



Alaska Energy Authority Biomass– 2023 First Quarter Report

Karen and Angie have been very busy with a number of biomass initiatives. The following is a list of projects that we have worked on in the past quarter.

1. Funding Opportunities and Collaboration with Our Partners

We have established an ever-growing list of biomass partners to provide technical support and advice for their grant applications. We started a system to send out an announcement of funding opportunities and weekly reminders as the deadlines approach, resulting in the highest number of Alaskan applications to the annual USFS Community Wood and Wood Innovations grants.

Not only did we direct people to Priscilla Morris and Katie Conway for the perspective grant- or application-related questions, but more importantly we encouraged our partners to reach out to Angie or Karen for advice on their projects. As a result, our available and appropriate AWEDTG team members worked independently with several partners in following ways:

- planning out their projects,
- informing different technical, funding, and other resources available
- advising on what is best to request funding for, and
- providing technical assistance

This teamwork also resulted in a living document of **Potential Biomass Funding Needs** to track all existing and new biomass projects in Alaska. Each of our members is given access to view and edit the spreadsheet as they receive updates on different projects. This spreadsheet is sent periodically to funders such as the Denali Commission.

2. Alaska-Canada Wood Energy Conference Planning

The planning committee met regularly during the first quarter to set the date as ***Oct 3-5, 2023*** and place as ***Wedgewood resort in Fairbanks***. The third day of the conference is reserved for a Small Log (Sawmill) Summit in partnership with Alaska Forest Association and Nature Conservancy.

The committee is currently working on the following:

- Pursuing pre- and post-conference field trips to Nenana new chip BET boiler, Tok school biomass CHP system, and to Dry Creek Sawmill for those attending the summit on October 5th.
- Invited Wood Mizer to bring and demonstrate their latest Portable Sawmill



- Working with Wedgewood staff to finalize the contract and set the daily rates for venue and catering.
- Save the Date and Sponsorship posters are designed and were sent out through SEC newsletter and other partners in the planning committee. We will be sending them out to the participants from the last two conferences.
- The committee put together a draft conference agenda. Panelists and guest and keynote speakers are suggested in the draft agenda which will be developed further and finalized.

3. Cordwood Operator Training

We took this effort a step further and approached other potential partners at the Sustainable Energy program at UAF-Bristol Bay campus and the ANTHC Tribal Utility Support (TUS). Eric Goddard, the head of the Sustainable Energy program at UAF, was able to secure \$15K funding from USDA to pay for student expenses for Spring 2023 semester. However, it was not feasible to put together a training within the spring semester. Eric believes that the funding can be extended for Fall 2023, and hopefully for more training in the future.

We also corresponded and met virtually with Brian Menghini, the director of ANTHC TUS, and Martin Wortman, Utility Operations Specialist at TUS. In December 2022, their team did a successful operator training in Tanana for the operators of Hughes and Huslia. The Tanana WTP and biomass operator, James Robert, was one of the instructors, but has unfortunately resigned since then. We plan to collaborate with Eric, TUS team, and James Robert for future operator trainings.

The insight that we have discovered is that the biggest challenge with training “only the operators” is that the operators are most often on the lowest end of the authority chain, hence they do not have the power to purchase or harvest wood supply ahead of time to season, nor are they paid well. This results in a high turnover in the biomass position, making the “operator” training less effective if the operators trained last for only 1-3 seasons. This made us and the funders conclude that we need to design and offer some educational program for the local government bodies and authorities. In addition, starting some informal operator support network or association in the state will increase the successes of wood boiler O&M.



Advanced Operator Training: The most beneficial location for a training is **Tanana** as they have only three working cordwood boilers at their WTP out of all the existing boilers. We have built a working relationship with their new city administrator. Given the amount of work and time it will take to assess the boilers, order missing parts, and organize a training, we decided to do an advanced-level training in Tanana. It will be done with partnership and commitment from the community of Tanana.

Beginner Operator Training: Before the advanced training, we plan to organize a beginner-level training in a location with more than one cordwood boiler. To identify the geographically convenient location for communities with cordwood boilers, the following map was created. It shows the locations of existing cordwood boilers (yellow triangles) and potential training places with more than one boiler (red hexagons).



We plan to survey the potential training locations for their interest and need to host a training. Victory Bible Camp is one of the most convenient location as it is a camping lodge with catering service. They have two GARN boilers that heat the main lodge. We have reached out to their facilities director and event manager. Another community that reached out to us is Tanacross, where we have done a training in the past. We are working to set up calls to understand their biomass needs and explore the possibility and feasibility of doing a training there.



4. Biomass Roundtable

Fairbanks Economic Development Corporation has designated a staff—Cora “Killian” Felt—to join our weekly biomass steering committee meetings and conference planning committee. FEDCo also received a funding to restart the biomass roundtable discussions. To address the issue poor planning for wood supply, Karen and Angie are working with Killian to organize her first roundtable on “Biomass Supply in the Interior.”

Killian plans to do another roundtable at the 2023 Alaska-Yukon Wood Energy Conference given the opportunity of biomass experts and stakeholders gathering in Fairbanks.

5. General Biomass Updates

Given the unexpectedly high inflation rate and cost increase of construction in rural communities, many ongoing biomass projects are experiencing gap funding challenges. To give examples, the bid for constructing a 40’x8’x1’ concrete wall came at \$400K in Kluti Kaah last year while Craig high school just received a \$2.5M bid for installing their brand new containerized chip boiler which has landed in Craig.

In addition, the insurance for buildings in rural communities by Alaska Municipality League has increased by two to three folds in the last year. This makes it even more challenging to insure boiler rooms or buildings for new and existing biomass systems.

Beetle-kill utilization

Our team was approached by two groups from Eklutna: one to build a pellet mill and another to utilize beetle-kill trees for agricultural use and beyond. Our team met with each group independently and informed them of available resources for technical assistance and other support.

Biomass Supply

We are growing our partners in biomass supply from small sawmills to proposed and potential pellet mill projects across the state. The Ketchikan Pellet Mill project catalyzed two to three other potential pellet mill projects across the state that are closely tracking the progress and success of the containerized pellet mill construction in Ketchikan. In addition, our partners with small sawmills are growing as well.

The idle sawmill in Petersburg was purchased, and we are working closely with the new owners to bring the sawmill back to operation. Sourcing electricity from the local utility with 0.5 mile intertie is essential in the success and feasibility of this mill.



Juneau, AK 99801
Phone (907) 586-4351
www.seconference.org
Email info@seconference.org
SOUTHEAST ALASKA REGIONAL DEVELOPMENT ORGANIZATION

Prefeasibility Studies

Of the three prefeasibility studies approved last year, Bristol Bay Native Association (BBNA) and Cross Roads clinic have been successfully conducted. They both look feasible from the study. Cordova decided not to proceed with a study, hence the AWEDTG Board approved a prefeasibility study for the Native Village of Eagle.

6. Individual Project Updates

Hughes: SEC continues to reach out to Hughes to facilitate the repair of the boiler. At this time there are some funds at the Denali Commission to help with the repair but likely the funds will not be enough.

Nenana: SEC is coming to the end of the facilitation for this project and hope it will be commissioned this spring.

Craig High School: This project is on hold again due to a construction bid that exceeded the amount of funding on hand.