

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY**

DOE's Tribal Energy Program



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www.eere.energy.gov/tribalenergy



Department of Energy

Advancing Energy and National Security through Science, Technology and Environmental Stewardship

Contributes to the future of the Nation by ensuring energy security, maintaining the safety, security and reliability of the nuclear weapons stockpile, cleaning up the environment from the legacy of the Cold War, and developing innovations in science and technology

Managed by Program Offices:

- **Civilian Radioactive Waste Management**
- **Electricity Delivery and Energy Reliability**
- **Energy Efficiency & Renewable Energy**
- **Environmental Management**
- **Fossil Energy**
- **Legacy Management**
- **Nuclear Energy**
- **Science**



Principally, a National Security Agency

Energy Efficiency and Renewable Energy

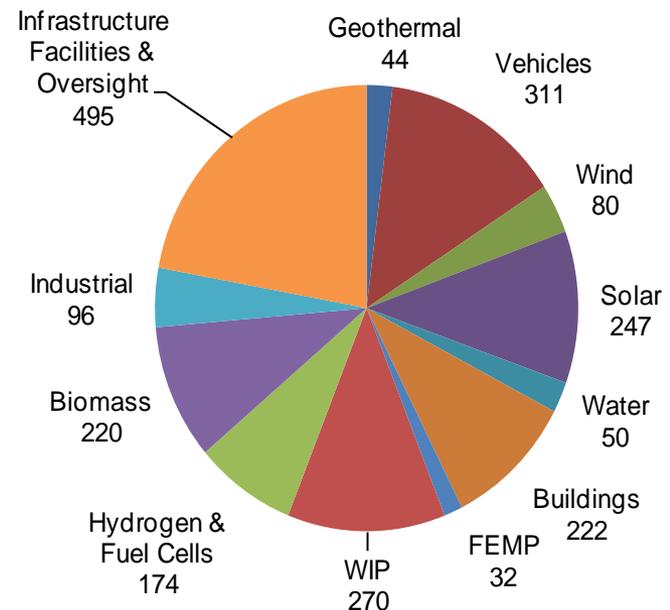
Clean Energy for America's Future

Invests in clean energy technologies that:

- Strengthen the economy,
- Protect the environment, and
- Reduce dependence on foreign oil

Leverages partnerships to speed the adoption of new technologies in renewable energy, advanced vehicles and fuels, and energy efficiency.

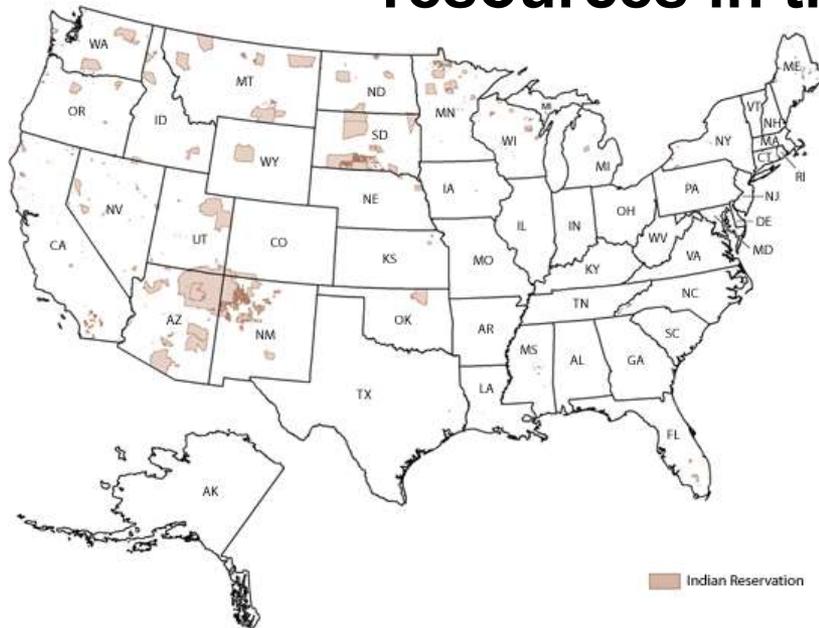
2010 Budget of \$2.2 Billion* (\$ Millions)



* Operates a budget of \$2.2 billion and responsible for investing more than \$16 billion in Recovery Act funds.

DOE's Tribal Energy Program

“Indian land comprises 5% of the land area of the United States, but contains an estimated 10% of all energy resources in the United States”



**Tribal Trust Lands
Comprise
55.7 Million Acres
(Per BIA)**

**~565 Federally
Recognized Tribes**

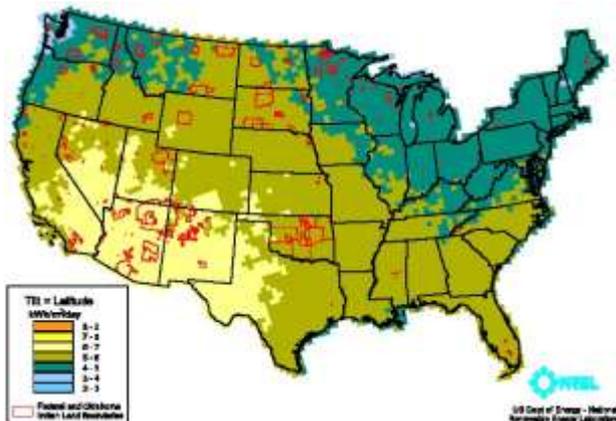
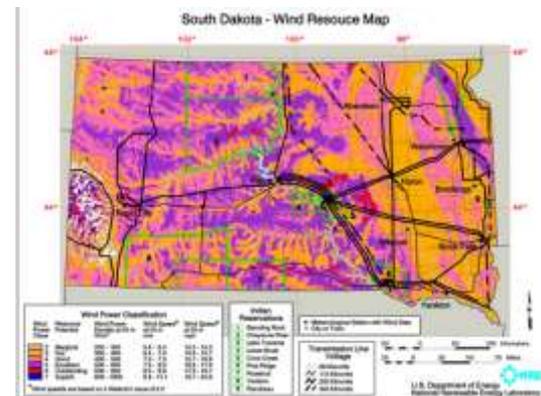
**Tribal energy resource development can
support local economies and Tribal sovereignty**



DOE's Tribal Energy Program

Abundant Renewable Resources

Wind Potential on Tribal Lands about 14% of 2004 U.S. Annual Electric Generation or about 535 Billion kWh/yr on Indian Lands in Lower 48 States (NREL 2004)



Solar Electric Potential on Tribal Lands ~4.5 times the Total U.S. Electric Generation in 2004 or 17,600 Billion kWh/yr on Indian Lands in Lower 48 States (NREL 2004)



DOE's Tribal Energy Program

Promote tribal energy sufficiency, economic development and employment on tribal lands through the use of renewable energy and energy efficiency technologies



Title V of the Energy Policy Act (EPAAct 2005)



DOE's Tribal Energy Program



Mission

Offering financial and technical assistance to Tribes through government-to-government partnerships that:

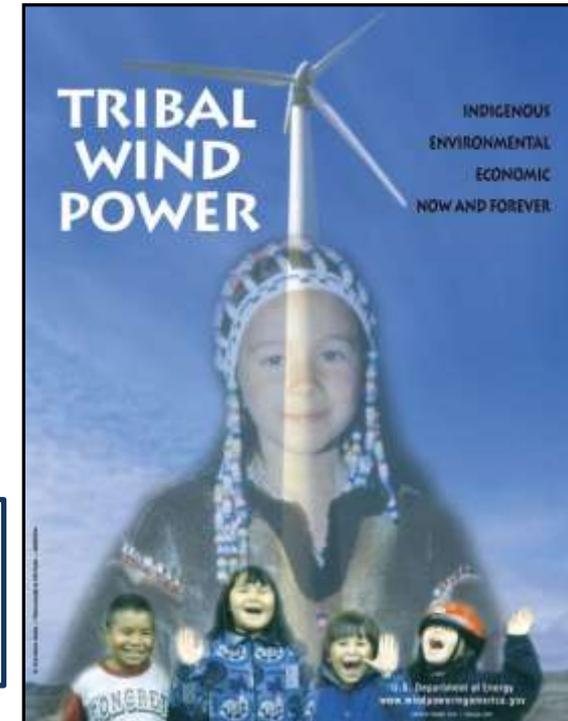
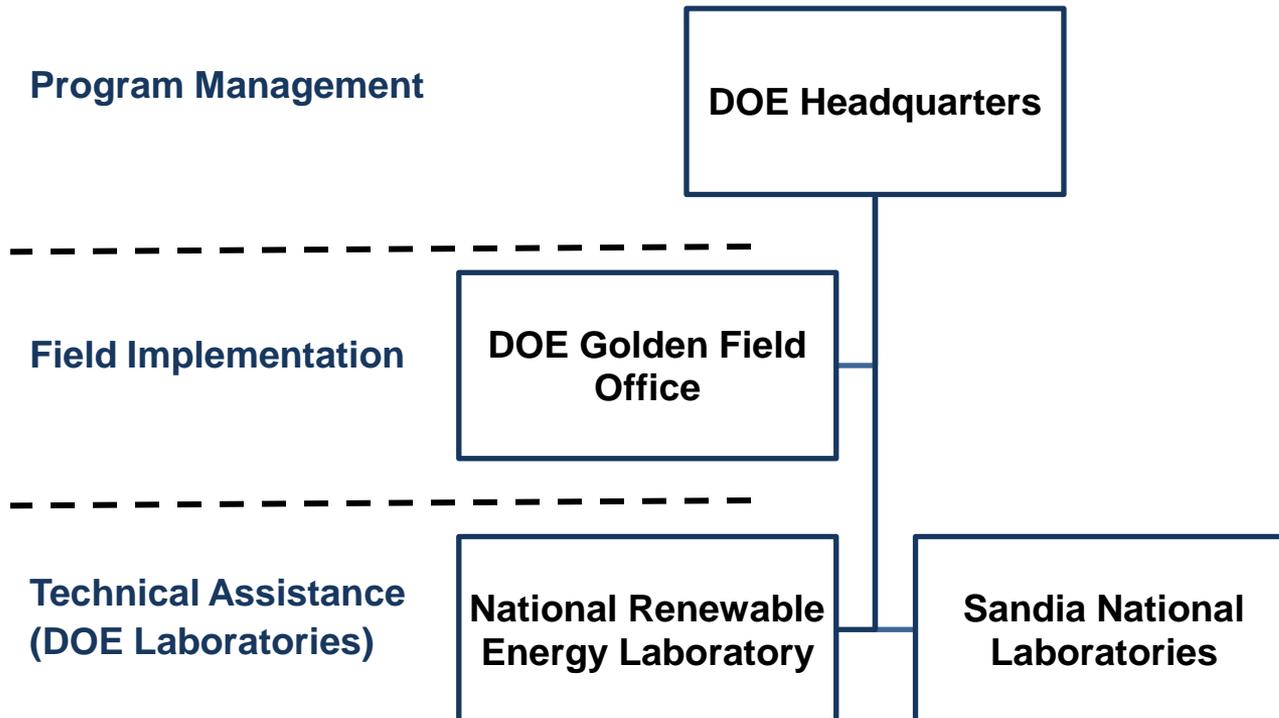
- 1) Empower Tribal leaders to make informed decisions about energy choices;***
- 2) Bring renewable energy and energy efficiency options to Indian Country;***
- 3) Enhance human capacity through education and training;***
- 4) Improve local Tribal economies and the environment; and***
- 5) Make a difference in the quality of life of Native***



DOE's Tribal Energy Program

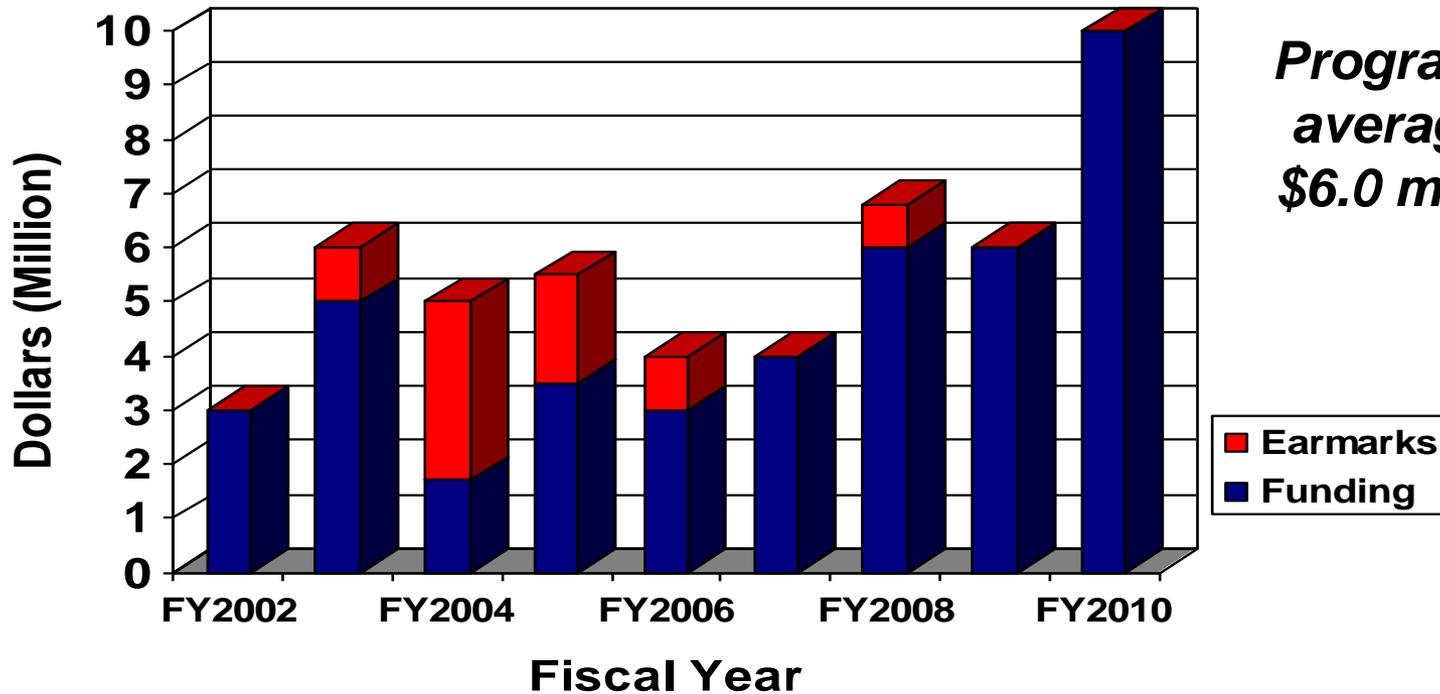
Organization

Program Management through DOE Headquarters, implementation through the DOE Golden Field Office, and technical support through the DOE's Laboratories



DOE's Tribal Energy Program

Program Funding History



Program budget has averaged less than \$6.0 million per year

\$20 Million/ Year Authorized in Title V, Indian Energy, EPL Act 2005





Tribal Energy Program (TEP) Funding*

	<i>FY2009</i>	<i>FY2010</i>	<i>FY2011</i>
<i>DOE Request</i>	<i>\$1.0</i>	<i>\$6.0</i>	<i>\$10.0</i>
<i>Appropriated Funds</i>	<i>\$6.0</i>	<i>\$10.0</i>	<i>TBD</i>
<i>Senate Mark</i>			<i>\$10.0</i>
<i>House Marks</i>			<i>\$15.0</i>

* Amounts in Millions



DOE's Tribal Energy Program **Three Pronged Approach**

**Financial
Assistance**

*Success through
Government-to-
Government
Partnerships*

**Technical
Assistance**

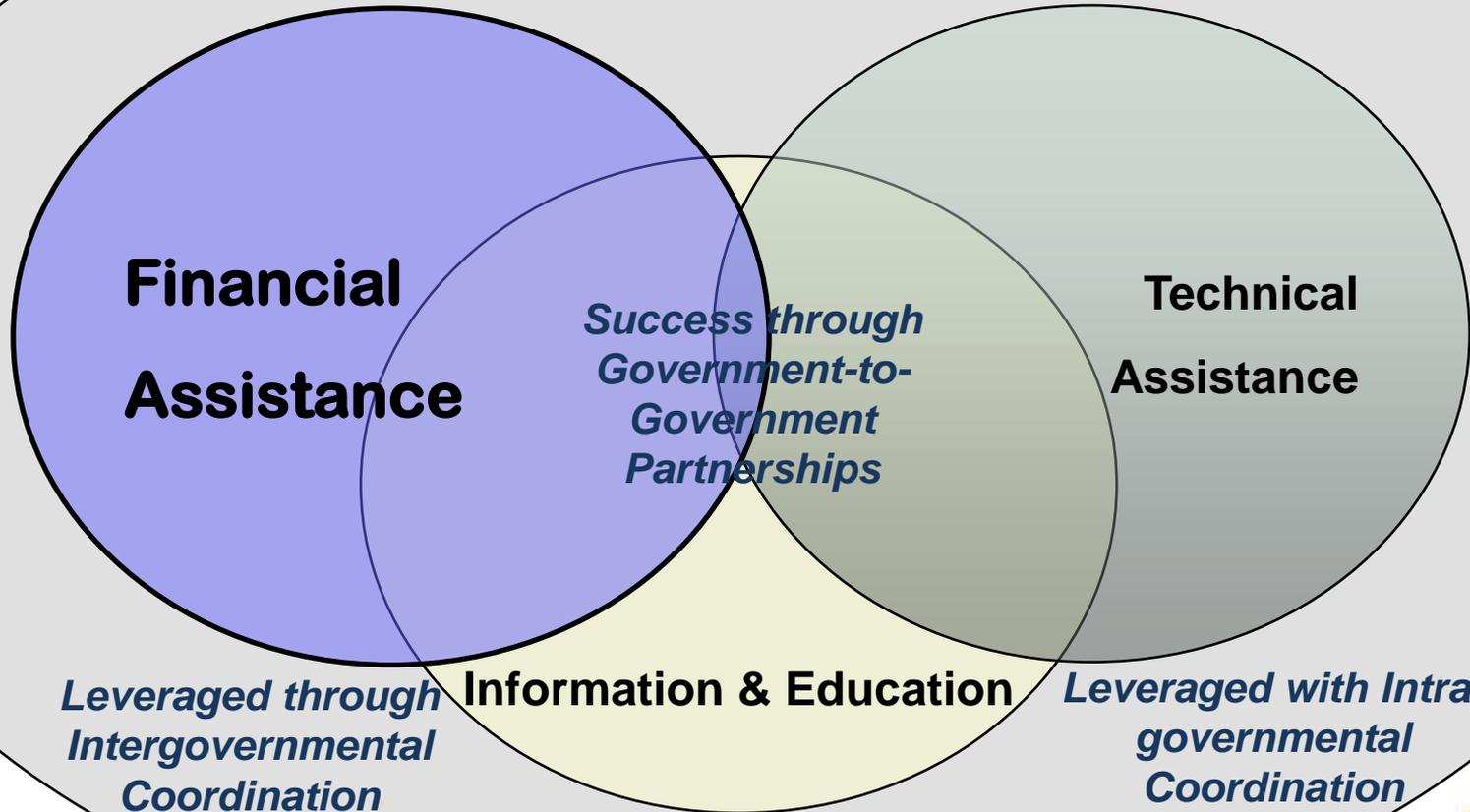
*Leveraged through
Intergovernmental
Coordination*

Information & Education

*Leveraged with Intra-
governmental
Coordination*



DOE's Tribal Energy Program **Three Pronged Approach**



Providing Financial Assistance

Providing financial and technical assistance to Tribes for the evaluation and development of renewable energy resources on Tribal Lands

Eligibility:

Federally-recognized Tribe, Tribal Energy Resource Development Organization, or Tribal Consortium (two or more entities, at least one of which is an Indian Tribe).



Tribal Lands include Indian reservations; Public domain Indian allotments; Former Indian reservations in Oklahoma; Land held by under the provisions of the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.); and Lands held in fee simple or under a Federal land lease.

Funds Awarded through a Competitive Process



FY2011 Financial Assistance

Financial Assistance to Spur Deployment in Indian Country

- **First Steps Toward Developing Energy Efficiency and Renewable Energy on Tribal Lands**
 - Strategic energy planning
 - Energy options analysis
 - Energy organization development
 - Human capacity development
- **Energy Efficiency Development and Deployment in Indian Country**
 - Feasibility Studies
 - Installation of energy efficiency improvements



Solar arrays on Navajo home



FY2011 Financial Assistance

Financial Assistance to Spur Deployment in Indian Country

- **Renewable Energy Development and Deployment in Indian Country**
 - **Feasibility Studies**
 - **Development (pre-construction) activities**
 - **Deployment (construction) activities**
- To apply, you must be registered in Grants.gov
- Registration may take up to 21 days to complete
- For more, see <http://www.grants.gov/GetStarted>
- Verify you are registered by contacting the Grants.gov Helpdesk
- For assistance help, contact Grants.gov Helpdesk at 1-800-518-4726 or support@grants.gov



First 750 kW Turbine on
Tribal Lands in the
Contiguous U.S.

Applications must be submitted electronically through Grants.gov



Project Pipeline

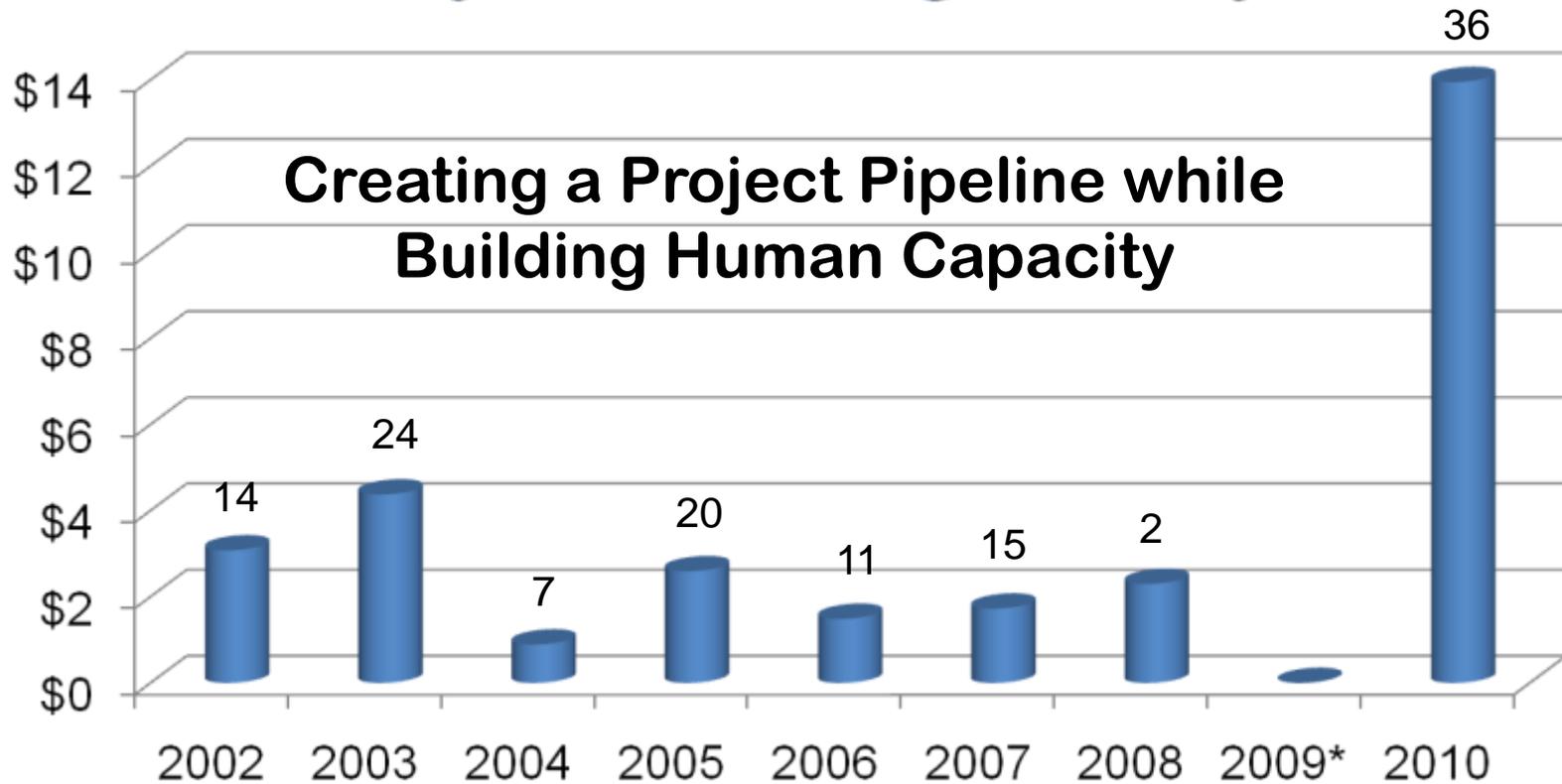
Investment in Tribal Energy Sufficiency

TRIBAL ENERGY PROGRAM FUNDING HISTORY				
Fiscal Year	Number of Awards	DOE Funding	Cost Share	Project Costs
2002	14	\$3.08	\$0.76	\$3.84
2003	24	\$4.38	\$1.11	\$5.49
2004	7	\$0.89	\$0.18	\$1.07
2005	20	\$2.59	\$0.94	\$3.54
2006	11	\$1.49	\$0.56	\$2.04
2007	15	\$1.73	\$0.54	\$2.26
2008	2	\$2.30	\$2.30	\$4.60
2009*	-	0	0	0
2010	36	\$13.95	\$22.71	\$36.66
TOTAL	129	\$30.40	\$29.10	\$59.50

* FY2009 funds carried over and used to fund projects awarded in FY2010



Project Funding History

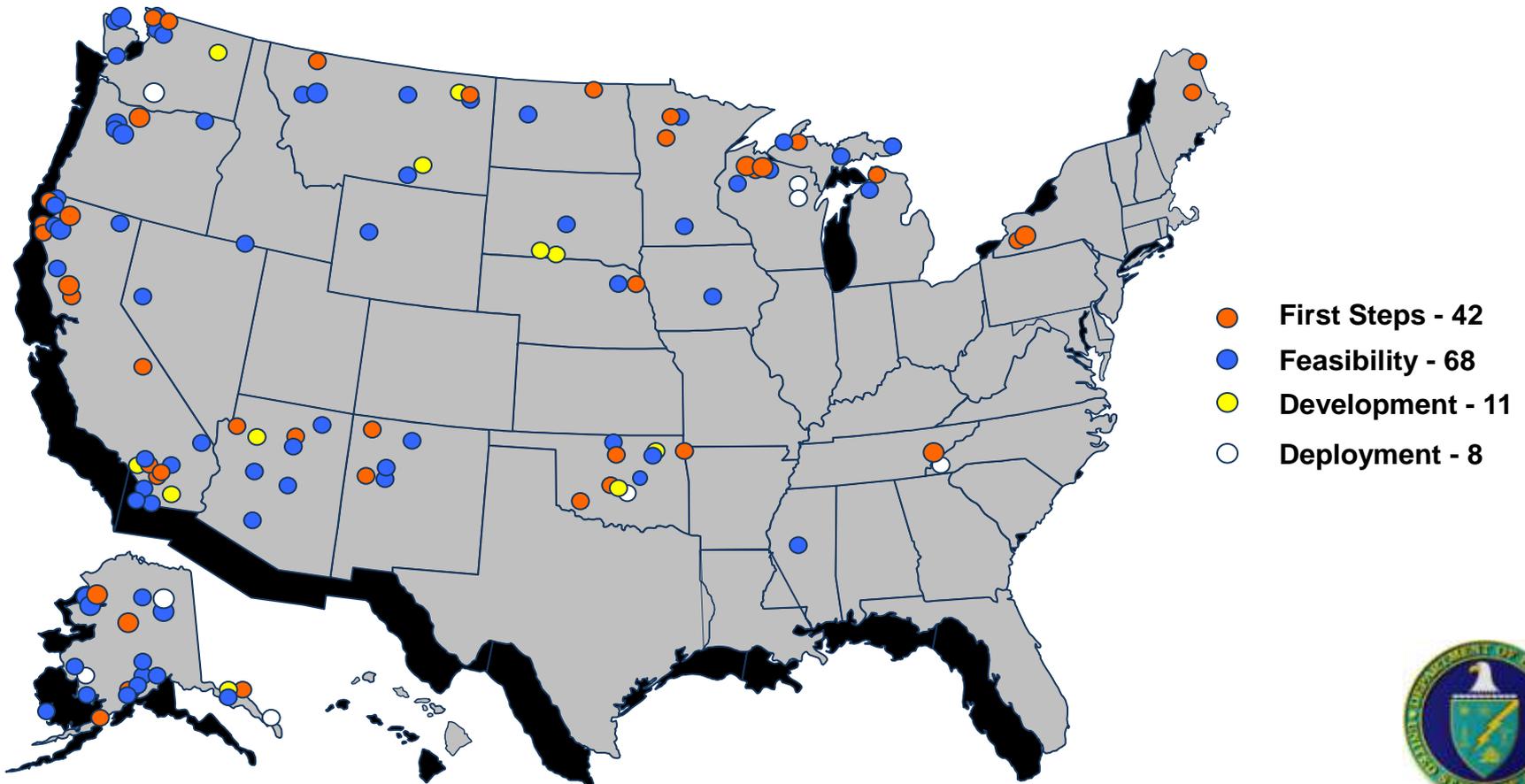


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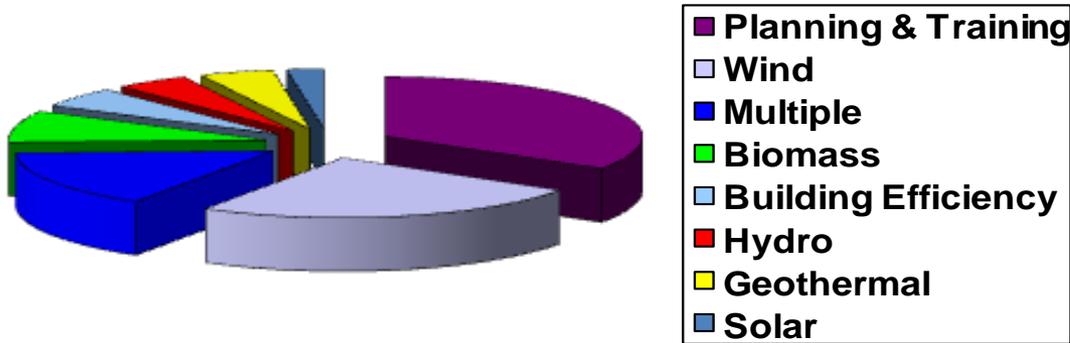
Investment of \$30.4 Million



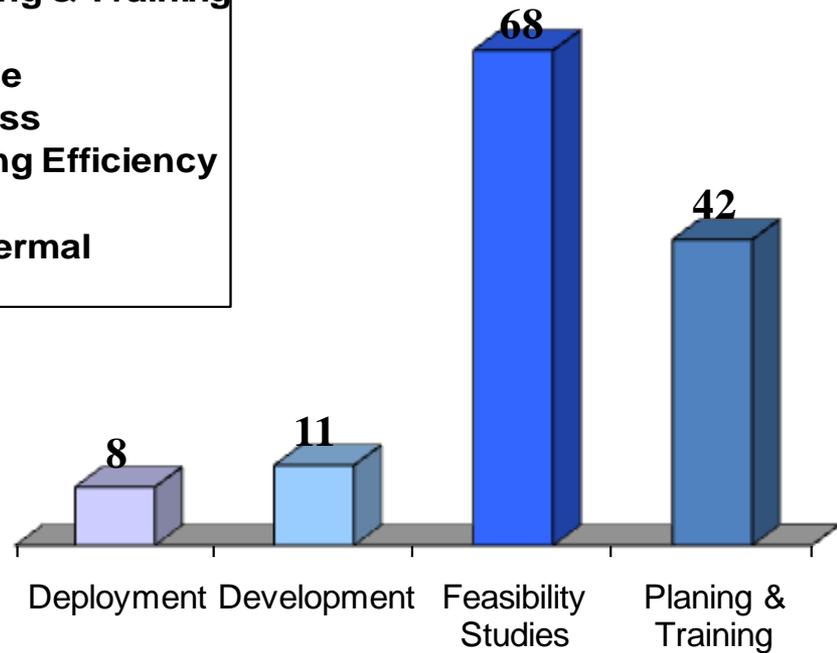
DOE has Funded 129 Tribal Energy Projects Totaling \$30.4 Million *(2002-2010)*



Tribal Energy Project Pipeline



Diverse Renewable Energy Resources in Various Stages of Development



Assisting Tribes Fulfill Their Energy Vision



DOE's Tribal Energy Program **Three Pronged Approach**

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*Success through
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**Technical
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*Leveraged with Intra-
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Providing Technical Assistance

Technical Assistance

- Technology Advice
- Models and Tools
- Resource Maps
- Strategic Energy Planning
- Pre-Feasibility Transmission Studies
- Project Support
- Economic Evaluation
- Design Review
- Special Studies

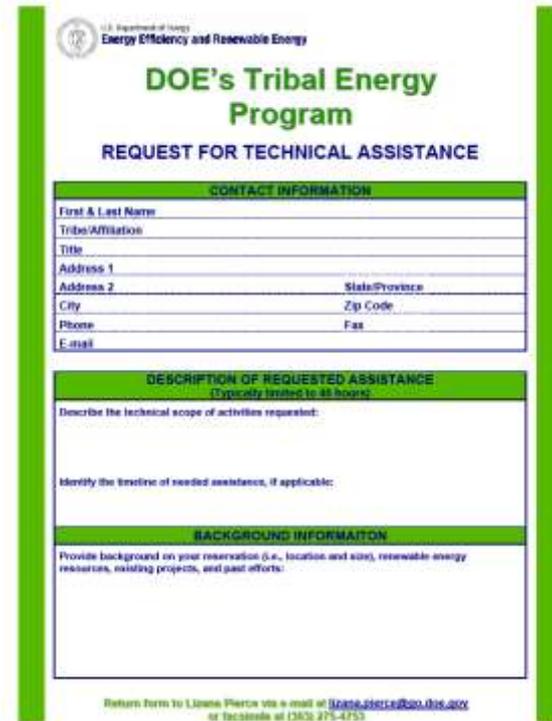


National Renewable Energy Laboratory (NREL) Science & Technology Facility and Solar Energy Research Facility (SERF)



Technical Assistance Requests for Tribes

- The application process is quick and easy: complete the request form and forward it to tribal@go.doe.gov. Soon to be web-based.
- The value of technical assistance for Tribes is typically limited to 40 hours and may include, but is not limited to, renewable energy technology information, renewable resource information, energy efficiency techniques, project support, system performance modeling, policy information, design review, special studies, strategic energy planning, pre-feasibility transmission studies, and training.



The image shows a form titled "DOE's Tribal Energy Program REQUEST FOR TECHNICAL ASSISTANCE". The form is divided into three main sections: CONTACT INFORMATION, DESCRIPTION OF REQUESTED ASSISTANCE, and BACKGROUND INFORMATION. The CONTACT INFORMATION section includes fields for First & Last Name, Tribe/Affiliation, Title, Address 1, Address 2, State/Province, City, Zip Code, Phone, Fax, and E-mail. The DESCRIPTION OF REQUESTED ASSISTANCE section includes a field for "Describe the technical scope of activities requested:" and a field for "Identify the timeline of needed assistance, if applicable:". The BACKGROUND INFORMATION section includes a field for "Provide background on your reservation (i.e., location and size, renewable energy resources, existing projects, and past efforts:". At the bottom of the form, there is a note: "Return forms to Lonna Pierce via e-mail at lperce.doe@doe.gov or facsimile at (202) 275-4753".

Technical Assistance Request Form at
www.eere.energy.gov/tribalenergy/tech_assistance.cfm



DOE's Tribal Energy Program **Three Pronged Approach**

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*Success through
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**Technical
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*Leveraged through
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**Information &
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Coordination*



Annual Program Review

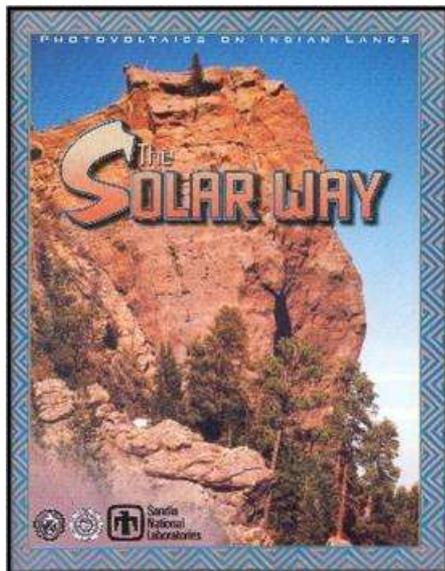
Unique Tribal Forum for Sharing and Learning

- Forum for Tribes to meet and learn from other Tribes pursuing energy sufficiency through renewable energy and energy efficiency, and share in their successes
- Networking & learning opportunity
- Tribal project presentations – lessons learned.
- Forty to fifty (40-50) tribal energy projects represented
- Typically 200-250 participants



Held Annually in Denver, CO

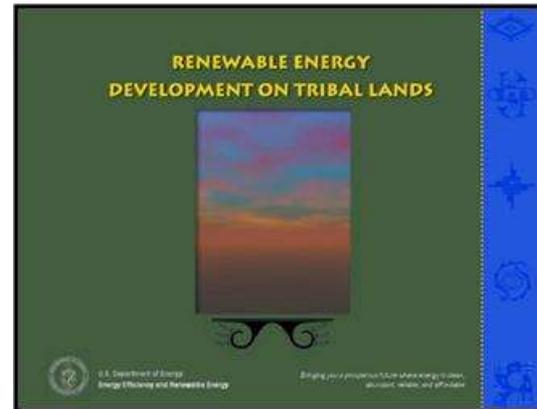




Tribal Energy Website

Guide to Tribal Energy Development

Information Resources



Join Our Email List

For Information on funding opportunities, workshops & training, and other tribal energy information

Email tribal@go.doe.gov



Student Summer Internships

Requirements

- Must be a U.S. citizen and a **Native American**, defined as a member of a federally recognized tribe, Alaska Village, or Alaska Corporation

Application Process

- Applications due in February
- 12 week internships at Sandia National Laboratories (NM)
- Contact Sandra Begay-Campbell at (505) 844-5418 or skbegay@sandia.gov
- Application form posted on TEP website annually

Interns

- Twenty-one (21) interns sponsored since 2002

**Student Paper and Workshop Materials
Posted on TEP Website**

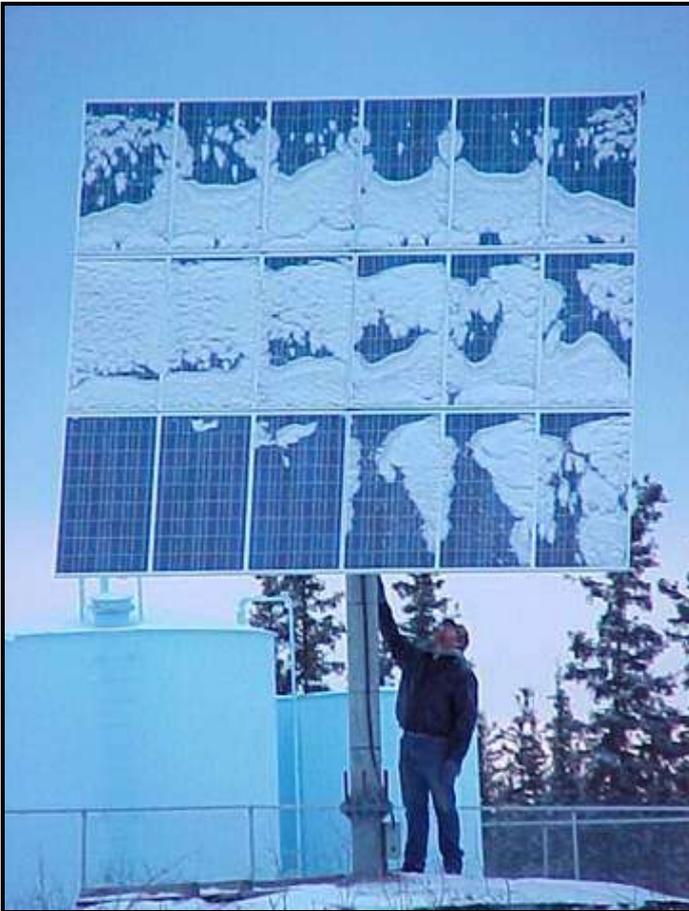


Summer Interns on the Navajo
Reservation (2003)

Summer Interns on a windy day (2004)



Assisting Tribes Achieve Their Energy Vision



One of the World's Northern-most
Tribally owned Solar system

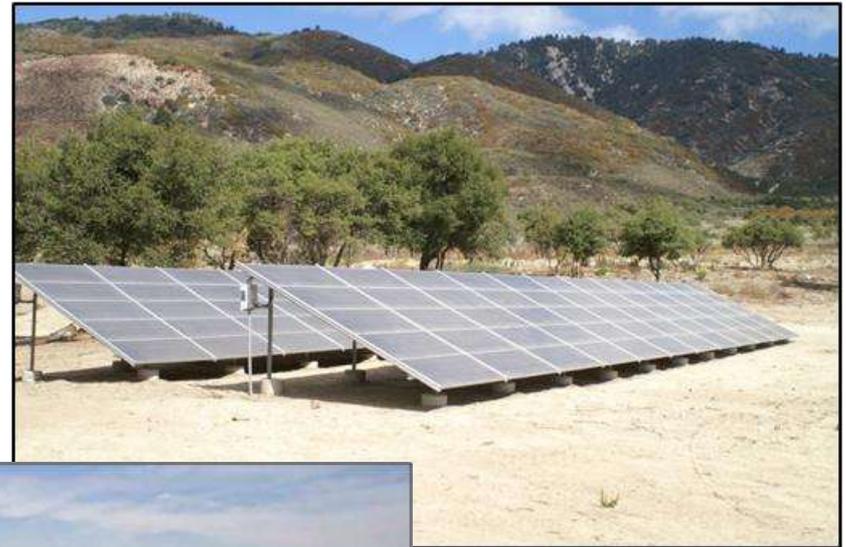
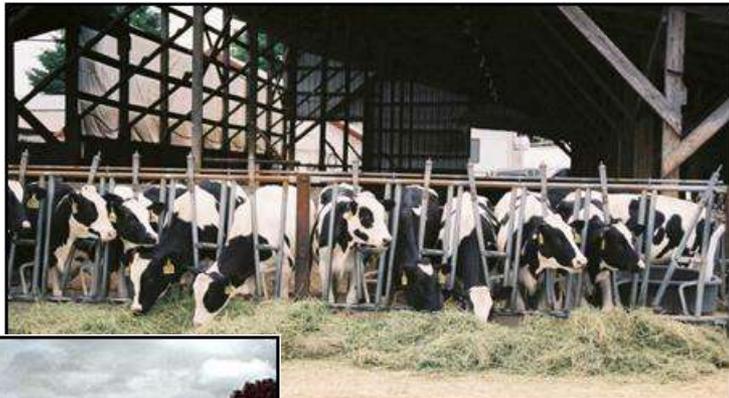
Solar Installations at
Pueblo of Laguna's
Majors Ranch



Solar Electric Carport at SIPI's Science and Technology Building



Commitments to the Future



Tulalip Tribe's (WA) used an anaerobic digester to reduce dairy waste pollution in the groundwater and salmon stream



Augustine Band of Cahuilla Indian's (CA) installed the "largest" (1.1 MW) solar electric system in Indian Country (February 2009)

Ramona Band used renewables to power planned ecotourism business



Energy Efficiency and Conservation Block Grants (EECBG) Program

Purpose

- (1) Reduce fossil fuel emissions created as a result of activities within the jurisdictions of eligible entities in a manner that—
 - (A) is environmentally sustainable; and
 - (B) to the maximum extent practicable, maximizes benefits for local and regional communities;
- (2) Reduce the total energy use of the eligible entities; and
- (3) Improve energy efficiency in—
 - (A) the transportation sector;
 - (B) the building sector; and
 - (C) other appropriate sectors.



**Total of \$3.2 Billion Appropriated
2% Tribal Set-aside (~\$54 Million)**



Tribal Energy Efficiency and Conservation Block Grants (EECBG)

- Awarded \$53.4 million to Federally Recognized Tribes and Alaska Regional Corporations via formula grants
- Total of 424 grants, representing 538 funding allocations awarded (“group” awards)

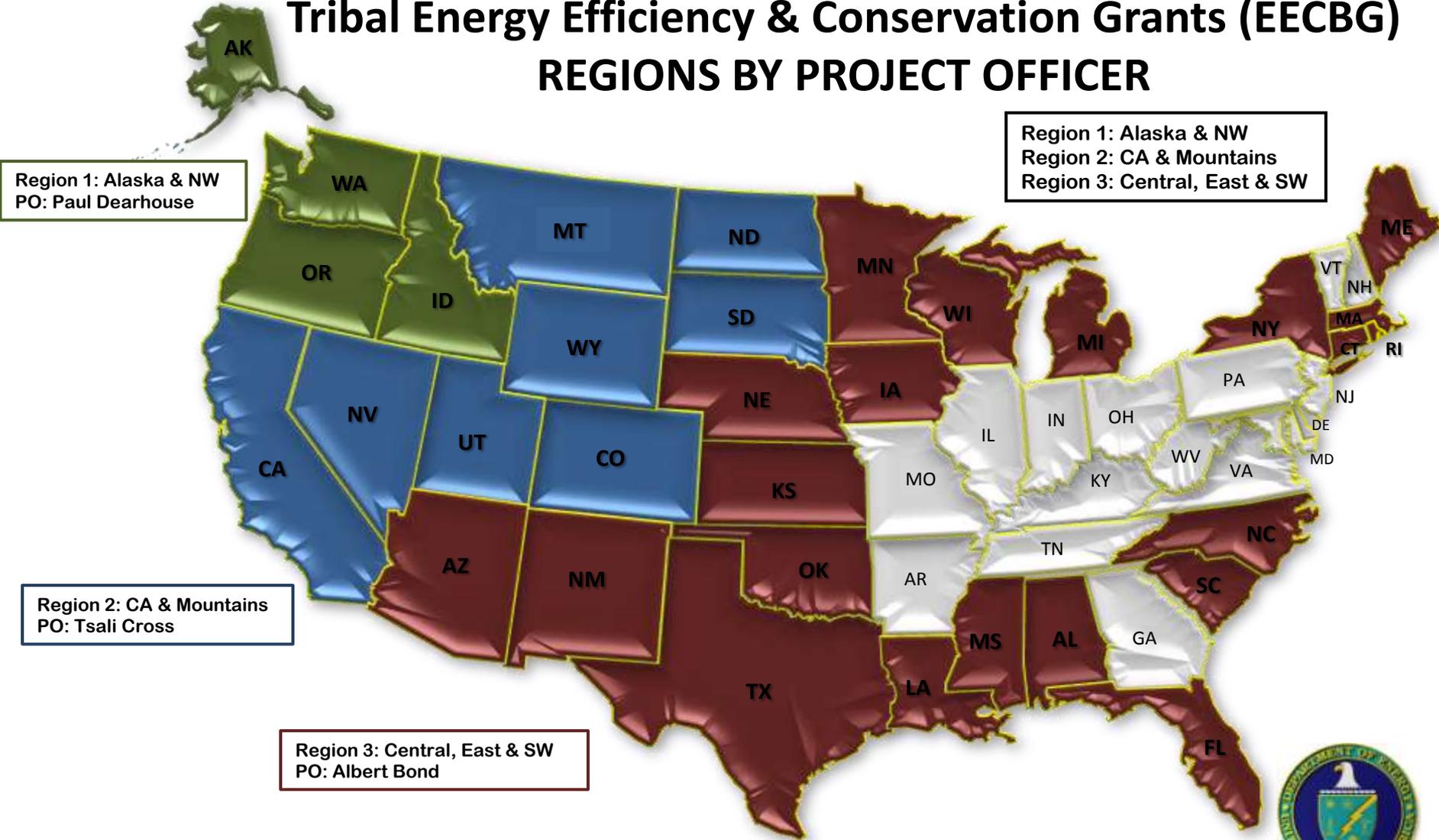
Formula:

- Indian Tribes--Of amounts available for distribution to Indian Tribes under subsection (a)(3), the Secretary shall establish a formula for allocations to Indian Tribes, taking into account any factors that the Secretary determines appropriate.
- The formula for tribal governments is based on two weighted factors:
 - Tribal population (Weighted at 75%), and
 - Climatic conditions - heating and cooling degree days (Weighted at 25%).

**Tribal Team at Golden Field Office Overseeing the
Tribal EECBG grants**



Tribal Energy Efficiency & Conservation Grants (EECBG) REGIONS BY PROJECT OFFICER



States in white designate States where there are no Tribal EECBG projects



Tribal Energy Efficiency and Conservation Block Grants (EECBG)

- EECBG Webinars
- EECBG Blog
- Solution Center
 - Best practices and tools
 - Accessible from eecbg.energy.gov
- Technical Assistance Center
 - Call 1-877-EERE-TAP (1-877-337-3827)
 - <https://tac.eecleanenergy.org/?TAR=TARequest.aspx>

EECBG Webcast ▶



**Energy Efficiency and
Conservation Block Grant
Program Webcast Series:
Register Here**

**Or Contact Your Project Officer, Project Monitor or
E-mail tribal@go.doe.gov or Call (720) 356-1360**



Contact Information

Tribal Energy Program
Department of Energy
Golden Field Office
Telephone: (720) 356-1352 (Main)
Email: tribal@go.doe.gov

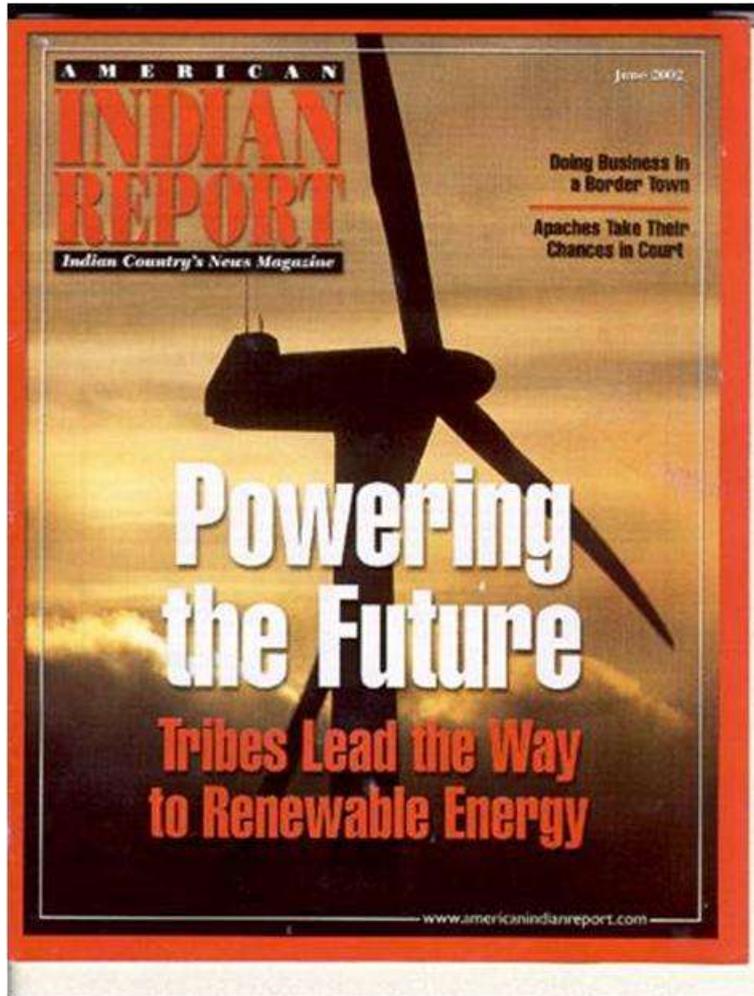
To receive periodic email information on funding opportunities, upcoming workshops and training, and other tribal energy information

“Join Our Email” list by sending your contact information to tribal@go.doe.gov



All presentation materials will be posted





Questions

“Tribes Lead the Way to Renewable Energy”

American Indian Report
June 2002

