

U.S. DEPARTMENT OF ENERGY OFFICE OF INDIAN ENERGY ALASKA ENERGY PIONEER

News on Actions to Accelerate Alaska Native Energy Development

Winter 2016

Welcome to the U.S. Department of Energy (DOE) Office of Indian Energy's quarterly newsletter for Alaska Native villages and others who are partnering with us to explore and pursue sustainable solutions to rural Alaska's energy crisis. Read on and learn about projects in action, local Energy Ambassadors, and ways you can become engaged and access funding and technical assistance. Your feedback is welcomed and encouraged!

Fort Yukon Gets Fired Up Over Biomass CHP Project

In 2005, the Native Village of Fort Yukon sought a less costly fuel than diesel to heat common buildings, as well as a water system that could operate at -60°F. As village leaders researched the options, they investigated biomass as a potential resource and learned about sustainable forest management practices.

DOE funded the Council of Athabascan Tribal Governments (CATG)—a 10-tribe consortium—to study a regional wood energy program in 2007.

The following year, Fort Yukon partnered with CATG, securing more than \$9 million in funding, including a \$1.2 million DOE grant, for a combined heat and power (CHP) system to generate electricity and useful thermal energy in a single, integrated system using sustainably harvested hardwoods from their 200,000 acres. The grant included training and construction for the project, which will be online by 2017 and will employ two seasonal harvesters each year. "It took a lot of work, but we are breaking new trails," said Frannie Hughes of Fort Yukon's Gwitchyaa Zhee Corporation.

Learn more at www.energy.gov/indianenergy/articles/fort-yukon-gains-heat-and-insight-biomass-project.



Cynthia James was among the eight Fort Yukon residents who benefited from training provided as part of the DOE-funded biomass project. Photo from Kelda Britton, CATG, NREL 35529

UPCOMING EVENTS

FEBRUARY 24–25, 2016

Alaska Power Association
Legislative Conference
Juneau, AK*

FEBRUARY 29, 2016

DOE Office of Indian Energy
Regional Workshop
Anchorage, AK*

MARCH 2–4, 2016

Southwest Alaska Municipal
League Annual Conference
Anchorage, AK†

MARCH 3–4, 2016

Law Seminars International
Tribal Sovereignty and Economic
Development Conference
Anchorage, AK*

MARCH 20–24, 2016

Reservation Economic Summit (RES)
Las Vegas, NV*†

APRIL 25, 2016

DOE Federal Energy Workshop
Fairbanks, AK*†

APRIL 26–28, 2016

Alaska Rural Energy Conference
Fairbanks, AK*†

* DOE is speaking/presenting

† DOE is exhibiting

BUILDING BRIDGES

DOE EXPLORES ECONOMICS OF SOLAR IN ALASKA

When most people think of Alaska's bountiful energy resources, solar isn't the first thing that comes to mind. The tendency to omit solar energy from Alaska's energy playbook is rooted in one glaring problem: minimal winter sunlight, especially in the North. But despite this seemingly insurmountable barrier, solar photovoltaic systems are increasingly popping up statewide. The reasons are varied, but it turns out solar energy

can make economic sense under the right conditions—even in remote Alaska.

As part of the National Strategy for the Arctic Region, the Office of Indian Energy is working with several Alaskan stakeholders to examine how public-private partnerships can be used to facilitate and attract increased financing for solar and other energy technology development in the state. For details, watch for *Solar Energy Prospecting in Alaska*, a soon-to-be released Office of Indian Energy analysis of the economic opportunity for solar energy in Alaska.



Photo from Northern Power Systems, NREL 08963

RESOURCES AND OPPORTUNITIES

ENERGY TRACK A HIT AT BIA TRIBAL PROVIDERS CONFERENCE

The DOE-hosted energy track at the 25th Annual Tribal Providers Conference in December 2015 was a hit among tribal energy leaders and professionals looking to make informed decisions about energy projects. In the months following the conference, the Office of Indian Energy saw a marked increase in technical assistance requests from Alaska.

The energy track included seven well-attended breakout sessions featuring more than 20 speakers from the Office of Indian Energy, as well as numerous federal and state agencies and local and regional corporations.

If you missed it, check out the presentations at www.energy.gov/indianenergy/downloads/alaska-bia-providers-conference-presentations. The Office of Indian Energy would like to thank our speakers and attendees for helping make this event a success. If you attended any of the sessions and have comments or suggestions for improvement for future events, we welcome your feedback at indianenergy@hq.doe.gov.

Similar energy tracks will be offered at RES Las Vegas March 21–23, and the Alaska Rural Energy Conference April 26–28 in Fairbanks. Watch our website for additional details!

DOE OFFICE OF INDIAN ENERGY PREPARES TO ISSUE FUNDING OPPORTUNITY FOR INTER-TRIBAL PROVIDERS NETWORK

On Dec. 8, 2015, the Office of Indian Energy announced plans to issue a funding opportunity for regional inter-tribal organizations looking to help member tribes and Alaska Native villages develop needed knowledge and resources to execute successful energy solutions. Keep an eye out for the planned funding opportunity announcement.

NEW VIDEO!

The DOE Tribal Energy Grant Program is empowering Native leaders to energize rural Alaska. To watch our new video celebrating program successes in Alaska and other tribal communities, visit Youtube.com/energygov, click on Playlists, and select DOE Office of Indian Energy.

AK ENERGY IN ACTION

AKHIOK TAPS DOE EXPERTISE TO BOLSTER MICROGRID PERFORMANCE

After the Native Village of Akhiok experienced costly power plant generator and electrical cable failures, the tribal council requested technical assistance through the Office of Indian Energy to improve system performance and efficiency.

In September 2015, Robert Butt of DOE's National Renewable Energy Laboratory traveled to the remote village on Kodiak Island to conduct a technical assessment of its power plant and electrical distribution system. The outcome was a prioritized report with recommendations for resolving Akhiok's grid safety, reliability, and load-balancing issues, including a phased replacement of the existing underground cable system. Akhiok is working with the Kodiak Area Native Association to pursue grants to help fund the system upgrades.

Encouraged by Akhiok's experience, another Native village is seeking similar technical assistance through the Office of Indian Energy. Learn more about how to apply for technical assistance with residential energy efficiency, strategic energy planning, research and analysis, and more and find additional resources at www.energy.gov/indianenergy/resources/alaska-native-villages.



Akhiok's radio tower and other infrastructure will perform better and operate more cost-effectively as a result of recommended upgrades to improve the reliability and efficiency of the village's electrical distribution system. Photo by Robert Butt, NREL 35528

AK ENERGY CHAMPIONS

KAREN JOHNSON



As a native of Dillingham, Alaska, Denali Commission Program Manager Karen Johnson feels an obligation to represent residents of Alaska's small, rural communities. Her firsthand knowledge of the financial and economic struggles they face led her to focus on developing training projects and building capacity for rural facility workers and tribal, municipal, and utility administrators.

For the past five years, Johnson has worked to create the Rural Alaska Maintenance Partnership and partnered with the Alaska Rural Manager Initiative to develop a state standard certificate for facility maintenance technicians and improve education and training programs. She's a firm believer in the capacity of both

statewide collaborations to mitigate the energy challenges tribal governments face.

"Development and construction of energy systems and alternative energy systems are critical to rural Alaska, but just as critical are the skills and abilities of the people left behind to maintain and operate these systems," said Johnson.

Read our interview with Johnson at www.energy.gov/indianenergy/articles/alaska-energy-champion-karen-johnson.



U.S. DEPARTMENT OF
ENERGY

Office of
Indian Energy

GIVEY KOCHANOWSKI
Alaska Program Manager
U.S. Department of Energy—Office of Indian Energy
420 L Street, Suite 305
Anchorage, AK 99501
907-271-1423
givey.kochanowski@hq.doe.gov

February 2016 • DOE/IE-0037-04
Karen Petersen, editor and lead writer
Page 1: top photo from iStock 13906335
Page 2: bottom photo from Karen Johnson
Printed on paper that contains recycled content.