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March 16, 2012

EPA Scientific Advisory Board (SAB) Biogenic Carbon Emissions Panel
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Submitted via email at stallworth.holly@epa.gov

Re: Becker et al. Comments on the SAF Task Force's Report *Managing Forests because Carbon Matters*

Dear EPA SAB Biogenic Carbon Emissions Panel:

Becker et al. missed our primary point from "Managing Forests because Carbon Matters", namely that "[s]ustainably managed forests can provide carbon storage and substitution benefits while delivering a range of environmental and social benefits, such as timber and biomass resources, clean water, wildlife habitat, and recreation." Instead, they have focused on a hypothetical scenario of clearcutting a forest stand and utilizing all harvested wood to generate energy by converting this wood to liquid biofuel. The scenario is seriously flawed because it uses technology that is not yet commercially viable and because it assumes that the higher valued components, such as sawlogs, would not be used to produce lumber and other long-lived products with much higher carbon efficiencies and much higher market values.

Wood is already the second most used source of renewable energy (EIA 2011) in the United States and its utilization for energy has increased at the same time that forest inventories have increased (Smith 2009). As we pointed out in our report, the data are unequivocal: the utilization of wood residues for energy is a complement to, rather a competitor of, sustainable forestry. Forest landowners and wood processers have made huge strides in capturing and utilizing residues that historically have been burned to reduce wildfire risk or left to decompose, both of which release CO_2 without generating any useful energy. As we pointed out, wood residues are increasingly used to replace fossil fuel energy sources and this is becoming the standard practice in much of the United States (Malmsheimer et al. 2011, S20, S30-34, & S36). Much of the policy confusion seems to be related to the fact that the climate benefits related to wood used for energy are tracked in the US Greenhouse Gas Inventories' energy chapter, rather than land use and forestry chapter (US EPA 2011).

Nearly all of the published articles and consultants' reports cited by Becker et al. make their calculations based on the coefficients in Smith et al. (2006) that claim unutilized sawmill residues are 12-18% of incoming sawlog volumes. However, Smith et al. (2009) measured unused residues at only 1-2% of the delivered sawlog volumes. The reports quoted by Becker et al. also seem to assume that all the wood used for energy would have grown forever if it had not been utilized for energy, an assumption that is in clear violation of the logistic laws of growth for biological systems. Spelter and Toth (2009) documented that 84 percent of the biomass going into wood pellets came from residues rather than roundwood inventories. As Zhang et al. (2010) pointed out in the review of reforestation after the 1992 Fountain Fire,

March 16, 2012

the sale of logging residues for energy helped finance the reestablishment of a forest in a region where persistent shrub cover is the typical outcome of taking no action after a fire. Becker et al.'s contrary conclusions on global inefficiencies of using wood for energy are not surprising since they use old and poorly documented estimates of product efficiencies and assume no hierarchy of uses based on economic factors.

The data are clear that US forests and the global climate have benefited from increased utilization of wood residues for energy that are collected from managed forests as well as wood discarded by consumers. Convoluted scenarios based on the inefficient utilization of wood products from hypothetical forest projects simply do not line up with current practices that are well documented in the most recent Forest and Rangeland Renewable Resources Planning Act documents.

Sincerely,

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