Alternative Fuels & Chemicals Coalition

Advocating for Public Policies to Promote the Development & Production of Alternative Fuels, Renewable Chemicals, Biobased Products, and Sustainable Aviation Fuels

June 24, 2022

California Air Resources Board
Rajinder Sahota
Deputy Executive Officer
Climate Change and Research, CA Air
1001 1 St #2828
Sacramento, CA, 95814

Re.: Forest Residuals are Carbon Neutral

Dear Rajinder Sahota,

Background

AFCC and its member companies welcome the opportunity to provide comments on the CARB Scoping Plan, in which CARB identifies which programs and strategies are working well and others which could be improved or given more clarity to advance not only California's climate initiatives, but the nation's. The policy is the bedrock for reducing the carbon intensity of transportation fuels, which still are considered the largest source of GHG emissions contributing to the climate crisis.

AFCC is a collaborative government affairs effort organized by the Kilpatrick Townsend & Stockton law firm and American Diversified Energy. AFCC was created to address policy and advocacy gaps at the federal and state levels with respect to renewable chemicals, bioplastics/biomaterials, cell-cultured food ingredients, alternative proteins, single cell protein for food and feed, enzymes, alternative fuels, biobased products and sustainable aviation fuels sectors. AFCC member companies work on food and fiber supply chain security and sustainability, renewable chemicals, industrial biotechnology, bioplastics and biomaterials, and biofuels.

Carbon Neutrality from Forest Residuals

Innovators strive to produce biofuels that are more carbon efficient for both ground and aviation biofuels. In the draft Scoping Plan, CARB announced their plan to increase the short – and long-term ability for the LCFS to achieve carbon neutrality by 2045, which will be a result from reducing reliance on fossil fuels. Carbon neutrality is an important long-term goal; however, it can only be enabled by accurate accounting of carbon from feedstocks. AFCC is concerned that CARB is not appropriately recognizing the carbon neutrality of forest residuals, and instead is inclined to rely on erroneous reports based on narrowly focused on modeling studies that fail to account for the carbon benefits of diverting forest residuals to use in products, chemicals, and fuels relative to open burning, decay, or other dispositions. We respectfully urge CARB to consider all reports carefully and eliminate considering those which are narrowly focused on predictive modeling and have limited scientific scope.

Most recently and concerningly, the C-BREC Model as described in various reports (Minimizing emissions from forest residues – Schatz Energy Research Center (schatzcenter.org)), which was developed by Professor Kevin Fingerman at Humboldt State for CA's biopower program https://www.energy.ca.gov/publications/2021/california-biopower-impacts-project-climate-and-air-pollution-impacts-generating, has been recommended for adaptation for the LCFS program. Based on its embedded assumptions and inputs, this model shows forest residue as carbon-positive, even considering avoided wildfire and avoided burn piles. There are multiple concerns with reliance on this model, particularly given other models and well-established reports of the carbon neutrality of forest residuals as feedstocks. For example, the model takes the existence of forestry / thinning residues as a given, and then compares conventional management- which is left to decay in place, and some pile-burned versus biomass removal and bioenergy production yet does not provide transparency on the portions of these alternative fates nor on their relative carbon releases.

The model does not include a lot of intermediate results, so it is difficult to parse. There is an apparent attempt to account for residue decay times and integrating emissions impacts over time, but no half-life studies were reported. The scope is so narrowly focused, and therefore it does not address or quantify the potential benefits from more widespread fuel management in the first place. Furthermore, it is probably no surprise that the results are carbon-positive, since the model does not include any of the factors that could make such a system carbon-negative – reduced wildfire severity from the fuels reduction treatment itself, co-production of wood products, or carbon-negative bioenergy production. AFCC and its member companies recommend a wider, more relevant scope for any predictive modeling from feedstocks to end of life of the biofuel.

Biofuel Policies Treat Biomass as Carbon Neutral for Decades

AFCC and its member companies have been working very closely with USDA (Forest Service (FS)) and EPA (Office of Transportation and Air Quality (OTAQ)) regarding risk of wildfire. Based on this work and in keeping with good forest management for wildfire prevention, we recommend and support policies that forest residuals be removed from forest grounds quicky for use by biofuel producers, so that aging and decaying emissions do not become an undue and inaccurate factor in forest predictive modeling studies which are not setup to capture decaying emissions and counterfactual fates accurately. If inaccurate models are used, this will materially change the carbon intensity (CI) calculation for LCFS credits for AFCC producers, making them worth far less than what is supported by the best science and the experience of AFCC and its member companies. The vast majority of greenhouse gas (GHG) emissions accounting and biofuel policies treat forest residual feedstocks employed for biofuel as carbon neutral, as should CARB under the LCFS. Thereby, we ask CARB to consider adopting the definition for carbon neutrality in the most recently enacted (FY2022) Appropriations bill, in the omnibus House bill, *H.R.2471*, see page 919, referred to as the Carbon Neutrality language, which is shown below. The language is commonly referred to as "Promoting biomass as carbon neutral."

POLICIES RELATING TO BIOMASS ENERGY
SEC. 432.

To support the key role that forests in the United States can play in addressing the energy needs of the United States, the Secretary of Energy, the Secretary of Agriculture, and the Administrator of the Environmental Protection Agency shall, consistent with their missions, jointly—
(1) ensure that Federal policy relating to forest bioenergy—
(A) is consistent across all Federal departments and agencies; and
(B) recognizes the full benefits of the use of forest biomass for energy, conservation, and responsible forest management; and
(2) establish clear and simple policies for the use of forest biomass as an energy solution, including policies that—
(A) reflect the carbon neutrality of forest bioenergy and recognize biomass as a renewable energy source, provided the use of forest biomass for energy production does not cause conversion of forests to non-forest use;
(B) encourage private investment throughout the forest biomass supply chain, including in—
(i) working forests;
(ii) harvesting operations;
(iii) forest improvement operations;
(iv) forest bioenergy production;
(v) wood products manufacturing; or
(vi) paper manufacturing;
(C) encourage forest management to improve forest health; and
(D) recognize State initiatives to produce and use forest biomass.

Most federal, state, and international standards such as the EPA RFS, EPA U.S Inventory, CA LCFS Crop Residue 2009, CA LCFS CCS Protocol, CA LCFS Grid Avg Power, CA RPS, and the internationally agreed Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), consider biomass such as forest residuals as carbon neutral. AFCC and its member companies consider CARB a leader in developing GHG policies and therefore CARB needs to ensure the treatment of carbon accounting is done accurately with the appropriate scientific methodologies and predictive models. AFCC and its member companies request that CARB treat all forest residuals in risk of wildfire deployed in new fuel technologies are consistent with all fuel policies and pathways.
AFCC and its member companies request that CARB have a workshop on forest residuals and achieve consensus by all stakeholders on carbon neutrality studies, use of forest biomass feedstock calculator for CA-GREET which estimates emissions from forest residuals and recognizes zero indirect land use change (iLUC) which will be adopted by all states. This, in turn, should lead to an administrative action or rulemaking by CARB to confirm the carbon neutrality of forest residuals and ensure that CARB's tools reflect that.

Conclusion

AFCC and its member companies are requesting forest residuals or hazardous fuels to be treated as carbon neutral feedstocks for producers of biofuels. We respectfully ask CARB to have consistency in its regulatory development of standards to that of other states, federal agencies, and international policies, for ease of adoption, and not create market confusion. We ask that CARB hold a stakeholder workshop on forest residuals and its treatment of carbon neutrality, leading to policies, rules, and tools properly reflecting the carbon neutrality of forest residuals as biofuel feedstock.

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