



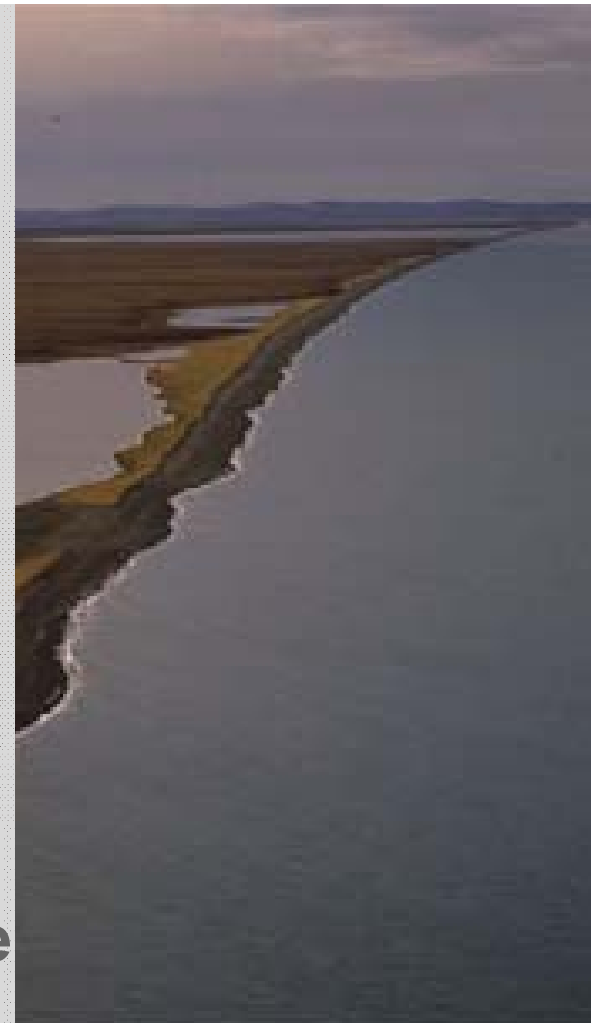




Overview of Region

- 35,989 square miles
- 11 villages
- 7,400 (pop. 2008)
- 82.5 % Alaska Native
- More than 12,000 NANA shareholders
- **48 % more expensive than Anchorage**

Source: Alaska Economic Trends, August 2009





Cost of Energy

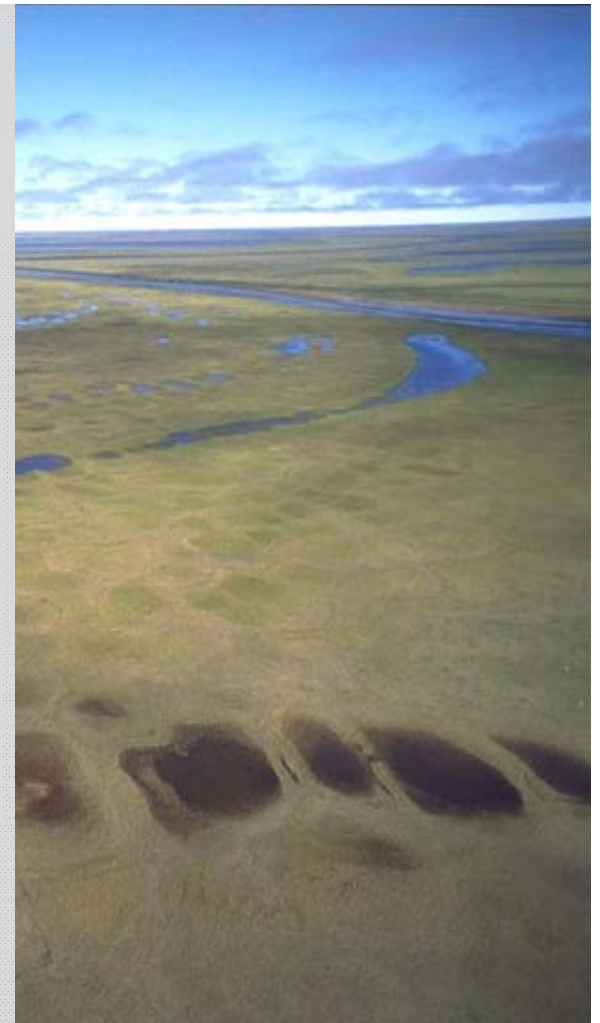
- 55.4% of households received energy assistance last winter (2008)
 - Gasoline – \$6.68 per gallon (average)
 - Stove oil – \$630 per winter month (average)
 - Electricity – \$ 294 per month (average)





Opportunities

- Alternative and traditional energy sources
- Public/private partnerships
- Willingness of the people
- Unexplored potential
- Job creation





NANA Strategic Energy Plan (SEP)

- Energy Options Analysis completed
- Regional Energy Plan completed (www.nana.com)
- Regional Energy Summit
- Energy surveys completed
- \$16 M (WHPacific and NANA Pacific)

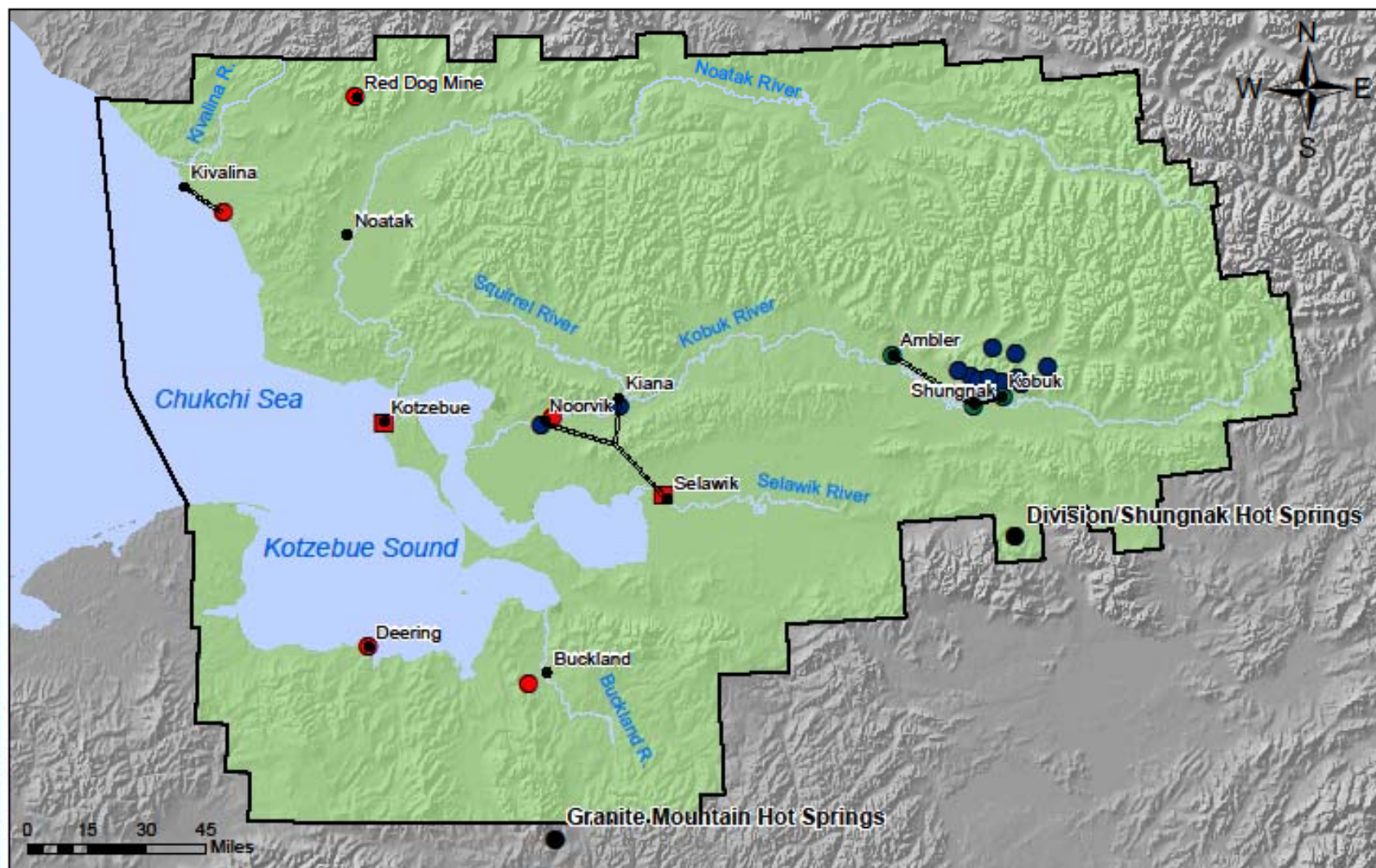




Regional Projects

- Wind diesel development
- Hydroelectric feasibility
- Biomass development
- Solar/photovoltaic
- Energy efficiency & conservation
- Fossil fuel





Legend

- | | |
|------------------------------------------------|-------------------------------------------|
| — Proposed/Under Investigation Powerline | ● Proposed/Under Investigation Hydro Site |
| — Existing Powerline | ● Proposed/Under Investigation Wind Site |
| ● Proposed/Under Investigation Biomass Site | ■ Existing Wind Site |
| ● Proposed/Under Investigation Geothermal Site | ■ NANA Region |



NANA Regional Corporation Renewable Energy Sources



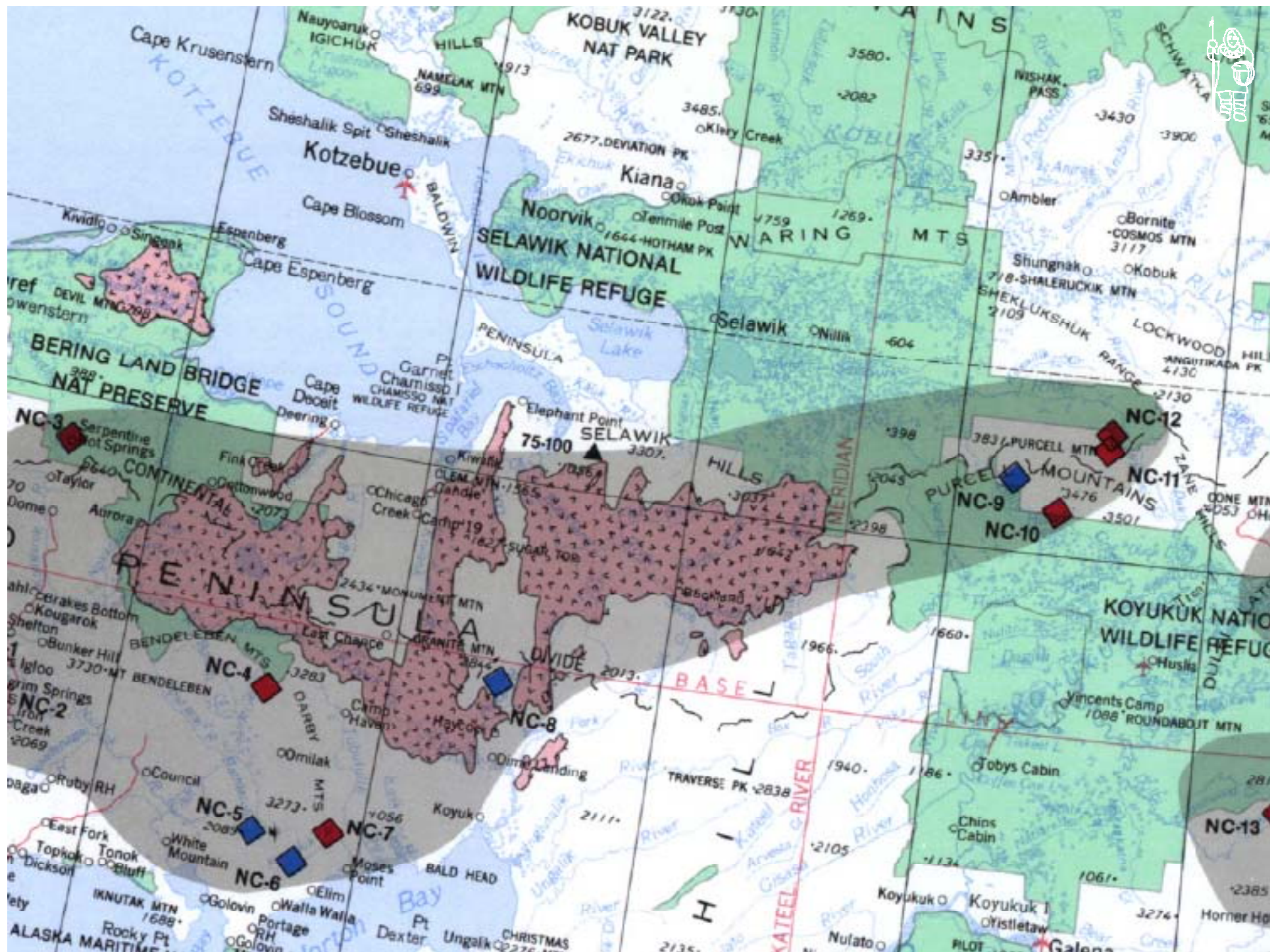
Date: 03/24/2009
Projection: Alaska State Plane Zone 7 NAD 27



NANA Wind Resource Assessment Program (WRAP)

- Wind data collection
- New turbines
 - Noorvik, Deering, Buckland
- Erecting MET towers
 - Noatak, Red Dog, Ambler
- Exploring public/private partnerships

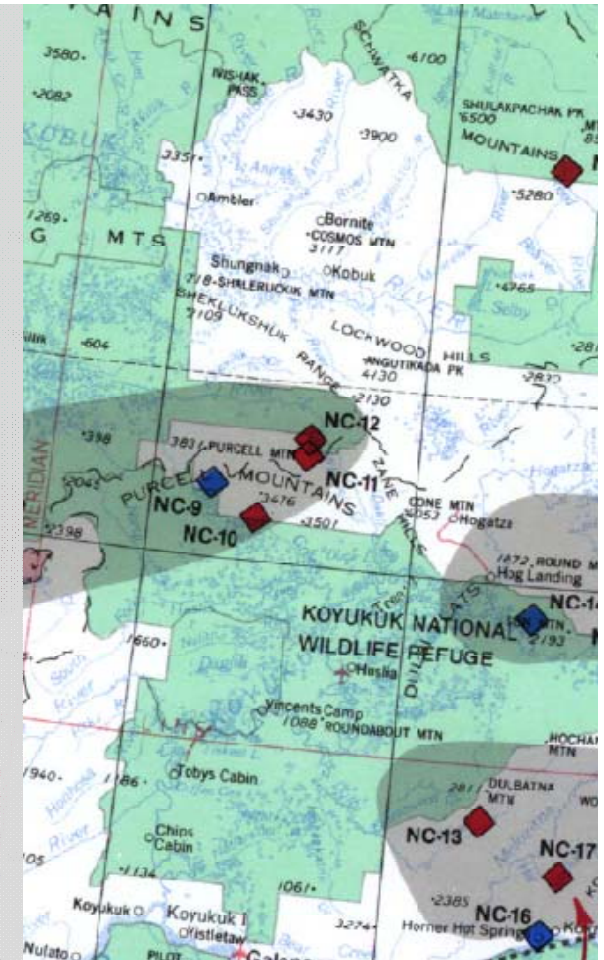






NANA Geothermal Assessment Program (GAP)

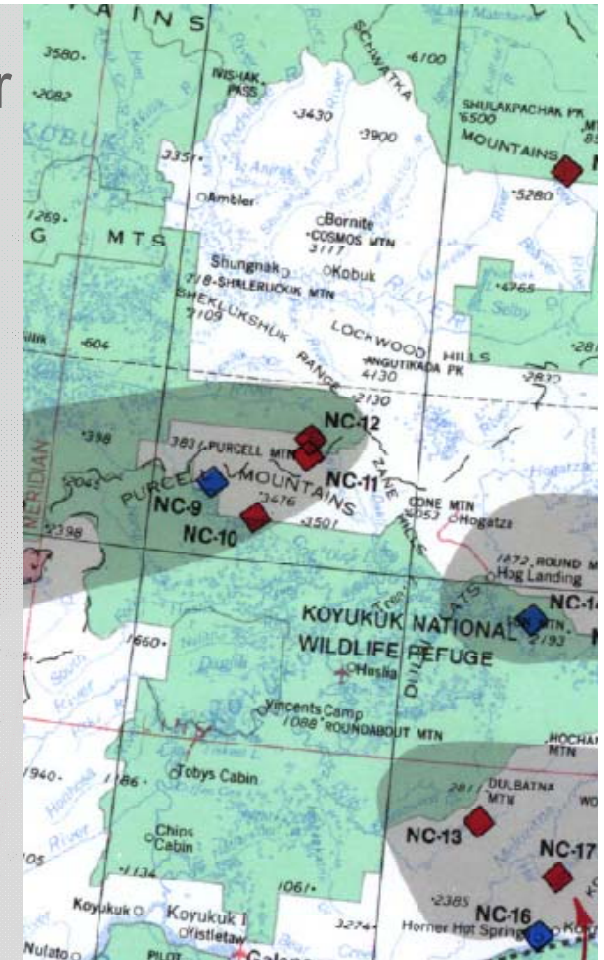
- Report completed –site identification (www.nana.com)
- Seven hot springs in the NANA region
- Mapped hot springs are 40 miles or more from NANA region communities
- Collaboration with the University of Alaska, Fairbanks (Alaska Center for Energy & Power)





Biomass, Hydro, Solar

- Biomass resource assessment for upper Kobuk (Partner: NIHA)
- Hydro feasibility study (AVEC)
- Solar electricity (AVEC)





Natural Gas & Oil Exploration

- Vast potential
- Partnered with Trio
- 3 on-shore potential drill locations
 - Kobuk Delta, Baldwin Peninsula, and Cape Espenburg
- Village outreach
- Working on permits





Energy Efficiency and Conservation Block Grant

- Department of Energy (DOE) and Denali Commission
- Funds projects that:
 - Reduce energy use
 - Reduce fossil fuel emissions
 - Improve in energy efficiency.
- 9 of 11 villages elected to participate
- Tribes decide on grant use





Constraints & Concerns

- Government
 - Streamline funding process
 - Uncertain permit requirements
 - Not eligible for AEA grants
- Immediate concerns
 - Fuel crisis in 4 villages
 - Fuel providers
 - Lack of choice





Next Steps

- Strategic Energy & Energy Options plan
 - Update
- Continue collaborations
- Demonstration and research opportunities
- Monitor funding opportunities
 - Federal Department of Energy
 - AEA
- Develop “bankable” projects



Taikuu

