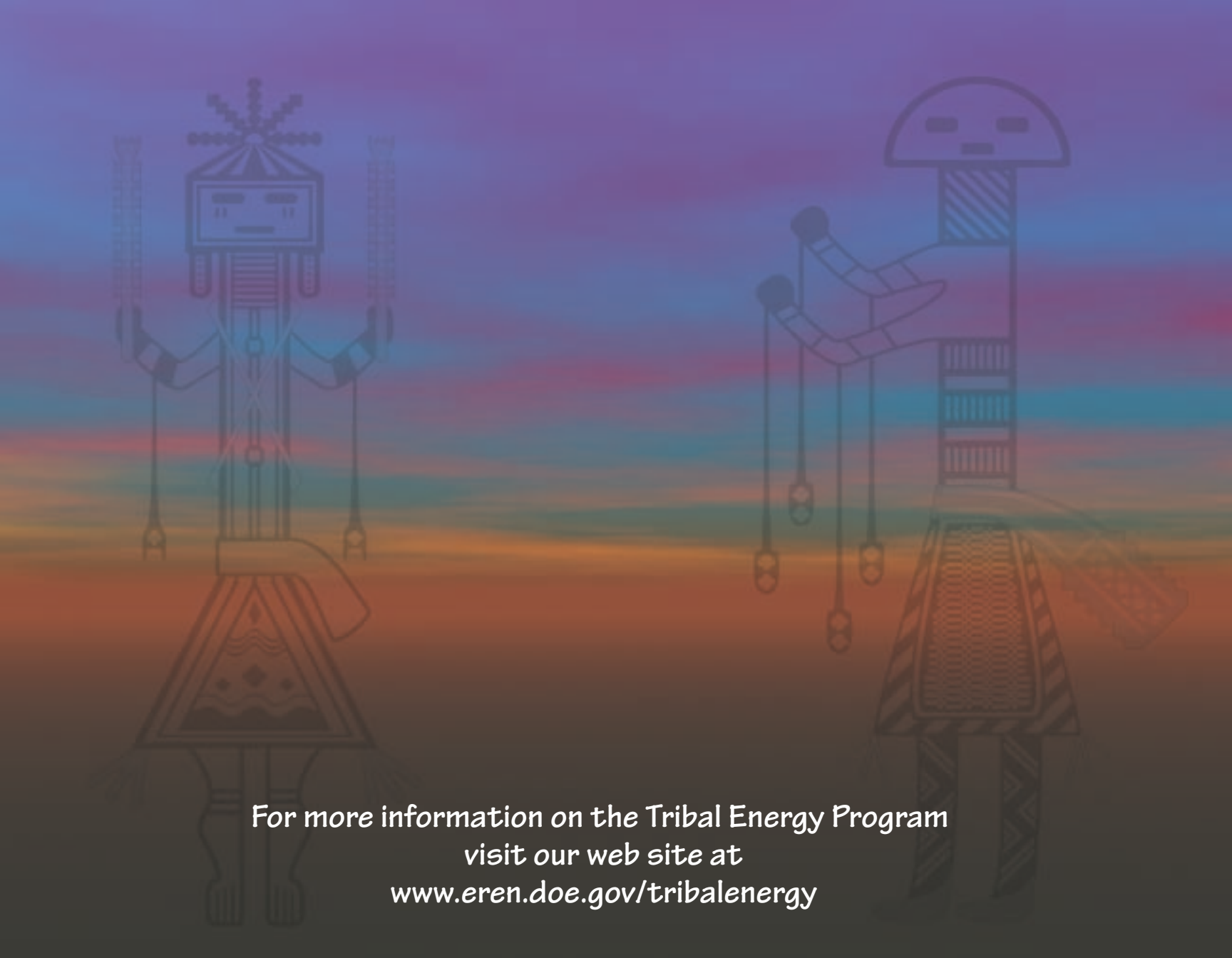
U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy

# Renewable Energy Development on Tribal Lands



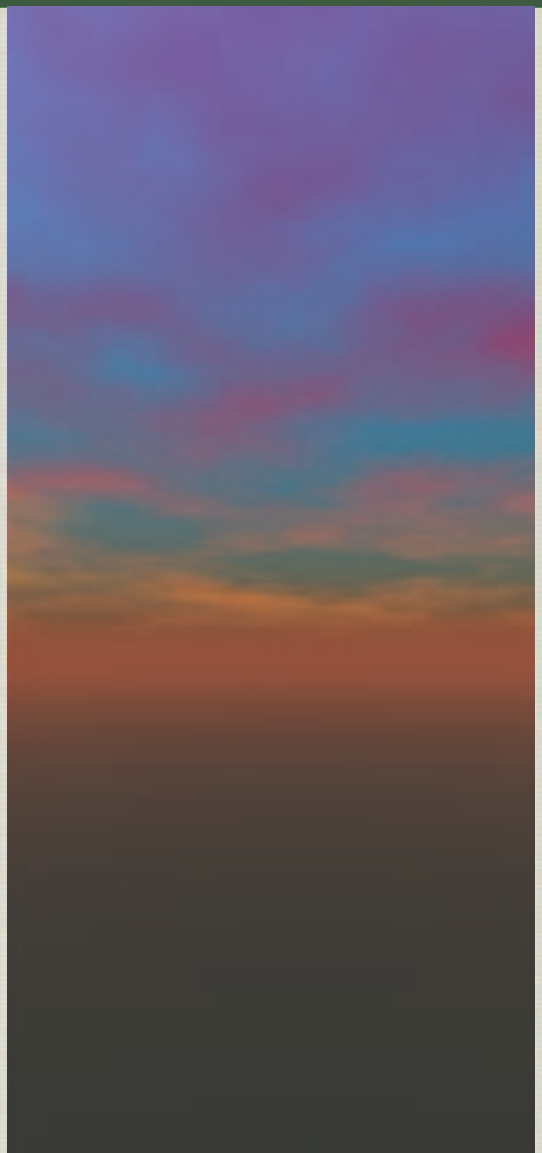
For more information on the Tribal Energy Program
visit our web site at
www.eren.doe.gov/tribalenergy

# ABOUT THE PROGRAM

## Purpose

The Tribal Energy Program under the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy provides financial and technical assistance to Tribes for feasibility studies and shares the cost of implementing sustainable renewable energy installations on tribal lands.

The program promotes tribal energy self-sufficiency and fosters employment and economic development on tribal lands through the use of renewable energy.



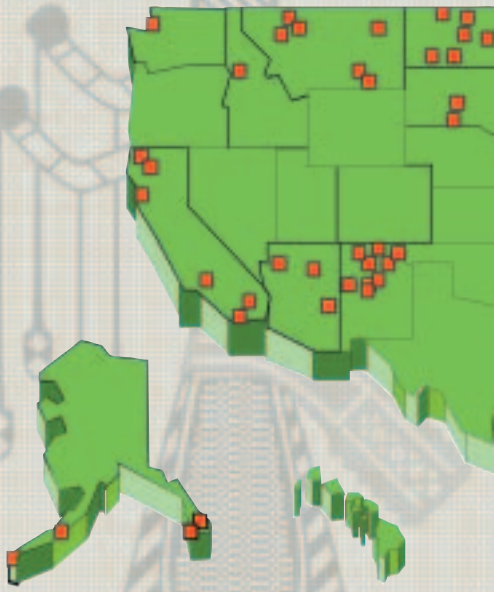
## Policy

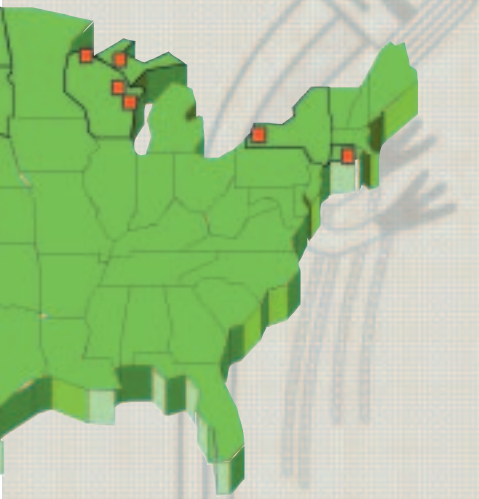
The U.S. Department of Energy American Indian and Alaska Native Tribal Government Policy sets forth principles to be followed by DOE to ensure an effective implementation of a government-to-government relationship with American Indians and Alaska Native tribal governments. Through the authorities set forth in EPAct and the Executive Orders, DOE is seeking to support energy self-sufficiency on Tribal Lands and support the trust responsibility set forth in DOE's American Indian and Alaska Native Tribal Government Policy.

For the policy, visit
www.em.doe.gov/public/tribal/policy2.html.

Nez Perce Tribe
Biodiesel Pilot Project

Hybrid wind/PV system for
Manzanita Band of Kumeyaay



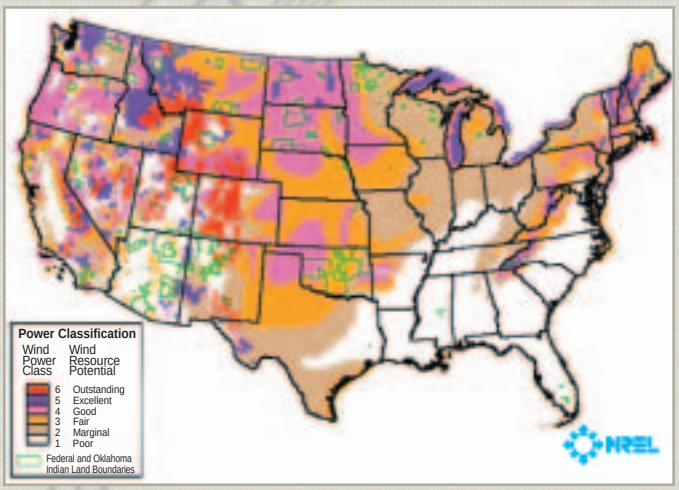


Blackfeet Tribe Small-Scale
Utility-Grade
Wind Turbine Project

Jicarilla Apache Reservation PV Array
on Dulce High School

## Wind Energy

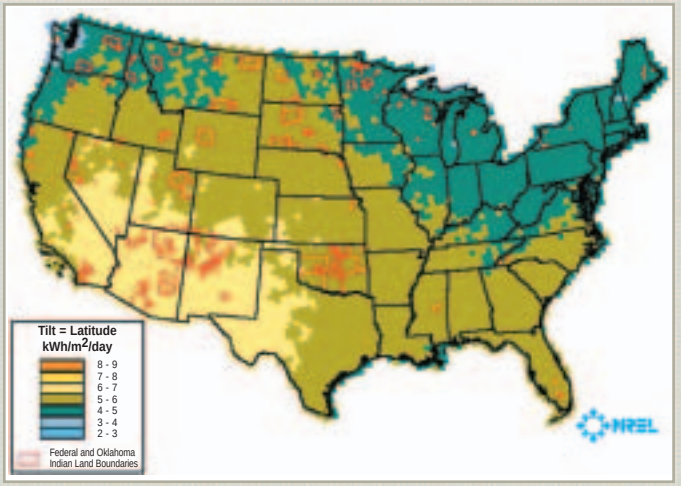
Wind energy can generate electricity, charge batteries, pump water, grind grain, or power homes and businesses. Large, modern wind turbines grouped together in wind farms produce electricity for utilities. Small turbines are used by homeowners and remote villages to help meet energy needs.




Areas designated class 4 or greater are suitable for most utility-scale wind turbine applications, whereas class 2 and 3 areas are marginal for utility-scale applications but may be suitable for rural applications.

## Solar Energy

A plot of land in the southwest 100 miles on a side could generate all the electricity used in the U.S.!



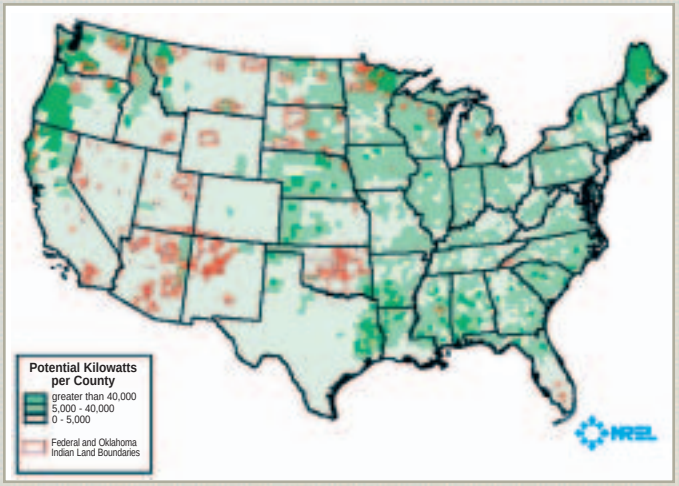

A distance from the nearest utility line of only a quarter mile raises distribution costs sufficiently to make PV cost-effective for small loads even in the cloudiest parts of the country.



For renewable energy resource information, visit DOE's National Renewable Energy Laboratory Renewable Resource Data Center at http://rredc.nrel.gov/

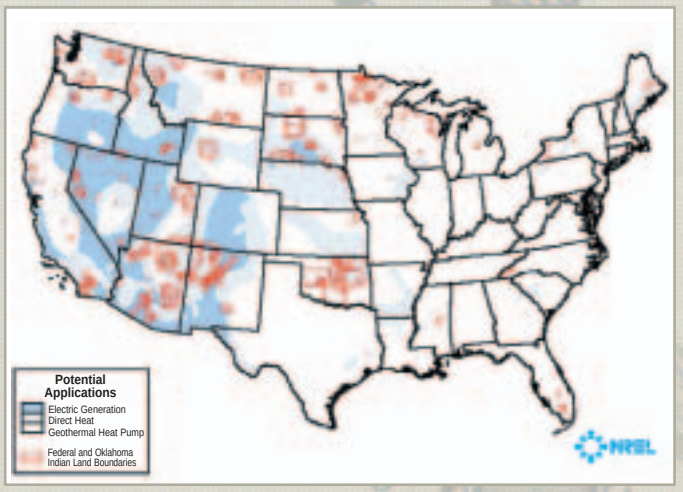
## Biomass Energy

Biomass is a sustainable renewable resource that can be used as a fuel for producing electric power and other energy products. Materials such as wood chips, rice straw, switchgrass, bagasse (sugar cane waste) and corn have been used to produce electricity and transportation fuels, such as methanol and ethanol.




## Geothermal Energy

Geo (Earth) thermal (heat) energy is an enormous, underused heat and power resource that emits little or no greenhouse gases, is reliable (averaging 95% system availability), and reduces our dependence on foreign oil.

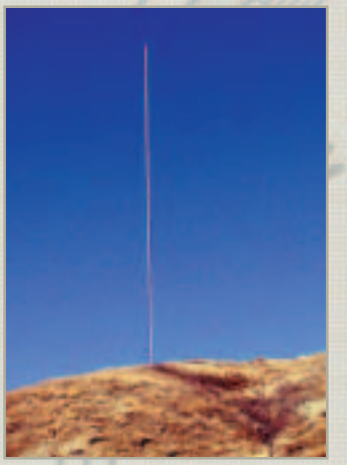



About 2,800 megawatts (MW) of geothermal electricity are currently produced in the United States. Today's technology produces electricity from hydrothermal (hot water/steam) resources.

## Hydropower

Hydropower plants capture the kinetic energy of falling water to generate electricity, using a turbine and a generator to convert the energy from the water to mechanical and then electrical energy. Hydropower currently contributes the greatest share of renewable electricity generation in the United States.

Oneida Tribe of Indians of Wisconsin



Three Affiliated Tribes

Wind Monitoring for
Utility-Scale Turbine
Demonstration

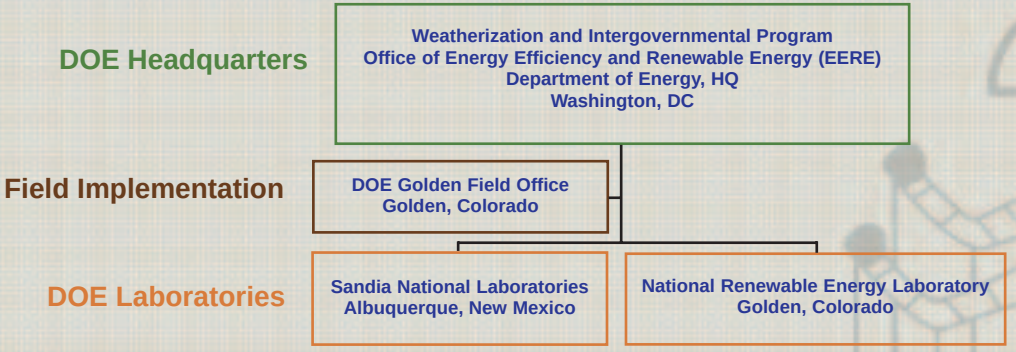
Pueblo of Laguna Solar Electric

Ute Mountain
Indian

Reservation
PV Water Pumping

For general inquiries or information, contact the Energy Efficiency and Renewable Energy Clearinghouse at 1-800-DOE-EREC (363-3732) or doe.erec@nciinc.com

# How We're Organized




The Tribal Energy Program consists of program management through DOE headquarters, program implementation through DOE's Field Offices, and technical support through the DOE Laboratories.

Program management for EERE's Tribal Energy Program is provided through DOE's Office of Weatherization and Intergovernmental Programs, which provides direction and funding to the DOE's Golden Field Office who issues solicitations and manages the resulting projects.

Two of DOE's National Laboratories, the National Renewable Energy Laboratory and Sandia National Laboratories, provide technical support to the Golden Field Office and individual tribal energy projects, as well as conduct renewable resource analysis and independent research.

The National Renewable Energy Laboratory is DOE's premier laboratory for renewable energy research & development. NREL provides links to other DOE Programs including Wind Powering America, Building America, International Programs, Education Programs and the Federal Energy Management Program—in support of the Tribal Energy Program.

Sandia National Laboratories multiprogram engineering and science laboratories, design all non-nuclear components for the nation's nuclear weapons, perform a wide variety of energy research and development projects, and work on assignments that respond to national security threats — both military and economic.

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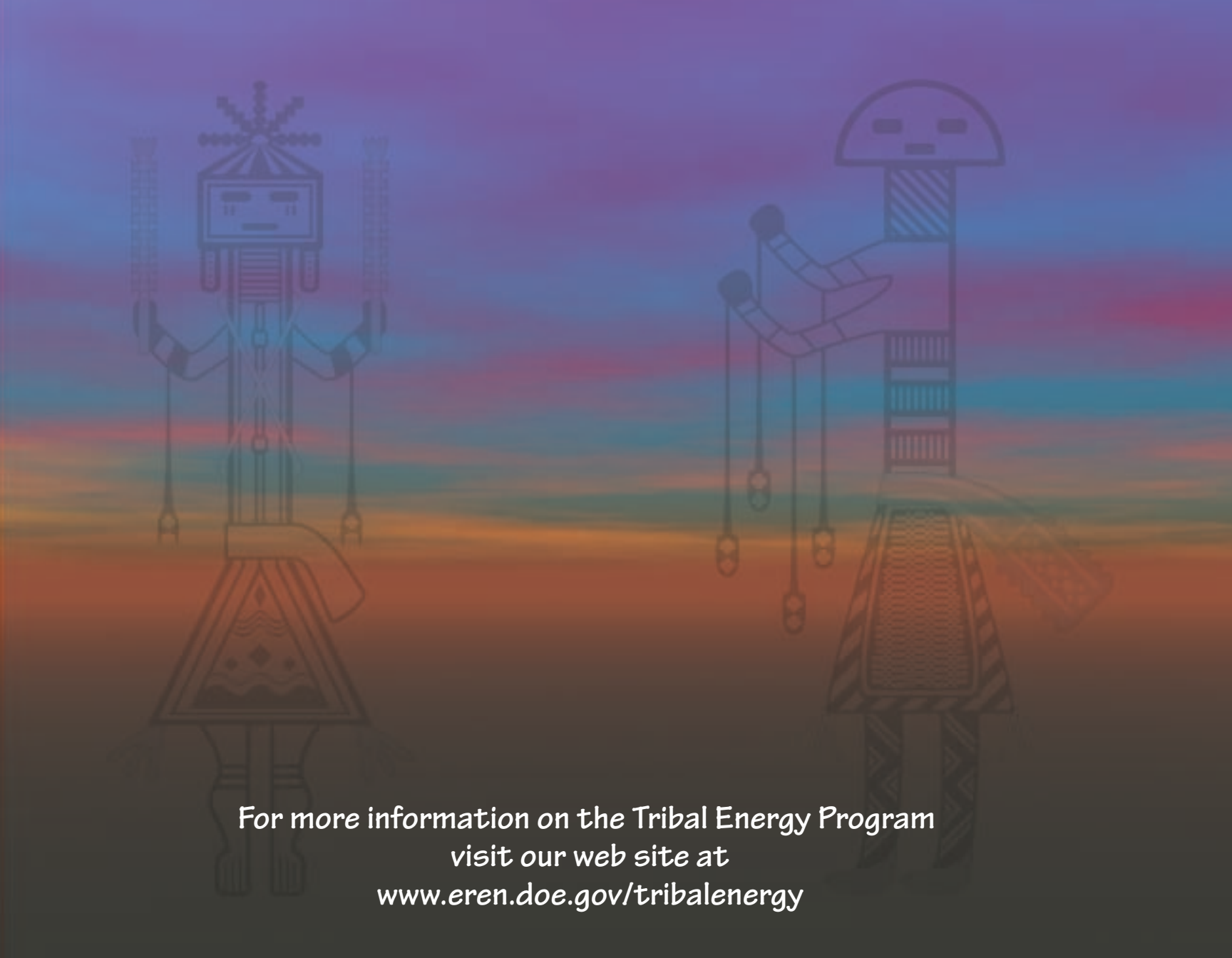

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Weatherization and Intergovernmental Program

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