DOE OFFICE OF INDIAN ENERGY

Office Overview

IACC 2023 Conference

Tweedie Doe, Lead Project Officer





October 25, 2023



About Us



Office of Indian Energy

The DOE Office of Indian Energy is charged by Congress under the **Indian Tribal Energy Development and Self Determination Act of 2005** (Title V of the Energy Policy Act of 2005) to "provide, direct, foster, coordinate, and implement energy planning, education, management, conservation, and delivery programs that –

- (1) promote Indian tribal energy development, efficiency, and use;
- (2) reduce or stabilize energy costs;
- (3) enhance and strengthen Indian tribal energy and economic infrastructure relating to natural resource development and electrification; and
- (4) bring electrical power and service to Indian land and the homes of tribal members located on Indian lands or acquired, constructed, or improved (in whole or in part) with Federal funds."



Clockwise from right: **Seneca Nation's** (NY) 1.5-MW wind turbine, **Sokaogon Chippewa Community** (WI) Housing Project, and **Chippewa Cree Tribe's** (MT) Residential Solar.



Deployment Program

Financial Assistance



Provides funding and financing to support tribal energy development

Technical Assistance



Offers no-cost technical assistance to advance tribal energy and infrastructure projects

Education and Capacity Building



Supports internal capacity building to develop energy projects and navigate energy markets





Meet the Team



Leadership



Wahleah Johns, Director, Washington, D.C.



David Conrad, Deputy Director, Washington, D.C.



Meet the Team



Comprised of 15 federal employees and 11 contractors stationed across the country.





Program Financial Assistance and Investments



Office of Indian Energy Investments 2010–2022

- More than \$120 million invested in over 210 tribal energy projects across the contiguous 48 states and Alaska
- Valued at more than \$215 million
- Leveraged by over \$93 million in recipient cost share



For more information on funded projects, see: energy.gov/indianenergy/tribal-energy-projects-database



Financial Assistance Results (2010-2022)

- Nearly 46 MW of new generation installed
- Nearly 13 MWh of battery storage installed
- Over \$14.4 million saved every year
- Nearly \$315 million saved over system
 lifetimes
- \$3.38 saved for every DOE dollar invested
- Nearly 8,800 tribal buildings affected



Clockwise from top right: Huslia Tribe Council (AK) installed a community-scale biomass project to heat their community's buildings (2018); Rosebud Sioux (SD) solar system on low-income home (2016); Alaska Village Electric Cooperative, Inc. (AVEC) and Bethel Native Corporation's (BNC) installed a 900-kW turbine to power the communities of Bethel and Oscarville, AK.



Financial Assistance

All Funds Awarded Through a Competitive Process



(Includes FOAs issued in 2009 for award in 2010) Accepted nearly 690 applications valued at nearly \$742 million Funded over 32% of all applications received (223 out of 687)

DOE average ~ 5%-10%

The Office of Indian Energy has primarily fulfilled the requirements under 42 U.S.C. § 7144e by providing costshared federal funding to Indian tribes and tribal entities through competitive financial assistance awards.



2023 Investment in Tribal Energy Projects



U.S. Department of Energy Announces \$34 Million to Deploy Clean Energy Technologies in American Indian and Alaska Native Communities

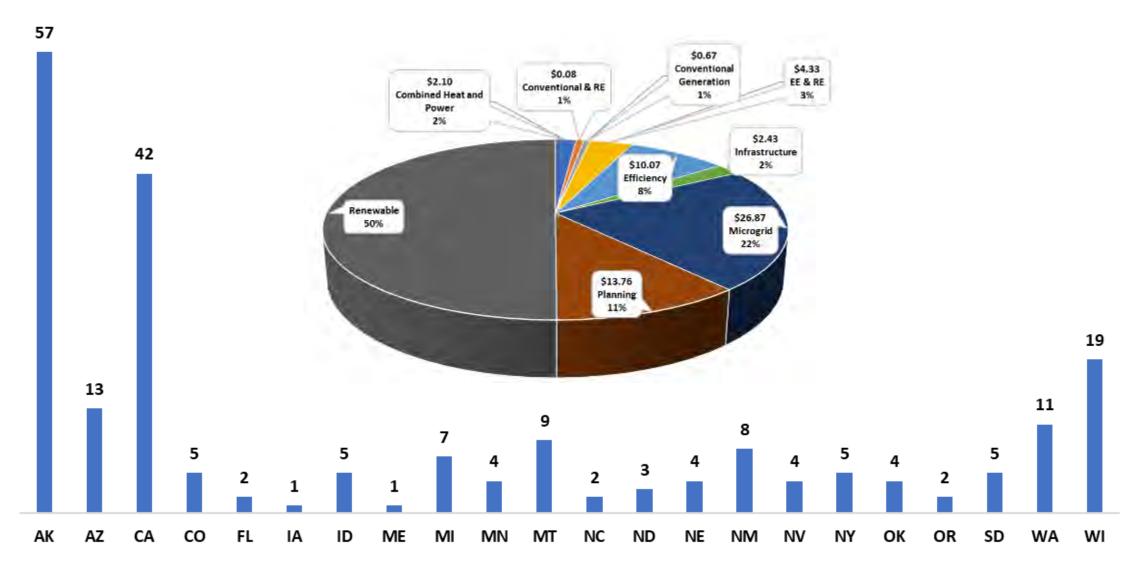
Department of Energy

MAY 23, 2023

In 2023, the Office of Indian Energy announced an additional \$72 million for over 30 tribal energy projects across the Nation. These projects collectively are estimated to result in over 18 MW of new clean energy generation, affect 2,300 tribal buildings and save those communities \$225 million over the life of those systems.



Investments by Technology and State (2010-2022)



Office of Indian Energy



Success Stories



Tribal Energy Successes – Solar



Spokane Housing Authority (WA)

- 652.5 kW on 32 buildings/homes
- Completed December 2022
- Project amounts:
 - DOE: \$1,000,000
 - Awardee: \$1,013,181
 - Total: \$2,013,181



Ute Mountain Ute Tribe (CO)

- 1 MW solar system
- Completed September 2019
- Project amounts:
 - DOE: \$973,820
 - Awardee: \$1,196,576
 - Total: \$2,170,396



San Xavier Education Building (AZ)

- 182 kW solar system
- Completed April 2022
- Project amounts:
 - DOE: \$501,267
 - Awardee: \$501,268
 - Total: \$1,002,535



Fort Mojave Indian Tribe and Aha Macav Power Services

Community-Scale Solar System Installed in 2021 Saves Tribe More Than \$250,000 Annually

Need: Provide tribal homes and businesses with reliable, lower-cost power; reduce dependence on outside power providers

Solution: 2.3-MW ground-mounted solar PV system

Total cost: \$4M (DOE \$3M; cost share \$1M)

Benefits:

- Generates ~10% of Tribe's energy needs
- Saves \$253,120 per year
- Creates jobs and provides training





Tribal Successes – Wind



Chaninink Wind Group (AK)

- Five 90 kW Wind Turbines
- Completed March 2012
- Project amounts:
- DOE: \$750,000
- Awardee: \$1,2500,000
- Total: \$2,000,000



Seneca Nation (NY)

- 1.8 MW Wind Turbine
- Completed June 2017
- Project amounts:
 - DOE: \$1,500,000
 - Awardee: \$4,520,125
 - Total: \$6,020,125



Bethel Wind Energy Construction Project – 2017 Wind Project

75-meter wind turbine installed in Alaska to supply energy for more than 6,600 rural Alaskans

Need: Stabilize the costs of power and provide cleaner air for residents in Bethel, Oscarville, and Napakiak and reducing the use of diesel fuel

Solution: 900 kW wind turbine

Total cost: \$4.1M (DOE \$1M; cost share \$3.1M)

Benefits:

- Generates energy for about 2,900 buildings
- Saves up to \$1,106,000 in diesel fuel costs each year
- Reduces energy costs by about \$18 million over 20 years





Other Tribal Energy Successes



Aleut Community Store Deep Energy Retrofit (AK)

- Retrofit energy efficient systems
- Completed November 2020
- Project amounts:
- DOE: \$494,458
- Awardee: \$501,531
- Total: \$995,989



San Pasqual Band Mission of Indians Microgrid (CA)

- 150kW battery storage & more
- Completed October 2021
- Project amounts:
 - DOE: \$703,716
 - Awardee: \$703,716
 - Total: \$1,406,432



Nuvista Kwethluk Energy Storage (AK)

- 500 kW battery storage system
- Planned completion September 2023
- Project amounts:
 - DOE: \$447,050
 - Awardee: \$447,050
 - Total: \$954,100



Ishkonige Nawadide – Microgrid and Solar Project Bad River Band of Lake Superior Tribe of Chippewa Indians

Solar microgrid provides battery storage for three vital public facilities including 100% of electric usage at Wastewater Treatment Plant & Health Clinic

Need: Mitigate and prepare for consequences of hazards and effectively respond and recover in event of an emergency or disaster after 500-year flood

Solution:

- 1,000 kWh Battery Energy Storage Systems with "smart controls"
- 3 solar systems (500 kWh) at essential tribal buildings

Total cost: \$2M (DOE \$1M; cost share \$1M)

Benefits:

- Reduces electric bills by \$841,000 over 25 years
- Solar to offset equivalent of 487 tons of CO2 emissions per year
- Independent of the grid







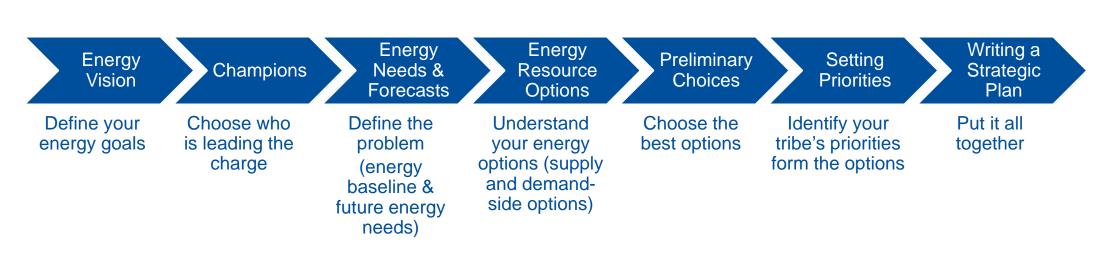


Technical Assistance



Technical Assistance

Goal: address a specific challenge or fulfill a need that is essential to a current project's successful implementation Intended result: a tangible product or specific deliverable designed to help move a project forward



Strategic Energy Planning



Technical Assistance

Request Technical Assistance

Office of Indian Energy Policy and Programs

Eligibility

The following tribal entities are eligible for onrequest technical assistance:

- Federally recognized Indian Tribes, including Alaska Native regional and village corporations (hereafter referred to as Tribes)
- Tribal entities, such as tribal energy development organizations, intertribal organizations, and other organized tribal groups.

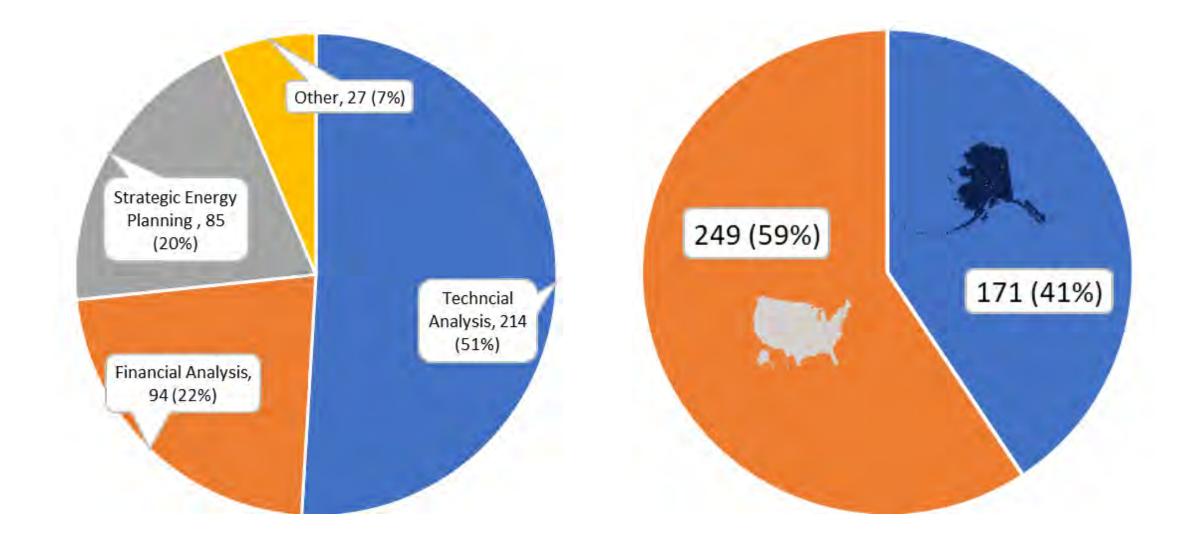
Types of On-Request Technical Assistance

- Clean Energy Planning
- Energy Efficiency Assessments
- Resource Assessments
- Clean Energy Project Planning
- Building Codes and Utility Formation





Completed Technical Assistance Requests (2010-2022)





Completed Technical Assistance Requests (2010-2022)





Education and Capacity Building



Comprehensive Project Reporting

Online Tribal Energy Projects Database

- Interactive project map
- Project database (sortable)
- **Project success stories**
- **Project summaries**
 - Annual presentations
 - Final reports

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Akwesasne Housing Authority on behalf of St. Regis Mohawk Tribe – 2016 Project

Office of Indian Energy Policy and Program

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Summary

Project Overview

Type of Application

DOE Grant Number

Project Amounts

Start: July 2016

End: June 2019

Deployment

Initiative I: Go Solar Tribe/Awardee Under the Community-Scale Akwesasne Housing Authority (AHA) Go Solar Initiative, the St. Regis Mohawk AHA will Akwesasne Housing Authority install approximately 614.74 kilowatts (kW) of solar photovoltaic (PV) systems in Franklin County, New York, to Location serve 159 housing-related buildings on the Tribe's Hogansburg, NY reservation. The ground-mounted PV systems will be installed on a 25-acre parcel owned by the Tribe, and the **Project Title** generated electrical power will be utilized under National Community-Scale AHA Go Solar Grid's net metering programs to offset energy use and Initiative and Net Zero Initiative costs for AHA's buildings and tribal members' residences.

This project will serve 5% of the total tribal community's residential energy load and 4% of the total electrical energy usage including governmental and commercial buildings. When considering all fuels used on the reservation, the project provides a 3.35% reduction of total energy load on DE-EE0000038 the reservation.

Initiative 2: Net Zero

DOE: \$1,500,000 The Akwesasne Housing Authority will create three "netzero" buildings by installing energy efficiency measures Awardee: \$1,837,831 and 161.5 kW of solar PV, reducing annual energy costs by Total: \$3,337,831 about \$36,200. Two of the buildings are part of the Sunrise Green Development project, a tribal alfordable housing Project Status development that will provide on-site services to tribal See project status veterans, elders, and their families; the third is an existing building that houses the Akwesasne Boys & Girls Club. **Project Period of Performance**

Project Description

Background

Saint Regis Mohawk Tribe is a sovereign, lederally acknowledged Indian tribe. The Tribal Council created the AHA by ordinance in July 1984 and has designated the AHA as its agency for purposes of administering the Tribe's Indian Housing Block Grant under the Native American Housing and Self-Determination Act of 1996. The St. Regis Mohawk Reservation is also known by its Mohawk name Akwesasne, U.S. census data indicate that the total population is 2,919, and U.S. Post Office data confirm that there are 1,277 households on the reservation

SL Regis Mohawk Tribe and AHA have worked together to develop a IQ-Year Tribal Strategic Energy



Funding Resources

Current Funding Opportunities

 Open tribal energy related funding opportunities from federal agencies and other sources

Ongoing Funding Opportunities

 Ongoing sources of funding, including grants, loans, loan guarantees, and other incentives across the federal government

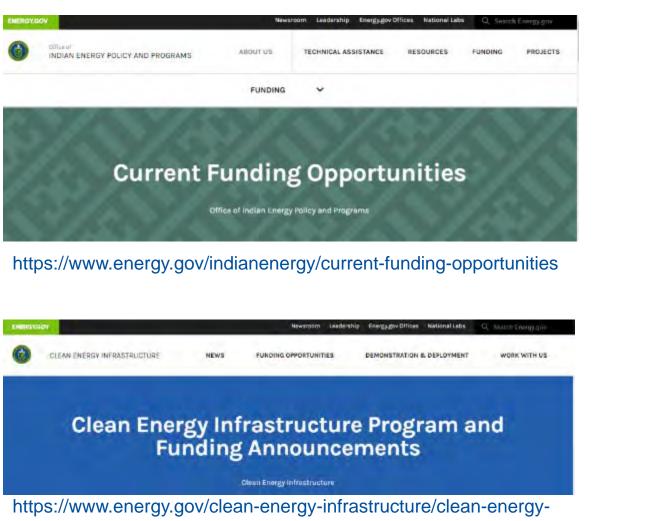
Past Funding Opportunities

• Information on prior Office of Indian Energy funding opportunities

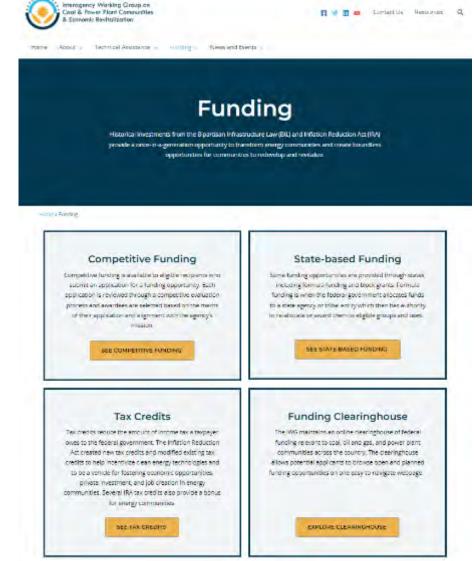




Funding Resources



infrastructure-program-and-funding-announcements



https://energycommunities.gov/funding-opportunities/

Other Funding Opportunities

Title	Description	Agency	Amount	Deadline
Assistance to High Energy Cost Communities	This grant program is designed to assist communities with extremely high energy costs. The grant funds may be used to acquire, construct, or improve energy generation, transmission, or distribution facilities serving communities where the average annual residential expenditure for home energy exceeds 275% of the national average.	United States Department of Agriculture (USDA) Rural Utilities Service (RUS)	\$10 million	October 31, 2023
Transmission Siting and Economic Development Program	This initiative is designed to overcome state and local challenges to expanding transmission capacity while also supporting communities along major new and upgraded lines. DOE will support two distinct categories of activities related to the development of new or upgraded interstate and offshare transmission lines, siting and permitting and economic	DOE Grid Deployment Office (GDO)	\$300 million	Concept Paper: October 31, 2023 Full application:
	offshore transmission lines: siting and permitting and economic development.			April 5, 2024
Energy Future Grants (EFG): Creating a Community-Led Energy Future	This grant program provides financial assistance and technical assistance to support local, state, and Tribal government-led partnership efforts that will advance clean energy program innovation. EFG seeks to enhance energy affordability and access for communities, ensuring the broad benefits of a clean energy economy—including heath, economic development and jobs and emissions reductions—flow to disadvantaged communities.	DOE State and Community Energy Programs (SCEP)	\$27 million	November 10, 2023
Communities Local Energy Action Program (LEAP)	This program support efforts in disadvantaged communities and those with historical ties to fossil fuel industries to take control of their clean energy future. Communities will receive technical assistance to develop and advance locally driven energy plans to reduce local air pollution, increase energy resilience, lower utility costs and energy burdens, and create good- paying jobs.	Multiple office partnership within the DOE complex	\$18 million	December 14, 2023



Other Funding Opportunities

Title	Description	Agency	Amount	Deadline
<u>Tribal Electrification</u> <u>Program (TEP)</u>	This program will provide financial and technical assistance to Tribes to connect homes to transmission and distribution that is powered by renewable energy; provide electricity to unelectrified Tribal homes through zero-emissions energy systems; transition electrified Tribal homes to zero-emissions energy systems; and support associated home repairs and retrofitting necessary to install the zero-emissions energy systems	U.S. Department of the Interior (DOI) Indian Affairs Office of Indian Economic Development (OIED)	\$72.5 million in initial funding \$150 million total funding	Full application: December 22, 2023
<u>Rural Energy for</u> <u>America Program</u> (REAP)	The program provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements. Agricultural producers may also apply for new energy efficient equipment and new system loans for agricultural production and processing.	USDA	Renewable Energy System Grants: \$1 million max per applicant Energy Efficiency Grants: \$500k max per applicant	December 31, 2023
Energy Efficiency and Conservation Formula Grant Program	Formula grants are available to reduce energy use, reduce fossil fuel emissions, and improve energy efficiency.	DOE SCEP	Formula allocations	January 31, 2024
<u>Tribal Energy</u> <u>Financing</u>	This program supports Tribal investment in energy-related projects by providing direct loans or partial loan guarantees. DOE can support a broad range of projects and activities for the development of energy resources, products, and services that utilize commercial technology.	DOE Loan Programs Office (LPO)	 \$20 billion for loans or guarantees \$80 million for associated costs 	No deadline, application open



Curriculum and Resources

Information Resources

- Energy Resource Library features publications, websites, videos, and more
- Curriculum includes foundational and advanced courses, educational webinars

Workshops and Webinars

- Monthly webinars presents foundational information, resources, and case studies
- Periodic workshops address specific topics

Tribal Energy Atlas

• Interactive geospatial tool enables tribes to conduct their own data-driven analysis





Outreach and Communications

Listening Sessions

- IE/LPO Funding & Financing Listening Session, May 2021 (586 registered; 369 attendees)
- IE Energy Access & Reliability Listening Session (Congressional Report), November 2021/July 2022 (~300 attendees; majority tribal representatives)

Monthly Webinars

- Monthly webinars provide foundational information, resources, and case studies
- Statistics: 1,100+ total attendees in FY 2022;
 - ~140 per webinar

Email Newsletters

- Highlight funding, upcoming events, and tribal energy related news
- Statistics: 20,000+ subscribers
 - Over 5.3k new subscribers in FY2023

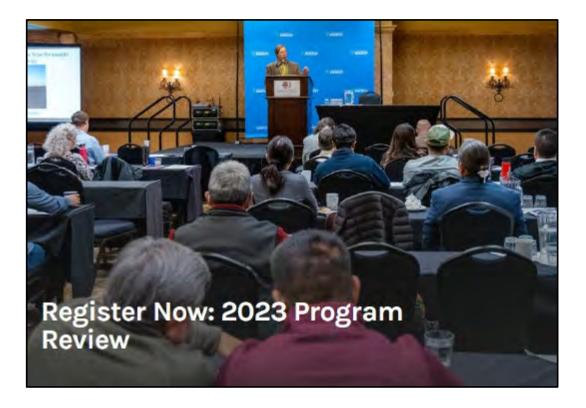




Annual Program Review

Unique Tribal Forum for Sharing and Learning

- Opportunity for tribes to meet and learn from each other and to share their successes and challenges
- Networking and learning opportunity
- Learn about 40 to 50 tribal energy projects from across the country
- ~200 participants
- Typically held in November



November 13-16, 2023, in Denver, Colorado

For more, see <u>https://www.energy.gov/indianenergy/projects/program-review</u>



Engage With Us to Learn More



Office of Indian Energy (240) 562-1352 indianenergy@hq.doe.gov energy.gov/indianenergy



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Social Media

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- <u>twitter.com/DOEIndianEnergy</u>







Questions?



Thank you!

Tweedie Doe <u>tweedie.doe@hq.doe.gov</u> 720-585-4999 EMPOWERING NATIVE COMMUNITIES AND SUSTAINING FUTURE GENERATIONS

