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Comments: Short-Lived Climate Pollutant Reduction Strategy

Dear Mr. Tollstrup:

I am writing on behalf of the California Biomass Energy Alliance to express our support for the Short-Lived Climate Pollutant Reduction Strategy Concept Paper ("Concept Paper") and recommend how to preserve existing solutions for both California's short-term and long-term climate goals.

The Draft appropriately recognizes California's existing woody biomass power industry is playing a role today in reducing California's short-lived climate pollutants. One part of the active global carbon cycle involves the cycling of carbon from biomass to the atmosphere. Biogenic carbon can be cycled from biomass to the atmosphere in one of two forms, oxidized (CO_2, CO), or reduced (CH_4, HCs). One of the ways in which biomass energy production can affect global warming is by substituting CO_2 emissions from the power plant for CH_4 emissions that would have occurred in alternative disposal of the biomass that is used as fuel. The impact of this substitution is dramatically lower greenhouse warming potential from the biogenic carbon emitted to the atmosphere at the time of the emissions, with the residual benefit declining for approximately 50 years before it is gone.

In California there are 24 biomass electric generating plants, distributed across 17 counties. The biomass plants combined produce more than 600 megawatts of baseload renewable energy. That is enough to power more than 750,000 California homes. California's current plants use almost 7 million tons of wood waste as fuel annually that would otherwise clog the landfills, be left to decay and serve as a fire hazard in the forest, or be open burned. About 2 million tons of wood waste is urban wood waste diverted from landfills thereby helping local governments meet landfill diversion mandates. The remaining tons come directly out of the fields and forests. Biomass plants promote healthier forests by reducing the amount of overgrowth materials in the forests, as well as reducing the amount of open burning by the agricultural and forestry communities. Biomass power production in California at current levels avoids 2.8 million tons annually of fossil CO_2 emissions, and reduces the biogenic greenhouse-gas emissions

associated with the alternate fates for the fuel by 3.5 million tons of CO_2eq. emissions annually. Approximately 60 percent of the total fleet MW has contracts expiring over the next few years, and is at risk of shutting down.

On the other hand, were conditions ripe, there are approximately 195 MW of idle biomass generating capacity in 13 facilities that could be restarted. These facilities collectively could displace another 1.2 million tons of fossil CO_2 emissions, and reduce the biogenic greenhouse-gas emissions associated with the alternate fates for the additional needed fuel by 1.5 million tons of CO_2eq. emissions annually.

Despite the benefits of biomass power, the draft accurately notes the industry is in jeopardy. In the past year, five plants have closed due to antiquated contracts that do not cover all of the plants' costs. Half of the remaining plants are facing expiring contracts. Without new contracts and revenue streams that reward biomass plants for all of their attributes, half the industry will cease to exist. That means more than 300 megawatts of baseload renewable energy will no longer be available. Millions of tons of wood waste will once again be open burned or sent to landfills. In fact, there is a direct correlation to the increase in open field burning in the Central Valley and the recent closure of biomass power plants. Most importantly, more than 1,000 people will be out of work. In many instances, the biomass plants at risk are some of the largest private employers in their community.

Preserving California's existing facilities is an obvious and simple near-term solution to black carbon emission from open burning (controlled and uncontrolled) of agriculture and forestry residues and the reduction of methane in landfills. The consequence of letting these facilities close are unacceptable. The closure of one 50 MW plant in the Central Valley would result in the displacement of an estimated 350,000 bone dry tons of agriculture residues. It is a realistic goal for the State to ensure we don't lose any more MWs and even reopen currently idle facilities.

CBEA supports California's Short-Lived Climate Pollutant Reduction Strategy, but need further findings that California needs to make significant changes to the utility processes for contracting with biomass power facilities and incentives to better align with SLC reductions. For purposes of action items and opportunities, CBEA suggests the following edits to explicitly acknowledge the work already being done by this existing industry and that it should be preserved if we are to meet our GHG emissions reductions goals, both short-term and long-term.

In the agriculture section (p. 31), the paper sites existence of state and local controls on agriculture burning. Missing from this analysis is the recent and growing threat to these controls with the loss of biomass plants in the region as noted above. The head of the San Joaquin Valley APCD has been publically suggesting the District may be forced to issue more burn permits if financial assistance for these facilities is not secured. To that end, **we would recommend under "Recommended Actions" in this section (p. 33) adding "Agriculture Burning" and include financial assistance to local air districts to protect these programs by preserving existing infrastructure**.

In the "Additional Reductions by 2030" in the Forest-Related Sources of Black Carbon Emissions section, CBEA recommends the following clarifications and additions, which are consistent with the Governor's recent Emergency Proclamation on the tree die-out:

- P. 37: Though electricity generation from forest residue has recognized benefits, the number of operating bioenergy plants and the generation capacity is decreasing due to fixed price contracts expiring and the uncertainty of future power pricing policies. Bioenergy production **doesn't necessarily cost more** ~~costs more~~ than other energy sources ~~due~~, **but there are additional costs attributed** to the large distribution of the biomass and the costs to process and transport it to the facilities. Establishing a robust biomass use market with diverse wood product manufacturing and distributed bioenergy production is essential to provide value to biomass and thereby make it cost-effective to transport from the forest to end users. Management to improve forest health should continue to drive the amount and type of biomass removed from the forest to ensure only sustainable forest management practices are promoted. Existing regulations and approved land management practices should be applied to ensure there are no adverse effects on soil, water, or biodiversity.

- P. 38: A plan that provides for strong and focused coordination affords the best opportunity to balance the many ecological, policy, financial, health and emission tradeoffs of any given forest or land management strategy. Long term interagency coordination is necessary to **protecting existing infrastructure and** create a competitive bioenergy market by researching ways to increase the environmental and economic sustainability of bioenergy production, and fully quantify the benefits of bioenergy production in California **and providing incentives**. Putting woody biomass to its most beneficial use requires lifecycle and economic analysis of the many waste diversion options to fully quantify the benefit and identify possible unintended consequences of each biomass use option by region. Over the long term, all pathways should be explored to provide a diverse set of options to maximize use of woody biomass and achieve black carbon, GHG, and criteria air pollutant emission reductions. However, given the **state of the status of the current infrastructure and lack of additional** ~~current imbalance of biomass supply to viable~~ outlets, **addressing expiring contracts and energy prices to ensure long-term viability and** exploring near-term waste utilization techniques must be a priority to avoid open pile burning to the extent possible.

Eliminating organics from landfills is a compelling goal. Although CBEA has not thoroughly thought though this proposal, it has the potential to significantly change the fuel markets for all the biomass-to-energy technologies using wood wastes and residues. As we consider our engagement on this issue, CBEA will be assessing how such a regulation would impact our future fuel supplies and costs. An essential component to being more successful in renewable energy markets is obviously reduced fuel cost. If it is determined that this regulation would bring prices down which we

anticipate it should, it would be removing a key barrier to the success of biomass-to-energy in California. CBEA recommends the following clarifications and additions:

- **Align financial incentives with organics diversion.** Achieving the 2020 target of 75 percent diversion will likely require **the preservation of existing infrastructure and** approximately 100 new or expanded facilities statewide to process and reuse diverted organic waste from landfills —through composting, anaerobic digestion, or other methods. Achieving 90 percent diversion by 2025 will require even more infrastructure build out. Continued, increased State funding is critical to building and maintaining this necessary infrastructure. At the same time, an increase in California's Integrated Waste Management Fee is also needed to discourage the landfilling of organic waste and other recyclables, and provide funding to support organics recycling infrastructure. CalRecycle estimates that State support on the order of **a minimum** of $100 million per year for five years – in the form of grants, loans, or incentive payments – will be needed to leverage private sector financing and local rate structure changes to support the development of necessary organic infrastructure and help to foster markets.

We look forward to working with the Air Resources Board to develop and implement a successful strategy to reduce SLCP. The Concept Paper is a great start.

Sincerely,

Julee Malinowski Ball, Executive Director

JMB/kmg