

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

# **TRIBAL ENERGY PROGRAM**



**Peer Review**

**January 13-14, 2004**

**Thomas Sacco**

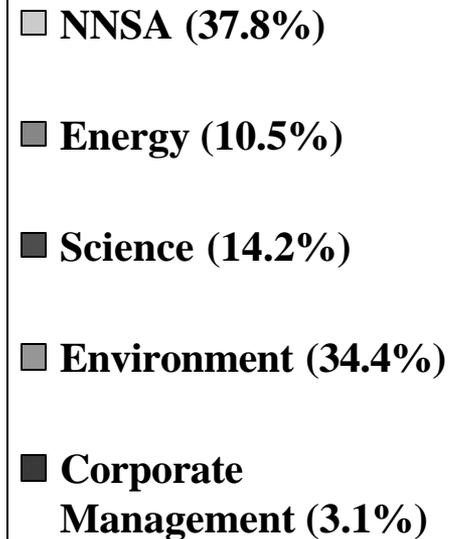
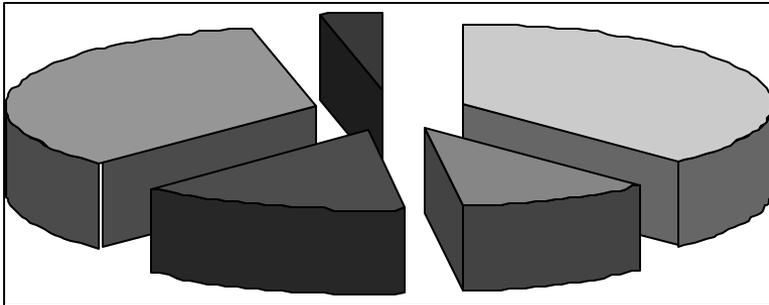
**DOE, Golden Field Office**



# Department of Energy

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

## DOE Budget of \$23.4 Billion



**Energy (\$2.45 Billion) includes:**

- Energy Efficiency and Renewable Energy (\$1.3)
- Fossil Energy (\$0.75)
- Nuclear Energy, Science and Technology (\$0.38)





**DOE's Office of Energy Efficiency and Renewable Energy (EERE)**

# **EERE's Mission**

**The EERE's mission is to strengthen America's energy security, environmental quality, and economic vitality in public-private partnerships that:**

- Enhance energy efficiency and productivity;
- Bring clean, reliable and affordable energy technologies to the marketplace; and
- Make a difference in the everyday lives of Americans by enhancing their energy choices and their quality of life.



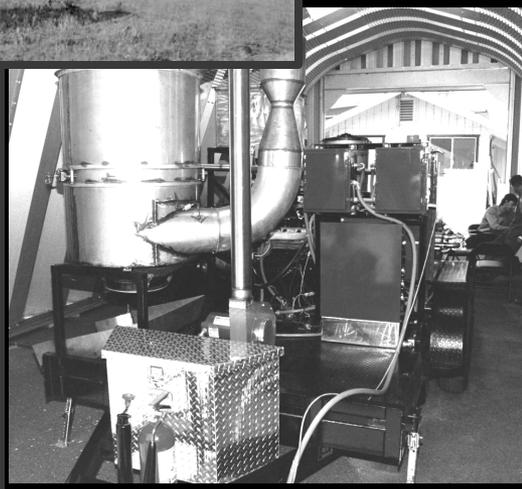


# Renewable Energy Resources





# Renewable Energy Technologies

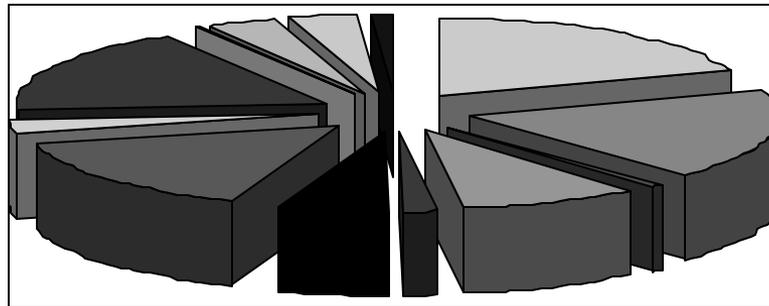




# DOE's Office of Energy Efficiency and Renewable Energy

## \$1.3 Billion Total EERE Budget Request (FY2004)

### Energy & Water Development Request \$444.2 Million



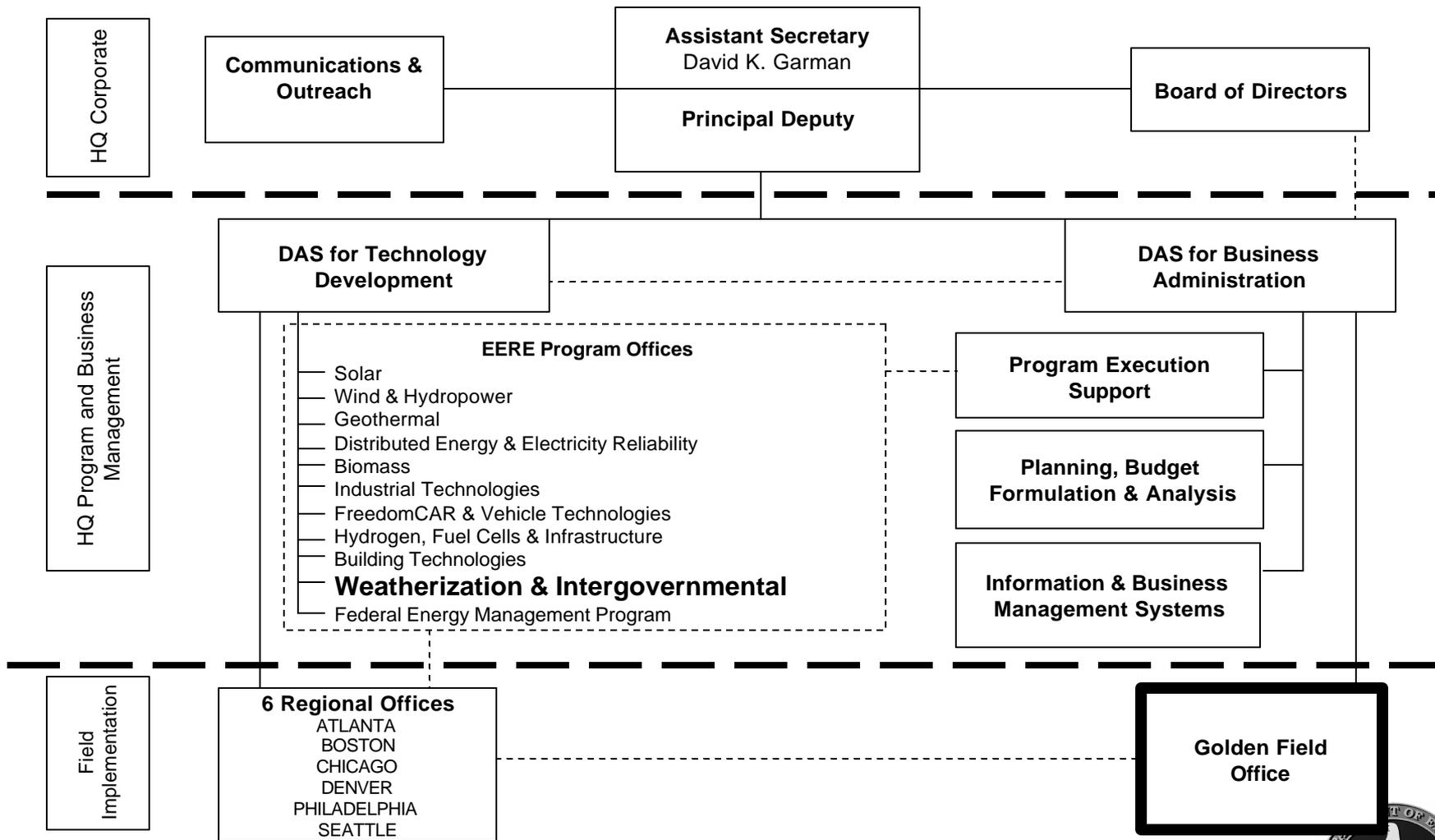
- Hydrogen
- Solar Energy
- Zero-Energy Buildings
- Wind Energy
- Hydropower
- Geothermal
- Biomass/Biorefinery Systems R&D
- Intergovernmental Activities
- Electric Reliability
- Energy Management
- NCCTI
- Program Direction
- Facilities & Infrastructure

Tribal Energy Requested  
FY2004 Budget: \$6 Million





# Office of Energy Efficiency and Renewable Energy





DOE's Tribal Energy Program

# Tribal Energy Program

Promote tribal energy self-sufficiency and economic development and foster employment on tribal lands through the use of renewable energy



## Authority

Section 2606 of Title XXVI Energy Policy Act of 1992 (P.L. 102-486)





DOE's Tribal Energy Program  
**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”

“Wind resources in the Great Plains could meet 75% of the electricity demand in the contiguous 48 states.” (Native American Energy Development and Self-Determination Act of 2003)





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

The most-burdened 10 percent of Indian households on reservations spend 20 percent or more of their income on electricity. Over twice the percentage of U.S. households at the same income level. (2000 EIA Report)



**Hopi Solar Installation**

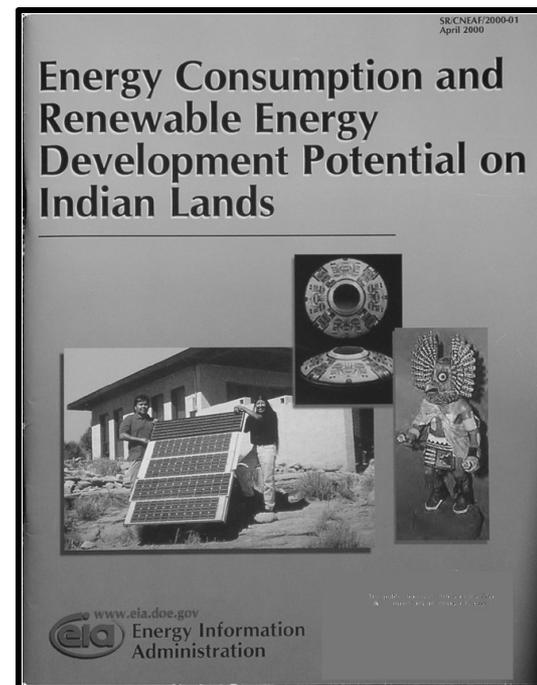




## DOE's Tribal Energy Program

# Tribal Energy Program

“Indian households on reservations are disproportionately without electricity. A total of 14.2% of Indian households have no access to electricity, as compared to only 1.4% of all U.S. households.”  
Navajo accounts for 75% of the households without electricity  
(2000 EIA Report)



DOE funded the Navajo Nation Electrification Demonstration Program (P.L. 106-511) resulting in 503 households electrified in fiscal year 2002





DOE's Tribal Energy Program

# Tribal Energy Program

**Providing financial and technical assistance to Tribes for feasibility studies and sharing the cost of implementing sustainable renewable energy projects on Tribal Lands**



**Tribes include Federally-recognized Tribes; Alaska Native villages; and Alaskan Native Corporations.**

**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.**





DOE's Tribal Energy Program

# Tribal Energy Program

## Assist Tribes Meet Their Energy Goals

- **Developing in Cooperation with Tribes**
- **Providing Funding Opportunities**
- **Supporting Government-to-Government Relations**
- **Offering Technical Assistance**
- **Providing Information and Education**
- **Facilitating Government Collaboration and Leveraging Resources**

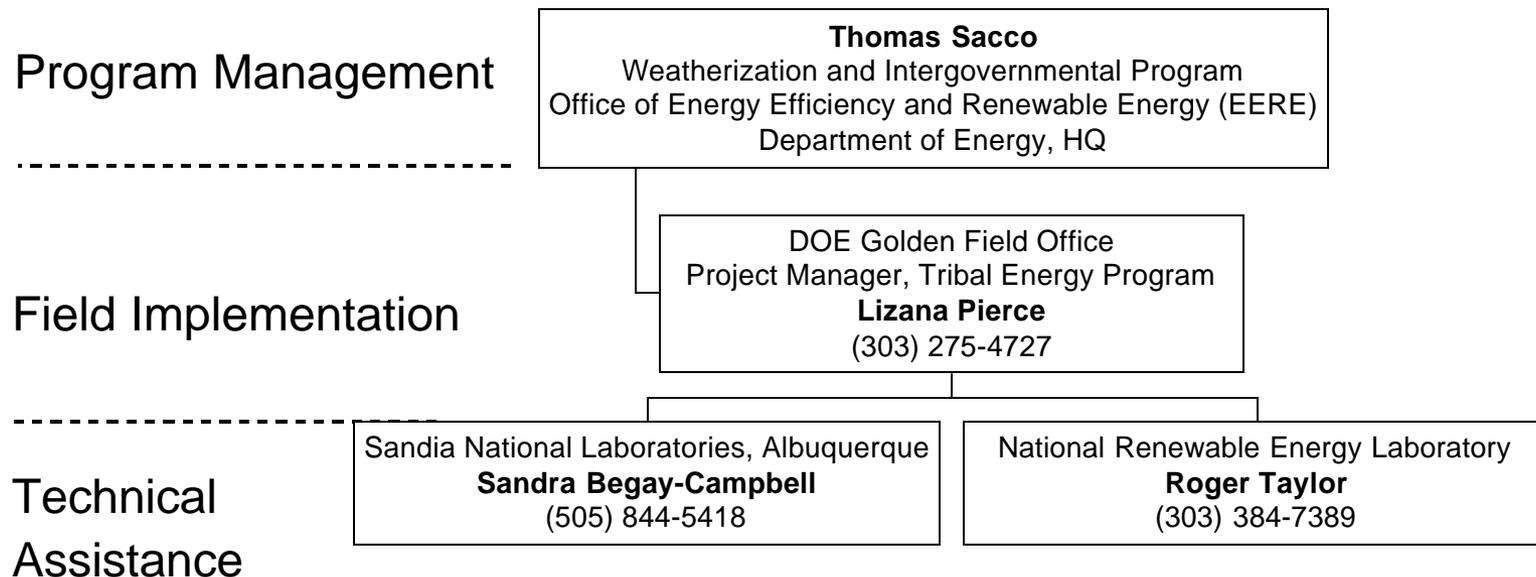




## DOE's Tribal Energy Program

# Tribal Energy Program Organization

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





# Tribal Energy Program History

**BETWEEN FY1994 AND FY2001, DOE FUNDED 51 PROJECTS  
TOTALING OVER \$9.5 MILLION**

## **Title XXVI Projects (Funded FY1994)**

-35 Projects in 13 States (\$6.5 million)

## **Remote Applications Projects (Funded FY99)**

-8 Projects in 5 States (\$1.9 million)

## **Tribal Colleges and Universities (Funded FY00-01)**

-7 Feasibility Studies in 6 States (\$700,000)

-1 Project in New Mexico (\$431,000)



**Solar Installation on  
Navajo Nation**





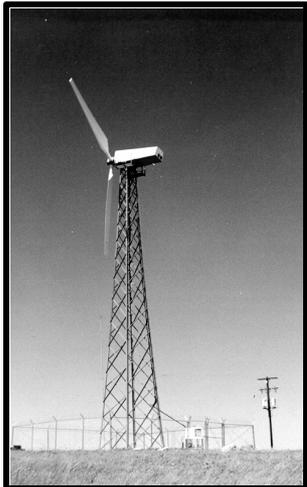
# Tribal Energy Program History

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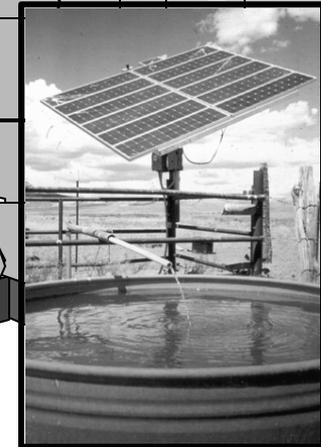
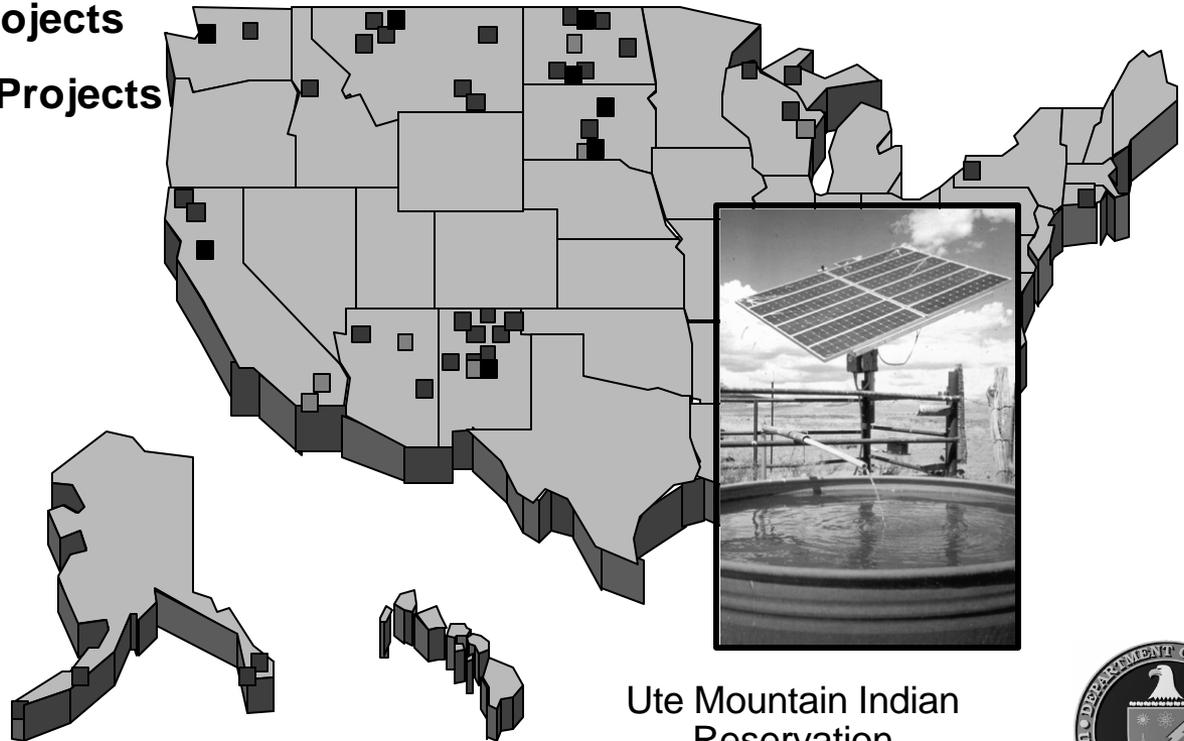
! FY1994-95 Title XXVI Projects

! FY1999 Remote Power Projects

! FY2000-01 Colleges &  
Universities Projects



Blackfeet Tribe  
Small-Scale  
Utility Grade  
Wind Turbine  
Project



Ute Mountain Indian  
Reservation  
PV Water Pumping





## DOE's Tribal Energy Program

# Funding Opportunities

### First Steps Toward Developing Renewable Energy and Energy Efficiency

- Strategic planning
- Energy options analysis
- Capacity building
- Organizational development



**Chairman Tex Hall, Three Affiliated Tribes**  
**Ground Breaking for Wind Turbine on the Fort**  
**Berthold Reservation**

### Renewable Energy Development on Tribal Lands

- Feasibility studies
- Development projects (cost shared)





# Tribal Energy Program

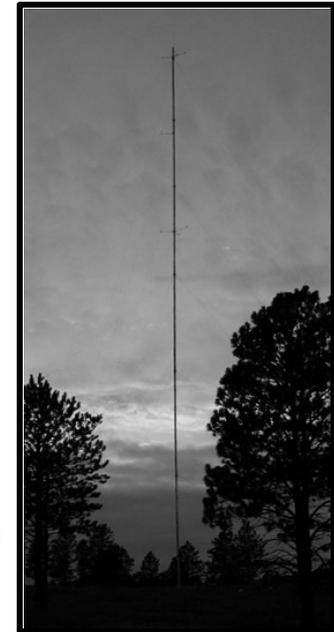
**IN FY2002 AND FY2003, DOE FUNDED 38 PROJECTS TOTALING  
\$7.5 MILLION**

## **Renewable Energy Projects (Funded FY2002)**

- 12 Feasibility Studies in 12 States (\$900,000)
- 2 Development Projects in 2 States (\$2,200,000)

## **Renewable Energy Projects (Funded FY2003)**

- 8 Feasibility Studies (FY2002) in 8 States (\$1,500,000)
- 3 Development Projects in 2 States (\$1,200,000)
- 4 Feasibility Studies in 4 States (\$900,000)
- 9 "First Steps" Projects in 6 States (\$800,000)



**Northern Cheyenne  
Nation**

**Wind Resource  
Assessment**





# Tribal Energy Projects

**TOTAL OF 22 PROJECTS TOTALING \$4.6 MILLION  
FUNDED FROM FY2002 SOLICITATION**

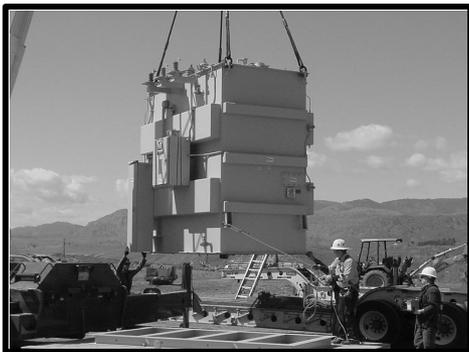
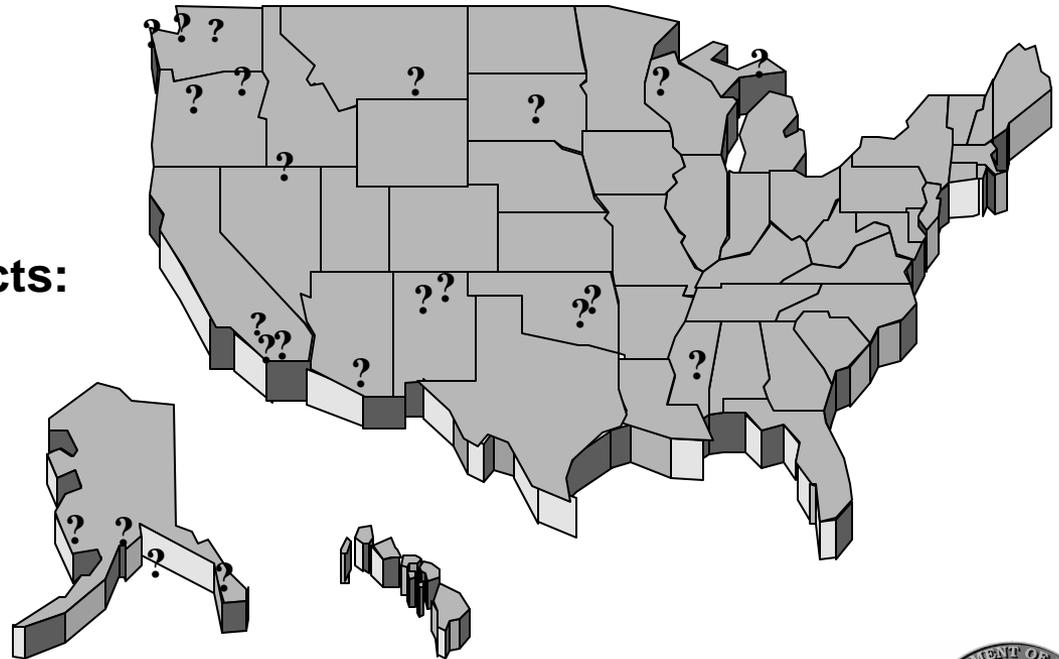
**FY2002 Funded Projects:**

? = 12 Feasibility Studies

? = 2 Developmental Projects

**FY2003 Funded FY2002 Projects:**

? = 8 Feasibility Studies



**Colville Indian Power and  
Vener Energy Substation**





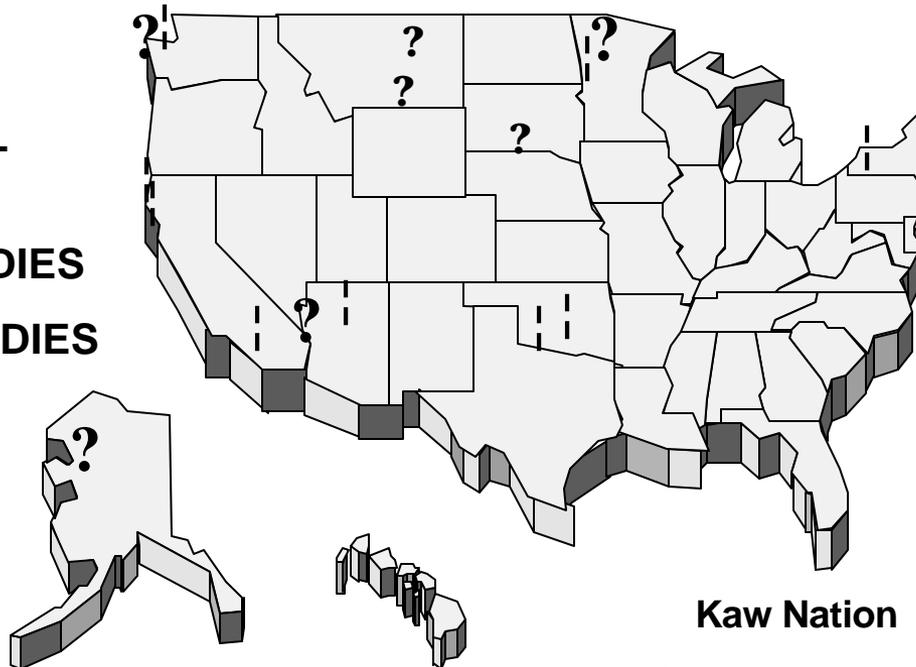
# DOE NEWS

U.S. DEPARTMENT OF ENERGY • OFFICE OF PUBLIC AFFAIRS • WASHINGTON, DC 20585

## DOE Awarded \$2.9 Million to 16 Tribal Clean Energy Projects in FY2003

### FY2003 PROJECTS:

- ? 3 DEVELOPMENTAL PROJECTS
- ? 4 FEASIBILITY STUDIES
- ! 9 FIRST STEPS STUDIES

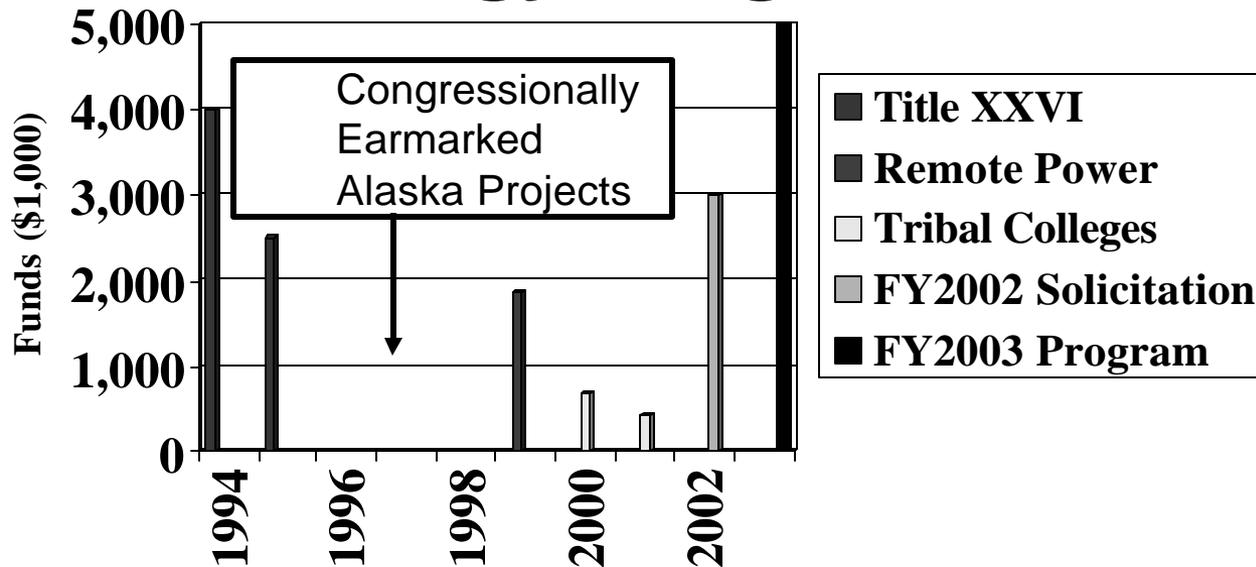


**Kaw Nation**

**Wind Resource Assessment**



# Tribal Energy Program Funding



	1994	1995	1999	2000	2001	2002	2003
<b>Title XXVI</b>	4,000	2,500					
<b>Remote Power</b>			1,900				
<b>Tribal Colleges</b>				700	430		
<b>FY 2002 Solicitation</b>						3,000	
<b>FY2003 Program*</b>							5,000

\* Congress appropriated \$6,000 with \$1,000 being non-discretionary





# DOE's Tribal Energy Program Funding

	FY2002	FY2003	FY2004
Requested	\$2,100	\$8,307	\$6,000
Enacted	\$3,000	\$6,000*	\$5,000**
Discretionary	\$3,000	\$5,000	\$1,700

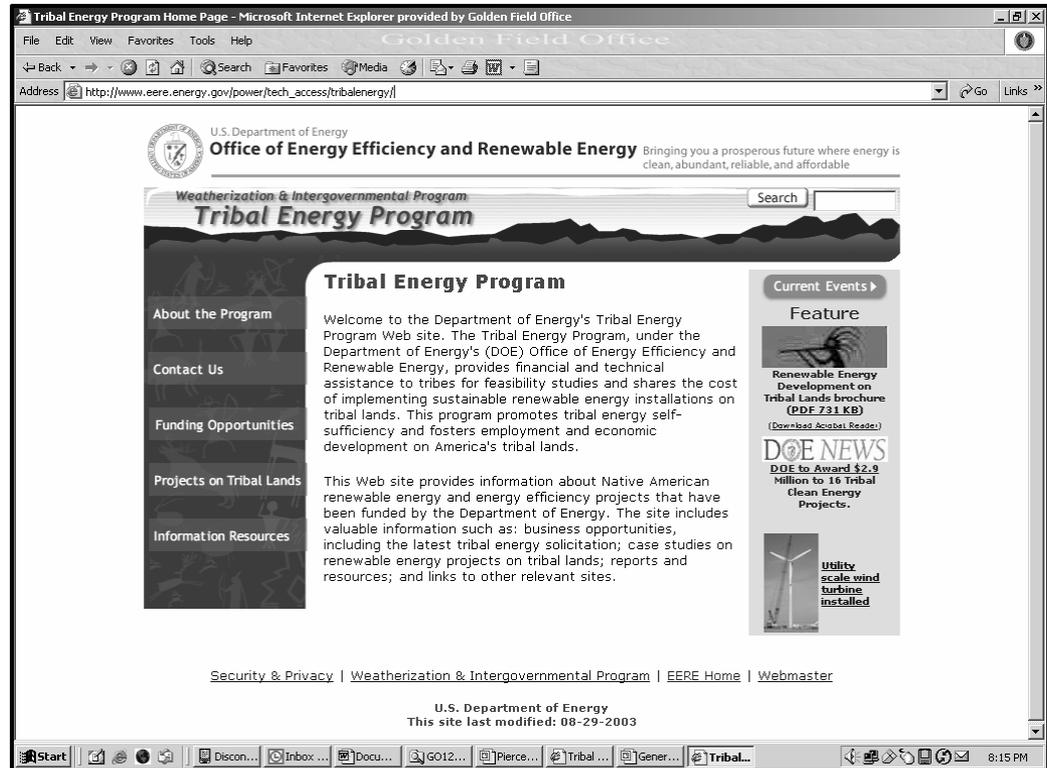
\* Total of \$1,000,000 earmarked to the Council of Energy Resource Tribes (CERT)

\*\* Total of \$3,300,000 earmarked to CERT, ICOUP, and Pyramid Lake Paiute



# Tribal Energy Web Site

- Features
- Current Events
- Funding Opportunities
- Projects on Tribal Lands
  - Project Overviews
  - Status and Reports
  - Contacts
- Information Resource
- Contacts



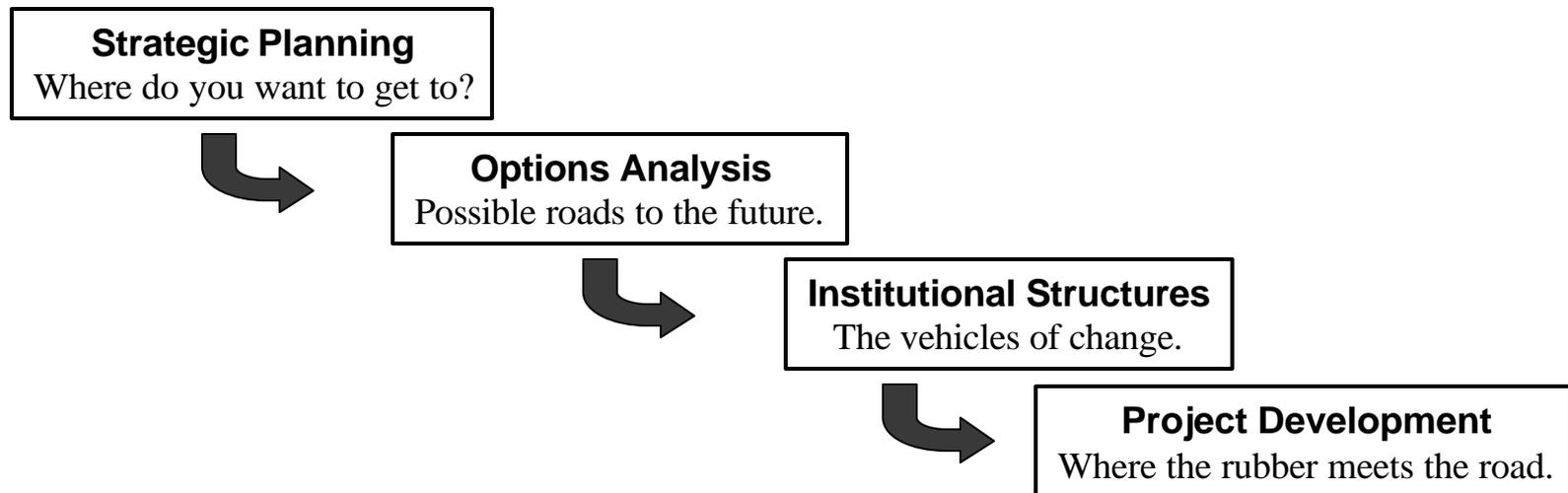
Tribal Energy Program [www.eere.energy.gov/tribalenergy](http://www.eere.energy.gov/tribalenergy)





# Web-Based Guide to Tribal Energy Development

- Framework for the planning and implementation of energy development strategies
- Tool for addressing energy needs and an aid in achieving energy vision



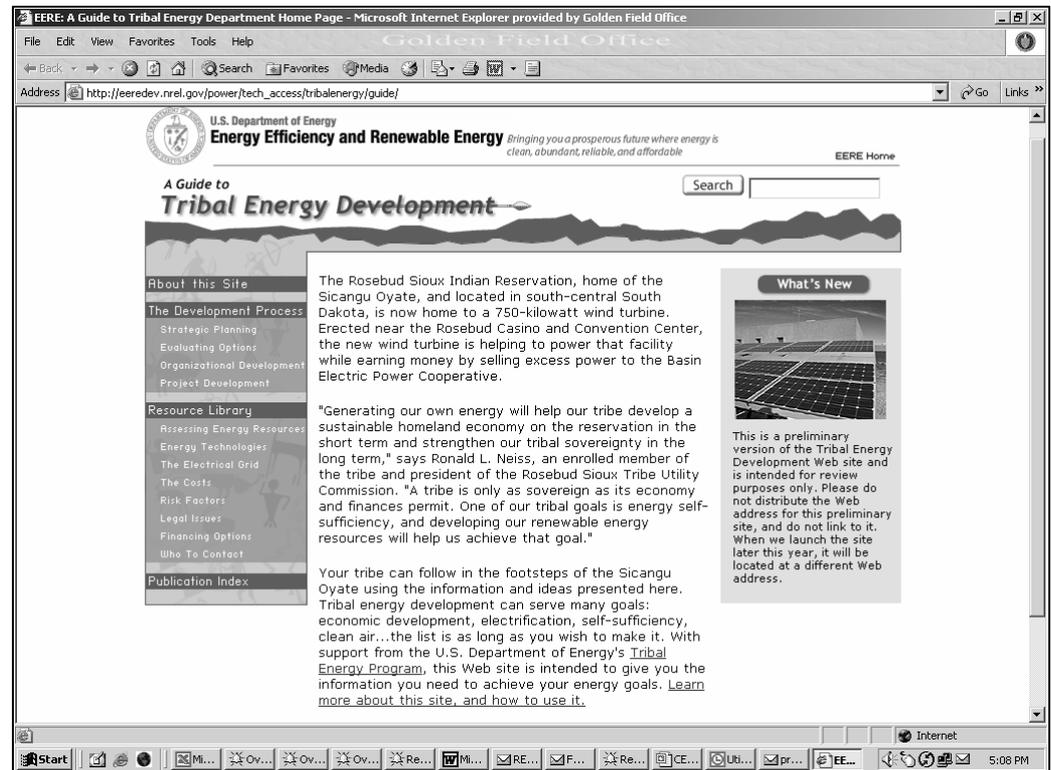
# Guide to Tribal Energy Development

## Development Processes

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

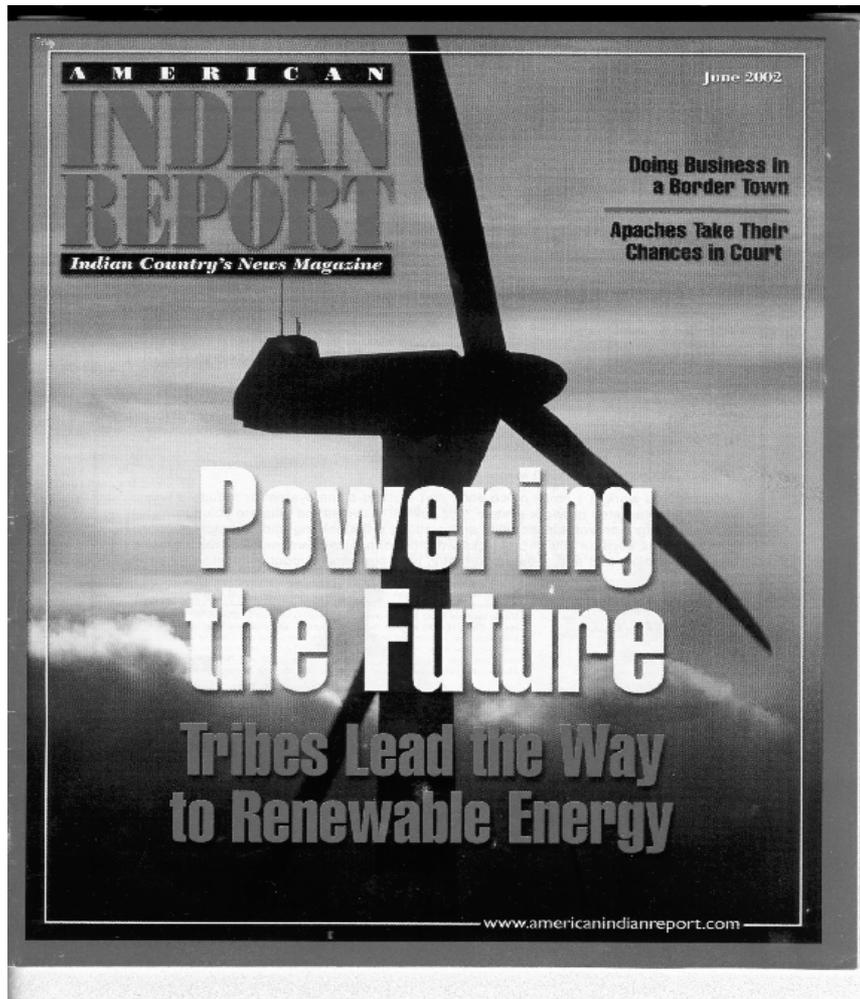
## Resource Library

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



The screenshot shows a Microsoft Internet Explorer browser window displaying the EERE Tribal Energy Development website. The browser title is "EERE: A Guide to Tribal Energy Department Home Page - Microsoft Internet Explorer provided by Golden Field Office". The address bar shows the URL: [http://eeredev.nrel.gov/power/tech\\_access/tribalenergy/guide/](http://eeredev.nrel.gov/power/tech_access/tribalenergy/guide/). The website header includes the U.S. Department of Energy logo and the text "Energy Efficiency and Renewable Energy" with the tagline "Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable". The main heading is "A Guide to Tribal Energy Development". The page content is organized into several sections: "About this Site", "The Development Process" (with sub-links for Strategic Planning, Evaluating Options, Organizational Development, and Project Development), "Resource Library" (with sub-links for Assessing Energy Resources, Energy Technologies, The Electrical Grid, The Costs, Risk Factors, Legal Issues, Financing Options, and Who To Contact), and "Publication Index". A featured article titled "The Rosebud Sioux Indian Reservation, home of the Sicangu Oyate, and located in south-central South Dakota, is now home to a 750-kilowatt wind turbine..." is displayed. A "What's New" section features a photo of solar panels and text stating: "This is a preliminary version of the Tribal Energy Development Web site and is intended for review purposes only. Please do not distribute the Web address for this preliminary site, and do not link to it. When we launch the site later this year, it will be located at a different Web address." The browser's taskbar at the bottom shows the Start button and several open applications, with the system clock indicating 5:08 PM.





# “Tribes Leading the Way to Renewable Energy”

American Indian Report  
June 2002

