

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

# *DOE's Tribal Energy Program*



**Lizana K. Pierce, Project Manager**

**U.S. DOE, Golden Field Office**

**(303) 275-4727 or [lizana.pierce@go.doe.gov](mailto:lizana.pierce@go.doe.gov)**

**[www.eere.energy.gov/tribalenergy](http://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**

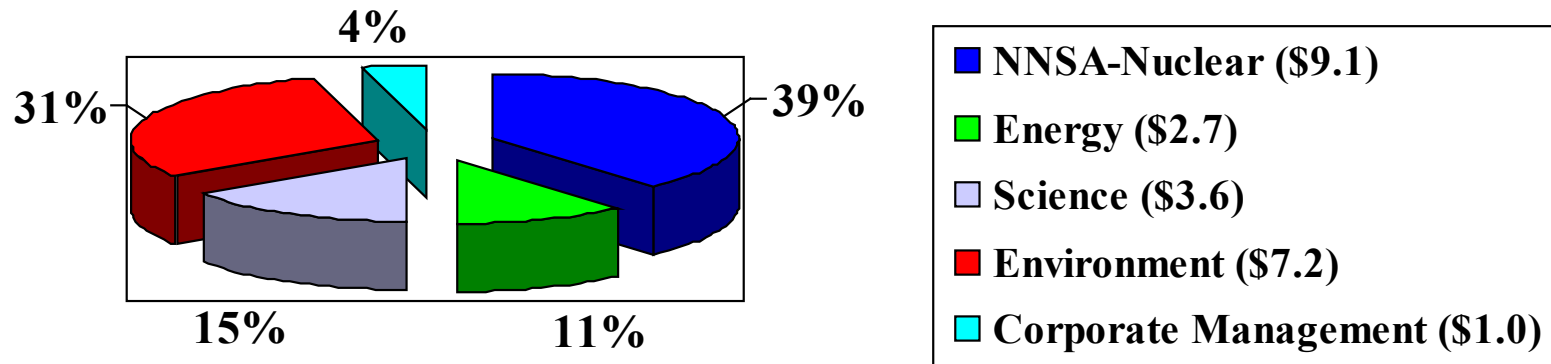


**Principally, a National Security Agency**



# Department of Energy

**Advancing Energy and National Security through  
Science, Technology and Environmental Stewardship  
(FY2006 Budget: \$23.6 Billion)**



Energy (\$2.7 Billion or 11%) includes:

- **Energy Efficiency and Renewable Energy (\$1.2)**
- **Electricity Delivery & Energy Reliability (\$0.16)**
- **Fossil Energy (\$0.84)**
- **Nuclear Energy, Science and Technology (\$0.54)**

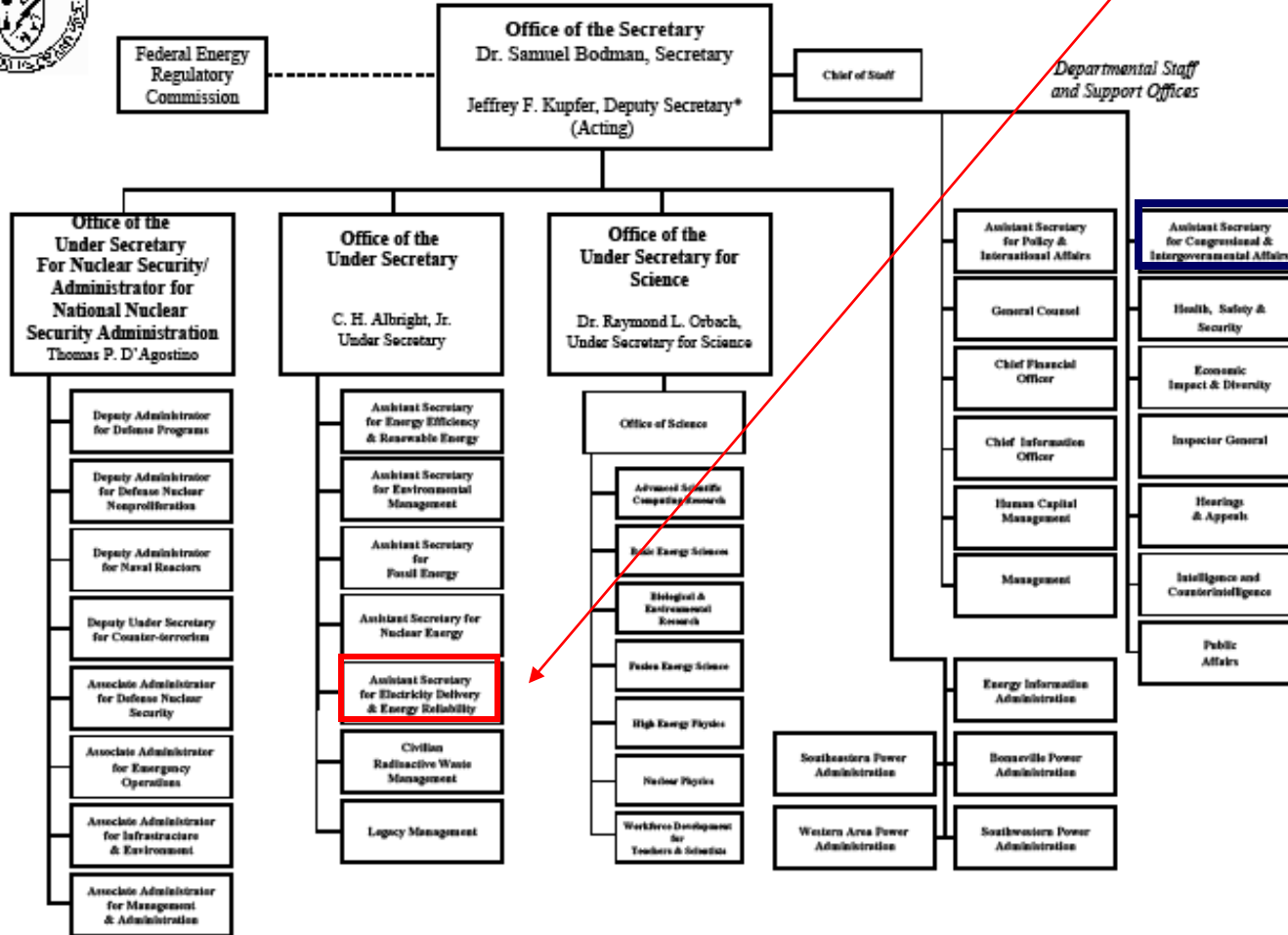
**Only 5% of Budget for Energy Efficiency and Renewable Energy**



# DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

Congressional and Intergovernmental Affairs

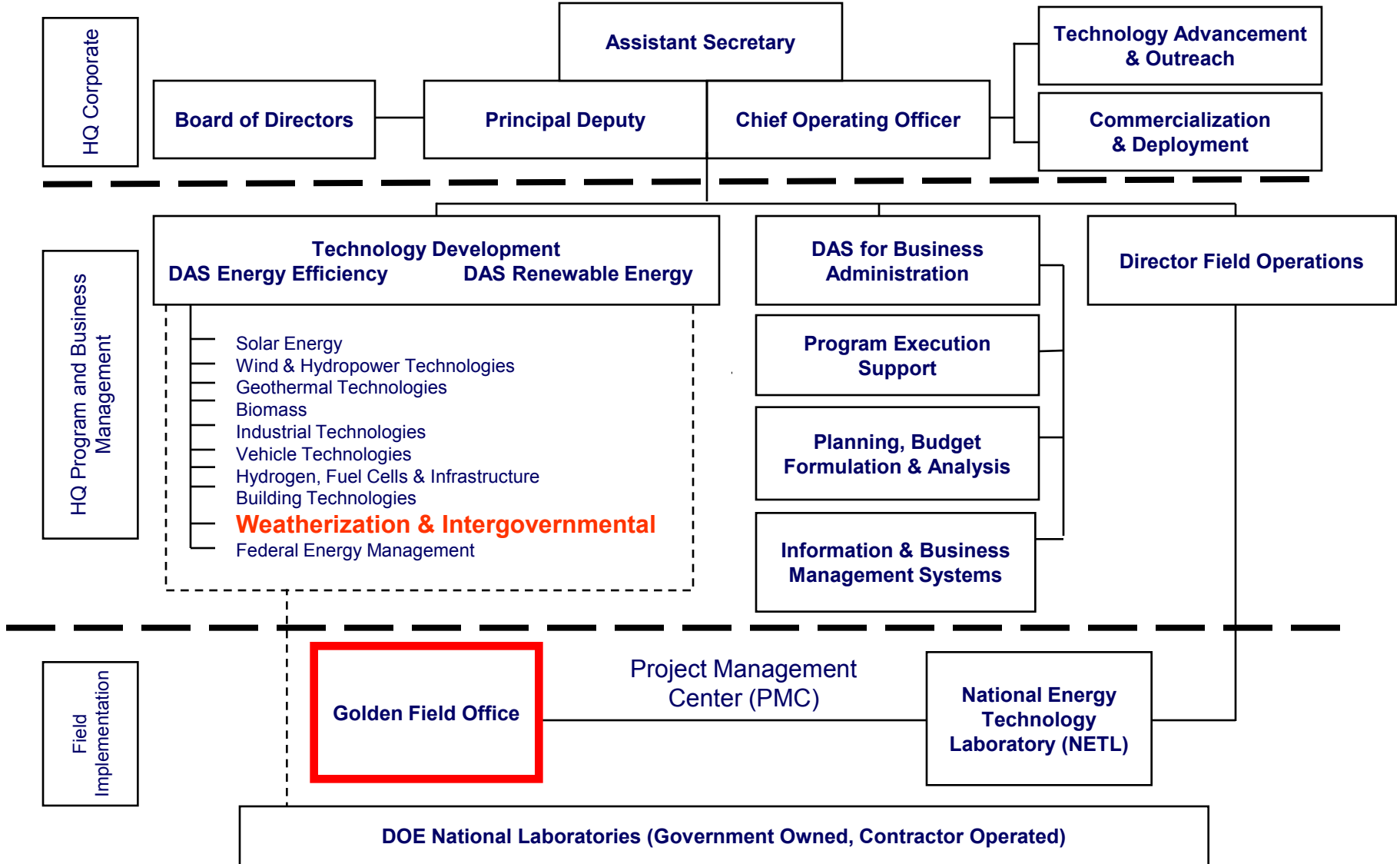


\* The Deputy Secretary also serves as the Chief Operating Officer

10 Mar 08

## EPAct 2005 Directs the Establishment of an “Office of Indian Energy Policy and Programs”

# Office of Energy Efficiency and Renewable Energy





## *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**



### **Authority**

**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 Americans.***





# *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

### Program Management

---

**Thomas Sacco**  
DOE, Program Manager

### Field Implementation

**Lizana Pierce**  
DOE, Project Manager

**Victoria DeHerrera**  
Navarro, Sr. Project Analyst



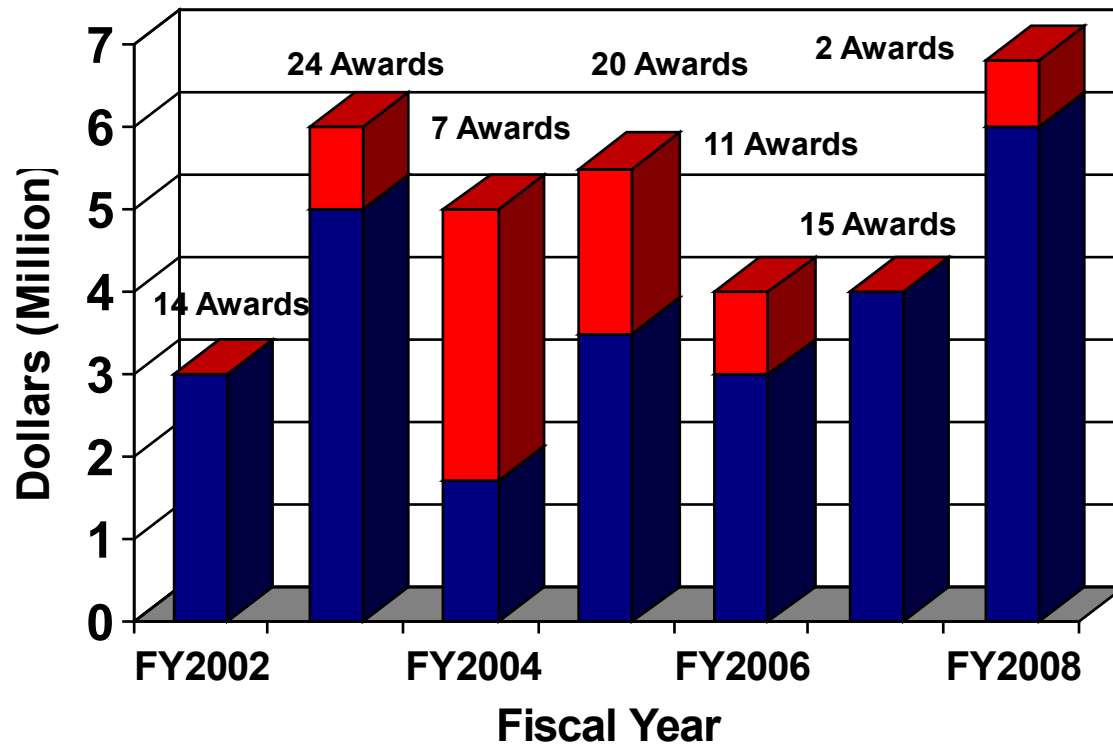
### Technical Assistance (DOE Laboratories)

**Sandra Begay-Campbell**  
SNL

**Roger Taylor**  
NREL



# DOE's Tribal Energy Program Funding History



**Budget  
Averages  
\$5 million  
per year for  
all ~565  
Tribes**



**\$20 Million per Year Authorized in EPO Act 2005  
- None Appropriated -**



# FY2009 Program Funding

***FY2009\****

<b><i>DOE FY2009 Request</i></b>	<b><i>\$1.0</i></b>
<b><i>House Marks</i></b>	<b><i>\$6.0</i></b>
<b><i>Senate Marks</i></b>	<b><i>\$6.0</i></b>

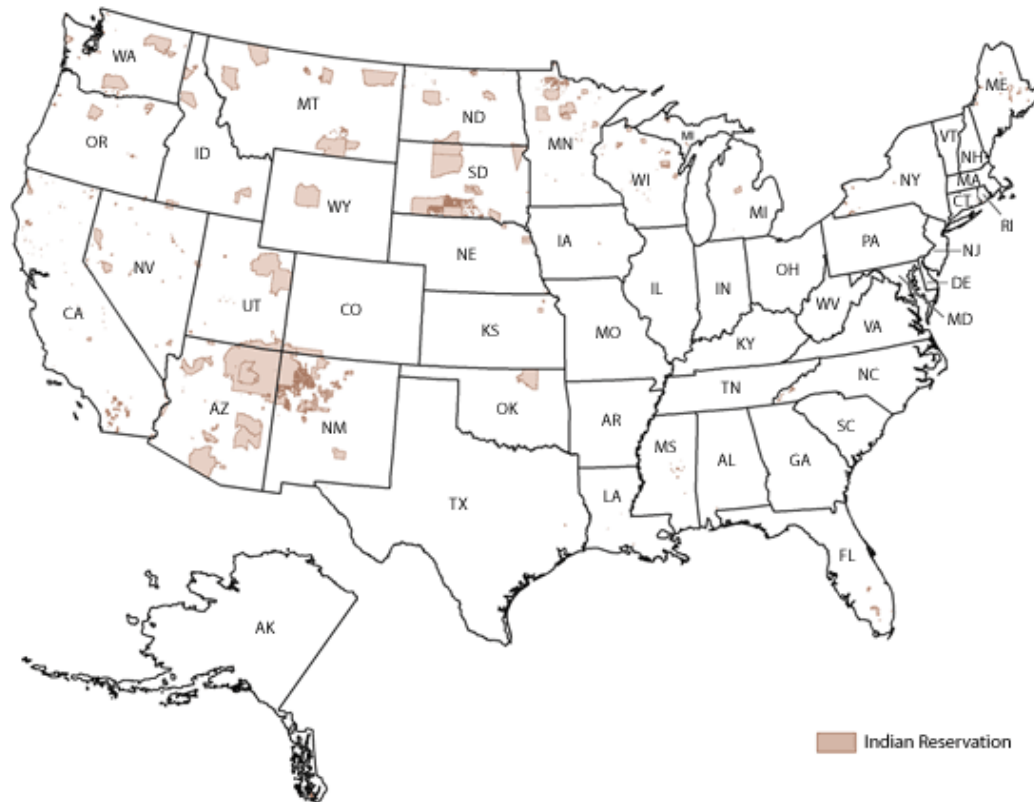
\* Amounts in Millions

*“Funding reduction maintains core tribal energy assessment and technical assistance contributions. In FY 2008, program restructuring was initiated to develop finance mechanisms that streamline project development and increase access to private developers, thereby reducing the need for direct financial assistance to Tribes. Redirected funds enable EERE to accelerate critical national research priorities that benefit the Nation.”*



# *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  
Comprises 55.7  
Million Acres (Per BIA)**





# *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**

**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*

# **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 Tribes or Tribal Energy Resource Development Organization (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.**

***All Funds Awarded through a Competitive Process***





# *DOE's Tribal Energy Program* **Funding Opportunities**

**Applications must be submitted electronically through Grants.gov**

- 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](mailto:support@grants.gov)

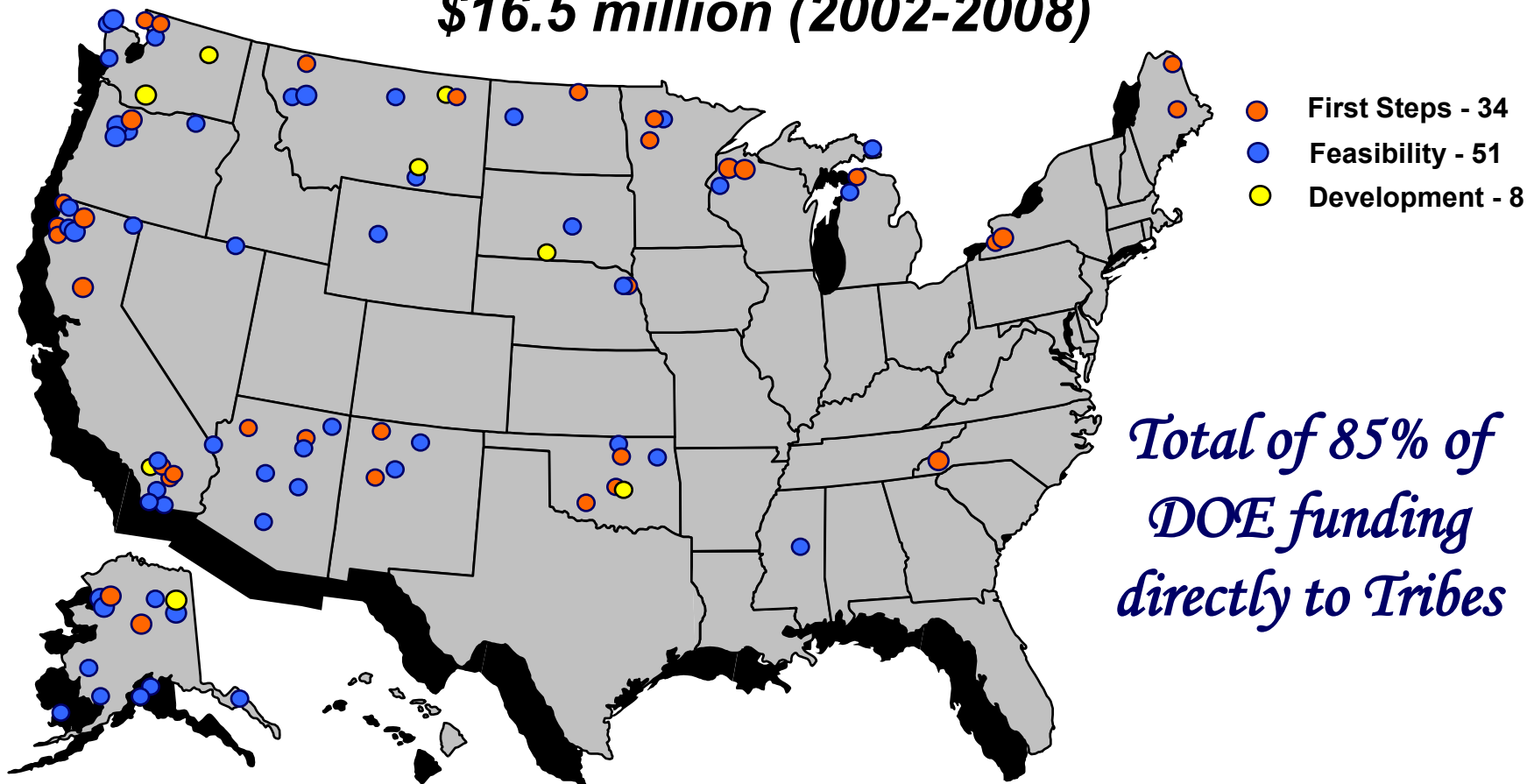


First 750 kW Turbine on  
Tribal Lands in the  
Contiguous U.S.



# *DOE's Tribal Energy Program*

**DOE has funded 93 tribal energy projects totaling  
\$16.5 million (2002-2008)**



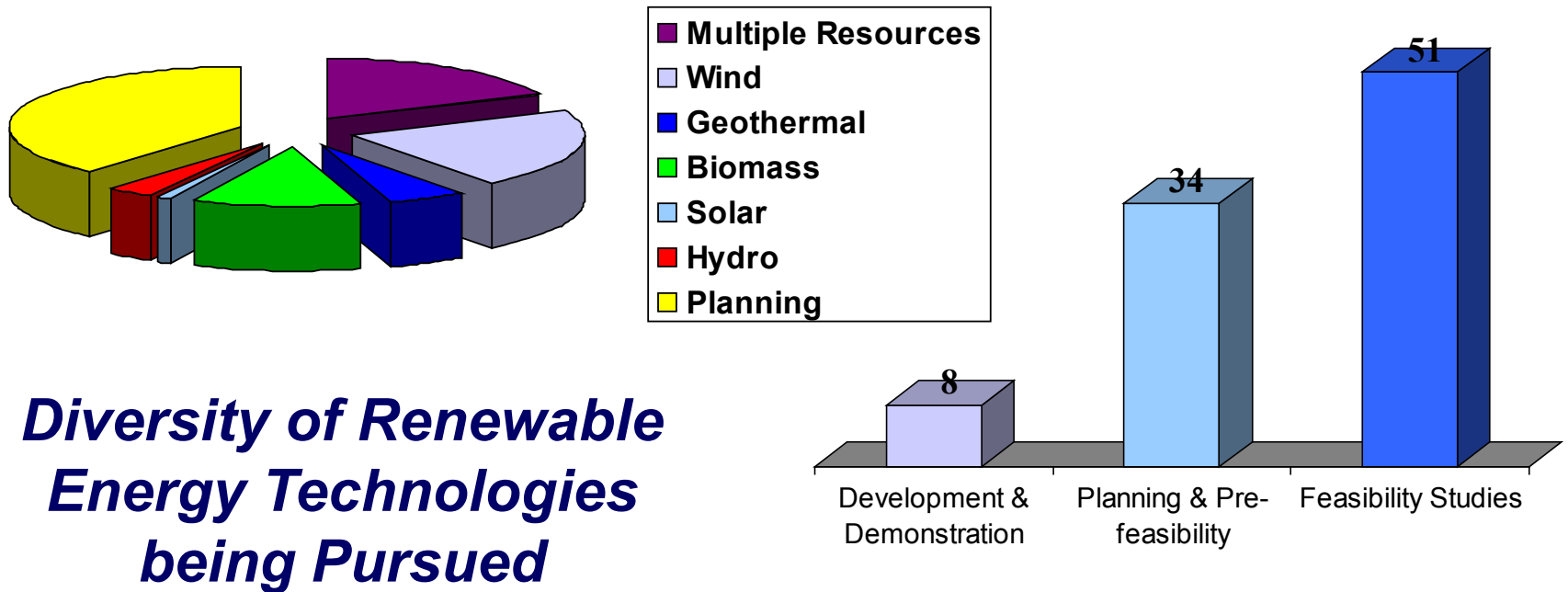
*Total of 85% of  
DOE funding  
directly to Tribes*

*Tribes cost-shared \$6.4 million*



# DOE's Tribal Energy Program Project Pipeline

*Assisting Tribes Fulfill Their Energy Vision*





Samish Indian Nation  
of Washington Energy  
Options Study

# DOE's Tribal Energy Program

## Success through Government-to-Government Partnerships

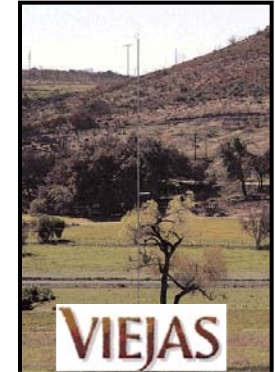
- Four demonstrations projects completed and four underway
- Thirty-five (35) tribal feasibility studies completed and reports posted
- Eight (8) feasibility projects proceeding toward development
- Twenty-two (22) tribes developed strategic energy plans and three proceeded to feasibility studies
- Over 50 anemometers measuring tribal wind resources in Indian Country

Cabazon Band of  
Mission Indians



Pueblo of Jemez Geothermal  
Feasibility Study

Three Affiliated Tribes  
Wind Feasibility Study



Viejas Tribal Government  
Tribal Utility and Wind  
Study



St. Croix  
Chippewa  
Biomass Study





# *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*

## Providing Technical Assistance

### Technical Assistance

- Technology Advice
- Models and Tools
- Resource Maps
- Strategic Energy Planning
- Project Support
- Economic Evaluations
- Design Review
- Special Studies



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



*Assisting Tribes with expertise through  
DOE's National Laboratories*



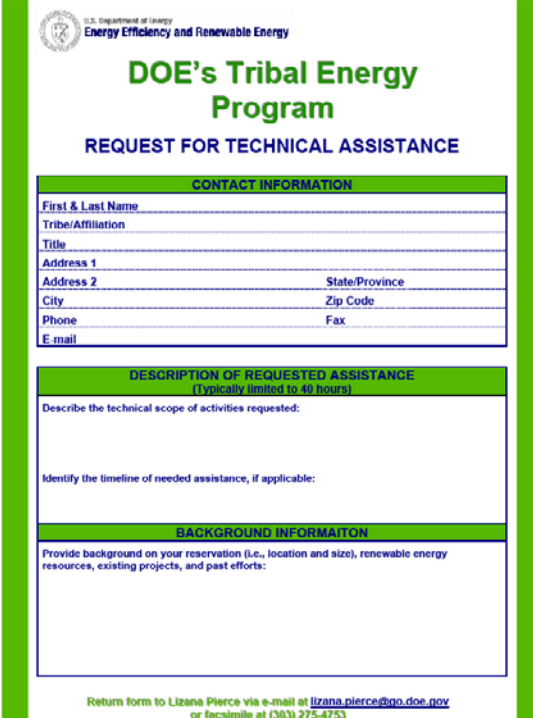




# DOE's Tribal Energy Program

## Technical Assistance Requests

- The application process is quick and easy: complete the request form and forward it to Lizana Pierce, TEP Project Manager, via e-mail or via facsimile at (303) 275-4753.
- The value of technical assistance 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, and training.



U.S. Department of Energy  
Energy Efficiency and Renewable Energy

### DOE's Tribal Energy Program

REQUEST FOR TECHNICAL ASSISTANCE

CONTACT INFORMATION	
First & Last Name	
Tribe/Affiliation	
Title	
Address 1	
Address 2	State/Province
City	Zip Code
Phone	Fax
E mail	

DESCRIPTION OF REQUESTED ASSISTANCE (Typically limited to 40 hours)
Describe the technical scope of activities requested:
Identify the timeline of needed assistance, if applicable:

BACKGROUND INFORMATION
Provide background on your reservation (i.e., location and size), renewable energy resources, existing projects, and past efforts:

Return form to Lizana Pierce via e-mail at [lizana.pierce@eo.doe.gov](mailto:lizana.pierce@eo.doe.gov) or facsimile at (303) 275-4753

***Technical Assistance Request Form at  
[http://www.eere.energy.gov/tribalenergy/tech\\_assistance.cfm](http://www.eere.energy.gov/tribalenergy/tech_assistance.cfm)***





# *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*

## **Annual Program Review**

### **Forum for Sharing and Learning**

- Forum for tribes to meet and learn from other tribes pursuing energy sufficiency through conservation or renewable energy, and share in their successes.
- Networking & learning opportunity
- Tribal energy project updates
- Forty (40) tribal energy projects highlighted
- Typically 120-150 participants



2008 Review to be held at the Renaissance Denver Hotel, 801 Quebec St, Denver, CO 80207

*November 17-20, 2008 Denver, CO*

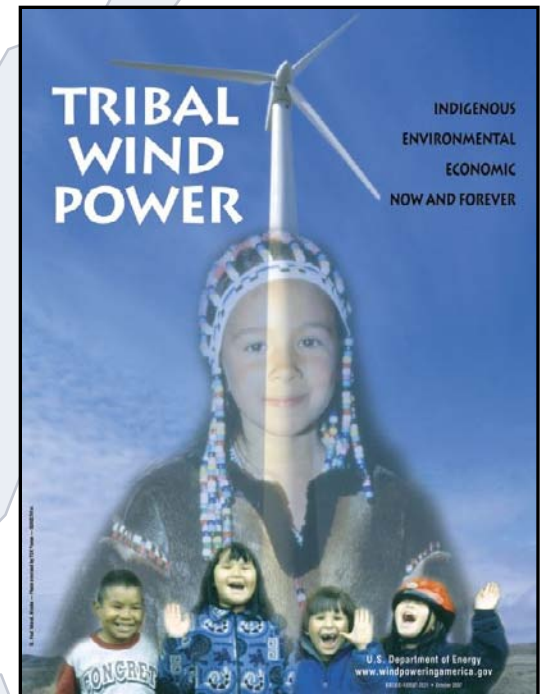


# *DOE's Tribal Energy Program*

## **Education & Training**

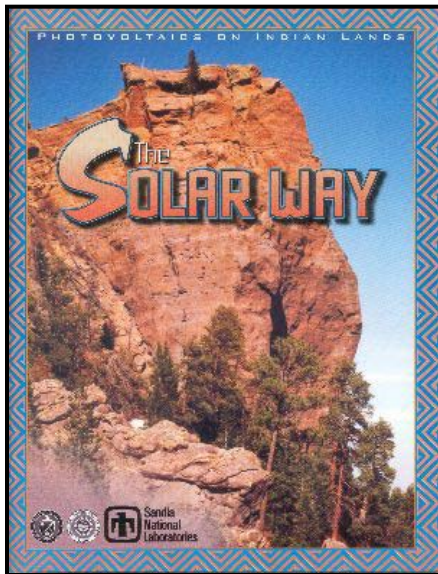
### **FY2009 Training Planned**

- **Two (2) National Business Development and Project Financing Training Sessions**
  - Plus Optional Renewable Energy and Energy Efficiency
- **Three (3) Alaska Regional Training Sessions**
- **Tribal Weatherization Training**

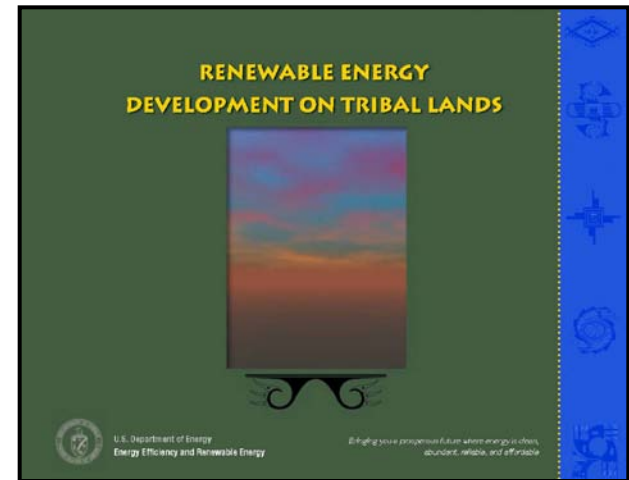
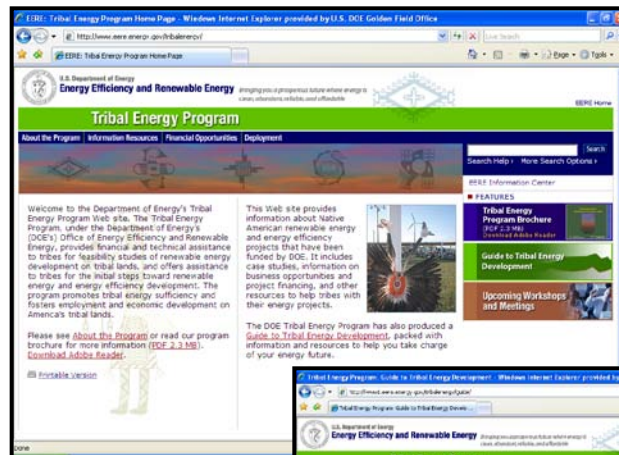


*Building Human Capacity in Indian Country*

# DOE's Tribal Energy Program



## Information Resources



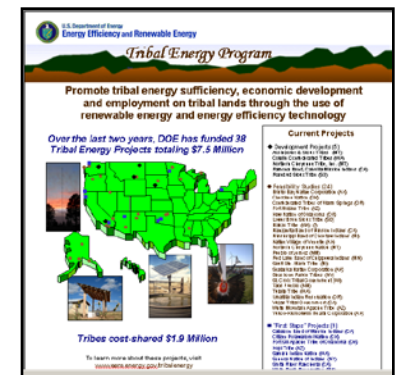
Tribal Energy Website

[www.eere.energy.gov/tribalenergy](http://www.eere.energy.gov/tribalenergy)



Guide to Tribal Energy Development

[www.eere.energy.gov/tribalenergy/guide](http://www.eere.energy.gov/tribalenergy/guide)



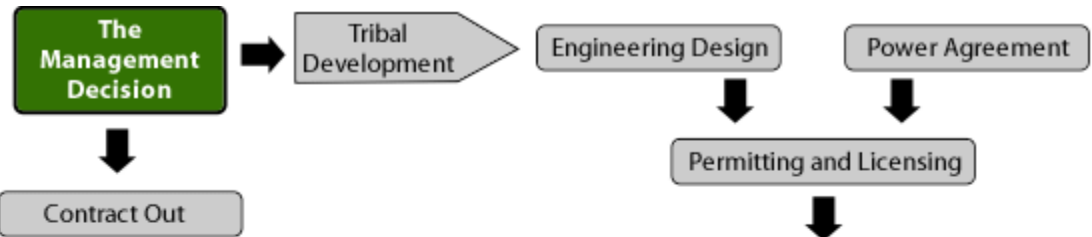


# DOE's Tribal Energy Program

## Guide to Tribal Energy Development

### Development Processes

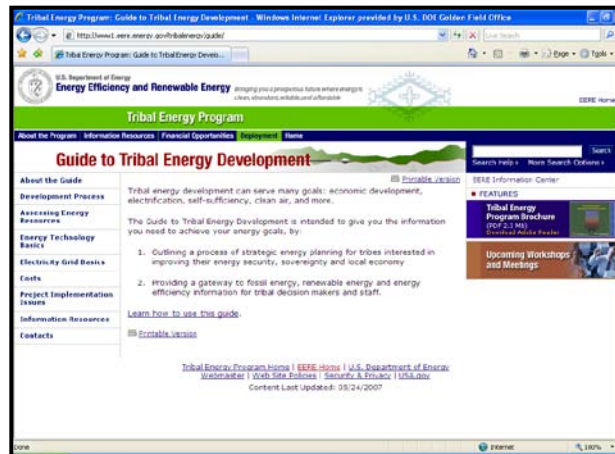
- Strategic Planning
- Options Analysis
- Organizational Development
- Project Development



### Business & Financing (Under development)

### Resource Library

- Energy Resources
- Technologies
- Costs
- Risk Factors
- Legal Issues
- Financing Options
- Contacts



[www.eere.energy.gov/tribalenergy/guide](http://www.eere.energy.gov/tribalenergy/guide)





# DOE's Tribal Energy Program

## Student Internships

### Requirements

- The student applicant must be a U.S. citizen and a **Native American**, defined as a member of a federally recognized tribe, Alaska Village, or Alaska Corporation (*excludes* state-recognized tribes; bands or groups; and first peoples of Guam or Hawaii). Specific interest in renewable energy is required.

### Application Process

- Applications due February for 12 week internship at Sandia National Laboratories or contact Sandra Begay-Campbell at (505) 844-5418 or [skbegay@sandia.gov](mailto:skbegay@sandia.gov)
- Application form posted on TEP website annually

### Internships (17 Interns 2002-2008)

- Three (3) summer interns sponsored in 2003 and 2004 each
- Year-round intern sponsored (2002-2004)
- One (1) summer intern and two (2) year-round interns (2005)
- Three (3) summer interns and one year-round intern sponsored (2006)
- Three (3) summer interns sponsored (2007)
- Four (4) summer interns sponsored (2008)



Summer Interns on the Navajo Reservation (2003)

Summer Interns on a windy day (2004)



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



# *DOE's Tribal Energy Program*

## **Other Resources & Information**



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



Solar arrays on Navajo home



Solar Installations at Pueblo of Laguna's Majors Ranch

A 6kW PV System at SIPI's Science and Technology Building



Jicarilla Apache Reservation PV array on Dulce High School







# *DOE's Tribal Energy Program*

## **Title V of EPOA 2005, Indian Provisions**

**Authorizes the creation of an “Office of Indian Energy Policy and Programs” within the Department of Energy**

### **Department of Energy Program**

- **DOE Indian Energy Education Planning and Management Assistance Program (Authorization for \$20 Million for each fiscal year 2006-2016)**
- **DOE Loan Guarantee Program (Aggregate amount guaranteed not to exceed \$2 Billion)**

### **Department of Interior Program**

- **Indian Tribal Energy Resource Development Program (Authorized such sums as are necessary in fiscal years 2006 through 2016)**
- **Indian Tribal Energy Resource Regulation (Grants for energy inventories and feasibility studies)**

**No Funds Appropriated for EPOA 2005**



# *DOE's Tribal Energy Program*

## **Energy Independence & Security Act (2007)**

### **Energy Efficiency and Conservation Block Grants (Subtitle E)**

Establish a program to provide grants for:

- Reduce Fossil Fuel Emissions
- Reduce the Total Energy Use
- Improve Energy Efficiency

Allocated as follows to eligible entities:

- 68% to eligible units of local government
- 28% to States
- 2% to Indian Tribes
- Remaining 2% for competitive grants to non-eligible entities

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.

**\$2 Billion Authorized Each Year (FY2008 – FY2012) FY09  
House Marks at \$295 Million (~\$10,400/Tribe)**



# *DOE's Tribal Energy Program*

## **Emergency Economic Stabilization Act (2008)**

### **Renewable Energy Incentives**

#### **Extension and Modification of the Production Tax Credit:**

- Extended for wind and refined coal through December 31, 2009 (1-year)
- Extended for other sources through December 31, 2010 (2-years)
- Expands types of facilities to include new biomass facilities and marine renewables (e.g., waves and tides)

#### **Long-term Extension of Energy Credit**

- Extends the 30% investment tax credit for solar and qualified fuel cell through 2016
- Extends the 10% tax credit for microturbines through 2016
- Adds small commercial wind for qualified investment
- Adds new 10% investment tax credit for combined heat and power and geothermal heat pumps



# *DOE's Tribal Energy Program*

## **Emergency Economic Stabilization Act (2008)**

### **Renewable Energy Incentives (Continued)**

#### **Long-term Extension and Modification of Residential Energy Efficiency Property Credit**

- **Extends credit for solar through 2016**
- **Add residential small wind investment, capped \$4,000 and geothermal heat pumps, capped at \$2,000**

#### **New Clean Renewable Energy Bonds ("CREBs")**

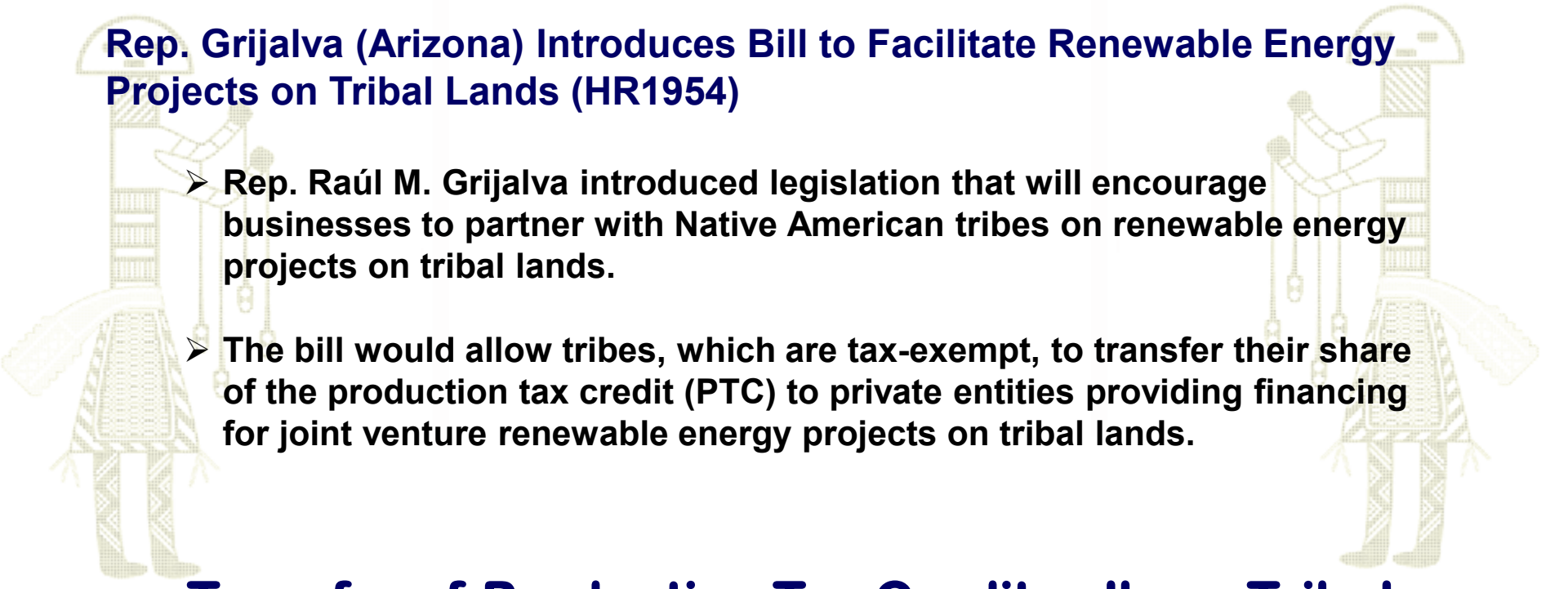
- **Authorizes \$800 million for facilities that generate electricity from wind, closed-loop biomass, open-loop biomass, geothermal, small irrigation, qualified hydropower, landfill gas, marine renewable and trash combustion facilities**
- **Subdivided into thirds: 1/3 State,/local/tribal governments; 1/3 public power producers; and 1/3 electric cooperatives**



# *DOE's Tribal Energy Program*

## **Pending Legislation**

### **Rep. Grijalva (Arizona) Introduces Bill to Facilitate Renewable Energy Projects on Tribal Lands (HR1954)**

- 
- **Rep. Raúl M. Grijalva introduced legislation that will encourage businesses to partner with Native American tribes on renewable energy projects on tribal lands.**
  - **The bill would allow tribes, which are tax-exempt, to transfer their share of the production tax credit (PTC) to private entities providing financing for joint venture renewable energy projects on tribal lands.**

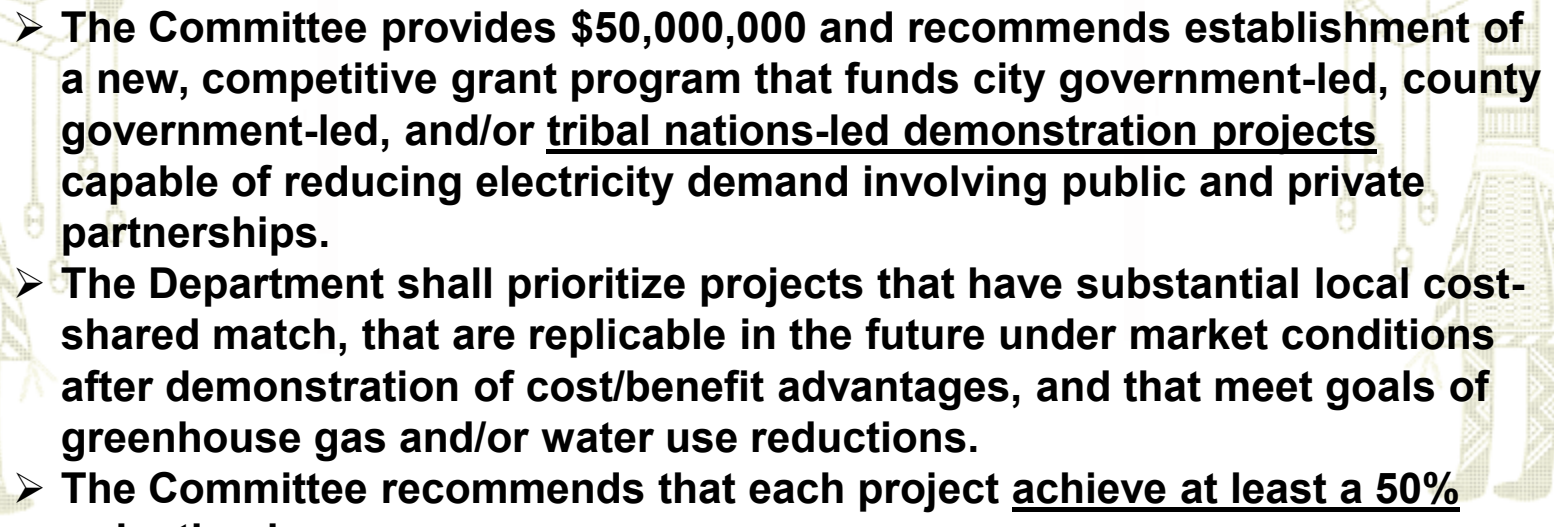
**Transfer of Production Tax Credits allows Tribal Projects to be Competitive**



# *DOE's Tribal Energy Program*

## **Pending Appropriations**

### **Local Government and Tribal Technology Demonstrations (Senate Committee Report)**


- 
- The Committee provides \$50,000,000 and recommends establishment of a new, competitive grant program that funds city government-led, county government-led, and/or tribal nations-led demonstration projects capable of reducing electricity demand involving public and private partnerships.
  - The Department shall prioritize projects that have substantial local cost-shared match, that are replicable in the future under market conditions after demonstration of cost/benefit advantages, and that meet goals of greenhouse gas and/or water use reductions.
  - The Committee recommends that each project achieve at least a 50% reduction in energy usage.
  - The Committee recommends each grant not exceed \$5,000,000 per project and the total Federal share for each project be capped at 50 percent.





# *DOE's Tribal Energy Program*

## Information Resources

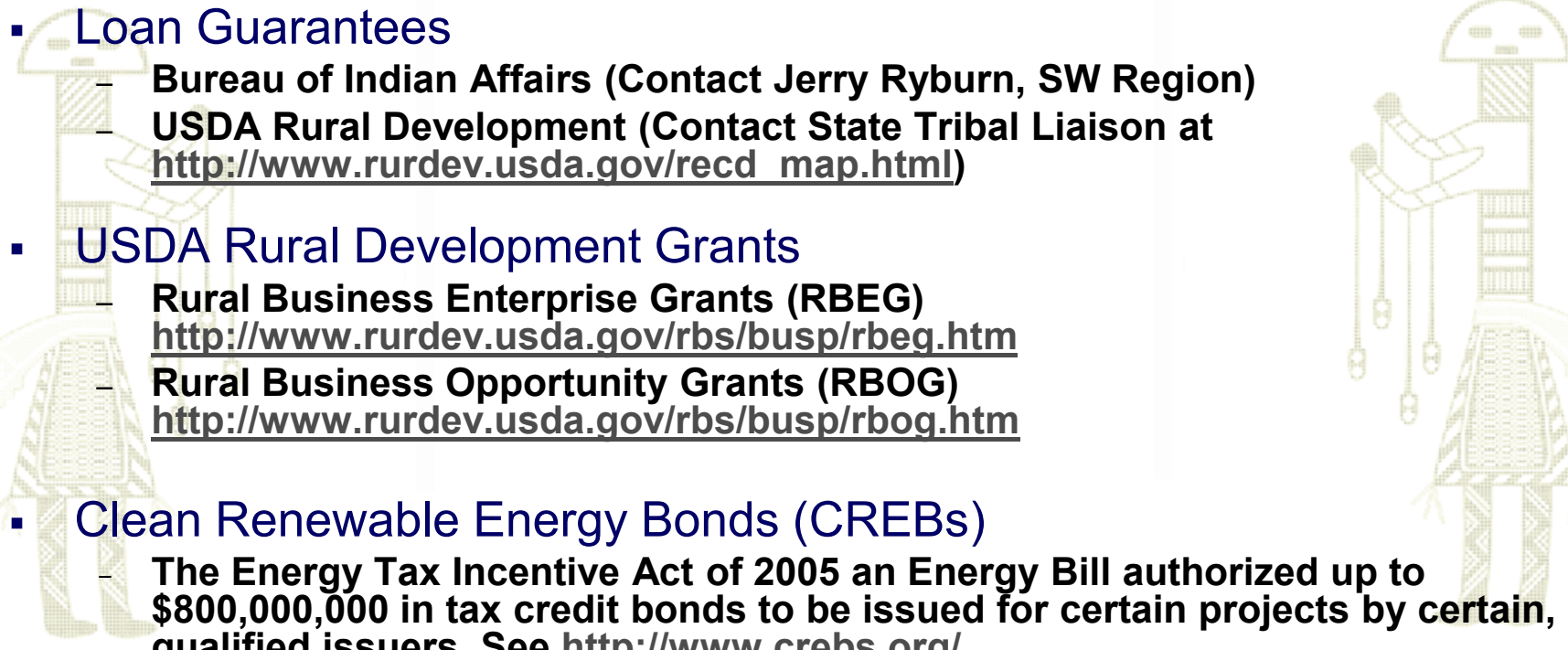
- **Federal Grants**
    - **One-stop for Federal grant opportunities, see [www.grants.gov](http://www.grants.gov)**
    - **Forwarded monthly through TEP Tribal Email list**
  - **Tribal Grants (Tribal Energy Program website)**
    - **See [www.eere.energy.gov/tribalenergy/government\\_grants.cfm](http://www.eere.energy.gov/tribalenergy/government_grants.cfm)**  
Identifies grants through the Tribal Energy Program, Other DOE opportunities, and Federal funding, and provides links to funding through DOI, USDA, DOC, EPA, and HUD
    - **Other opportunities forwarded through TEP Tribal Email List**
  - **Database of State Incentives for Renewables and Efficiency**
    - **DSIRE at [www.dsireusa.org/](http://www.dsireusa.org/)**
  - **Tax Incentives Assistance Project**
    - **TAIP at [www.energytaxincentives.org/](http://www.energytaxincentives.org/)**
- 





# *DOE's Tribal Energy Program*

## **Funding Resources**

- **Loan Guarantees**
    - **Bureau of Indian Affairs (Contact Jerry Ryburn, SW Region)**
    - **USDA Rural Development (Contact State Tribal Liaison at [http://www.rurdev.usda.gov/recd\\_map.html](http://www.rurdev.usda.gov/recd_map.html))**
  
  - **USDA Rural Development Grants**
    - **Rural Business Enterprise Grants (RBEG)**  
<http://www.rurdev.usda.gov/rbs/busp/rbeg.htm>
    - **Rural Business Opportunity Grants (RBOG)**  
<http://www.rurdev.usda.gov/rbs/busp/rbog.htm>
  
  - **Clean Renewable Energy Bonds (CREBs)**
    - **The Energy Tax Incentive Act of 2005 an Energy Bill authorized up to \$800,000,000 in tax credit bonds to be issued for certain projects by certain, qualified issuers. See <http://www.crebs.org/>**
- 



# *DOE's Tribal Energy Program*

## **Funding Resources**

- **Renewable Energy Certificates (RECs), also known as Green tags, Renewable Energy Credits, or Tradable Renewable Certificates (TRCs)**
  - **Tradable environmental commodities in the United States which represent 1 MWh of electricity generated from an eligible renewable energy resource.**
  - **See <http://www.eere.energy.gov/greenpower/markets/certificates.shtml?page=0>**
- **White Certificates**
  - **White certificates are documents certifying that a certain reduction of energy consumption has been attained. In most applications, the white certificates are tradable and combined with an obligation to achieve a certain target of energy savings. To date, three states – Connecticut, Nevada and Pennsylvania - have adopted legislation requiring energy efficiency credits as part of a mandated portfolio standard.**



# *DOE's Tribal Energy Program*

## **Funding Resources**

### **US Treasury Awards \$8.2 Million to Organizations Serving Economically Distressed Native American Communities**

**(News Release June 19, 2008)**

“U.S. Department of the Treasury's Community Development Financial Institutions (CDFI) Fund visited Scottsdale, Arizona today to announce awards totaling \$8,224,587 to 29 organizations serving Native American or Alaskan Native communities located in 15 states. The awards were made through the CDFI Fund's Native American CDFI Assistance (NACA) Program.”

- **New Market Tax Credits**

- **Created by Congress to permit taxpayers to receive a tax credit against federal income taxes for making equity investments in Community Development Entities. Substantially all the qualified equity investments must in turn be used by the Community Development Entities in low-income communities.**
- **The Community Development Financial Institutions Fund ("CDFI Fund") under the U.S. Department of Treasury administers the program.**
- **See <http://www.cdfifund.gov/>**
- **For Native American Initiatives, see [http://www.cdfifund.gov/what we do/programs id.asp?programID=3](http://www.cdfifund.gov/what%20we%20do/programs%20id.asp?programID=3)**



# *DOE's Tribal Energy Program*

## **Contact Information**

### **Lizana Pierce, Project Manager**

Department of Energy

Golden Field Office

Telephone: (303) 275-4727

Fax: (303) 275-4753

Email: [lizana.pierce@go.doe.gov](mailto:lizana.pierce@go.doe.gov)

### **Victoria DeHerrera, Project Analyst**

Navarro Research & Engineering

Golden Field Office

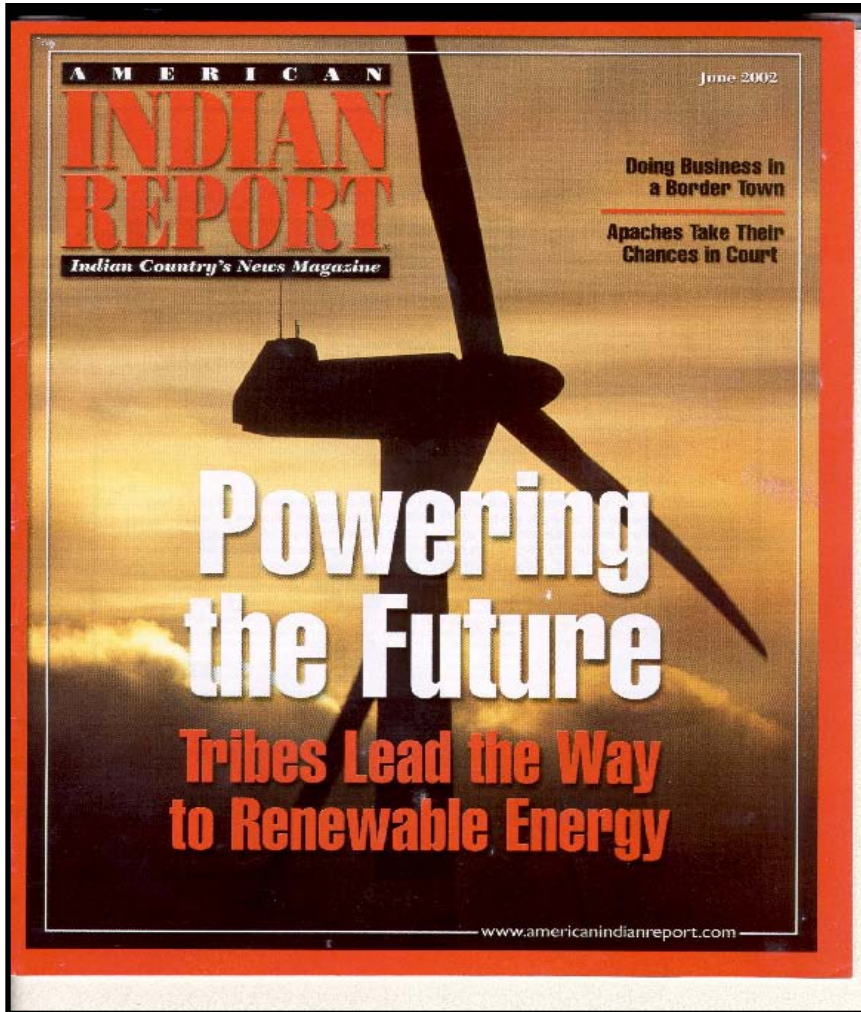
Telephone: (303) 275-4909

Fax: (303) 275-4753

Email: [victoria.deherrera@go.doe.gov](mailto:victoria.deherrera@go.doe.gov)



To receive periodic information on funding opportunities, upcoming workshops and training, and other tribal energy information, join our email list by contacting me at [lizana.pierce@go.doe.gov](mailto:lizana.pierce@go.doe.gov)



## QUESTIONS

**“Tribes Leading the Way to Renewable Energy”**

**American Indian Report  
June 2002**