U.S. Department of Energy Office of Indian Energy Policy and Programs

Strengthening Tribal Communities, Sustaining Future Generations

U.S. DEPARTMENT OF ENERGY | Office of Indian Energy

"Within every challenge lie the seeds of opportunity, and I believe tribes are well-positioned to cultivate those seeds through visionary leadership and strategic energy planning."

—CHRISTOPHER CLARK DESCHENE, DIRECTOR, U.S. DEPARTMENT OF ENERGY OFFICE OF INDIAN ENERGY

OUR MISSION

To maximize the development and deployment of energy solutions for the benefit of American Indians and Alaska Natives.

OUR VISION

To be the premier federal office for providing tribal communities and Alaska Native villages with the knowledge, skills, and resources needed to implement successful strategic energy solutions.

Letter from the Director

In May 2015 I began serving as Director of the U.S. Department of Energy's (DOE's) Office of Indian Energy Policy and Programs. Since then, I have crisscrossed the country visiting American Indian and Alaska Native communities that face a variety of pressing energy challenges. What has emerged from that experience is a bold vision for the future of Indian energy.

Many teachings from Indian Country share a fundamental belief that we are all connected. Accordingly, many of DOE's critical missions—national security, energy infrastructure, energy security, and climate resiliency—intersect with the challenges, goals, and concerns of American Indians and Alaska Natives.

And therein lies an opportunity. American Indian lands represent less than 2% of the total U.S. land base, yet they contain an estimated 5% of our country's renewable energy generation potential. Tribes and Alaska Native communities have significant resources that can address both tribal and national energy goals and concerns.

In Indian Country, there is also a guiding principle that resonates among tribal leaders, and that is to be forward-thinking in our decisions and actions today. Simply stated, what we plan and do today will have significant impact on future generations. Sovereignty depends on it.

The DOE Office of Indian Energy is committed to Indian Country's efforts today and tomorrow. By providing Tribes and Alaska Natives with accurate information, quality training, expert technical assistance, and project financial assistance, DOE and the Office of Indian Energy are investing in the future of Native American communities. We understand that now is the time to build partnerships that help our country, our Native communities, and our future. In closing, I am here to serve. The DOE Office of Indian Energy and its staff are dedicated to finding new and permanent solutions to our combined challenges. We have our mission and we have a vision that will serve the energy needs of American Indian and Alaska Native communities.

Thank you,

Chris Deschene

Director, DOE Office of Indian Energy

The DOE Office of Indian Energy: Strengthening Tribal Communities, Sustaining Future Generations

Under the Energy Policy Act of 2005, the DOE Office of Indian Energy is authorized to fund and implement a variety of programmatic activities that assist American Indian Tribes and Alaska Native villages with energy development, capacity building, energy cost reduction, and electrification of Indian lands and homes. To advance these goals, we employ a three-pronged approach designed to empower tribes to maximize the value of their energy resources.

Education and Capacity Building

Through regional workshops, webinars, Tribal Leader Forums, college student internships, and a comprehensive online training curriculum, we support tribal efforts to build internal capacity to understand and navigate energy markets.

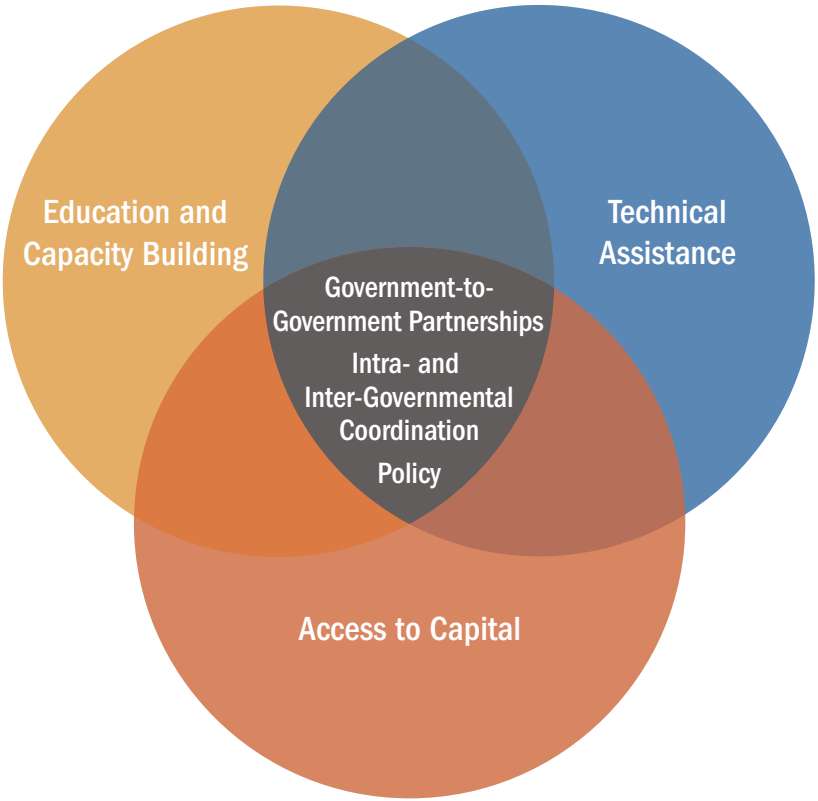
Technical Assistance

We provide federally recognized Indian Tribes, including Alaska Native villages, tribal energy resource development organizations, and other organized tribal groups and communities, with technical assistance to advance tribal energy projects. Technical experts from DOE and its national laboratories, along with other partnering organizations, provide up to 40 hours per year of in-depth support to assist tribes and Alaska Native villages with strategic energy planning and project development.

Access to Capital

We facilitate tribal access to capital for energy project development through financial assistance, including competitively awarded grants and DOE's Tribal Loan Guarantee Program.

Leveraging Intra- and Inter-Governmental Coordination to Achieve Success through Government-to-Government Partnerships



In all of our endeavors, the key to success is government-to-government partnerships. By leveraging intra- and inter-governmental coordination to promote tribal capacity building, provide technical assistance, and facilitate access to capital, the DOE Office of Indian Energy is working to maximize the return on its investments in the future of Native American communities.

Providing Education and Building Capacity

Action

Workshops and Training. In-person and online learning opportunities to enhance tribal staff understanding of the process for developing energy projects on tribal lands.

Webinars. A series of free webinars designed to assist tribes and Alaska Native villages interested in deploying energy projects to increase energy self-sufficiency, reduce energy costs, and strengthen tribal energy infrastructure.

Tribal Leader Forums. Best practices and information sharing on energy technologies and energy project development and finance to further support smart tribal energy development.

Internships. An opportunity for Native college students to be immersed in energy project planning and development activities and to work with technical experts in the field and at DOE's Sandia National Laboratories for six weeks each summer.

Student Internship Program at a Glance (2002–2015)

- 34 undergraduate and graduate interns
- 20 different tribal affiliations
- 17 different student majors
- 26% of interns were converted to year-round status (9 of 34)
- 12% of interns were hired as full-time employees or Sandia contractors (4 of 34)
- 59% of interns were female students hired based on merit and competitive selection process (20 out of 34)

From left to right: DOE Office of Indian Energy interns Tommy Jones, Kimberlynn Cameron, JoDonna John, Brittany Anstead, and Len Necefer, with DOE Office of Indian Energy Director Chris Deschene in the center and Sandra Begay-Campbell from Sandia National Laboratories to his left. *Photo by Randy J. Montoya, Sandia National Laboratories.*

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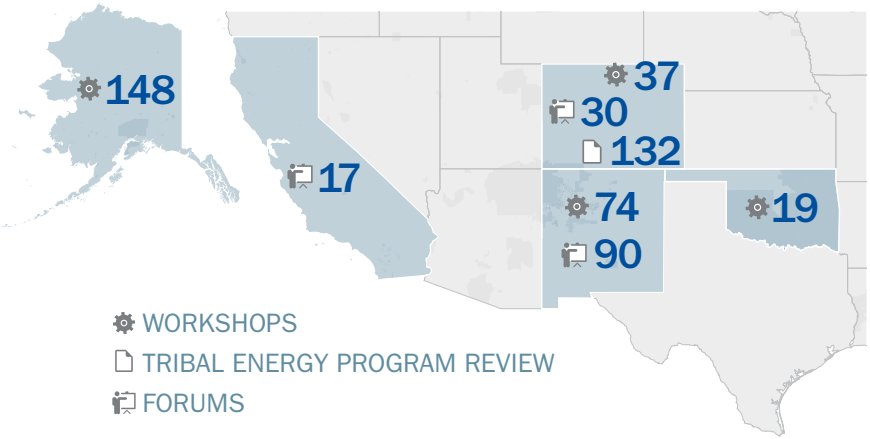
Number of Attendees by State at Fiscal Year 2015 (FY15) Education and Capacity-Building Events



2015 TRIBAL RENEWABLE ENERGY WEBINAR SERIES

7 WEBINARS

595 ATTENDEES

2015 COLLEGE STUDENT INTERNSHIPS

3 SUMMER INTERNS

2 PhD YEAR-ROUND INTERNS

5 TRIBES REPRESENTED

4 FIELD VISITS

9 TRIBAL INSTALLATIONS

"Amazing workshop! Please keep doing similar workshops."

"Excellent experts, really dynamic speakers with realistic information."

"Enjoyed success stories—they make applying for grants easier to apply for knowing the struggles from others."

—FEEDBACK FROM FY15 WORKSHOP PARTICIPANTS

Delivering Technical Assistance

Action

Project Development Support.* Unbiased technical expertise to help address specific tribal barriers to developing clean energy projects, including reviews of studies and system designs, technology assessments, and financial modeling and analysis.

Strategic Technical Assistance Response Team (START) Program. Expert technical assistance and support with community-driven tribal energy efficiency and renewable energy projects in Alaska and the 48 contiguous states.

Strategic Energy Planning.* On-site workshops led by tribal energy experts and focused on assisting tribes and Alaska Native villages with developing an energy vision and a viable road map to achieve that vision.

*Assistance is typically limited to 40 hours per tribe per year.

Attendees at a DOE-funded strategic energy planning workshop for the Saint Regis Mohawk Tribe in Akwesasne, New York. *Photo from Rachel Sullivan, NREL*

STRATEGIC ENERGY PLANNING WORKSHOPS

More than
240
PARTICIPANTS

"This [strategic energy plan] is the result of a lot of hard work by all who participated. For each of you, this means that we have a solid document that gives us a plan we can work with that will hopefully result in our forward movement, together, to bring affordable and more environmentally conscious energy to our community. It is my hope that through these efforts it will open doors to even more funding sources as we plan out all of our important projects on behalf of our worthy programs."

—RETHA M. HERNE, EXECUTIVE DIRECTOR, AKWESASNE HOUSING AUTHORITY

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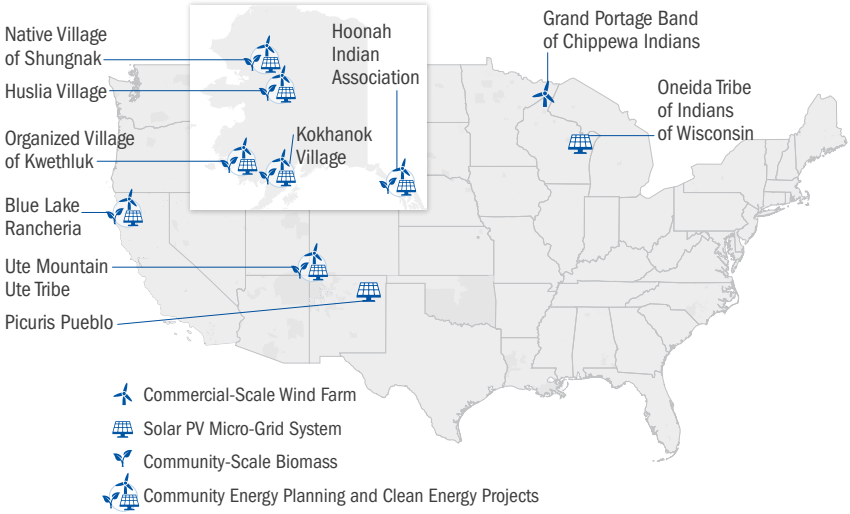
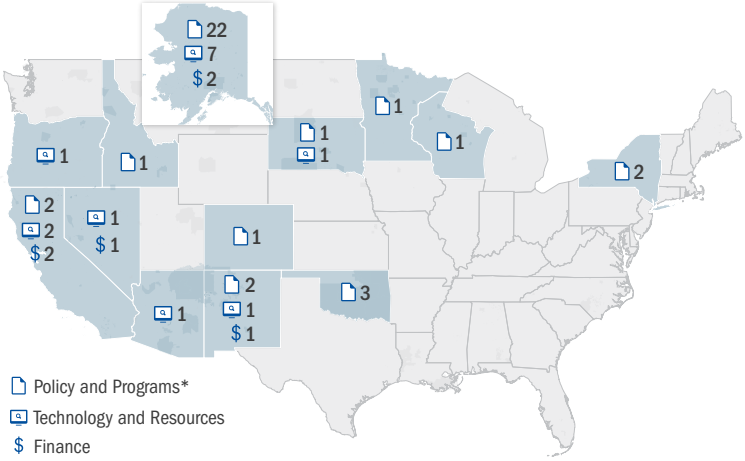
FY15 START Projects



Types of FY15 Technical Assistance Requests Completed or In Progress by State



*Includes strategic energy planning workshops.

POWER COST EQUALIZATION ASSISTANCE TO **16** VILLAGES IN ALASKA

"The greatest challenge of the Akiak Power Utilities and the City of Akiak staff persons was to correctly complete reporting requirements to the Regulatory Commission of Alaska and the Alaska Energy Authority, which authorize and provide much-needed Power Cost Equalization (PCE) funds to our customers and electricity users here at Akiak. [DOE technical assistance] is the most cost-effective technical assistance provided to us and improved our efforts to provide electricity services to our customers and ... be in compliance in receiving PCE funding to help our customers here in our community."

—DEBRA JACKSON, MAYOR, CITY OF AKIAK

Facilitating Access to Capital

Action

Grants. Funding for Indian Tribes, Alaska Native regional and village corporations, tribal energy resource development organizations, and tribal consortia to implement projects that promote tribal energy sufficiency and spur increased deployment of energy projects on Indian lands.

DOE Tribal Loan Guarantee Program. Authorizes DOE to provide loan guarantees to Indian Tribes to accelerate energy development pursuant to Title XVII of the Energy Policy Act of 2005.

Federal Energy Development Assistance Tool. Provides information about federal grant, loan, and technical assistance programs available from more than 10 federal agencies to support energy development and deployment in Indian Country and Alaska Native villages.

Tribal Energy Grants at a Glance (2002–2014)

DOE has invested $48 million in 183 tribal clean energy projects valued at $93.6 million. DOE's investments were leveraged by $45.6 million in tribal cost-share. Tangible results of these investments include:

- Retrofitted 70 tribal buildings (representing more than 1.8 million square feet), saving tribes more than 10 million kilowatt-hours (kWh) of energy and $2.5 million per year
- Completed energy audits on more than 250 tribal buildings
- Helped move more than 580 megawatts (MW) of potential new renewable energy generation into development
- Supported tribes and Alaska Native villages in assessing the potential for more than 4 gigawatts of new renewable energy generation
- Trained more than 170 tribal members as part of these tribal energy projects

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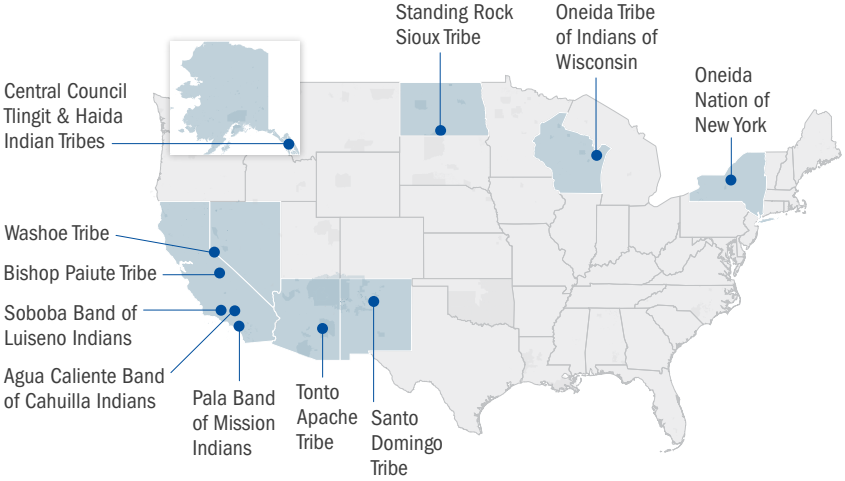
2015 Selected Tribal Energy Grant Recipients



DOE's nearly $6 million investment in these projects represents more than 4.4 MW of new renewable energy generation, saving the Indian Tribes over $1.4 million annually.

TRIBAL ENERGY GRANT SUCCESS STORY: Forest County Potawatomi Community

Utilizing $1.1 million in DOE funding, the Forest County Potawatomi Community (Wisconsin) completed an energy upgrade to Wunder Hall, a 34,000 square-foot historic building that now serves as the tribe's economic development center. The building's new energy upgrades included energy-efficient windows and doors; LED lighting; a new heating, ventilation, and air conditioning system; and water-saving fixtures. In addition to helping revitalize the former Concordia College campus area, which has been closed since the 1980s, the project is expected to reduce the tribe's energy costs by more than 50%.

DOE-supported Forest County Potawatomi Community projects include:

- Energy upgrades to the tribe's 34,000-square-foot Wunder Hall estimated to reduce energy costs by more than 50%
- A photovoltaic array on the roof of the tribe's Milwaukee administration building that generates up to 35,000 kWh of clean electricity
- A 2-MW anaerobic digester that converts food waste into biogas
- An LED lighting project at tribal casino parking facilities that reduced electricity use by more than 47%.

Fostering Partnerships

Action

Indian Country Energy and Infrastructure Working Group. Informal working group featuring representatives from tribes in the 48 contiguous states and Alaska Native villages that have expertise in energy development and infrastructure. Provides advice and recommendations to inform the strategic planning and implementation of the DOE Office of Indian Energy's resources, business, and energy infrastructure development policies and programs.

White House Council on Native American Affairs. Brings together representatives from more than 30 federal departments and agencies working collaboratively to promote the development of prosperous and resilient tribal communities.

National Strategy for the Arctic Region. Developing a 10-year renewable energy strategy through consultation and coordination with Alaska Native communities as part of the National Strategy for the Arctic Region, which outlines strategic priorities intended to position the United States to respond effectively to emerging opportunities in the region, while simultaneously pursuing efforts to protect and conserve its unique environment.

DOE Rural Utilities Study. Examining ways to sustainably address the high cost of energy in Alaska by collecting data from tribal utilities, investor-owned utilities, municipally owned utilities, and co-ops for a representative sampling of roughly a third of Alaska's 88 rural utilities.

DOE Deputy Secretary Elizabeth Sherwood-Randall speaks to students and staff at the Alaska Native Science and Engineering Program on May 28, 2015, in Anchorage, Alaska. During her visit she was joined by DOE Office of Indian Energy Director Chris Deschene and announced the five Native Alaska communities chosen as recipients of the third round of Alaska START Program awards. *Photo from DOE.*

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26 PRESENTATIONS

by Native American students at the DOE Working Group Tribal Leaders Roundtable and Summit with DOE Secretary Ernest Moniz in Arizona

32 REGIONAL REPRESENTATIVES

were invited to the Alaska Native Leaders Roundtable meeting with Secretary Moniz in Alaska

30 ALASKA RURAL UTILITY STUDY SITE VISITS

36 STATE AND REGIONAL ORGANIZATION REPRESENTATIVES

trained as Alaska Energy Ambassadors

FY15 National Strategy for the Arctic Region Meeting Locations

Federal Inter-Agency Efforts at a Glance

Four White House Council on Native American Affairs Tribal Energy Subgroup Working Groups continued a coordinated effort among federal agencies to promote energy and energy infrastructure development in Native American communities by:

- Developing the Federal Energy Development Assistance tool
- Establishing internal guidance for federal agencies on purchasing electricity, energy products, and energy by-products from tribes
- Opening doors to STEM careers for Alaska Native youth by coordinating a visit to the Alaska Native Science and Engineering Program by DOE Deputy Secretary Elizabeth Sherwood-Randall
- Launching a pilot Energy Ambassadors Program to provide Alaska Native villages with front line technical assistance to advance clean energy solutions in rural Alaska

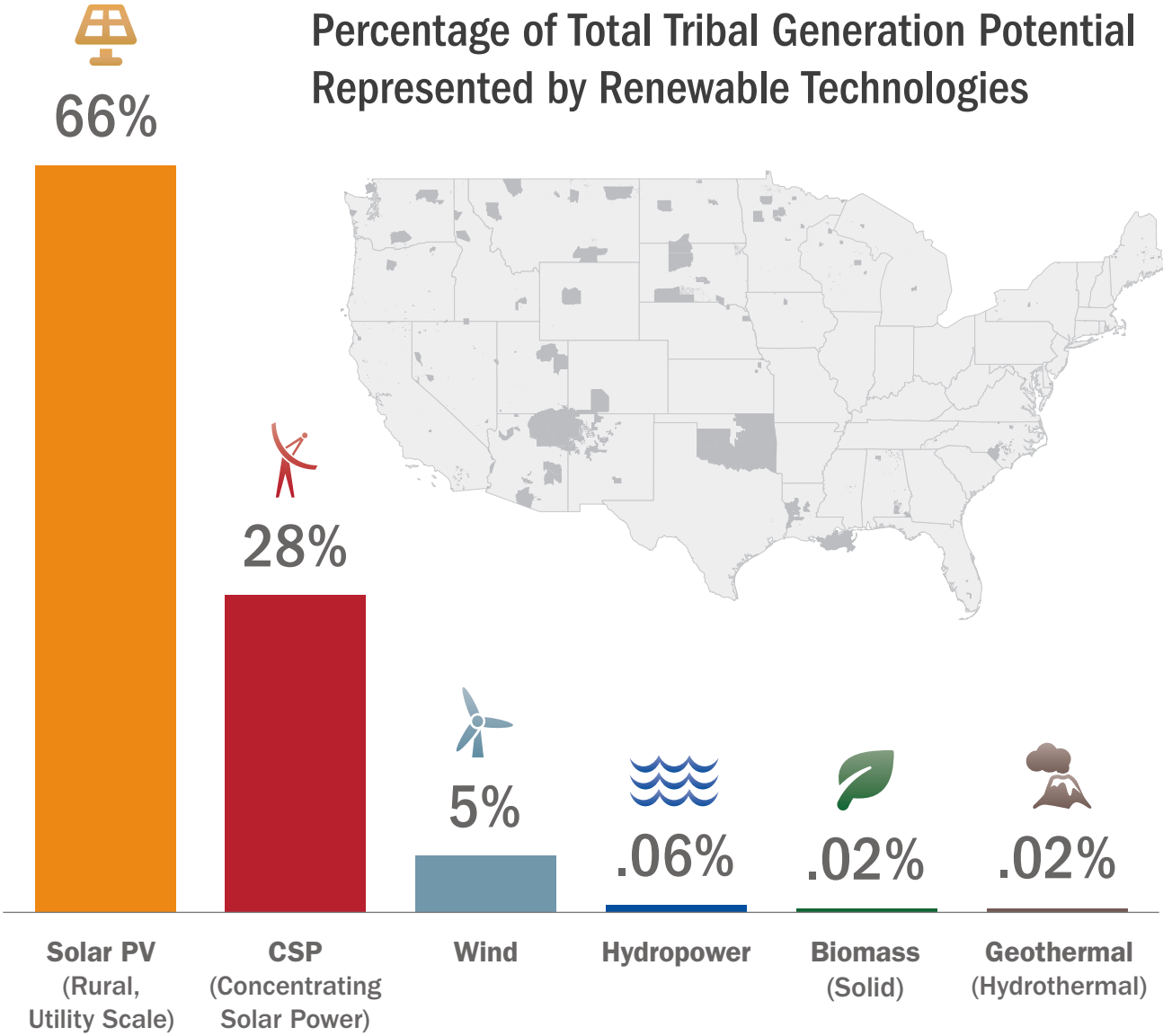
"DOE is a critical partner in the tribe's climate mitigation and resiliency activities, providing foundational resources including strategic planning guidance and plan templates, online and in-person trainings and workshops, specific technical assistance, and unfailing encouragement of the tribe's renewable energy and climate-related work. The tribe is committed to a long-term fight against climate change by acting now to help reverse it, and DOE has helped immensely in these efforts."

—JANA GANION, ENERGY DIRECTOR, BLUE LAKE RANCHERIA, WHITE HOUSE CLIMATE ACTION CHAMPION

Resource Potential in Indian Country

While American Indian land comprises approximately 2% of the total U.S. land base, it represents an estimated 5% of the total U.S. renewable energy generation potential.

Percentage of Total Tribal Generation Potential Represented by Renewable Technologies



About Our Staff

Christopher Clark Deschene

Director

Christopher Clark Deschene (Navajo Nation) has more than 20 years of management and policy experience along with extensive tribal relationships and deep expertise in business and energy development, natural resources, and environmental policies, federal Indian law, and government affairs. He plays a crucial role by providing advice and support to the Secretary, Deputy Secretary, Under Secretary for Science and Energy, and program offices across the DOE complex to help fulfill the Department's mission of advancing the national, economic, and energy security of the United States through scientific and technological innovation.

David Conrad

Deputy Director

David Conrad (Osage Nation) has represented DOE on federal interagency working groups, such as the White House Council on Native American Affairs, and coordinated Department-wide implementation of its federal Indian policy, including strengthening positive working relationships with tribal governments on issues related to DOE's mission.

Doug MacCourt

Senior Policy Advisor

Doug MacCourt has more than 25 years of experience working with tribes, Alaska Native Corporations, tribal business enterprises, and the private sector on all aspects of energy and natural resources development. He advises DOE and works with Congress and other federal and state agencies on policy, legislative, and funding issues that are critical to the mission of developing and deploying clean energy in Indian Country, including the National Strategy for the Arctic Region and the Climate Action Plan.

Michael Rodrigue

Chief Operating Officer

Michael Rodrigue coordinates and executes the administrative operations that support the mission of the Office, including acquisitions, human capital, facilities, and financial management.

Givey Kochanowski

Program Manager, Alaska

Givey Kochanowski works in Anchorage, Alaska, and is responsible for the support and delivery of DOE technical assistance, capacity building, energy education, and outreach to all Alaskan tribal entities. He oversees the most efficient utilization of federal financial and technical resources across DOE to promote Alaska Native energy cost reduction, economic development, and self-determination.

Lizana Pierce

Program Manager

Lizana Pierce works in DOE's Golden Field Office in Colorado and is responsible for implementing national funding and financing programs and administering the resultant tribal energy project grants and agreements. She has more than 20 years of clean energy technology, project development, and management experience assisting tribes in developing their energy resources and building their energy visions.

Contact Us

Access more information and resources online at **www.energy.gov/indianenergy** or email us at **indianenergy@hq.doe.gov**.

Cover photo from the Campo Kumeyaay Nation, NREL 16550; page 1 from DOE; page 5 by John De La Rosa, NREL 28047; page 7 from Connie Fredenberg, Marsh Creek; page 8 from Intelligent Energy Systems; page 9 from istock 9854399; page 11 from Siemens; pages 14–15 photos from DOE, Lizana Pierce's photo from Dennis Schroeder, NREL; back cover photo from Alaska Center for Energy and Power, NREL 32760

The DOE Office of Indian Energy is investing in the future of Native American communities by providing accurate information, quality training, expert technical assistance, and project financial assistance. The support and resources we offer empower tribes and Alaska Natives to implement strategic long-term solutions to their energy and climate challenges—solutions with the potential to reduce energy costs, enhance energy security, increase climate resiliency, promote tribal sovereignty, and create a sustainable energy future.

DOE Secretary Moniz (front center) with Arizona tribal leaders during the DOE Working Group with Tribal Leaders Roundtable and Summit in December 2014.

For more information on the DOE Office of Indian Energy's investments in the future of tribal communities and to access resources, visit **www.energy.gov/indianenergy**

DOE is helping explore how the Alaska Native community might tap into geothermal energy from Pilgrim Hot Springs outside of Nome, Alaska, to meet their electricity needs.

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