

SOFAR/EDC Biomass Utilization– Potential Projects [Updated 12.16.2022]

Black Oak Mine Unified School District

Interested in the incorporation of small-scale biomass plants at **two district locations**, Golden Sierra HS and GT Elementary, into the District's energy resiliency plan.

District energy use analysis by Wisewood Energy indicates **65 kW plants** would be appropriate. District also planning to include a **small lumber mill** to incorporate into the student CTE (Career Technical Education) program.

District staff provided a high level conceptual overview of biomass plan to the Board of Trustees, which was very favorably received.

Site meeting held June 14, 2022.

BOS-D4 letter of support (LOS) for Cal Fire Business and Workforce Development grant signed 06/28/22. App submitted to Cal Fire grant for Q2/2022-**not awarded**. App to be revised and resubmitted. Also will apply to USFS grant (01/23). Bond measure (Q) on 11/8/22 ballot, if approved, will free up GF \$ for project as well. **Not approved!**

Business Plan / Strategic Plan

Goal is to develop a countywide biomass business plan / strategic plan to demonstrate readiness, detail feedstock availability, identify appropriate approximate locations for biomass projects, and support grant requirements.

On hold as of 11/01/2022 awaiting results of Cal FRAME project*

Cal FRAME project, Phase I, not expected to be completed until the end of 2023.

Exploring opportunities to advance the Strategic Plan now rather than wait for completion of Cal FRAME, Phase I.

El Dorado Disposal (EDD)

Potential small-scale project site. Initial meeting with Wisewood Energy conducted. EDD expressed interest in further discussions. Check-ins with EDD occurring approximately every two months. EDD consumed with MRF rebuild and SB 1383 rollout.

Eldorado Northern Mill

Small mill on 12 acres producing pallets and agricultural wood products (poles). Small number of large trees currently being milled.

Private company (Rod Pimental - Owner)

Wisewood could potentially help but need fiscal agent for Eldorado Northern.

El Dorado County (EDC) staff exploring funding opportunities that will assist with business plan development, property improvements to accommodate increased volume (Caldor logs) and a potential mobile mill. Potential for a small-scale biomass plant. Cal Fire Business and Workforce Development grant a potential funding source.

Owner currently in process of selling Eldorado Northern. Met with potential buyer, who is interested in exploring the feasibility of a biomass plant at the site.

Currently waiting for sale of site to be completed.

Medium to Large-Scale Facility & Wood Products Campus

Legislative change will likely be necessary to allow for a large-scale, **6-10 MW facility** within EDC. A **2-5 MW** project may be more realistic.

BOS biomass ad hoc created to assist with discussions with SPI and other key stakeholders, including PG&E, Mountain Enterprises, SMUD, USFS, EDWA & Pioneer Energy.

SPI agreeable to sell or lease space at Camino site. Next step - fatal flaw analysis. **BOS to consider approval of contract with TSS Consultants on 1/24/2023 to conduct analysis.**

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Mobile Biomass to Energy Technology

Gold Seal Industries (GSI) partnering with Markit, working with Blue Forest, Great Basin Institute and USFS to launch a mobile pilot project within the Caldor burn area. Mobile unit(s) fully self-contained, will produce biofuel, biochar, and med grade water. **Pilot project anticipated to begin in Q2, 2024.** Once complete, potential for deployment of multiple units throughout Caldor burn area, including at or near Sierra-at-Tahoe.

Sierra-at-Tahoe Ski Resort, John Rice

Sierra-at-Tahoe (SAT) identified as a good **candidate for a combined heat and power small-scale biomass plant.** SAT focused on Caldor Fire recovery and repair of SAT infrastructure in prep for upcoming ski season.

Meeting with SAT and EDC RCD held June 15, 2022. Energy usage analyzed by Wisewood Energy. Info provided to SAT but due to SAT's focus on current '22/'23 ski season, further progress will likely not take place until spring of 2023.

SMUD

Biomass utilization included in SMUD's 2030 Zero Carbon Plan. Ongoing discussions between SMUD, SOFAR and EDC staff regarding how SOFAR/EDC can assist SMUD with achieving its 2030 zero carbon goal as it relates to developing/incorporating a biomass to energy project(s).

SMUD partnering with Mote Hydrogen to build a biomass to clean hydrogen facility in the Sacramento region.

Project also includes carbon sequestration. Feedstock will come from the Sierra NV, including within EDC.

SMUD/Mote submitted grant app to Dept of Conservation (DOC) 10/31/22 for \$500k to fund pre-development/planning phase, including site selection analysis. BOS Letter of Support (LOS) of DOC grant app approved 10/25/22. **Awaiting news of DOC grant award, which is anticipated in Q1, 2023.** Suggested SPI Latrobe or other nearby properties as potential project site(s). Working with Econ Dev on additional potential project sites in EDC.

South Tahoe Refuse (STR)

Working with Wisewood Energy on a **small-scale 125 kW demonstration project** at the Material Recovery Facility located within the City of South Lake Tahoe. Current TRPA ordinance code does not allow submittal of biomass to energy projects. STR appealed to TRPA on 11/16/22 to allow a project proposal to be submitted for consideration by TRPA. BOS approved a letter of support for STR on 11/08/2022. **TRPA conceptually approved.** STR/Wisewood returning to TRPA in January for final green light to proceed with permit application submittal. If approved, permit submittal date TBD but likely by Q3.

Note: Small-Scale = 1 MW or less; Medium-Scale = > 1 MW and < or = 5 MW; Large-Scale = > 5 MW

* Governor's Office, Planning & Research (OPR) California Forest Residual Aggregation Market Enhancement (Cal FRAME) program, Placer Co Water Agency is leading a pilot project in the Tahoe Central Sierra designed to explore the facilitation of regional biomass aggregation and centralized feedstock contracting. EDWA is engaged.