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#### Identifying Barriers and Predictors for Success for Renewable Energy Development on Tribal Lands

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# Financing and Funding Remains a Challenge



- Small scale projects > Large scale projects Challenges securing financing, outside capital, infrastructure, risk, RECs
- Lack tribal equity to dedicate to RE competing interests
- Debt Risk adverse, not willing/unable to take it, aversion of private capital







#### **Tribal Leadership and Staff: Building Capacity**

- Tribal Staff & Leadership the "champions" Capacity challenges & key for success
- Governance Separation of business and politics is key
- Education, Education, Education at all levels
- Federal Programs Key to building and filling capacity





# Building Productive Tribal-Non-Tribal Partnerships



- Mistrust between outside partners & tribes History, misalignment of goals & desired financial outcomes
- Federal policy Indian energy purchase preference, BIA Loan Guarantee Program reduces risk
- Intertribal forums Capacity building, partnerships, addressing challenges





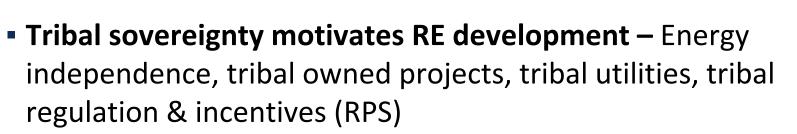


- Scale and geographic placement Larger projects = more impacts
- Worldview differences Natural resources ≠ economic resources, capitalism may conflict with values
- Strategic Energy Planning Identifying what options are a cultural fit, increasing chances of success





### **Tribal Economic Sovereignty: RE Catalyst for Energy Independence**



- Reliance out outside capital can influence planning decisions
- RE development Greater degree of economic sovereignty & self-determination
- Building capacity to meet these goals





### **Going Forward – Unique Tribes with Shared Barriers**



- Tribal RE development remains a formidable challenge
  - Multitude of challenges other than energy
  - Internal capacity Still being built
  - Tribal Sovereignty Driver for RE development
  - Each tribe is unique Many barriers are shared
  - Creating strategic energy plans Making decisions consistent with values
  - Developing technical tools & models Assess risk, policy, regulations





## **Vision of Future of Tribal RE**



- Strong and unified vision of RE energy development in Indian Country
  - Tribes partnering and collaborating on large and small scale RE projects
  - On and off reservation lands competing regionally, nationally, and globally
  - Economic sovereignty energy independence & economic benefit consistent with cultural values





# Ahe'hee - Wado



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- Sandia National Laboratories
- Sandra Begay-Campbell
- Anonymous experts
- University of Arizona
- Carnegie Mellon University

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