California ad hoc Forest Biomass Working Group

Framing, Vision and Guiding Principles – October 2011

Background

Beginning in the summer of 2010, a diverse group of individuals and organizations, all of whom work actively to simultaneously advance the causes of ecological restoration and resilience for California's public forestlands and promoting resilience and well-being of the state's rural forest communities, initiated a series of conversations on developing a collective strategy that could help to increase the utilization of biomass and development of a biomass utilization infrastructure in support of their shared-objectives for forests and communities.

Beginning as an informal email dialogue, representatives first met in-person on August 11th, 2010 in Sacramento and agreed that there was merit in forming an ad hoc working group to begin exploring common ground and developing state-level policy recommendations, along with associated communications and networking strategies. The group, coming together as the "California ad hoc Forest Biomass Working Group", has since met in-person 6 times, carried on an email dialogue, networked with other active stakeholders around the state, developed a short-term strategic plan, formed a series of interim working groups around priority issues, and established a remote web-site for sharing information and resources.

Currently participating organizations and institutions include;

- Sierra Forest Legacy
- California Forestry Association
- USDA Forest Service Region 5
- Sierra Nevada Conservancy
- Watershed Research and Training Center
- California Energy Commission
- Sierra Business Council
- Pacific Forest Trust
- The Nature Conservancy
- Sierra Forest Products
- Sierra Institute for Community and Environment
- Placer County Air Pollution Control District
- CAL FIRE

The nascent working group appreciates that it embarks upon this work in a complex socio-political environment, that there are a wide array of relevant stakeholders that could be affected by their actions, and that conducting their work in a transparent and inclusive manner is essential to their ultimate success.

To that end, the working group recognizes the following context; that there is building momentum across the forested regions of the state to advance the development of biomass energy from forest residues, that county and region-level working groups, committees and partnerships are emerging to work on locally specific projects and to affect state policy, that the state of California, forest industry, and both public and private utilities from across the state have a vested interest in biomass energy

development, that there are concerns about the environmental and human health impacts of biomass energy, and that there are costs and benefits to biomass development that their strategic actions, modus operandi, and policy recommendations must account for.

The working group has defined the following collective vision, principles to help guide their work going forward.

Vision

The California ad hoc Forest Biomass Working Group envisions that biomass harvesting and utilization should serve as tools to accomplish collaboratively developed public land management restoration objectives based in forest ecology and focused on enhancing the resilience of forest ecosystems. We believe that woody biomass utilization infrastructure should be developed around rural forest communities and be focused on appropriately-scaled, diverse, and integrated facilities that sort woody materials for their highest and best use-values to make a suite of durable wood products and thermally efficient energy, optimizing returns to forest stewardship activities, businesses and communities. At the local-level, these facilities should provide a means of economic diversification and development for rural public lands communities while supporting ecological restoration, hazardous fuels reduction, and community wildfire protection.

Principles

- Biomass harvest and utilization can improve ecosystem resilience and reduce the impact of climate change and the risk of catastrophic wildfire and other stand and landscape sale disturbances caused by insect and disease
- Biomass harvest, while potentially valuable for enhancing ecosystem resilience, is not a full surrogate for the function of fire in mixed conifer forests. Additional exposure to either prescribed fire or wildfire is needed to restore a more resilient structure and function to California's forest systems.
- Collaboration with relevant stakeholders, both of place and interest, is essential to attaining the social license to manage public forestlands, and to achieve desirable ecological, economic and community outcomes.
- With adequate consideration of facility siting, scale, and technologies, biomass energy can provide a broad range of public and ecosystem goods and services in the short and long-term.
- Incentives for biomass energy should not negatively affect competition for small diameter wood from existing or potential traditional or innovative durable value-added wood products that can create more economic activity and contribute more to carbon and air quality benefits.
- Pricing for biomass energy should acknowledge the public goods (including products and services) that appropriately sited, scaled, and designed systems provide.
- Determinations about the siting, scale, and technologies applied to the utilization of forest biomass should be subject to collaborative public processes to establish social license and ensure suitability to local contexts and community needs, and not limited only to regulatory and narrow permitting processes.

- Incentives for biomass energy should include where appropriate value on thermal efficiency of conversion technologies and processes. Combined heat and power systems that produce both electricity and power can achieve thermal efficiencies in excess of 85%, compared with stand-alone biomass power plants that often achieve 20-25% thermal efficiency.
- Incentives for biomass energy should be linked to the development of facilities that simultaneously address landscape and environmental resilience at appropriate scales.
- A suite of appropriately-scaled and distributed biomass energy facilities located in areas that optimize operational efficiencies, minimize transportation costs and fossil fuel emissions, reduce the need for new transmission capacity, and maximize the benefits to local communities and rural counties.
- Focusing investments on priority areas where fire risk and hazard coincide with a lack of existing economical markets for forest biomass will yield the highest public and ecological benefits while also minimizing distortions in existing markets.
- Investments in biomass energy should continue to be made in advanced conversion technologies (such as gasification and pyrolysis), moving them from demonstration phase to commercialization.
- The state of CA, biomass energy developers and communities should work towards legal authorities, incentives, and voluntary arrangements that provide opportunities for joint ownership, shared-equity, and profit sharing to ensure that a portion of the wealth generated through the harvest, utilization, and generation of renewable energy from local natural resources is accrued in local communities for reinvestment in community services, development, and overall well-being enhancement.