Regional Biomass Energy Cluster Working Group
Meeting #1

December 7, 2015 -- 1:00-3:30pm
Redmond Public Works Training Room
243 E. Antler Ave., Redmond OR

Notes

Meeting Attendees: Emily Roynestad; Damon Runberg (Oregon Employment Department); Mark Trapman (Mach 12 Consulting); Bob Smith (Prineville Sawmill Company); Steve Castillo (Bureau of Land Management); Amy Lowe (Forest Service); Kristen McBride (Forest Service); Brian Tandy (Forest Service); Rob Del Mar (Oregon Department of Energy); Ed Keith (Deschutes County); Jeff Rasmussen (Jefferson County); Stuart Otto (Oregon Department of Forestry); Paul Sunset (Interested Citizen); Marcus Kauffman (Oregon Department of Forestry); Phil Chang (Senator Merkley's Office); Loren Kellogg (Intermountain Wood Energy); Marilyn Miller (Miller Conservation Consulting); Meagan Nuss (Wisewood); Nicole Strong (Oregon State Extension); Jane Barker (Oregon State University – Cascades Campus); Vernita Ediger (Central Oregon Intergovernmental Council); Scott Aycock (Central Oregon Intergovernmental Council); Kiley Rucker Clamons (Central Oregon intergovernmental Council); **Phone:** Dylan Kruse (Sustainable Northwest); Matt Delaney (Delaney Forestry Services).

Introductions & Agenda Review

Scott Aycock explained COIC first became involved in biomass in 2001 when he worked on a National Fire Plan grant that focused on market-baseded ways to use forest restoration byproducts. Phil Chang further developed the program considerably over a period of 10 years. COIC has worked on convening, collaborating, and finding consensus around forest restoration, meanwhile looking for opportunities to help local businesses identify ways to use the materials that result from forest restoration. The effort has had some dead ends but also a few successes.

COIC recently received a Forest Service Wood Innovation Funding Opportunity (WIFO) grant to help ramp up biomass market development in the region. COIC can't complete the objectives alone. A huge ecosystem of partners is needed in order for the project to be successful.

Attendees were asked to introduce themselves, state what organization they represent if any, and why they are interested in the Cluster Development Project. (The bios can be found at http://coic2.org/community-development/biomass-energy-cluster-development-project/).

Scott Aycock then explained that participation in the working group is an open door for anyone that wants to roll up their sleeves and be involved. Those that don't want to be involved but would like to stay informed can stay on the outreach list. He also clarified that the grant funding the Cluster

Development project is for energy related biomass market development so that is what the focus of the project will be on; however, good ideas won't be turned away if they aren't directly related to energy. COIC recognizes that biomass market development is relevant whether the outcome is for energy or value added products.

Project Overview

Scott Aycock reviewed the project goals, objectives, activities, and draft project timeline listed on the "Scope of Work" handout. He explained that there currently is not a central coordinator or networking platform for the region regarding biomass. As part of the WIFO grant, COIC has proposed to step into that role. As part of that role, COIC will work to debunk myths surrounding biomass utilization, as public support is critical to the project.

Rob Del Mar mentioned that smoke pollution is going to be an issue to overcome because even members of OSU's sustainability committee are unaware of biomass utilization's environmental benefits.

The working group will develop a strategic plan to use as a tool to drive action. There will be implementation and marketing steps once it's developed.

Project development is another component of the Scope of Work. COIC and our partners will support project development for the projects specifically listed in the grant, as well as new projects. However, there is only funding available for staff time and a limited amount available for contract work for projects that were not included in the application. The projects identified include:

- OSU-Cascades Campus District Heating
- Deschutes County Landfill
- Mt. Bachelor Biomass Heat
- Redmond Power
- Intermountain Wood Energy
- Confidential Private Energy Developer

Scott Aycock asked attendees to let COIC know if they hear of new public facilities being built because those types of projects are often perfect for biomass heat. Whether it is a public facility or not, there are tools and resources available to quickly conduct feasibility assessments to determine if a project is worth pursuing.

Marilyn Miller asked if the Cluster Development projects could tie in with the Newberry Geothermal project and Scott Aycock responded that it could. Phil Chang added that there are likely more profitable markets that the Newberry project would pursue first.

Marcus Kauffman summed up the main components of the project to be the supply assessment, identifying baseline conditions, and then what to do about it.

Matt Delaney suggested keeping a list of names and organizations with a short bio about each since there are a lot of people involved with different information to share. He also suggested keeping a web page with tools and sources because there is a lot of great information out there but it can take time searching for it.

Available Resources

Introduction to broad view resources

Marcus Kauffman passed out the handout "Biomass Project Development Resources in Oregon". He explained that the Central Oregon Biomass Cluster Development Project is part of a larger context of biomass work happening in Oregon. There are various resources available in Oregon for assistance with biomass projects, including research and development, project development, capital construction, and technical assistance.

Marcus highlighted Oregon BEST as a resource for research and development. Many people are not aware of the program but Oregon BEST has funded a couple biomass projects involving biochar. He also explained that he provides concierge services to connect people to the right resources and people.

As for funding opportunities, Marcus explained that the Energy Trust of Oregon has funding available to projects related to utility-scale energy production. The Oregon SWET has pass-through funding from the Forest Service and there will be a competitive round of project funding in Spring 2016. The Forest Service's WIFO grant program, which is funding the Biomass Cluster Development Project, is accepting applications until mid-January for concise, well-defined projects needing engineering and design work. Marcus also noted that depending on the size of the project there are various capital construction resources available.

For technical assistance, there is a diverse array of public and private consultants that can help move a project along.

When looking at projects/strategies for Central Oregon, Marcus wanted to make sure that people were aware of all the statewide resources available. He then provided the handout "ODF Biomass Program, SWET Grants Awards" and explained that the grant awards listed are examples of the types of projects that can be supported by SWET. He noted that funding for grant programs come and go, so it is unlikely this funding will be available down the road 3-4 years.

Other local and regional resources

Scott Aycock invited attendees to speak about other resources they were familiar with:

Marilyn Miller asked about the status of the Biogreen Power Plant project in La Pine. Phil Chang responded that it is still being pursued, although in his opinion it is an economically marginal project. Phil added that a more promising project happening in La Pine is Quicksilver's new merchandising line that allows them to sort trees and route the trees to higher value markets.

Emily Roynestad asked what was meant by California markets being closed. Phil Chang answered that California's renewable portfolio standard gives preference to in-state projects. If California increased its renewable portfolio it would maybe allow for Oregon to take some of the market but there are a lot of political forces that want to keep their share of the renewable market unchanged. Rob Del Mar added that currently in Oregon utilities aren't looking to add renewables to their portfolios without added incentives.

Phil Chang explained that biomass is one of the most expensive sources of electrical power to bring on line compared to wind and solar. This is due to the subsidies that solar and wind has had. In order for a biomass project to be economical it usually has to involve heat as well.

Paul Sunset described an innovative biomass electricity energy technology that produces water and methanol as the byproducts. Since both of the byproducts have useful purposes there is essentially no waste, making the process very efficient. The first demonstration of this technology will be in 2016 by Exelon. Phil Chang added that a feasibility study or business plan for the demonstration would be interesting to look at as this technology could change the economics of biomass energy production.

Marcus Kauffman asked the group if they would be interested in taking a deeper look at market fundamentals for the various biomass products and there was general agreement. Nicole Strong suggested that it wouldn't have to be a long presentation. Instead, one speaker could present on a topic each meeting.

Phil Chang commented that there doesn't seem to be a prospect for a large-scale utility project in the region, so an in-depth supply assessment isn't needed. Scott Aycock added that two main reasons for conducting a generalized assessment are to identify supply potential and biomass characteristics. This information can be used to encourage companies suited for the region's potential and characteristics to pursue a business opportunity here.

Rob Del Mar asked if it is possible to quantify how much biomass is being burnt in slash piles. Marcus Kauffman responded that ODF tracks the volume of slash piles on a county by county basis, so that information is available. Marilyn Miller announced that the DCFP is establishing a sub-committee to work on smoke related issues from forest restoration projects.

Rob Del Mar continued by explaining that he has seen slash piles 100 yards off of US 97, which is as accessible for removal as forest biomass can be, yet it's not being removed. There is something missing in order to make biomass economically viable. Phil Chang suggested that what has been missing is a focus on small scale projects. Time has been spent on large power plant projects, which have not worked out. Phil explained that the focus needs to shift to a network of smaller-scale projects in order to make a difference for forest restoration and be economically viable. The OSU-Cascades and Mt. Bachelor projects could be very important to the region as demonstration projects.

Meagan Nuss added that natural gas is hard to compete with but the conversation in Central Oregon about using biomass is ripe and may be able to overcome competition from natural gas.

Scott Aycock clarified that the model of a network of smaller biomass projects seems the most promising but the group will not close the door to any viable project regardless of size.

Marcus Kauffman noted that a supply assessment isn't really needed for small-scale projects but if it were conducted for the public it would be very beneficial to use for education and awareness. Meagan Nuss agreed that a high-level supply assessment would be very useful for marketing to the public and potential users. Scott Aycock added that a supply assessment will put people at ease by providing the number of potential small/medium size projects the region can sustainably hold.

Damon Runberg asked if there are any producers of wood pellets or bricks in the region. He also asked if there were any local programs that help homeowners replace inefficient wood stoves. Both questions are related to the residential market. Scott Aycock responded that there are a few regional pellet producers. Meagan Nuss added that the residential market is a hard nut to crack because of the higher capital cost and lower payback. However, Wisewood is going to begin working with Ed Staub & Sons in early 2016. They currently provide liquid fuels distribution but are looking into biomass pellet distribution.

Scott Aycock noted that the Mt. Bachelor project is proposing to use dirty chips straight from forest restoration projects, which makes it a valuable demonstration project.

Loren Kellogg mentioned that technologies for harvesting and transporting forest biomass have been better suited for large-scale projects; however, there are many promising technologies that could be used for smaller projects. He would like to see research done in Central Oregon on these innovative technologies. A big piece of the market is the harvesting and transporting, so if products can be made onsite it will help with the economics.

Marcus Kauffman stated that Red Rock Biofuels is scheduled to break ground in Southern Oregon in April 2016 and their supply circle reaches La Pine, although it doesn't include federal land. It will take on 150,000 tons of biomass per year from both private and state lands.

Mark Trapman asked how to get access to Forest Service lands since they have the lion's share of forest biomass in the region. Phil Chang responded that a contractor should have the option to remove biomass from national forest land when they make a timber bid. Brian Tandy explained that Deschutes National Forest sells timber contracts on 5,000-15,000 acres per year.

There was some discussion about forest management. Scott Aycock clarified that there are many groups addressing forest management, such as the forest collaborative groups, which is very much related to biomass but this project will not address management issues. Instead, it will focus on biomass utilization of what is currently available.

Scott Aycock mentioned that Ecoreps in Prineville is making biochar for agriculture and filtration systems. He also shared the report "A Review of Biofuel & Specialty Biochemical Business Development Potential in Central Oregon," which was funded through a USDA Rural Business Enterprise Program

grant that COIC received. The assessment indicates that Central Oregon is well-suited for the biochemical industry.

Phil Chang explained that when a new public facility is built in Oregon that 1.5% of the budget is required to go towards renewable energy technology. Initially, solar was the only technology considered but geothermal fought hard to be included. Biomass has not been successful at being added to the policy. Marcus Kauffman said that a bill to add biomass to the policy will likely be introduced in the short session.

Biomass Supply Assessment

Scott Aycock reviewed the draft Biomass Supply Assessment Request for Quotes (RFQ) and asked for feedback. The group made these comments:

- Add emerging markets, such as biochar, and solid wood markets, such as post and pole.
- Clarify the difference between petrochemicals and biochemical.
- Add the cost of hog fuels vs. pulp quality chips.
- What is the timeframe? 3-6 months

There was discussion about how projects do not need to wait for the biomass supply assessment to be completed in order to get started. For instance, a feasibility study could be conducted immediately for the OSU-Cascades project. Mt. Bachelor recently had a feasibility and supply assessment conducted for their project and it could be used as a resource for other projects in the region.

Marcus Kauffman asked to delay the RFQ a week to allow for more time to review it.

Working Group Logistics

Scott Aycock suggested the next meeting should be in February and that the group should meet monthly once the project was going full-speed. There was no contest. Scott asked if there was a need to establish an Executive Committee at this early stage. Nicole Strong responded that often times Executive Committees form organically when the need exists. Finally, Scott requested suggestions for a more compelling name for the project.

Wrap-Up

Scott Aycock asked who else should be invited to participate on the project. The following people were suggested:

- Clay Penhollow, Confederated Tribes of Warm Springs
- Tim DeBoodt, OSU Extension Services – Crook County
- Jason Brush, Forester with Quicksilver
- Biomass producers, if not to be members at least to be engaged in some way

It was suggested that the group host a summit for contractors and suppliers to attend because that seems to be where there are some gaps in the supply chain.

Meeting adjourned.