



March 16, 2015

EPA Scientific Advisory Board (SAB), Biogenic Carbon Emissions Panel  
Dr. Holly Stallworth  
Designated Federal Officer (DFO) SAB Staff Office  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

**Biomass Power Association Comments to Scientific Advisory Board Biogenic Carbon Emissions Panel**

Dear Dr. Stallworth:

The purpose of this testimony is to educate the Scientific Advisory Board about the primary feedstocks we rely upon and why we use them. The universe of fuels used in our plants—forest and mill byproducts and residues, thinnings related to forest management, so-called “urban wood” —is entirely a function of power prices. Energy has and always will be the least attractive market for biomass. So long as power prices remain low relative to the value of sawlogs, pulpwood or, if necessary, the conversion of forest land for development, the economics of our industry limit our fuels to what others might call “wastes.” Though derived from various sources, almost all of the fuels used by our industry share certain fundamental characteristics: they (1) are not grown and harvested specifically for energy; (2) do not cause direct or indirect landscape changes; (3) if not used for energy would likely decompose, be landfilled, be openly burned, or exacerbate fire and disease risks in the nation’s overgrown forests. Because these fuels do not conflict with non-energy uses and avoid land use changes, they are what Professor Timothy Searchinger and others have characterized as “biofuels done right”<sup>1</sup> and are deserving of a simplified approach much like the Framework has done for waste-derived fuels as found in Appendix N.

By way of background, BPA is the voice of biomass-to-electricity in the United States. The Association represents power plants in more than 20 states that use organic materials to generate baseload, grid-connected power. Our industry is an economic engine for rural America, providing some 14,000 jobs in communities hit hard by the closure of paper mills and manufacturing plants. Whether rice hulls in Louisiana, orchard prunings in California or wood residue in states from California to Maine, our members produce power from feedstocks indigenous to their host communities.

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<sup>1</sup> “Beneficial Biofuels—The Food, Energy, and Environment Trilemma,” Tilman et al., pg. 270.

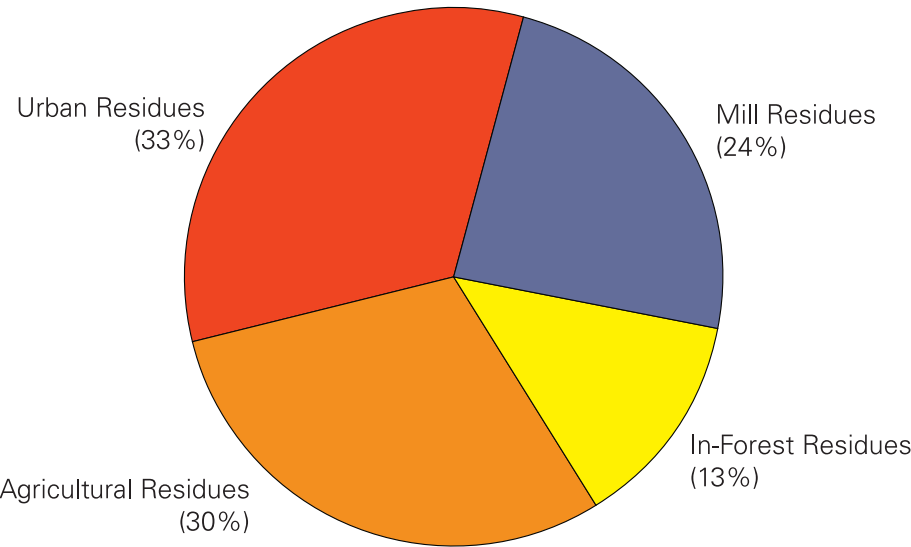
Currently, there are approximately 8,000 MW of installed power capacity in the United States utilizing primarily organic material. Approximately 75% of the capacity operates “behind the meter” at pulp and paper facilities; the remaining 25%, including BPA members, operate as stand-alone power producers, mostly on a so-called “merchant” or non-utility basis. Many biomass power plants operate based on relatively short term contracts and rarely secure long-term fuel supplies. All facilities pay for their fuel except where they are integrated as part of a larger operation like rice hulls from an adjacent mill or sawdust from the adjoining sawmill.

Though all fuel is 100% biogenic, the type of biomass fuel varies by region. Some areas of the country rely heavily on forest-derived materials (such as New England and the upper Mid-West), while in other regions (Florida, California) certain non-forest materials like urban wood comprise a large percentage of the feedstock supply. Two states—California and Maine—offer dramatically different illustrations of the feedstock supply.

Today, California has 31 biomass facilities, leading the nation in biomass power capacity. Together, California plants represent more than 650 Megawatts, consuming about 5.5 million tons of biomass annually. Historically, the California industry heavily relied upon sawmill residues. As the California forest products industry shrank, the plants were increasingly forced to source their fuel elsewhere.

As illustrated in Figure 1, today California’s biomass facilities rely upon sawmill residues for only 24% of their fuel, with the remainder from a wide variety of sources.

**Composition of California biomass fuel supply  
(statewide, average for 2010-2014)**



**Figure 1**

In contrast is Maine, which as a state ranks 5<sup>th</sup> in the production of biomass power. Biomass is responsible for 25% of Maine’s overall power supply and represents 60% of the State’s renewable portfolio. Wood accounts for almost one-third of New England’s entire renewable supply, with Maine supplying a significant amount to the region.

Maine’s forest products industry is healthy and sustainable. As the largest, contiguous privately owned working forest in the United States, it is a model for what can happen—both for rural communities and for the health of forests—when low-value wood is utilized for power. Pulpwood represents 56% of the 459 million cubic feet that was harvested from Maine’s woods in 2011; sawlogs make up 23%; biomass for electricity accounts for 18%; and pellets and firewood, 2%. Each of these uses co-exists. And each contributes to the economic health of the forest, allowing landowners to manage “forests as forests” and have access to markets for *all parts* of the tree. It is precisely because of these markets that Maine boasts a 97% regeneration rate and twice the standing wood volume today compared with 1950.<sup>2</sup>

Regardless of region, all biomass plants throughout the country share the same basic principle, namely, that they cannot compete with higher value uses like sawlogs and merchantable pulp. As a result, even if EPA were to conclude that all biomass is “carbon neutral,” the fear that biomass electricity would somehow undertake major harvests and compete with the value of pulp and sawlogs is fantasy. **Use of fuel is not a function of carbon accounting; it’s a function of price.** To illustrate this point, consider Figure 2, which demonstrates a direct correlation between the price of power and the price of the feedstock.

## THE ECONOMICS OF BIOMASS POWER

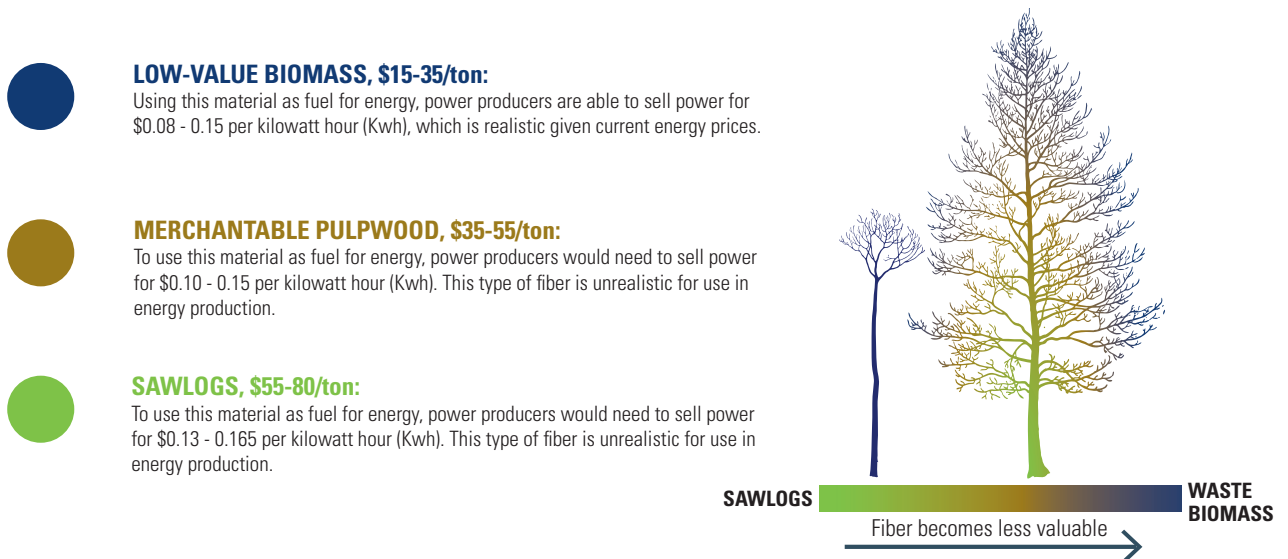


Figure 2

<sup>2</sup> “Maine’s Forest Economy,” Maine Forest Products Council, pg. 3.

As the price of power increases, a facility's ability to utilize more expensive fuels that directly compete with pulp and sawlogs also increases. The simple point, often overlooked in the discussion over biogenic carbon emissions, is that current power prices do not allow a facility to use merchantable pulp and certainly not saw timber or more expensive pellets. Moreover, analysts have projected either no or only modest increases in power prices if the Clean Power Plan is implemented.<sup>3</sup>

Because price defines our feedstock options, we urge the SAB and EPA to focus on a well-defined subset of biomass – the low-value feedstock currently in use – when finalizing the Framework. First, use of these fuels does not affect net growth on the production landscape. Second, as documented by the Green Power Institute, conversion for power avoids emissions that would otherwise occur, such as from decomposition or forest fires. Third, use of these fuels does not result in land use changes or management. As EPA noted in the Preamble to the 2010 Renewable Fuel Standard, “renewable fuel produced from feedstocks consisting of wastes that would normally be discarded or put to secondary use, and which have not been intentionally rendered unfit for productive use, should be assumed to have little or no land use emissions of GHGs.”<sup>4</sup> Finally, use of these materials has no indirect impacts or “leakage.”

Low-value fuels utilized for biomass electricity are similar to “waste-derived” materials described in Appendix N. Therefore, we request that the category of “waste-derived” fuels be expanded to include all low-value, non-merchantable biomass, whether derived from the forests or not. As others have noted in correspondence to the SAB, “waste and residues” are “truly low in carbon”<sup>5</sup> and their use should be encouraged.

We thank you for the opportunity to submit these comments on behalf of the biomass industry. Please be in touch with any questions.

Sincerely,



Robert E. Cleaves  
President  
Biomass Power Association

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<sup>3</sup> “Square Peg, Square Hole: Rate-Based carbon Trading under the Clean Power Plan.” Bloomberg Energy Finance, November 3, 2014.

<sup>4</sup> 75 Federal Register at 14794 (March 26, 2010)

<sup>5</sup> Letter from Dr. Viney P. Aneja et al. to Gina McCarthy, February 9, 2015, pg. 2.

