

Remarks for EPA SAB panel on biogenic emissions

Dr. Edie Sonne Hall, October 25, 2011

I would like to thank the members of this distinguished Panel for your willingness to dedicate your time and talent to this task at hand. I would also like to thank Dr. Holly Stallworth for organizing this session.

My name is Edie Sonne Hall, and I work in the Sustainable Forests and Products group at Weyerhaeuser Company. Weyerhaeuser is one of the world's largest forest products companies and is principally engaged in the growing and harvesting of trees; the manufacture of forest products; and home building. Incorporated in 1900, Weyerhaeuser has managed a precious renewable resource for more than a century, and we understand what it means to be long-term stewards of our shared environment.

I earned my Ph.D. in forest resources from the University of Washington. My dissertation included a life cycle assessment of greenhouse gas emissions from forestry activities. I was also granted a graduate certificate in "Interdisciplinary and Policy Dimensions of Earth Sciences" by the Program on Environment at the University of Washington. One of the goals of this certificate program is to educate scientists to help inform policy.

Until 2010 with the publishing of the EPA final rule for stationary sources of greenhouse gases, all international policy consistently recognized the combustion of biomass as carbon neutral. This was a policy decision informed by science. The science lies in the distinction eloquently conveyed in the recent EPA Accounting Framework Report that CO₂ emissions from fossil fuels will inevitably increase the amount of carbon in the atmosphere, but such an outcome is not inevitable with the consumption of biologically based feedstocks.

We can look to U.S. national accounting to demonstrate that this distinction is clear. U.S. forests are a significant net sink and every year this is reported to the IPCC through the EPA GHG Inventoryⁱ.

Critics say that if we continue to recognize biomass combustion as carbon neutral then our nation's forests will be razed and burned for energy. We can look to past and current practices to understand that this fear is unwarranted.

- 1) Forest owners in the U.S. manage their lands to produce the highest value product they can – usually sawlogs and other wood products – with pulp and paper and bioenergy as co- or by-products. They do not harvest sawtimber for lower value products. This is why we see pulp prices go up when economic conditions shut sawmills down: the sawmills are not producing chips and landowners do not harvest their sawlogs to fill the gap. Biomass for energy provides even less motivation to harvest just for that purpose. According to a recent FORISK study, biomass demand would have to increase 435% by 2016, for biomass to reach prices high enough to consider moving from a sawtimber forest management regime to a shorter rotation.ⁱⁱ

- 2) A big jump in prices for biomass is especially unlikely because supply is available. The most recent billion-ton update, published by the Department of Energy, showed that a goal of replacing 30% the nation's current fossil fuel consumption can be more than met with the help of surplus forest material, without even using current pulpwood supply.ⁱⁱⁱ
- 3) And finally, we can expect new markets for biomass to drive investments that will increase supply. In the U.S. South we have seen that although timber harvest increases every time a new forest product is introduced in the market, timber inventory increases by an even greater amount.^{iv}

Critics say this may be true to date but still want to restrict biomass energy use to guarantee against a worst case scenario. The problem is that this choice isn't free, and has unintended consequences. Restricting biomass use will impose costs and uncertainty on a complex but efficient system that is working well today. Approximately 75% of Weyerhaeuser's operations' energy needs are met using biomass fuels such as bark, wood residuals and other organic byproducts. However, only 39% of our fiber supply in 2010 came from our own lands; the majority of the remainder was supplied by small family forest owners. Because we are one of the few remaining integrated companies, with both land and mills, we can expect other fiber supply chains to be even more complex.

Restrictions on our use of biomass will add cost and uncertainty with no clear environmental benefit. Our company's technical staff tell us this proposed framework is unworkable, in part because of the wide variety of sources we use for fiber and biomass evident in the statistics I just mentioned.

Please consider the unintended consequences of providing EPA only with a scientific review of this overly complex system that is constrained by unnecessary limitations on the scope of the review. On the other hand, if you provide EPA with a broad scientific review, the Agency will be able to consider the full range of policy options as they draft proposed amendments to the Tailoring Rule next year.

Thank you.

ⁱ U.S. EPA. 2011. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2009. Washington, DC.

ⁱⁱ Mendell, Brooks, Amanda H. Lang, and Tim Sydor. 2011. Woody Biomass as a Forest Product: Wood Supply and Market Implications. Commissioned by: National Alliance of Forest Owners.

ⁱⁱⁱ U.S. Department of Energy. 2011. U.S. Billion-ton update: biomass supply for a bioenergy and bioproducts industry. A study sponsored by U.S. Department of Energy, Energy Efficiency and Renewable Energy, Office of the Biomass Program. Prepared by Oak Ridge National Laboratory.

^{iv} USFS data shows that from 1960-2005 in the U.S. south pulp capacity has increased from 50,000 – to 120,000 short tons per day; lumber capacity has increased from ~6 billion board feet to almost 20 billion board feet; and timber inventory has increased from 150 billion cubic ft to over 250 billion cubic feet.