Biomass Grants and Possible Bioenergy Projects: An Update

Mono County Board of Supervisors

May 14, 2024

Wendilyn Grasseschi, Mono County Wildfire Mitigation Coordinator



Here is how Webster's Dictionary defines biomass:

"The amount of living matter in any unit of measurement, such as the amount of weight of a stand of trees on an acre of land,"

or:

"Plant materials and animal waste used especially as a source of fuel."



• Timber harvest residuals – limbs and treetops generated during commercial timber harvest;



• Fuels reduction and forest restoration residuals — i.e. ladder fuels such as limbs, brush and small stems removed from trees and brush as a result of forest fuels reduction activities;



 Forest products manufacturing residuals – bark, sawdust, chips and



• Urban or agricultural-sourced biomass (potentially available from home, business and agricultural processes).



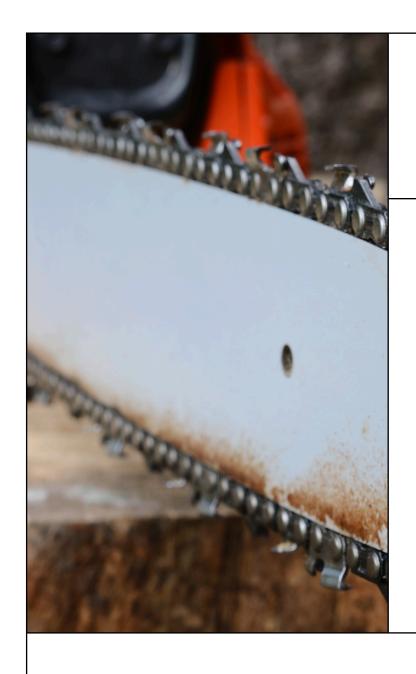
Here is how Webster's Dictionary defines bioenergy:

Bioenergy is "energy for industrial or commercial use that is derived from biological sources such as plant matter and animal waste."

In other words, the energy will be derived from processing the biomass in some kind of bioenergy facility.

Why is this discussion on biomass and bioenergy timely?





Coming soon: A big increase in the amount of biomass from local projects

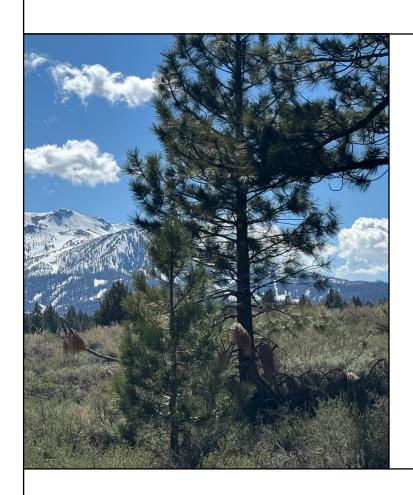
Over the next few years, there will be a large increase in the amount of biomass generated within Mono County which, if left on the landscape, could provide enough bone-dry fuel in the form of forest thinning byproducts to vastly increase the danger of catastrophic wildfires within the County. Most of it will come from a 56,000-acre project called the Eastern Sierra Climate and Communities Resilience Project, or ESCCRP.

Where will all that newly created biomass go?



Because of the size of the ESCCRP, multiple agencies and entities have been working toward establishing a locally-sited bioenergy facility that can take the excess biomass from domestic uses and fuels treatment projects and safely and economically convert it to a low-carbon-emission product of some kind, be it steam, electricity, biochar, or other products that meet these criteria.

The effort to establish a local bioenergy site was rewarded in 2023



The decade-long, multi-agency effort to site and build a local bioenergy facility accelerated in 2023 when Mono County was awarded a grant worth about \$600,000 from the USDA Forest Service to fund a contractor that could start the pre-development/pre-planning and engineering work needed for a locally sited bioenergy facility.



Mono County didn't do this alone

Although Mono County was the applicant for the Wood Innovations grant, the grant would not have been successful without several key partners.

It is important to understand the role each partner plays, because it shows the high level of support the County has for this proposed project.

Whitebark Institute

Whitebark Institute was instrumental in identifying the Wood Innovations grant as a potential source of funding.

Whitebark also helped the County write and complete the grant, allowing the County to meet a tight deadline during the very worst of the massive winter storms of February and March of 2023.

The County could not have done the necessary work to write and submit the grant without the expertise and support of Whitebark.





Town of Mammoth Lakes

The Town of Mammoth Lakes, under the leadership of former Town Manager Dan Holler, has long been a critical partner in the effort to bring a local bioenergy facility to fruition.

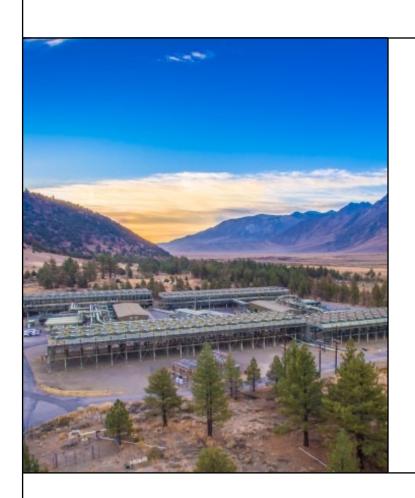
When Dan Holler retired early this year, new Town Manager Rob Patterson stepped up to the plate and is working closely with the County.



The Eastern Sierra Council of Governments (ESCOG)

ESCOG stepped up to provide the majority of the approximately \$300,000 in match the USFS required for the Wood Innovations grant, providing \$250,000. Mono County provided the approximately \$50,000 remaining match in the form of staff support.

Ormat Technologies Inc.



Ormat is supporting the project by offering to site the proposed bioenergy facility on land Ormat owns adjacent to the current Casa Diablo IV geothermal plant, thus avoiding the relatively more complicated process required to site a project on federal land.

Ormat plans to convert steam generated by the proposed bioenergy plant into electricity.



Inyo National Forest

The Inyo National Forest is working closely with Whitebark and Mono County on all aspects of bringing a biomass facility to fruition, including assuring there is an adequate sustainable feedstock source.



Mammoth Lakes Fire Department

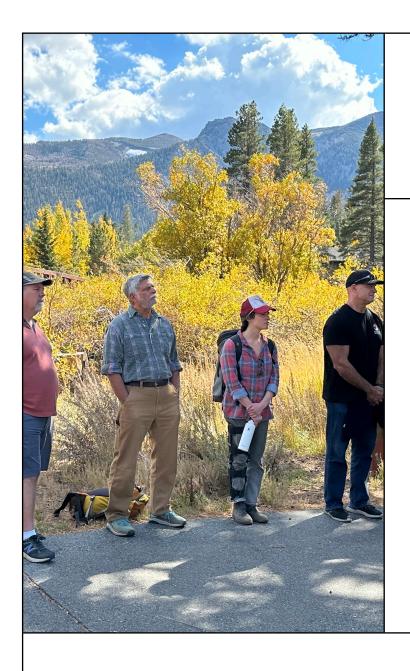
The MLFD gave its full support for a locally sited bioenergy facility based on long-term plans to do district-wide, private property defensible space and wildfire mitigation work.

Another reason to talk about bioenergy:

In late 2023, a bioenergy facility development company called West Biofuels included Mammoth Lakes as a possible bioenergy facility site in a Department of Energy (DOE) grant.

"Based partially on the success of the Wood Innovations grant noted above, this highly competitive grant was awarded to West Biofuels in March 2024 in the amount of \$30 million, with that total amount to be divided up between three different locations in Northern California, one of which is the Mammoth Lakes area."





In summary

Finding a way to remove the excess trees, brush, logs, and other woody debris/biomass which will be removed from the landscapes surrounding Mono County communities during forest fuels thinning projects and defensible space projects is critical, due to the increased wildfire danger triggered by the biomass as it dries out over time.

The Wood Innovations and West Biofuels grants, both of which have the support of many local organizations, entities, and agencies, could provide a partial solution to this issue.

Questions or comments?

