



October 11, 2016

Dr. Holly Stallworth
Designated Federal Officer
EPA SAB Panel on Biogenic Carbon Emissions

RE: Comments from the SAB on the Biogenic Carbon Emissions Panel 2.8.16 Draft Report

Dear Dr. Stallworth,

The US Industrial Pellet Association (USIPA) represents industrial wood pellet manufacturers located throughout the southeastern US, as well as others in the bioenergy supply chain. The purpose of our association is to promote the use of biomass as a low-carbon, renewable alternative to coal in large-scale power production.

The biogenic feedstock for industrial wood pellets consists of renewable low-grade wood fiber that is unmerchantable or underutilized by other segments of the forest products industry. Over the last decade, the industrial wood pellet industry has developed a sophisticated, innovative supply chain that effectively and efficiently deploys this low-cost, sustainable, and dispatchable fuel source.

Biomass power is already a thriving industry in the United States, but there is potential for further growth as opportunities arise for replacing coal with this more efficient form of fuel. However, without consistent policies in place that support investment in biomass-based power generation and that recognize the carbon benefits of this renewable resource, it will be difficult, if not impossible, for that growth to occur.

The UK Environment Agency has found that switching from coal to wood pellets can reduce carbon emissions up to 90%.¹ Industrial wood pellets are also low in sulfur, chlorine, nitrogen, and other harmful elements and pollutants.² For years, USIPA members have been helping European Union member states meet EU-mandated renewable energy targets and reduce greenhouse gas emissions.

¹ Judith Bates et al., *Minimising greenhouse gas emissions from biomass energy generation*, UK ENVIRONMENT AGENCY (April 2009), http://www.globalbioenergy.org/uploads/media/0904_Environment_Agency_-_Minimising_greenhouse_gas_emissions_from_biomass_energy_generation.pdf.

² Bates et al.

EPA has expressed support for biomass, noting “in many cases, biomass and bioenergy products in the power system can be an integral part of state programs and foster responsible land management and renewable energy.”³ The Clean Power Plan (CPP) further emphasizes the wide range of environmental benefits that biomass can offer, including aiding in the reduction of carbon emissions.⁴

Although EPA has made this assertion, any action related to the inclusion or exclusion of biomass in federal and state implementation plans has been deferred to completion of the work of this panel and the Scientific Advisory Board (SAB).

As you are aware, policy and regulatory clarity is necessary for the growth of any industry, but renewable technologies are particularly sensitive given many are in the developmental stage and must compete with the low cost of fossil fuels. Regulatory certainty and government support are critical to the success of these technologies and to our success as a country in reducing carbon emissions.

While we understand that this panel and the SAB are not policy making bodies in and of themselves, we recognize that this important work will have serious policy implications for the future. Biomass has an important role to play in mitigating climate change as a complementary technology that can be used alongside other renewables or co-fired with fossil fuels, making it the perfect accompaniment to an “all of the above” energy strategy that does not require costly upgrades to infrastructure.

Strong forest products markets, to which woody biomass contributes, lead to more forests and healthier forests overall. A recent study from the U.S. Forest Service Southern Research Station found that an increase in demand for bioenergy would result in an increase in both forest inventory and forested timberland area in the U.S. South.⁵ The reason is that the biomass industry improves the forest product market, which incentivizes landowners to keep their land forested rather than convert to agriculture or commercial development. The increased demand for forest products also encourages landowners to maintain and/or improve their forest management practices. This economic response helps to offset any carbon changes in the short-term from biomass use.

Biomass can also help states avoid stranding assets by making use of existing infrastructure. When co-fired alongside fossil fuels, biomass can lower the carbon and greenhouse gas emissions profile of coal plants that are not yet fully depreciated but have already been outfitted

³ Janet McCabe, *The Role of Biomass in Achieving Clean Power Plan Goals—A 2016 Workshop to Foster a Constructive Discussion*, EPA CONNECT BLOG (Nov. 16, 2015, 10:00 AM), <https://blog.epa.gov/blog/2015/11/the-role-of-biomass/>.

⁴ Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Final Rule, 80 Fed. Reg. 64662, 64757 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60) (hereinafter referred to as the Clean Power Plan or “CPP”).

⁵ Karen Lee Abt et al. *Effect of Policies on Pellet Production and Forests in the U.S. South*, UNITED STATES DEPARTMENT OF AGRICULTURE, U.S. FOREST SERVICE SOUTHERN RESEARCH STATION (Dec. 2014), http://www.srs.fs.usda.gov/pubs/gtr/gtr_srs202.pdf.

with modern pollution control technologies to comply with air emissions regulations. By preventing premature closure of these power facilities, energy rates remain low and stable for consumers. In short, biomass provides a reliable baseload power source that will enable states to smoothly transition away from fossil fuels and toward renewable energy technologies.

But none of this can happen without the conclusion of the work of this panel. Biomass has a critical role to play in mitigating climate change and the panel's work should support this role by providing EPA with a flexible, workable framework that can be useful in a policy setting. We would like to take this opportunity to lay out several considerations for the panel on temporal scale, baseline, and the overall framework.

Temporal Scale

We believe a long-term time scale to be the most appropriate. There is scientific consensus that the impact of carbon emissions on global temperature are a result of long-term, cumulative emissions. In order to mitigate these effects, policies related to climate change must look at changes in carbon over the long-term. This is made clear in the panel's own draft report that was submitted to the SAB and is supported by findings from the United Nations' Intergovernmental Panel on Climate Change (IPCC), the Society of American Foresters, and many others.⁶

Indeed, in its most recent analysis, the IPCC reports that "there is no evidence for global scale tipping points in any of the most comprehensive models evaluated to date in studies of climate evolution in the 21st century."⁷ Moreover, in a recent peer-reviewed article in the *Journal of Forestry*, the Society of American Foresters has stated, "forest bioenergy systems . . . typically result in lower cumulative CO₂ emissions over time, and cumulative CO₂ emissions, according to the IPCC, are the best predictor of future peak global temperatures."⁸

Baseline

As an industry we support the use of a historical reference point baseline. A future anticipated baseline and an attempt to define scenarios and counterfactuals is far too complicated for a policy setting and, frankly, impossible to predict. The historical reference point approach allows policymakers to view changes in carbon over the landscape and is easily implemented given that this data is already collected on a regular basis.

By monitoring carbon stocks and forest inventory and growth, federal and state governments are able to demonstrate that the nation's forests remain the largest net carbon sink and that products

⁶ INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC). 2013. *Climate change 2013: The physical science basis*. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, et al. (eds.). <http://www.ipcc.ch/report/ar5/wg1/>

⁷ Miner Abt Bowyer et al. *Forest Carbon Accounting Considerations in US Bioenergy Policy*. JOURNAL OF FORESTRY. (November 2014).

⁸ Miner Abt Bowyer et al.

sourced from the forest, like biomass, are done so in a sustainable manner that does not negatively impact the overall health and growth of the forest.

Similar to the SAB's recommendation, we feel the panel's report should not limit EPA from choosing a policy approach such as this one that can be easily implemented and monitored over time.

Framework

Consistent with the methods in which the impacts of other greenhouse gasses are assessed, the framework for biogenic carbon should include both biological and economic impacts. It is widely agreed upon that the use of residuals for biomass have a low or even negative carbon impact in comparison to the burning of fossil fuels. For larger feedstock, such as wood from thinning operations, tree tops, and large limbs, it is critical to consider the market impacts. Increased demand for forest products of any kind provides incentives for landowners to replant and make further investments in sustainable forest management. This incentive results in an increase in forested area, and thereby an increase in carbon stocks.

The Society of American Foresters in a review article on "Forest Carbon Accounting Considerations in US Bioenergy Policy" says it best,

“Studies that consider forest growth dynamics, landowner investment responses, and the warming impacts from biogenic carbon over a time horizon consistent with that used for other GHGs reveal low warming impacts from biogenic carbon associated with increased use of the types of forest biomass most likely to be used for energy in the United States. Such studies also show, for roundwood in particular, the importance of investment responses in contributing to low net emissions.”⁹

We appreciate the work of the panel on this important issue and the opportunity to provide comment and input.

Sincerely,

M. Seth Ginther
Executive Director
US Industrial Pellet Association (USIPA)

⁹ Miner Abt Bowyer et al.