



Transportation Technical Assistance for Tribes

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Intertribal Transportation Association
Annual Meeting

December 6, 2023

Agenda

1 The National Renewable Energy Laboratory

2 Clean Cities Coalitions

3 The Joint Office

4 Other Technical Assistance

The National Renewable Energy Laboratory

NREL at-a-Glance



2,926

Workforce, including

219 postdoctoral researchers

60 graduate students

81 undergraduate students



World-class

facilities, renowned
technology experts

More than
900

Partnerships

with industry,
academia, and
government



Campus

operates as a
living laboratory

NREL-Tribal Partnerships

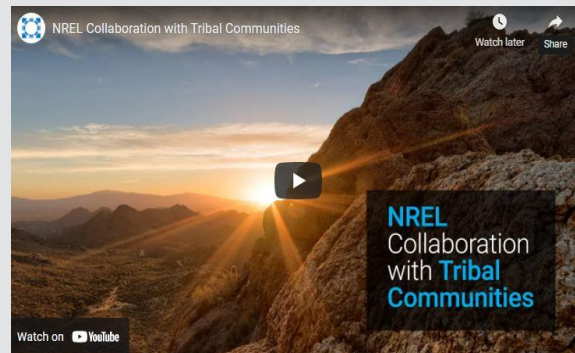
NREL works hand-in-hand with Tribal governments, Tribal members, and Tribal organizations to develop efficient, affordable, equitable, and resilient energy systems.

NREL provides **resources**, **analysis**, and **direct technical assistance** to support energy technology delivery and connect Tribes with world-class science and analytics.

- local energy goals and priorities
- technology and market analysis
- workforce and capacity building
- climate change
- energy justice
- infrastructure challenges
- economic development
- energy resilience.

Watch our video to see how else NREL works alongside Tribes and Alaska Native villages to support energy goals and projects.

bit.ly/NRELTribalVideo



Learn more at: nrel.gov/state-local-tribal/decision-support-tribes.html

The collective power of DOE and the national labs helps **Tribes** and **communities** reach their energy goals



Stakeholder engagement and decision support

Map and assess actionable pathways for achieving clean energy goals, with continuous community input. Leverage lessons from other Tribes to share best practices.



Customized tools, modeling, and analysis

Develop and apply customized tools to provide decision-supportive analysis on critical policy, technology, and market analytics.



Simulation, emulation, and validation

De-risk large-scale deployments through realistic simulations/emulations on the ARIES platform



Local capacity building and training

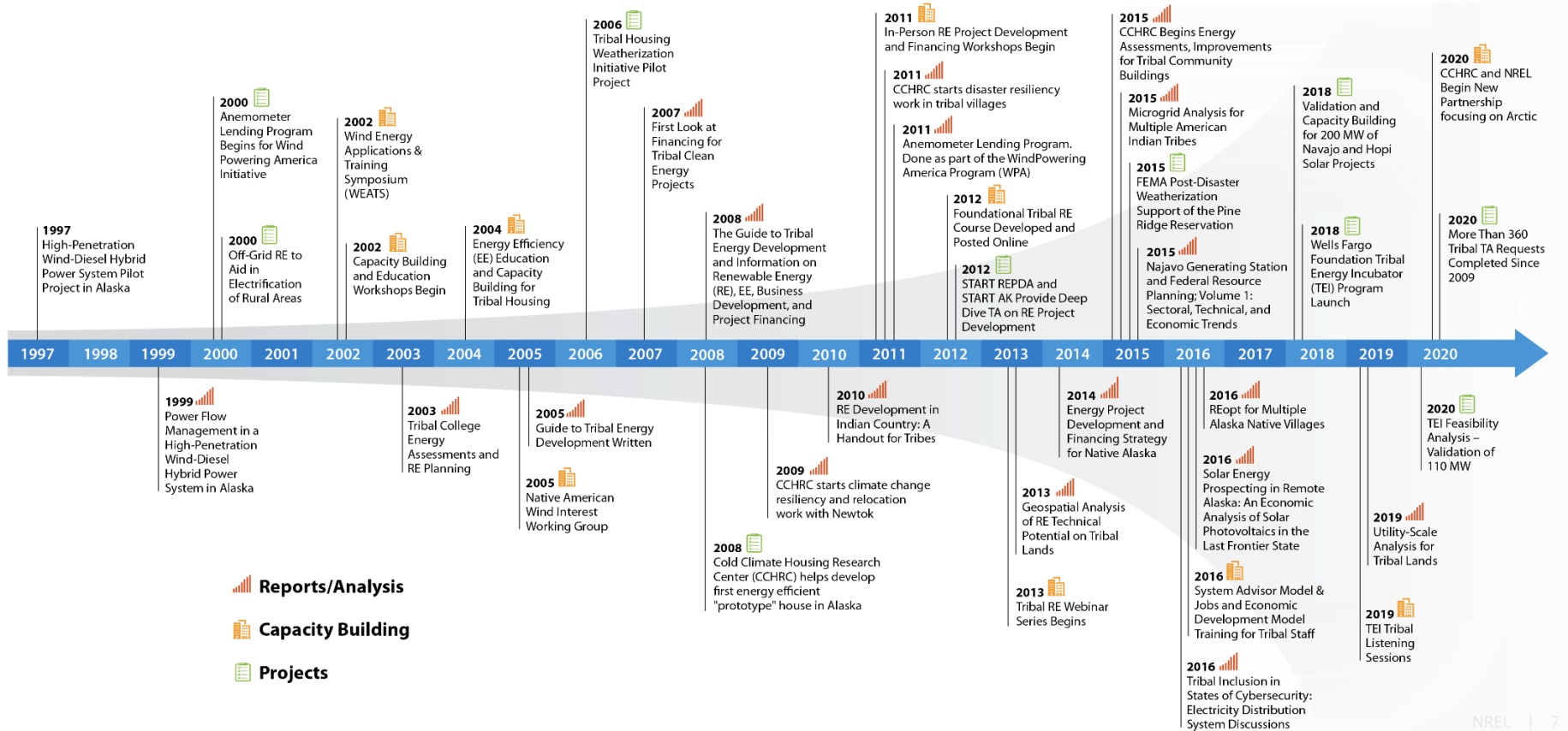
Support workforce and institutional capacity development on clean energy technology, equity, policies, and economic impact.



Resilience Assessment and Planning

Identify and plan for more resilient energy systems to mitigate future energy disruptions.

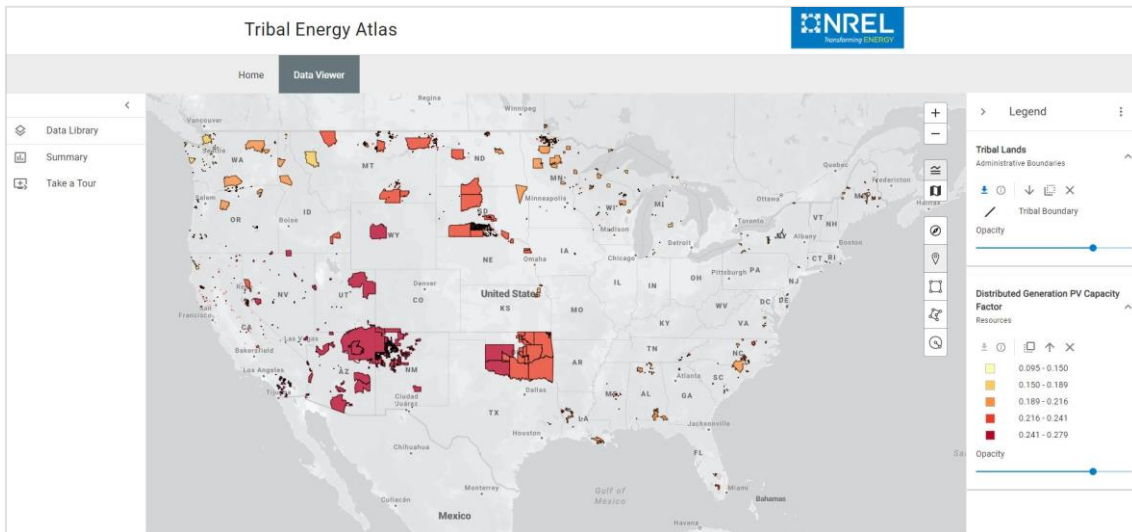
NREL's History in Tribal Energy



Tribal Energy Atlas

NREL supports data and development of DOE's Office of Indian Energy **Tribal Energy Atlas**.

The tool is a first-of-its-kind interactive geospatial application that allows tribal energy project planners, technicians, and investors to conduct their own analyses of installed energy projects and resource potential on tribal lands.



Explore the Atlas: maps.nrel.gov/tribal-energy-atlas

Clean Cities Coalitions

Clean Cities Coalition Network

A U.S. Department of Energy (DOE) partnership to advance clean transportation nationwide.



Clean Cities Coalitions:

- Serve as forums for local stakeholders to connect and collaborate on saving energy and using affordable alternative fuels
- Provide grassroots support and resources on new transportation technologies and infrastructure development
- Act as support networks to help their stakeholders identify cost-effective solutions that work locally

Clean Cities Portfolio



**Light-,
Medium-, and
Heavy-Duty
Vehicles**



**Alternative and
Renewable
Fuels and
Infrastructure**



**Idle Reduction
Measures and
Fuel Economy
Improvements**



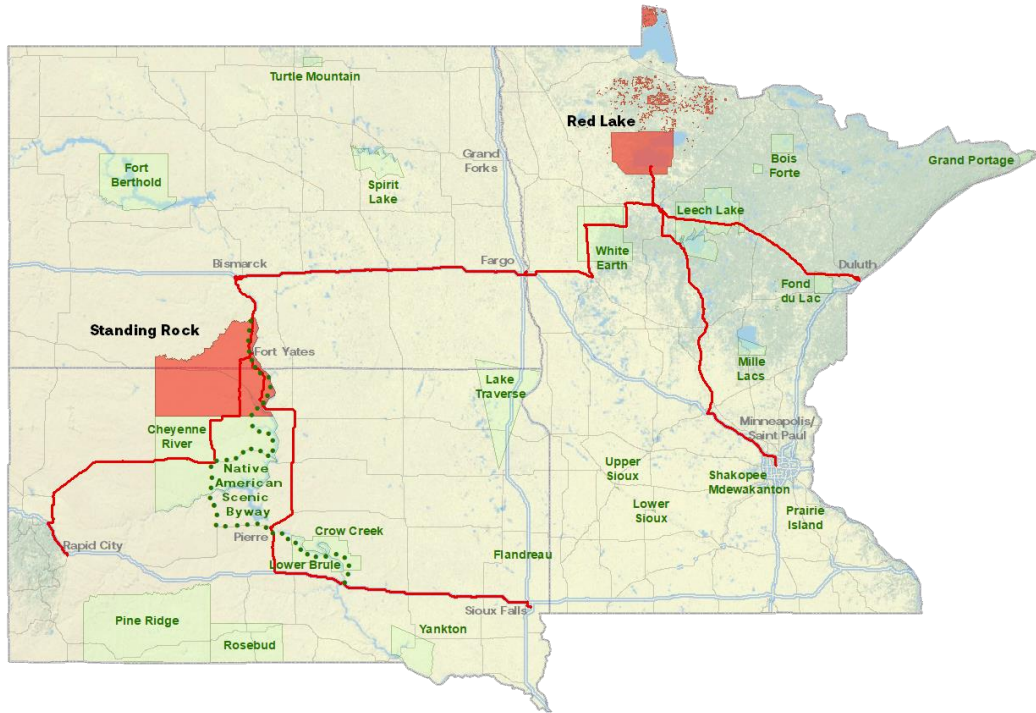
**New Mobility
Choices and
Emerging
Transportation
Technologies**

Building Relationships and Strengthening Markets

- Connecting fleets with fuel providers and industry partners
- Offering training and information
- Supplying access to technical assistance
- Identifying funding
- Providing public recognition
- Collecting data and tracking progress



Upper Midwest Inter-Tribal EV Charging Community Network (Electric Nation)



“Electric Nation’s mission is to provide equitable access to clean, affordable transportation in multifamily housing and rural, underserved Tribal communities. [Electric Nation] is committed to expanding access to benefits of electrified transportation to more Tribal members while growing public familiarity with clean transportation options and establishing EV corridors connecting rural Reservations and multi-family communities to key medical, educational, and retail destinations.”

— Electric Nation

<https://electricnation.info/>

Image credit:

https://www1.eere.energy.gov/vehiclesandfuels/downloads/2023_AMR/TI148_Blake_2023_o%20-%20Heather%20Rhoads.pdf

Project Overview

- Project Leads:
 - Native Sun Community Power Development
 - Standing Rock (SAGE) Renewable Energy Power Authority
- Supporting partners:
 - Center for Energy and Environment
 - Connexus Capital
 - eFormative Options
 - Minnesota and North Dakota Clean Cities Coalitions
 - Minnesota Pollution Control Agency
 - Minnesota Power
 - Otter Tail Power Company
 - Xcel Energy
 - Many community partners
- Budget:
 - \$6.7M DOE funding
 - \$7.2M cost share



Goals

59 DC Fast Chargers

63 Level 2 chargers

16 light-duty EVs

Electric shuttle

Two electric school buses

Two workforce training programs

52 events

<https://electricnation.info/>

The Role of MN and ND Clean Cities Coalitions

- During Grant Development
 - Build on prior experience obtaining DOE funding
 - Build relationships with cost-share sources
 - Leverage expertise with EVs and infrastructure development
 - Support grant writing
 - Support budget development.
- During Project Implementation
 - Lead subrecipient: oversee many subcontracts and reimbursements
 - Plan and execute events
 - Provide technical assistance for fleets and partners
 - Provide administrative support with federal processes and reporting.



Photo: Jon Hunter, North Dakota Clean Cities/Minnesota Clean Cities Coalition

Continued Collaboration: Expanding Regional EVSE Access with Tribal Nations Based on Community Priorities

- Native Sun Community Power Development
- Clean Cities Coalitions: Michigan, Minnesota, Wisconsin
- Approach
 - Support Tribal-led community engagement on desired benefits and priorities of EVSE deployment
 - Developed individualized EVSE deployment plans for participating tribal communities
- Outcomes
 - 15 Level 2 EVSE at community identified priority locations
 - Develop standard protocols for Tribal engagement and project evaluation, based on community input
 - Engage with all 34 tribal communities in the region
- Budget
 - \$1.67M federal funding
 - \$418,000 cost share

EVSE & Tribal Communities

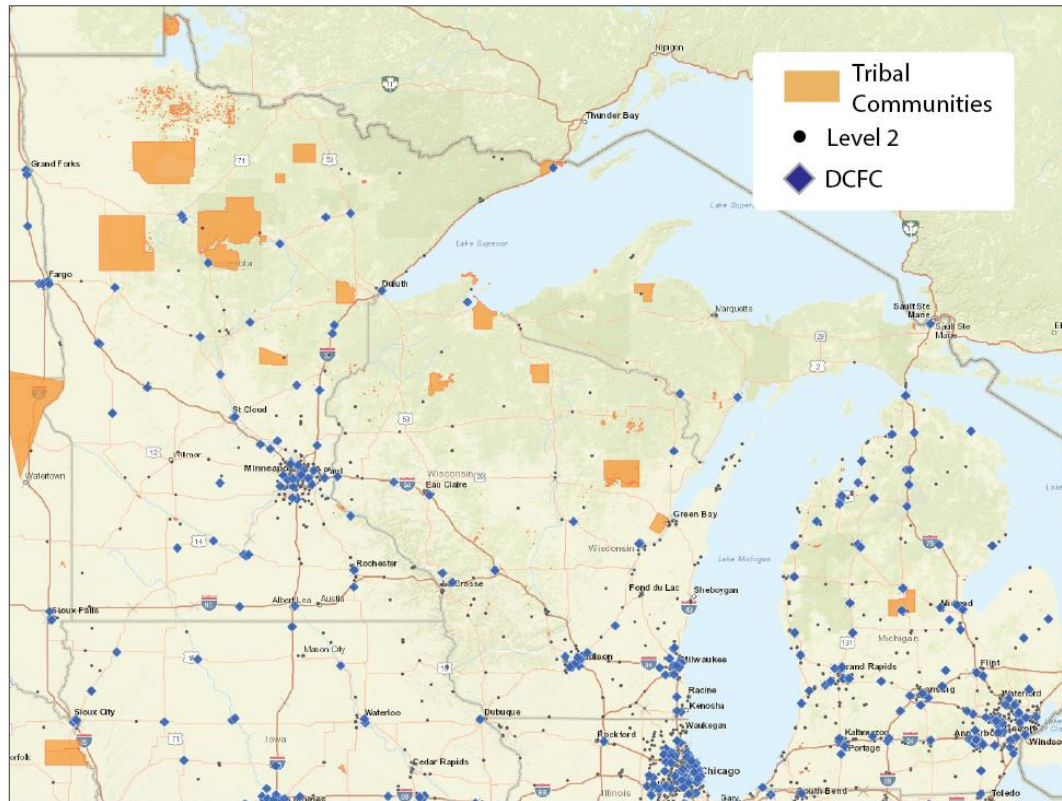


Photo: Jon Hunter, North Dakota Clean Cities/Minnesota Clean Cities Coalition

The Joint Office

Joint Office Mission and Vision

Mission

To accelerate an electrified transportation system that is affordable, convenient, equitable, reliable, and safe.

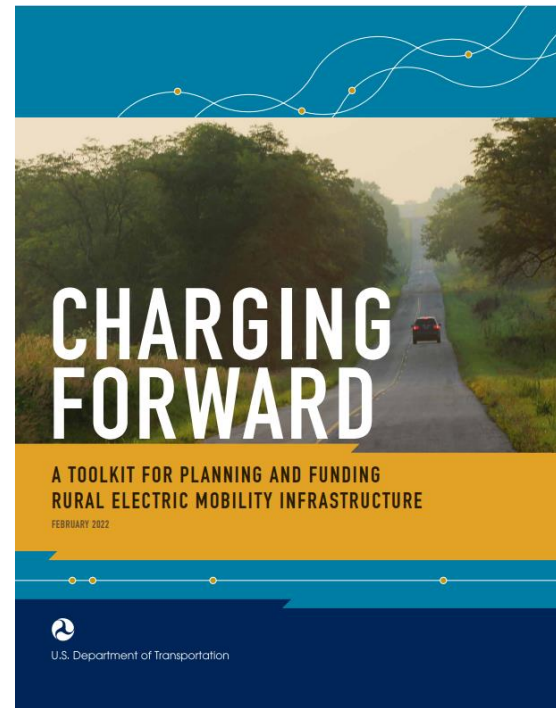
Vision

A future where everyone can ride and drive electric.



Rural EV Toolkit

- Department of Transportation
- Sections
 - Electric Mobility Basics
 - Benefits and Implementation Challenges of Rural Vehicle Electrification
 - Partnership Opportunities
 - EV Infrastructure Planning for Rural Areas
 - EV Infrastructure Funding and Financing for Rural Areas
 - Resources for EV Infrastructure Planning
 - Environmental Statutes and Executive Orders



www.transportation.gov/rural/ev/toolkit

Purpose of the EV Tribal Companion



Offer tribes a quick and efficient means of identifying the most relevant and timely EV funding opportunities and locating EV specific resources and project examples for tribal communities.



The resources and project examples can also assist tribes in connecting with agencies and other tribal communities that can share knowledge and insights to help prepare for and implement EV projects.

Streamlining Resources

Funding Opportunities

- Numerous funding opportunities have become available with the passing of the Bipartisan Infrastructure Law (BIL) and Infrastructure Investment Act (IRA).
- Many of these programs can be used to assist with EV projects.
- The Joint Office of Energy and Transportation's Technical Assistance page will highlight those programs most relevant to EV and accessible to Tribal communities.

Technical Assistance Resources

- Identifying agencies Tribes can contact for technical assistance to plan and implement EV projects.

EV Project and Partnership Examples

- Featuring examples of EV projects taking place across Indian Country and highlighting examples of EV project partnerships serving tribal communities.

Informational Webinars and Short Videos

Highlighted Funding Opportunities

[Tribal Energy Development Capacity Grant](#), U.S. Department of Interior, Bureau of Indian Affairs, Division of Energy and Mineral Development – **Current closing date for applications is Jan. 11, 2024.**

[Clean School Bus Rebate Program](#), U.S. Environmental Protection Agency (EPA), Office of Transportation and Air Quality – **Closes Jan. 31, 2024.**

[Tax Credits for Electric Vehicles Eligible for Elective Pay](#), Internal Revenue Service – **Tax credits set to expire 2032.**

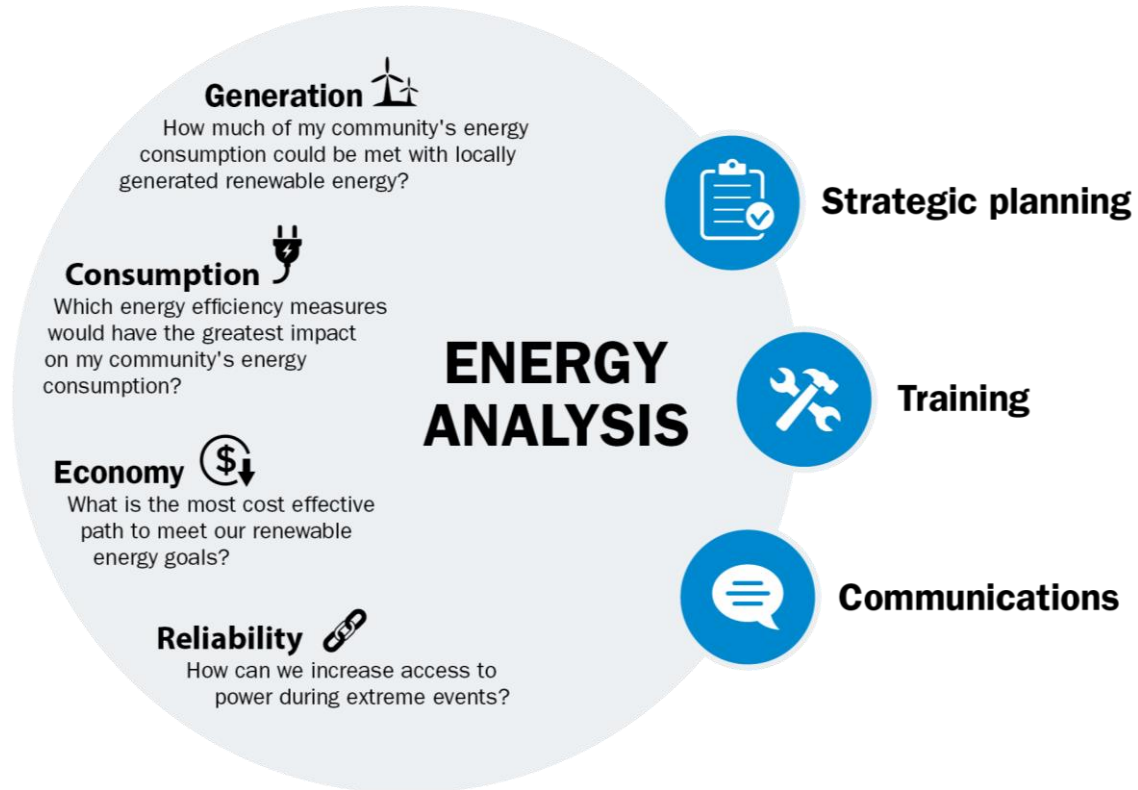
[Rebuilding American Infrastructure with Sustainability and Equity \(RAISE\)](#), U.S. Department of Transportation, Office of the Under Secretary for Policy (OST) – **NOFO expected Nov. 2023.**

[Diesel Emissions Reduction Act \(DERA\) Tribal and Insular Area Grants](#), U.S. Environmental Protection Agency (EPA), Office of Transportation and Air Quality – **Expected fall 2023.**

[Low or No Emissions Bus Discretionary Program](#), U.S. Department of Transportation, Federal Transit Administration – **NOFO expected winter 2024.**

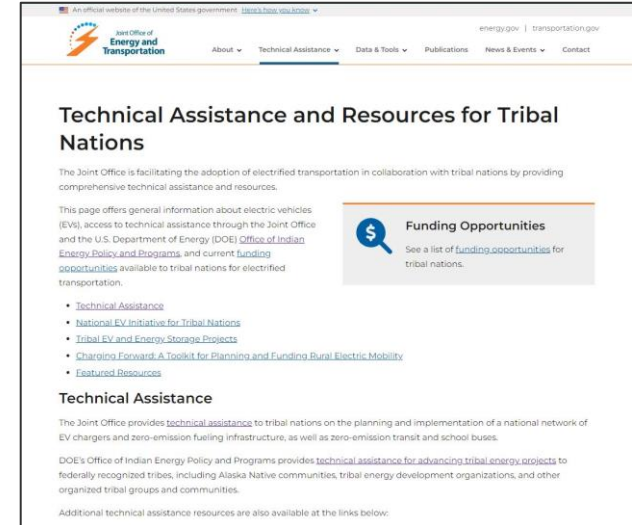
Technical Assistance

What is Technical Assistance?



Technical Assistance from the Joint Office

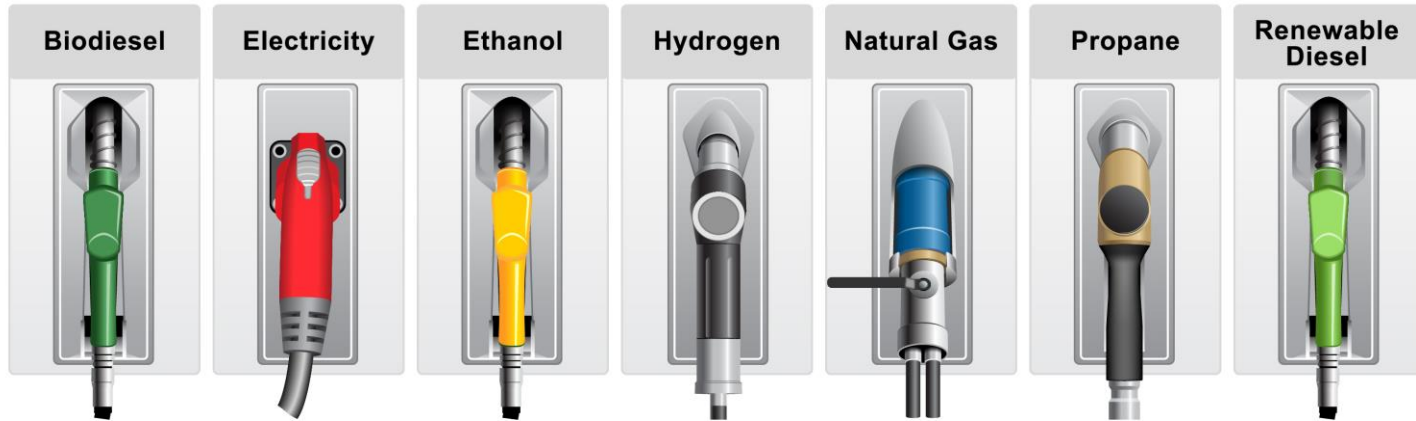
- Planning deployment of EV and zero-emission fueling infrastructure
- On-site energy storage and mobile power generation options
- Power needs analysis and tips for working with local utility
- Infrastructure siting needs and support
- Fleet electrification (transition) strategic planning
- Infrastructure development and needs assessment for bus fleets
- Route analysis and planning
- Vehicle procurement
- Impacts on battery performance (e.g., cold temperatures)
- Training and workforce development opportunities
- Solar and battery storage opportunities for electrification to serve as resilient backup power for facilities and other uses



The screenshot shows a webpage titled "Technical Assistance and Resources for Tribal Nations" from the Joint Office of Energy and Transportation. The page includes a navigation menu with "Technical Assistance" selected. The main content area features a sub-header "Technical Assistance and Resources for Tribal Nations" and a paragraph explaining the Joint Office's role in facilitating electrified transportation for tribal nations. A "Funding Opportunities" callout box is visible on the right. Below the main text, there is a list of links: "Technical Assistance", "National EV Initiative for Tribal Nations", "Tribal EV and Energy Storage Projects", "Charging Forward: A Toolkit for Planning and Funding Rural Electric Mobility", and "Featured Resources". A "Technical Assistance" section follows, detailing the types of assistance provided and listing the DOE's Office of Indian Energy Policy and Programs as the provider. The page footer mentions additional technical assistance resources available at the links below.

Request assistance at
driveelectric.gov

Technical Assistance from Clean Cities Coalitions



Communities Local Energy Action Program (LEAP)

Applications due Dec 14, 2023!

Communities LEAP aims to facilitate sustained community-wide economic empowerment through clean energy, improve local environmental conditions, and open the way for other benefits primarily through DOE's clean energy deployment work.



Clean Energy to Communities (C2C)

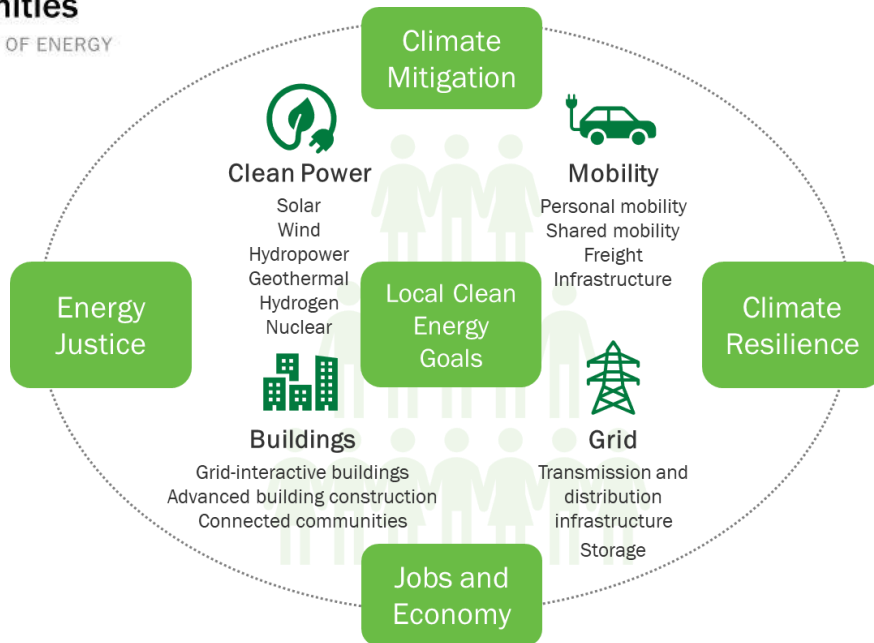


C2C: Clean Energy to Communities

U.S. DEPARTMENT OF ENERGY

C2C provides innovative, cross-cutting technical solutions using an integrated approach.

C2C is open to Tribes, as well as other local communities and utilities.



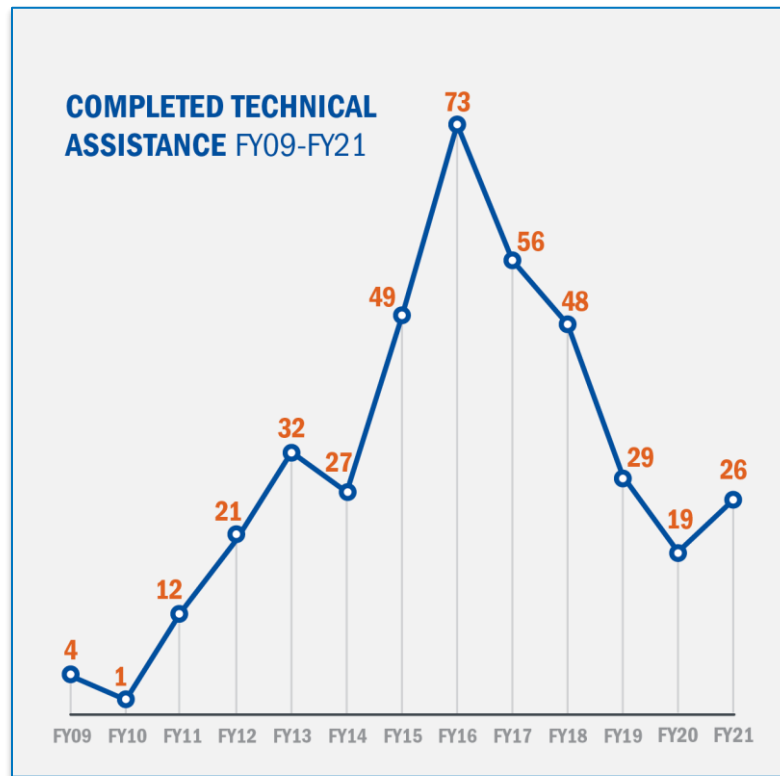
Technical Assistance for Tribes

NREL supports DOE's Office of Indian Energy's on-request technical assistance (TA) program.

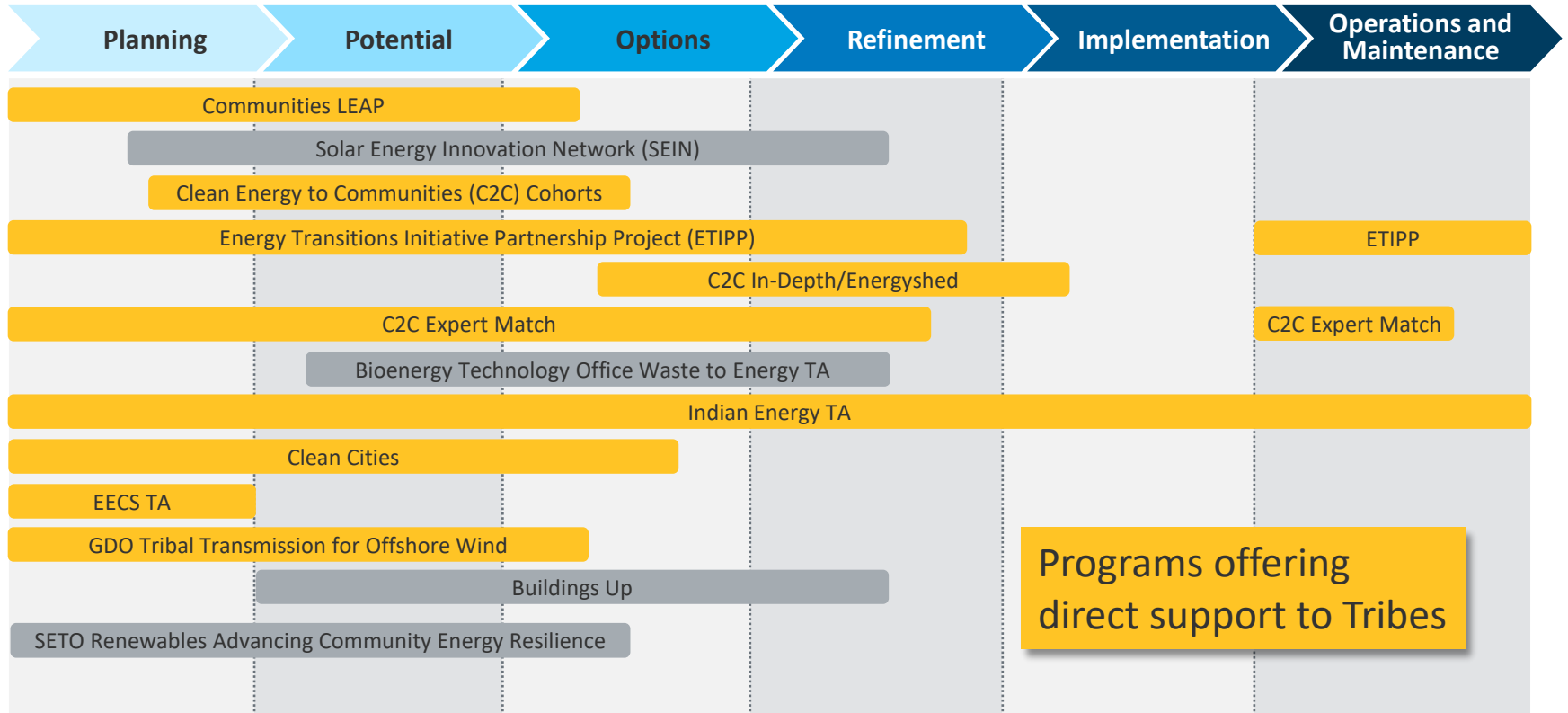
The TA program works alongside American Indian Tribes and Alaska Native villages to advance their self-determined energy visions and foster energy security and sovereignty.

TA through DOE's Office of Indian Energy includes:

- strategic energy planning
- technical analysis
- financial analysis.



NREL/DOE Energy Transition Project Development Technical Assistance



Technical Support Services Agreements

NREL's Technical Support Services agreements extend the benefits of NREL expertise to state, local, and Tribal energy decision makers and planners charting their course to a clean energy future.



Ask an Expert



Technical, Policy,
and Regulatory
Overview



Custom Data
Development
for Jurisdictions



Expert
Participation
in Technical
or Advisory
Committee



Technical
Review of
Request for
Proposal (RFP)



Technical
Review of
Proposals in
Response
to RFP



Request NREL
expert in-person
services
(domestic U.S. only)

Through streamlined contracting timelines, terms, and cost-effective pricing, the service agreements offer users timely and customized technical support to navigate renewable energy, energy efficiency, and/or sustainable transportation projects.

Learn more at: nrel.gov/state-local-tribal/technical-support-services.html

Thank You!

www.nrel.gov

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