Chiefs Conference
Community Solar Projects to Tribal Communities along the Railbelt. 4 communities.
Estimated
$25.5 million
Rural Community Solar Battery Program
Alaska Native Tribal Health Consortium
Tribal community scale solar PV and battery energy storage in rural Alaska. 9-12 communities.
Estimated
$30.7 million
Residential Rooftop Program
Alaska Housing Finance Corporation
Rooftop solar systems in low-income Alaska Native and American Indian households along the Railbelt or larger utility service areas.
Estimated
$6.25 million
Labor and Workforce Development
Electrician Training
Vocational Tech
Scholarship
Estimated
$250,000



$62.5 Million (Shared with AHFC)

- **In April 2024, AEA and the Alaska Housing Finance Corporation (AHFC) were selected for a $62.5 million grant from the Environmental Protection Agency's Solar for All program.**
  - AEA will develop community solar in disadvantaged communities.
  - AHFC will develop residential rooftop solar for low income households.
- **Program benefits:**
  - Energy cost savings
  - Increased resiliency
  - Equitable access to solar
  - Asset ownership
  - Workforce development
  - Reduction in greenhouse gas emissions.
- **No matching requirements**

The Goal

Leverage this once in a generation funding opportunity to expand clean energy access for low-income and rural communities in Alaska, increase resilience and reduce reliance on diesel generation.

Houston Solar Farm, Houston, AK

Major Lines of Effort:

- Community Solar (AEA)
- Residential Rooftop Solar (AHFC)
- Labor and Workforce Development

- ENVIRONMENTAL JUSTICE
- CLEAN ENERGY ACCESS
- GREENHOUSE GAS REDUCTIONS
- JOB CREATION
- INCREASED RESILIENCE
- ENERGY SOVEREIGNTY

OUR STRUCTURE

AEA will work with partners, stakeholders, and experts to maximize program impact.

Solar installations will take the form of residential "behind the meter" projects or larger community scale solar farms integrated directly to the local grid.

The federal funds will serve as the foundation for the AKSFA program, with the potential to leverage additional resources, including state funding, private investment, and tax benefits, to further reduce installation and long-term operational costs.

AEA will be designing the community-scale solar program around the existing renewable energy fund (REF) program: a round of applications with grants directed to the community to execute their proposed project.

AML will be working with communities and stakeholders around the state to facilitate the application process and identify needs regarding installation training as well as operations and maintenance.

THE VISION

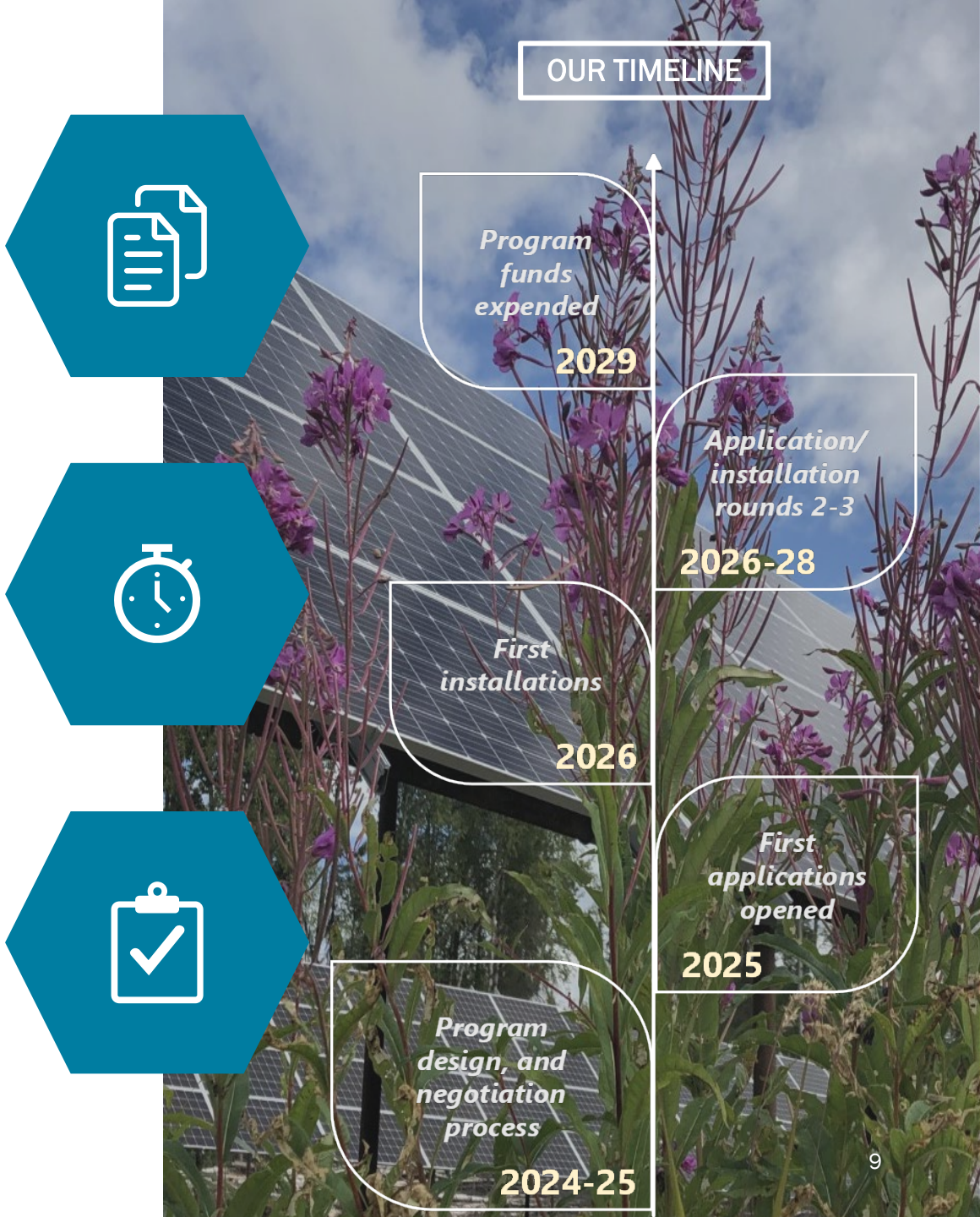
Program Outcomes and Outputs

Solar energy offers an opportunity to diversify the energy mix, lower costs, and reduce emissions. Panel technology has a lifespan of over 20 years with basic maintenance.

- AEA will focus on installations deployed in communities designed to provide shared benefits, tailored to the unique needs and climates of Alaskan regions.
- Our program design considers AEA's Power Cost Equalization program to maximize the savings impact for every participant. The EPA expects savings of over 20% on an annual residential energy bill.
- Job creation and workforce development will be core considerations, as this funding will provide opportunities for those interested in developing new skills and finding work supporting the needs of their communities.
- Reducing the reliance on diesel.

Next Steps

- AEA is working with the EPA and our partners to develop a program capable of delivering high-impact projects to energy burdened communities.
- Our current timeline puts the first application period in 2025, with the first community projects being delivered in 2026.
- Continuous monitoring of the savings, job creation and feedback from participating communities will help us to refine and expand the program over life of the program.



Thank You

Alaska Energy Authority
813 W Northern Lights Blvd.
Anchorage, AK 99503
Phone: (907) 771-3000
Fax: (907) 771-3044
akenergyauthority.org

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