



Proposed Solutions to Regulatory Barriers to Tribal Solar Development

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American Solar Energy Society Conference
June 22, 2022

Agenda

1 *Addressing Regulatory Barriers to Tribal Solar Deployment Overview*

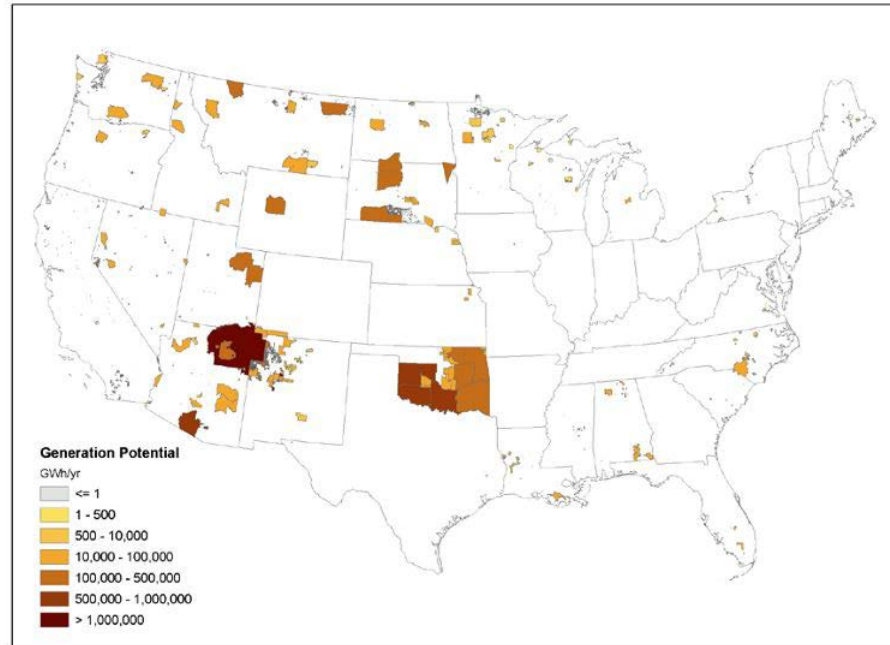
2 **Barrier 1: Lack of Tribal Representation**

3 **Case Study: Agua Caliente Band of Cahuilla Indians**

4 **Next Steps**

*Addressing Regulatory
Barriers to Tribal Solar
Deployment*

Tribal lands represent approximately 6.5% of total U.S. utility-scale renewable energy technical potential.



Photovoltaic generation potential by reservation



This project articulates key regulatory challenges or barriers that affect solar projects **specifically or disproportionately** because they are located on tribal lands.

This project is working to ready stakeholders to address regulatory barriers by:

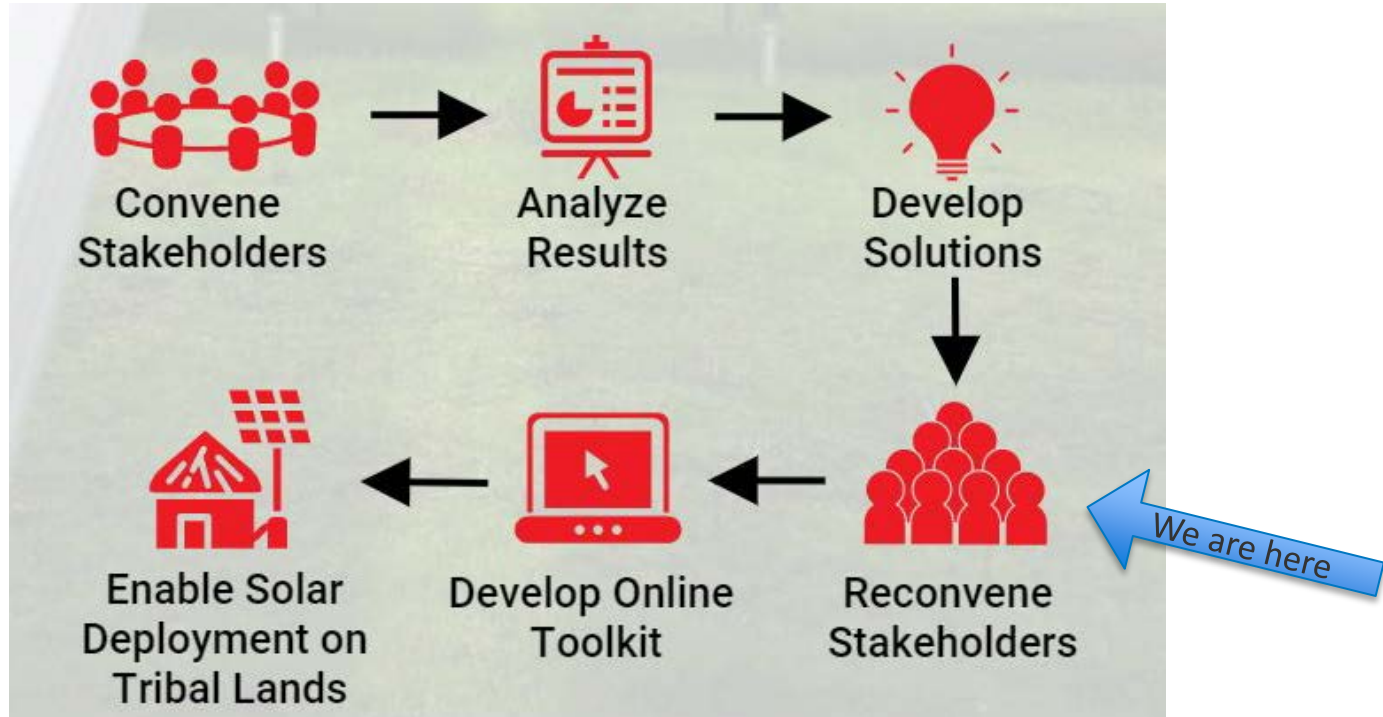
- Increasing institutional capacity for tribes and regulatory bodies
- Developing frameworks
- Providing trainings
- Developing a document repository.

The Tribal Solar Initiative is a partnership between the National Renewable Energy Laboratory (NREL) and the Midwest Tribal Energy Resources Association (MTERA).

Project Overview



Project Approach

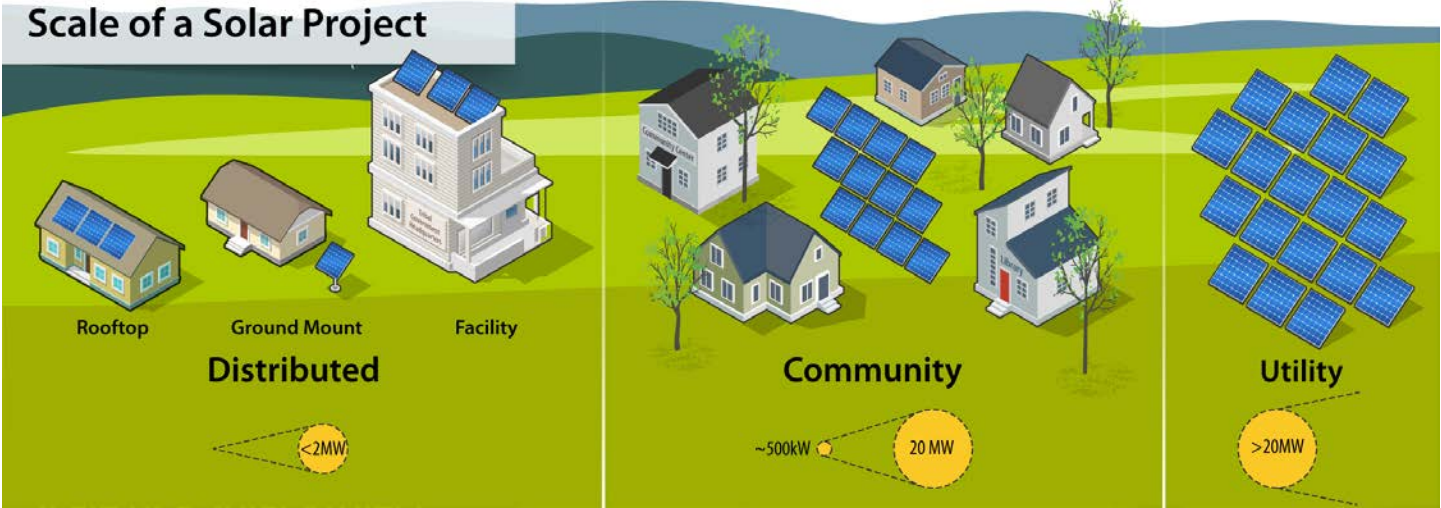


Regulatory Barrier

Regulatory Process: any decision-making process that involves making rules that govern where, when, and how a solar project can be developed.

Jurisdictional Level	Organization
Tribal	Tribal government
Local Utility	Cooperative utility (or similar) governing board
Local	County
State	State public utility commission
Regional	Independent system operator/regional transmission operator
Federal	Federal Energy Regulatory Commission

Solar Project Scale



Barrier One: Lack of Tribal Representation in Utility, State, or Federal Energy Policy Decision-Making Processes

Overview

Tribes are often not represented in decision-making processes that impact their ability to develop energy projects.

- Relevant project scale: all
- Relevant jurisdiction: all.

Potential reasons

- Time
- Financial resources
- Technical expertise
- Sovereignty concerns
- Election procedures.



Community solar array at Picuris Pueblo

See Issue Brief 1: Tribal
Sovereignty

Solutions

Short-Term/Workaround Solution

- Outreach from Tribal staff or leadership to elected and appointed officials with info about Tribal perspectives or priorities
- Tribal liaison positions.

Long-Term Solution

- Tribal members run for or get appointed to office
- Generic dockets.

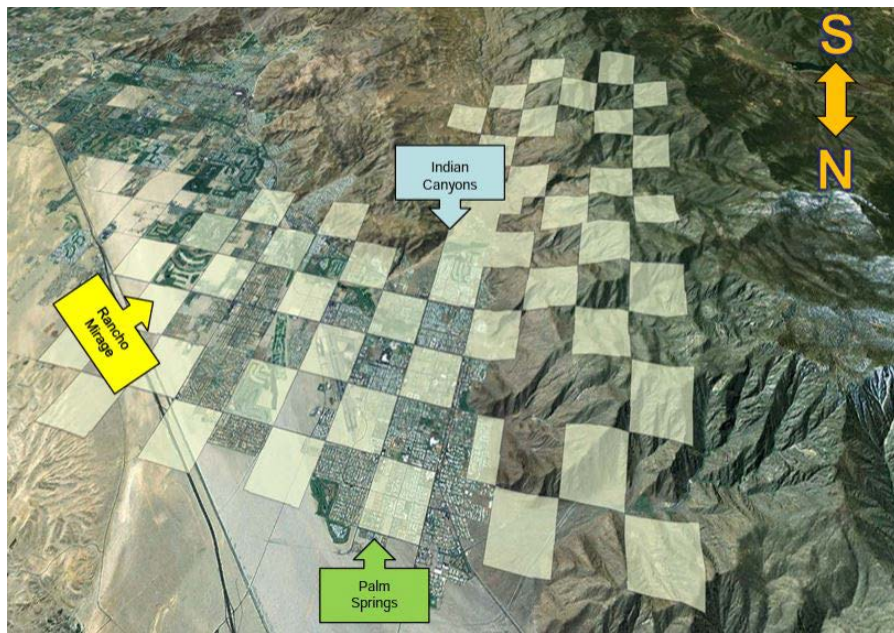


Participants of the 2018 Energy Planning & Development Workshop in Kodiak Alaska.

See Issue Brief 5:
Utility Tribal Engagement

Case Study: Agua Caliente Band of Cahuilla Indians

Challenge: “Checkerboarding”



Agua Caliente land is highlighted in the Palm Springs California area, displaying the “checkerboard” pattern.

See Issue Brief 2:
Land Jurisdiction
Considerations

Challenge: Rate Negotiation

Solution: tribal liaison and customized rate structure



80-kW parking canopy solar system at Agua Caliente reduces Tribal office electricity cost from \$22,000 to \$200 annually.

See Barrier 4:
Net-Metering Limits or Lack of a
Net-Metering Policy

Challenge: Intra-Tribal Communication

- Solar has higher upfront costs and longer payback times—compared to hospitality, tourism, and gaming.
- Solar seen as riskier investment.
- Communicate other benefits:
 - Energy resilience
 - Environmental benefits
 - Economic diversification value.



The San Carlos Apache Tribe's 10-kW solar PV system generates energy to run the tribal radio tower

Next Steps

Guidebook Available for Comment



The screenshot shows the MTERA website header with a navigation menu: SIGN IN, 2022 CONFERENCE, ABOUT US, WHAT WE DO, TRIBAL SOLAR INITIATIVE, INFO HUB, CONTACT US, MTERA UPDATES, NEWS, and a red JOIN US button. The main content area features a large image of solar panels with the text "PROJECT UPDATES AND DISCUSSION FORUM" overlaid in white. Below this, there is a section for the Tribal Solar Initiative with a sub-heading "Addressing Regulatory Challenges to Tribal Solar Deployment Guidebook Draft" and a small image of solar panels. The text below the image states: "The Guidebook DRAFT for the Tribal Solar Initiative is now available to view here on our site. Comments, feedbacks, suggestions, and successes related to this guidebook are welcome and can be submitted directly to Laura Behilla at laura.behilla@nrel.gov" and "Apr 1, 2022".

<https://www.mtera.org/tribal-solar-initiative-updates-and-forum>

Networking Session

Thursday, June 23

2:15–3:30 p.m.

Ballroom A

Thank you!

www.nrel.gov

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