THE BECK GROUP
13500 SW 72nd Ave, Suite 250, Portland, OR 97223
Office #503-684-3406
info@beckgroupconsulting.com
www.beckgroupconsulting.com

Meeting summary for Happy Camp Biomass Project
Final Update (11/07/2024)

Quick recap

The meeting focused on the feasibility of two biomass utilization technologies in Happy Camp, including a small-scale specialty sawmill and a wood wool cement panel production plant. The team also discussed the potential for introducing a new building material, wood wool, into the market and the need for additional funding and an entrepreneur to operate the businesses. Lastly, the meeting touched on the challenges of building a cogeneration power plant in Happy Camp and the possibility of grants to fund a pilot project to rebuild homes in Happy Camp.

Next steps

• Rise Collaborative to organize a meeting with all interested groups to sort out roles and next steps.

• Rise Collaborative to conduct more rigorous due diligence and detailed financial modeling for the proposed businesses.

• Emily Dawson to continue working with OSU on mix design and structural testing for wood wool cement.

• Emily Dawson to pursue building code approvals and work with jurisdictions on acceptance pathways.

• Rise Collaborative to develop a comprehensive business plan for the proposed ventures.

• Rise Collaborative to identify potential entrepreneurs/operators for the sawmill and wood wool cement businesses.

• Rise Collaborative to explore funding sources, including the USFS Wood Innovation Grant program.

• Emily Dawson to continue research on viable fiber types and species for wood wool cement production.

• Rise Collaborative to share the final feasibility study report with all interested parties.

Summary

Biomass Supply and Feasibility Discussion

In the meeting, Roy Anderson, Vice President at The Beck Group, initiated a discussion about a biomass supply and feasibility final project. The meeting was attended by around 24 people. Roy expressed gratitude for the attendees and introduced himself.

Beck Group's Happy Camp Project

Roy, a 20-year veteran at the Beck Group, discussed the company's 40-year history in the forest products industry and their role in the Happy Camp project. The project had three objectives: to assess the available raw material in the area, to evaluate various biomass utilization technologies, and to conduct a high-level feasibility analysis for two viable technologies. The Beck Group's report on the project is available on their website. Steve Courtney, another Beck Group member, presented the supply analysis, noting that within a 15-mile radius of Happy Camp, an average of 19.6 million board feet of timber is harvested annually. He also mentioned the potential for pre-commercial thinning activities to contribute to the available biomass. The team is focusing on the top two viable opportunities, with interest in both.

Small-Scale Specialty Sawmill Discussion

Steve and Roy discussed the potential for a small-scale, specialty sawmill in Happy Camp. Steve explained that the mill would focus on cutting specialty products from larger logs, such as post and beams, and custom orders for local customers. The mill would also utilize less common species like incense cedar. The estimated capital cost for the mill was $1.3 million, with an annual revenue of $2.2 million and annual costs of $1.9 million, resulting in a pre-tax cash flow of $293,000 and a 4.4-year payback period. Steve also mentioned that the mill would not include a planer, auto grading stackers, or elevating the mill off the ground to keep costs down. The mill would cut about 12,000 feet a day, matching closely to the log supply available.

Wood Wool Cement Panel Production

Roy discussed the concept of a wood wool cement panel production plant, emphasizing its potential for cost reduction and market building. He detailed the process of panel production, from mixing the materials to curing and cutting out channels for wiring and plumbing. Roy also presented a feasibility study for a pilot-scale plant, estimating a capital cost of $320,000 and an annual operating cash flow of $168,000. He highlighted uncertainties in the project, such as quality control at a pilot scale and market demand. Roy acknowledged the potential challenges and the proposed solution of building a pilot-scale facility with a lower capital investment to prove out the process. Roy also noted the need for further planning and analysis to ensure the plant's full capacity utilization.

Introducing Wood Wool Building Material

Roy and Emily discussed the challenges and potential solutions for introducing a new building material, wood wool, into the market. Emily, an architect with experience in mass timber construction, explained that the material has already proven successful in Europe and is being tested for structural properties in the US. She highlighted the importance of gaining product data and certifications to gain approval from jurisdictions. Emily also explained how to pursue a performance path to code acceptance, similar to what was done for mass timber in Oregon. Roy emphasized the need for a meeting involving various stakeholders to discuss roles and involvement in the project. He also mentioned the need for more detailed work on the financial modeling and regulatory issues.

Additional Funding and Business Ownership

Roy discussed the need for additional funding for follow-up work and the importance of having an entrepreneur to operate the businesses. He mentioned a potential candidate, Eric Hokanson, who is nearing retirement and interested in both businesses. Christy suggested that the entity facilitating the pilot scale development could also be the owner operator. Jason asked about publicizing the project for potential investments, to which Roy and Abigail confirmed that the feasibility study would be shared publicly once finalized. They also agreed on the need for a more rigorous due diligence and a business plan before approaching investors.

Wood Innovation Grant and Sawmills Discussion

Christy announced the opening of the Wood Innovation Grant program, which is currently offering $34 million. Steve discussed the local timber available. Jason suggested there is potential for timber yield from both the Scott Salmon district and the Happy Camp district. Colleen raised a question about the viability of using hazard trees for lumber, to which Steve responded that they are getting to the end of their life. Roy suggested testing the compatibility of different species with the wood wool cement product. Colleen also asked about Eric Hokanson's interest in the small-scale specialty sawmill and the wood wool cement pilot. Roy speculated that Eric's main focus is on sawmilling, but there could be opportunities for the businesses to help each other. Jason asked about the certification needed for selling forest service products and the species mix in the area, to which Steve and Roy responded. Lastly, Jason raised a question about the potential for a sawmill in the initial harvest, to which Roy responded that they did consider this.

Power Plant Challenges and Grants

Roy discussed the challenges of building a cogeneration power plant in Happy Camp, ruling it out as an option. Jason asked about labor for skill set knowledge, to which Roy responded that starting small could help learn these things without a large capital investment. Emily added that the labor intensity in the field is low, but some skills like crane operation and ground work are needed. She also mentioned the product's versatility, including the ability to route conduits in the field and its complete wall section design. Christy suggested the possibility of grants to fund a pilot project to rebuild homes in Happy Camp. Emily confirmed she is working on a grant for a demonstration project in Portland.

Full video recording of this meeting can be found at
https://www.beckgroupconsulting.com/happycamp