# DOE OFFICE OF INDIAN ENERGY NSAR Ten Year Renewable Energy Plan -Integration Planning

September 2015





# **Overview**

- Process
- 3Ps
- 3Cs



## National Strategy for the Arctic Region (NSAR) -Federal Engagement

- Step One See Russia from your House
- The Ten Year Renewable Energy Plan
  - captures existing energy planning and development activities within the context of renewable energy and energy efficiency
  - identifies gaps or areas appropriate for federal agency engagement as stated in:
- Executive Order 13175 Consultation and Coordination with Indian Tribal Governments
- Executive Order 13689 on Enhancing Coordination of National Efforts in the Arctic

# Vlad came across the Sea for the 4<sup>th</sup> this year



## **DOE IE and NREL at work as we speak in the Arctic**





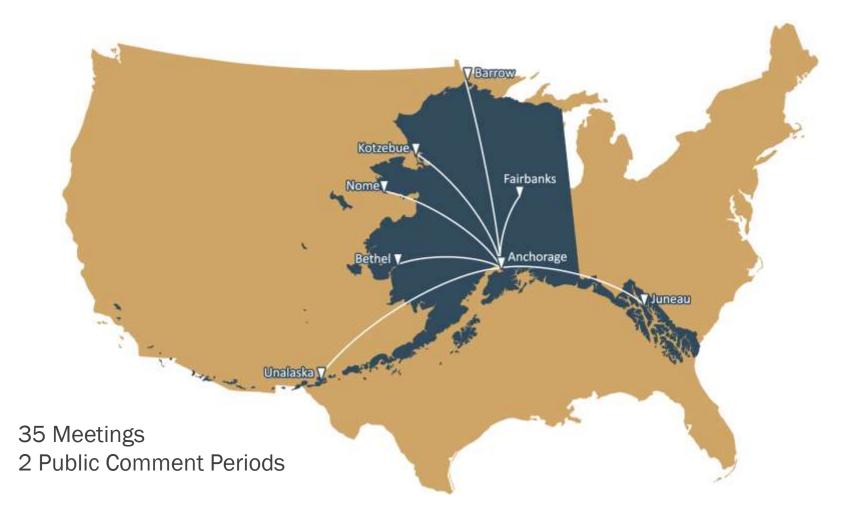
# **Arctic Communities**

# Bannent Fairbanks 0 Alaska Towns and Villages ARCTIC BOUNDARY 🗠 Railbelt Transmission Grid As defined by the Arctic Research and Policy Act (ARPA) Dillingham





## Stakeholder Outreach and Consultation Meetings





# **Community Input**

- Common themes were identified and grouped into 21 areas with associated frequencies. Top four:
  - Innovative Technology/Research and Development (54)
  - Training and Workforce (52)
  - Coordination (48)
  - Basic Infrastructure/Hybrid Systems (46)



# Holistic Approach

Ten Year Renewable Energy Plan for the Arctic

Priority Areas

R&D of Appropriate Renewable/Energy Efficient Technologies in a Changing Arctic

Optimizing Existing Infrastructure





#### New DOE Report on Tribal Energy System Vulnerabilities to **Climate Change**

The DOE Office of Indian Energy report assesses climate change and extreme weather vulnerabilities specific to tribal energy infrastructure and systems in the contiguous United States and Alaska.



#### **PROGRAMS & INITIATIVES**

Alaska Native Villages

India

Country working one National Strategy for the Arctic Region

#### **TECHNICAL & FINANCIAL ASSISTANCE**

- Apply for Technical Assistance
- Federal Energy Development Assistance Tool
- START Program
- Uncoming Opportunities

#### SEPTEMBER 17, 2015 **USDA Helps Reduce H** Tribal Lands

SEPTEMBER 11, 2015 2015 Tribal Energy Sur Solutions to Energy an

More News 🕥

#### BLOG

SEPTEMBER 16, 2015 Running the Race for C

SEPTEMBER 16, 2015 Montana Tribes Realize Acquiring Kerr Dam: In Keepers Inc. CEO Brian

More from the Blog 🕥

#### UPCOMING EV

**NAU/ITEP Native Amer** Management Online Tr September 14, 2015 to D Tribal Energy Summit: Sovereignty September 23, 2015 to 5

More Events 🕥

#### SUBSCRIBE

# Partners, Profiteers, and Panhandlers

- Pick Well
- Win, win, wins
- What's left when the dust settles?

- The Federal Family is like any real family
  - Some are just good for pictures (bureaucrats)
  - Some are very loved (public servants)



# The 3 Cs of NSAR Caution

- Cinderella
- Command and Control
- Cost



# Summary

- Process
- Partners vs Profiteers
- Cinderella et.al.
- A quick Visual Arctic Conclusion



# SUITE 200 SIMON & SEAFORT'S

# SUITE 300 U.S. SMALL BUSINESS ADMINISTRATION

## SUITE 305 U.S. DEPARTMENT OF ENERGY ARCTIC ENERGY OFFICE



# Off we go into the wild blue yonder





# Biomass (formerly known as wood) Boiler





## Jade - also found at the Washington Monument





# Daisy in Deering – Utility Manager





# "The laws of math also apply in Alaska" - Pilar Vortex 2014





# Rural AK Utility Study Site Research





## GZ – Ft Yukon (8 miles above the Arctic Circle)





# Off to Central





## **DOE's Arctic Executive**





# From the Halls of DC to the Shores of the Kuskokwim





# George Guy – an AK Sparkplug





# Combi in Bethel, first week on the job





# Last Train to Nowhere





# Always gov't fine print





# From Fairbanks originally



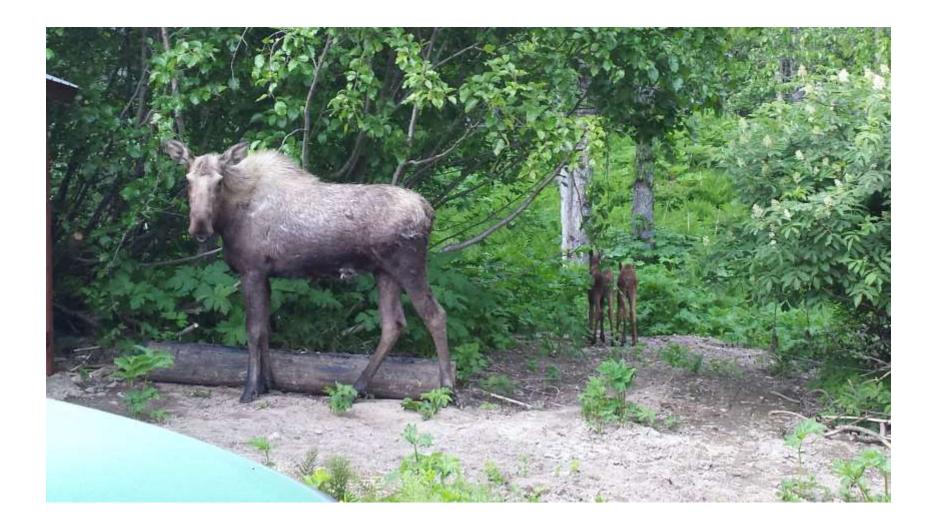


# My inspiration





# **Twins**





# Sweet Caroline





# www.CCHRC.org check it out





# Off to work





# Braided Stream





# **AK Marine Highway**





# Permafrost Tunnel





## **Permafrost**





### A Shy \$250 for a small bed roll





### Honey bucket in a plumbed home





#### **AK has days without snow**





## Red Dog





#### Should be here – his dogsled had a flat





## Innovation in the Arctic





#### **Essential Partners and Arctic Leaders**





# DOE – IE, always on call





#### **The Bob and Ken Show, tune in on FM 90.1**





## AK's newest hydro project





## Best job in the world



US. DEPARTMENT OF Office of Indian Energy

#### **More Arctic Innovation**





# Matt's hunting rig





#### Arctic Region

#### C1119C1119C1119C1119C1119C1119





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