

Huslia Tribal Office

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## Biomass Project

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Ts'aatiyhdinaada kk'onh Dinh Tribe

# Huslia Village Council

“dba” Huslia Tribal Council

- Alaska Native Tribe
- Most residents are Koyukon Athabascans
- Roughly 290 Air Miles West of Fairbanks, AK
- Heating Fuel is delivered by river barges in Spring & Fall





# Vision Statement

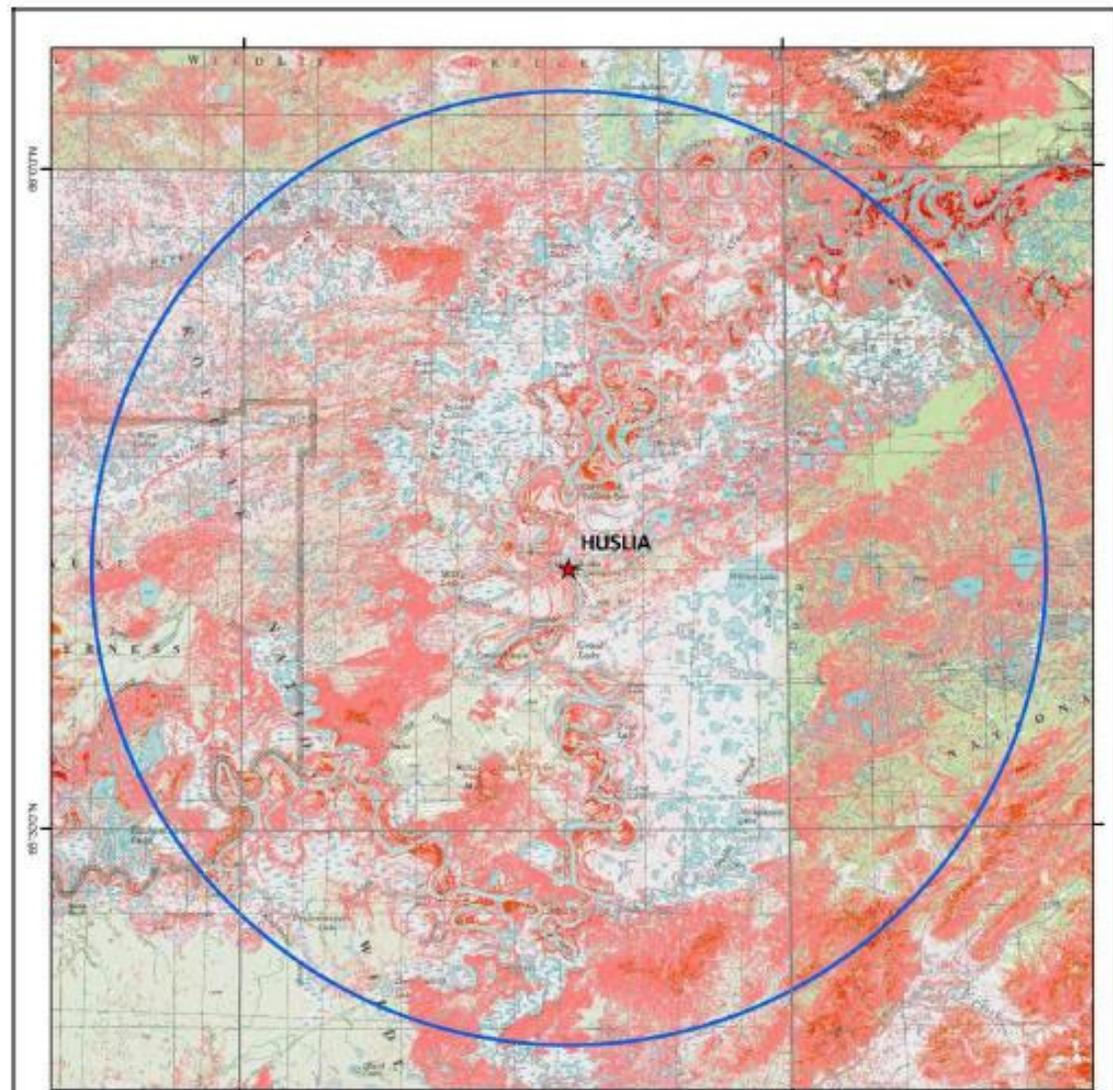
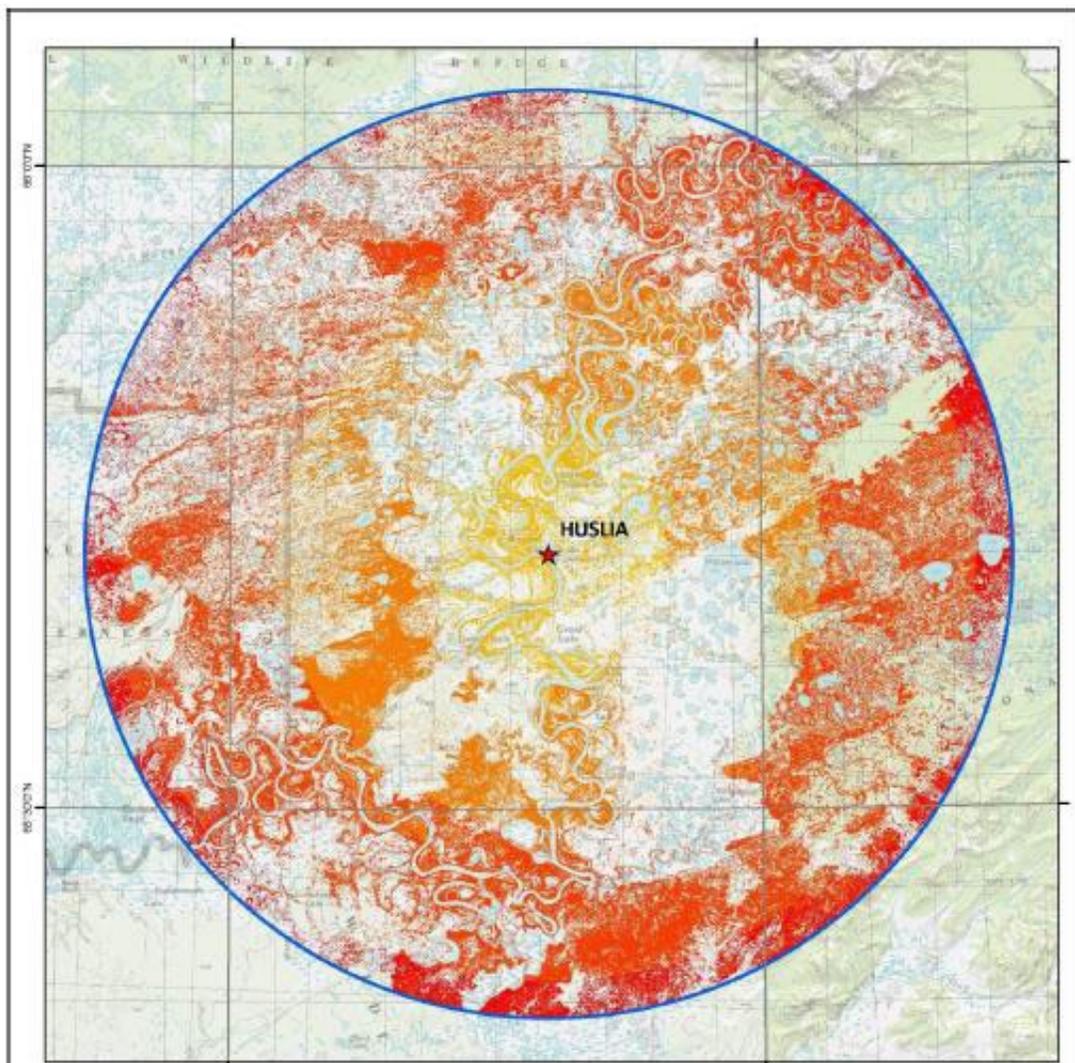


**“The main goal of our community is to ensure the survival of our community and the preservation of our traditional way of life. We envision our community as a desirable place to live where future members will want to come back after schooling to work and raise families. To reach this goal we need to create a self-sustaining economy and address social, cultural and infrastructure issues in our community.” – Huslia Community Plan 2017**

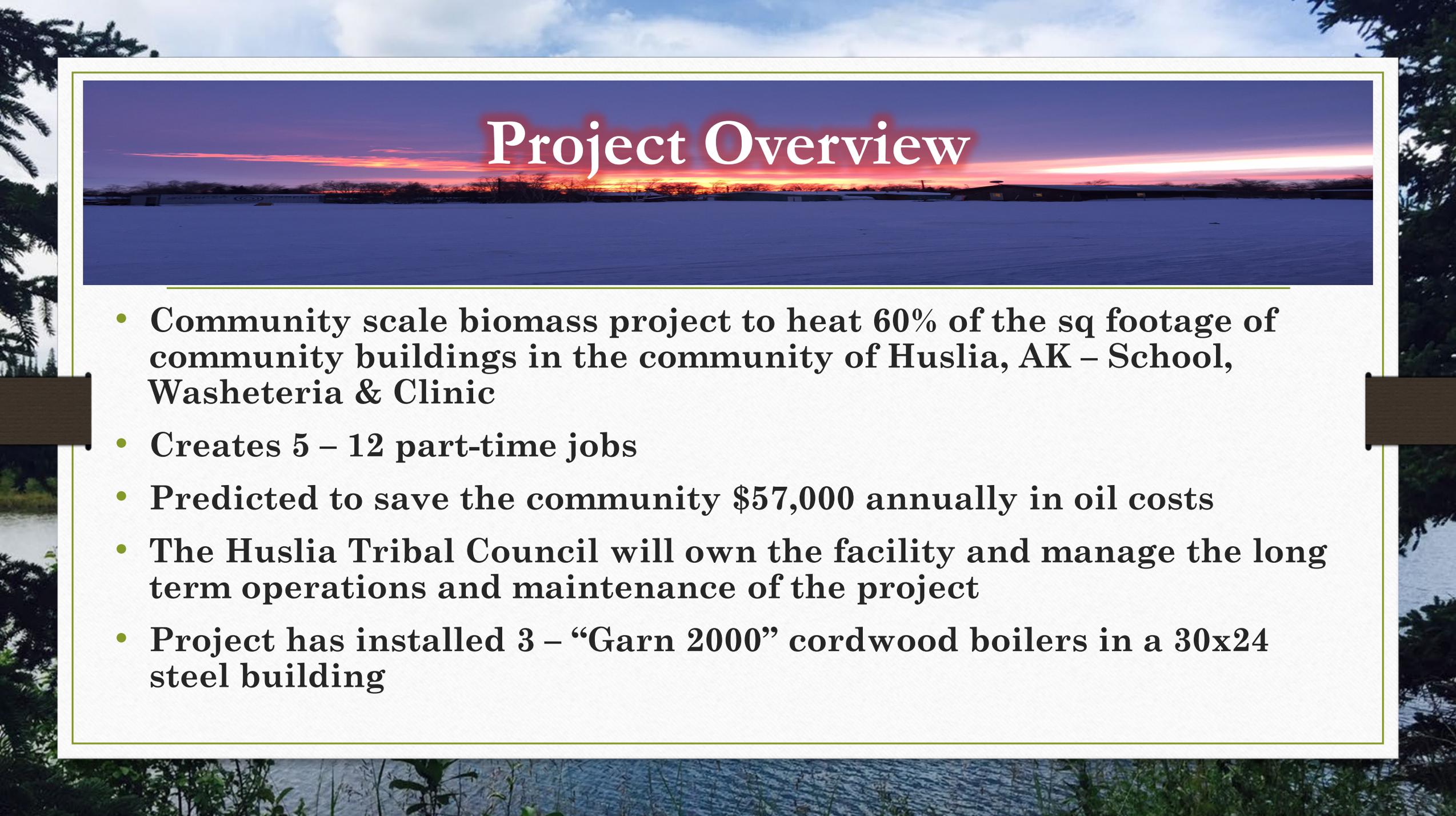
# Biomass Background

- The planned Garn cordwood boiler technology is well proven in Alaska. Currently 14 community- scale cordwood and woodchip-fired energy projects are in operation around the state
- The project is in line with HTC's goal of supplying 25% of our energy from renewables.





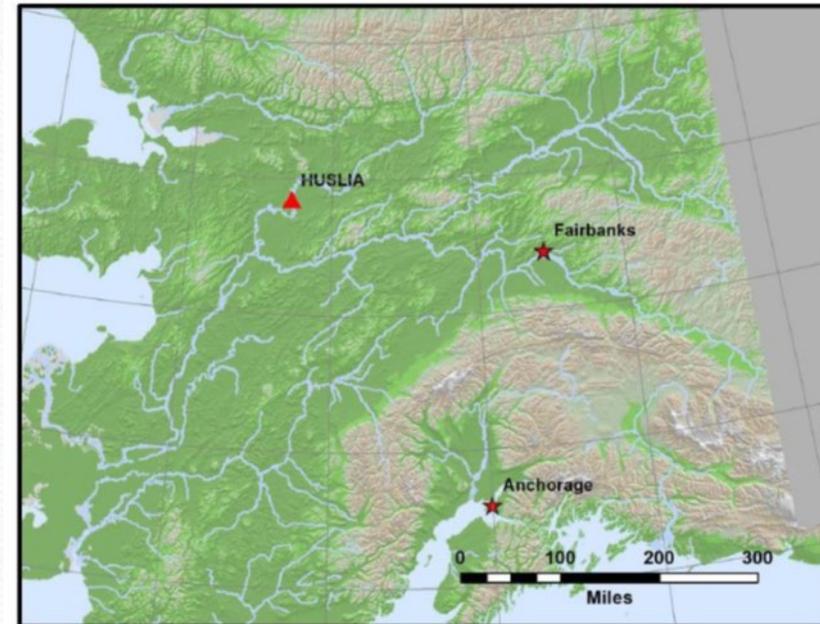


The slide features a background image of a sunset over a large body of water. The sky is a mix of purple, blue, and orange, with a bright orange glow on the horizon. The water is dark blue. The title 'Project Overview' is centered at the top in a white, serif font with a red glow effect. Below the image is a white rectangular area containing a bulleted list of project details. The list items are in a bold, black, serif font. The slide is framed by a thin green border and has dark brown horizontal bars on the left and right sides.

# Project Overview

- **Community scale biomass project to heat 60% of the sq footage of community buildings in the community of Huslia, AK – School, Washeteria & Clinic**
- **Creates 5 – 12 part-time jobs**
- **Predicted to save the community \$57,000 annually in oil costs**
- **The Huslia Tribal Council will own the facility and manage the long term operations and maintenance of the project**
- **Project has installed 3 – “Garn 2000” cordwood boilers in a 30x24 steel building**

The Huslia Tribal Council Biomass Project will increase tribal energy security, decrease imported diesel and provide much needed employment for tribal members in Huslia, Alaska





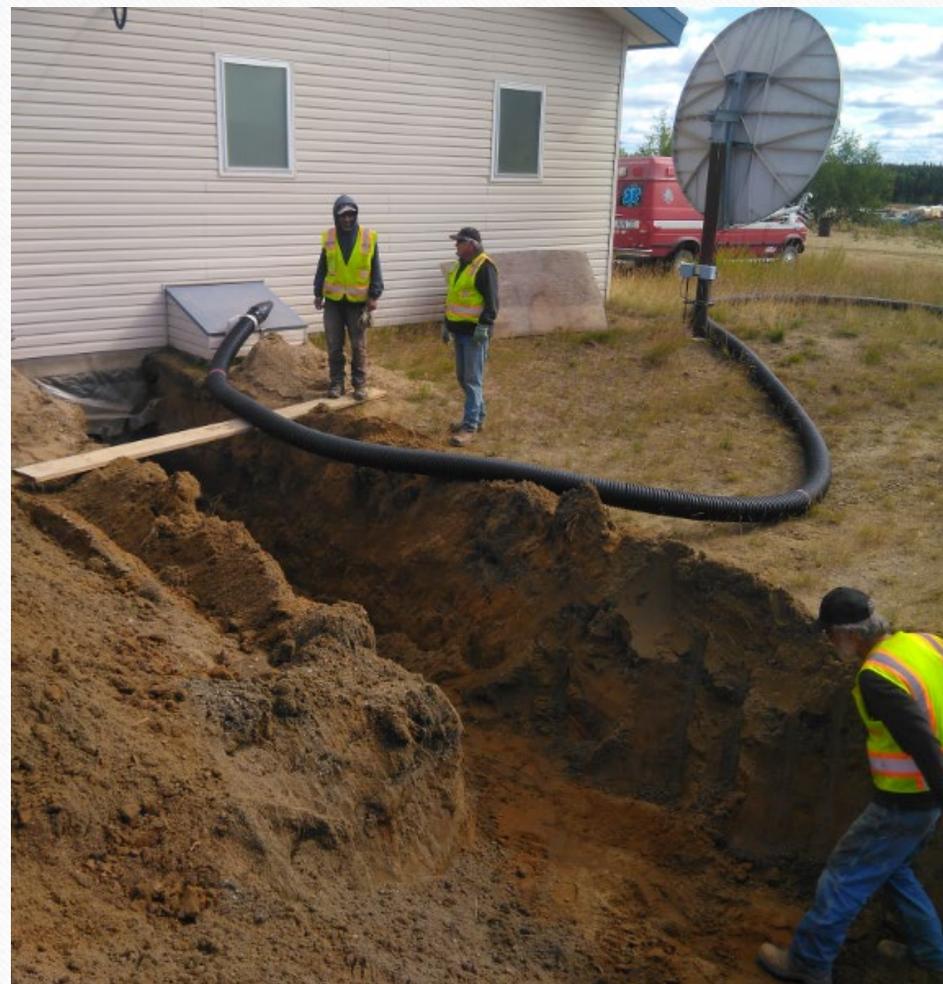














# Major Participants

- **Huslia Tribal Council (HTC)**
- **City of Huslia**
- **Yukon Koyukuk School District (YKSD)**
- **Alaska Native Tribal Health Consortia (ANTHC)**
- **Tanana Chiefs Conference (TCC)**



# Management Approach and Team Roles

- **The Huslia Tribal Council (HTC) applied for and received the DOE Award and the tribe manages 100% of the book keeping and invoicing for the project**
- **Tanana Chiefs Conference (TCC) acted as the Technical Point of Contact and oversaw conceptual design, contractor selection and construction**
- **Alaska Native Tribal Health Consortium (ANTHC) led the design of the project**
- **Yukon Koyukuk School District YKSD took on the biomass integration from the wall of their mechanical room into their boiler system**
- **During the operation, HTC will purchase fuelwood from local contractors and sell heat to the Yukon-Koyukuk School District (YKSD) and tribal buildings**



# Key Milestones & Deliverables

- **Year 1:**

- **Oct 1<sup>st</sup> 2017 – Huslia Tribal Council began project**
- **Jan 30<sup>th</sup> 2018 Design at 100%**
- **April 30<sup>th</sup> 2018 long lead items all at Nenana Barge Landing**
- **May 15<sup>th</sup> 2018 Building Construction Contractor Selected**
- **July 30<sup>th</sup> 2018 Building foundation, walls, piping complete**

- **Year 2**

- **February 28<sup>th</sup> 2019 mechanical work scheduled to be completed**
- **Test firing school, clinic, water plant**
- **Data Collection on project to take place in the remainder of the year**



# Project Goals

- **Cost Reduction**

- Displace approximately \$57k of the fuel used to heat the facilities with local, sustainably harvested woody biomass. Fuel cost savings over the 25-year life of the project are estimated at approximately \$1.5 million.

- **Carbon Reduction**

- Reduce greenhouse gas over the life of the project.

- **Community Resiliency**

- Enhances self-sufficiency and technical capabilities of Huslia residents by reducing money export from the community for fuel oil and providing training for system operators and fuel harvesters.

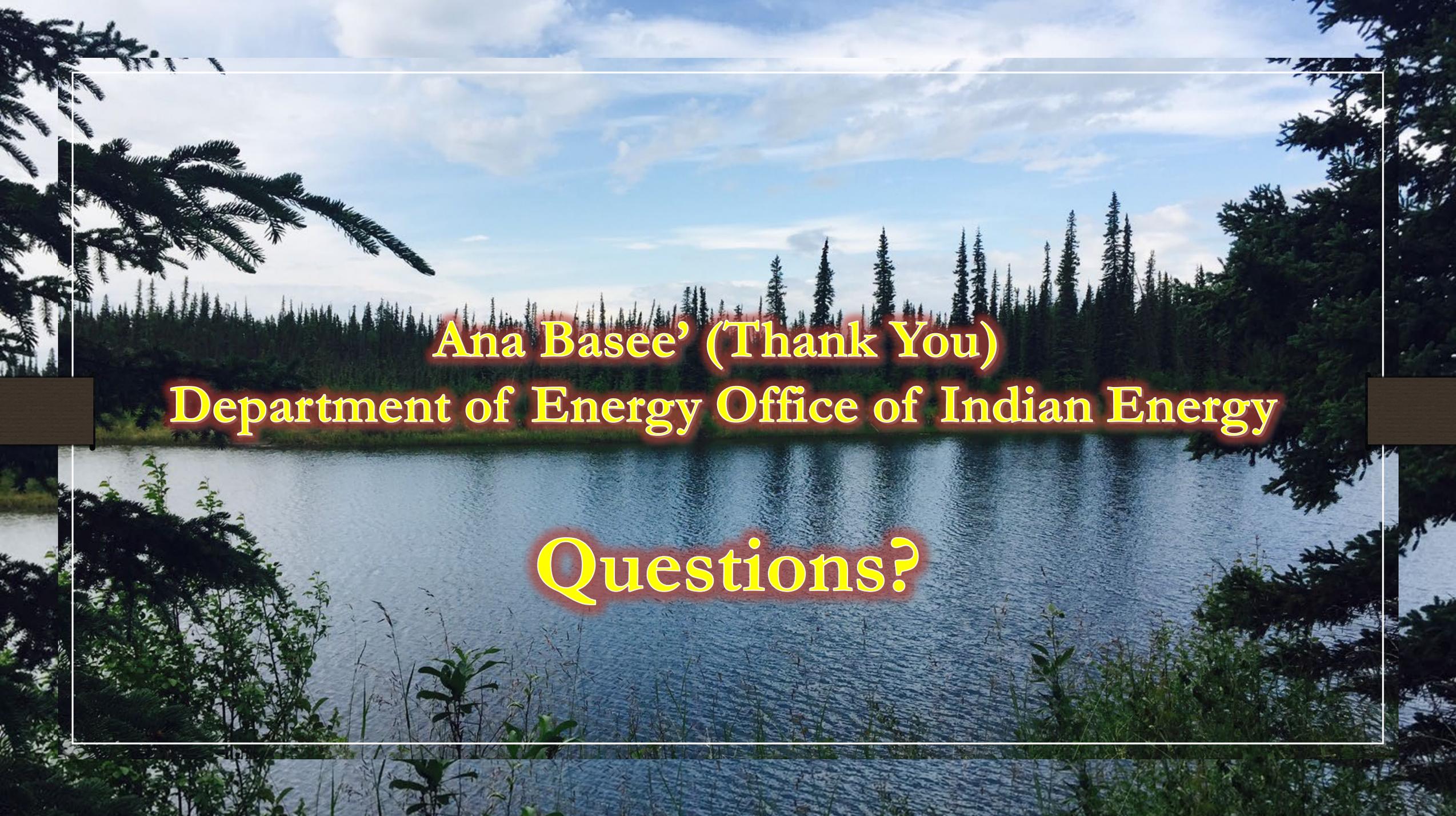
- **Economic Development**

- Create approximately 5-12 part-time jobs for wood harvesters, and 2 part-time jobs for boilers operators



# Project Benefits & Outcomes

- Installation of 3-Garn 2000 biomass boilers to heat 3 main buildings in the community of Huslia
- Create 5-12 part time and full time jobs harvesting and operating the biomass system
- Long-term reduction in oil costs for these 3 facilities estimated at \$57,000/year and over \$40,000/year of local economic development pumped into the local community
- Near completion of the Huslia Tribal Council's Renewable Portfolio Standard (RPS) to achieve 25% diesel displacement in its community facilities by the year 2025
- Leverage 50% of project costs in the form of in-kind and cash contributions
  - Federal Funds: \$361,143                      Cost-share: \$361,143                      Total: \$722,286



Ana Basee' (Thank You)  
Department of Energy Office of Indian Energy

Questions?