

## Biomass Carbon Neutrality

### Issue

The U.S. Environmental Protection Agency (EPA) issued its final Greenhouse Gas (GHG) Tailoring Rule in 2010 and for the first time ever regulated GHG emissions from bioenergy in the same way as fossil fuel energy. In response to stakeholder efforts, EPA appropriately agreed to defer regulation of bioenergy/biogenic emissions to allow for additional study of available science and to develop an accounting framework for biomass carbon emissions. We are now waiting for release of EPA's proposal—known as the Biogenic Framework—which will determine how carbon emissions from biomass combustion will be treated under the Clean Air Act. This document may determine the fate of the concept of carbon neutrality of biomass, which is a key plank of our industry's sustainability platform. While combusting biomass in our boilers releases stored carbon, the forests from which that biomass is sourced are constantly sucking up and storing carbon from the atmosphere. It is this dynamic, continuous cycle that ensures forest-based carbon emissions are stable or even declining over time.

EPA's decisions will determine whether bioenergy will remain a viable part of our nation's renewable energy portfolio, with significant implications for the health of forests and farms, for jobs, and for related economic activity. Poor decisions on EPA's part will result in:

- Reduced use of renewable energy;
- Accelerated loss of power generation diversity, increasing the potential for higher, more volatile electricity prices;
- Increased net GHG emissions;
- For the hardwood manufacturing sector, requiring facilities to obtain permits for all carbon emissions associated with biomass boilers used to heat and power mills would be crippling in both costs and administrative burdens.

### Background

Bioenergy is an abundant, clean, sustainable, renewable energy resource capable of meeting growing energy needs. Bioenergy sources include biomass from working forests and farms, waste wood and other organic material, and new sources of dedicated energy crops.

Bioenergy offers promising opportunities to help manage net greenhouse gas emissions while creating thousands of jobs across the bioenergy supply chain—which includes loggers, farmers, truckers, facility operators and others—particularly in rural areas where jobs are badly needed.

- In the case of *forest biomass*, robust markets for biomass will provide revenue for enhanced forest management, healthier forests, fewer catastrophic wildfires and their associated uncontrolled releases of carbon. Strong markets for forest products such as biomass will also enable forest landowners to keep their lands as working forests, reducing the likelihood of converting these working forests to less environmentally beneficial uses.
- In the case of *agricultural biomass*, new techniques, crops and crop strains are yielding ever greater productivity with fewer energy inputs, enhancing the ability of working farms to generate biomass on a frequent and consistent basis.
- In the case of *waste wood and other organics*, the ability to convert these materials to energy rather than burning them in the open or allowing them to decompose to methane in landfills or elsewhere will yield net GHG benefits.
- Robust bioenergy markets will also encourage the development of *new dedicated energy crops* that offer an ability to improve carbon storage in under-utilized land.

### **The Hardwood Federation Position**

EPA should exempt biogenic CO<sub>2</sub> emissions from greenhouse gas regulations and in future carbon accounting schemes as long as aggregate measures of U.S. land-based carbon stocks are stable or increasing. Monitoring land-based carbon stocks rather than emissions is consistent with international methods of carbon accounting, and with the past practices of EPA, the U.S. Department of Energy and the U.S. Department of Agriculture.

If EPA instead decides to adopt a formulaic emissions-based approach, it must be scientifically defensible, practical and affordable to implement. Approaches such as EPA's *Accounting Framework for Biogenic CO<sub>2</sub> Emissions from Stationary Sources* (September 2011) are complex and will discourage the use of biomass. Should EPA adopt such a formulaic approach, it must fully credit feedstocks, practices and processes that result in net removals of greenhouse gasses from the atmosphere.