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March 19, 2009

George D. Gentry
 Executive Officer
 State Board of Forestry and Fire Protection,
 P.O. Box 944246, Sacramento, CA, 94244-2460

Dear Mr. Gentry,

The IFWG focus on taking a hard look at the potential in significantly increase climate benefits through the expanded use of ‘woody biomass’ will help bring California’s plans in sync with the opportunities laid out by the IPCC in their 2007 report as well as those laid out in the new US EPA Greenhouse Gas Emission inventory (February 2009). The importance of tracking carbon neutral energy from sustainable forest management (not just fuels reduction projects) was noted by most recent IPCC report (“ In the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit.” (IPCC, 2007, p 543)) , and has gained greater prominence in the updated GHG emission inventory from the US EPA (February 2009).

California’s current accounting system for the forest sector seems to include ~2 million tons of emissions from post-consumer waste as well as ~2 million tons of emissions from ‘forest slash – bioenergy’. Under IPCC accounting and current US EPA accounting, these emissions are tracked other sectors. More importantly, they represent potential sources of ‘carbon-neutral’ energy that could both help meet the 20% RPS target for 2010 as was all help address other state goals such as reducing forest fuels that exacerbated wildfire loss risks and reduce landfill deliveries. .

Table 1: Air Resources Board CO2 flux for forestry based on economic sectors

| Sinks | 1990 | 2004 | Difference | Pct of Total Difference from 1990 to 2004 |
|-------------------------------------|---------------|---------------|--------------|---|
| Forest growth | -14.245 | -14.105 | 0.140 | |
| Emissions in forests | | | | |
| Wildfires | 2.032 | 2.012 | -0.020 | |
| Land use change | 0.021 | 0.021 | 0.000 | |
| Other emissions | 1.208 | 1.196 | -0.012 | |
| Harvest slash - left | 0.156 | 0.155 | -0.001 | |
| Harvest slash - bioenergy | 1.532 | 1.517 | -0.025 | |
| Emissions from products | | | | |
| Wood waste - open decomposition | 0.255 | 0.803 | 0.548 | 27% |
| Wood waste - landfill decomposition | 2.350 | 3.740 | 1.390 | 68% |
| Net CO2 flux | -6.690 | -4.662 | 2.028 | |

Source: http://www.arb.ca.gov/cc/inventory/data/tables/net_co2_flux_2007-11-19.pdf

The new US GHG inventory (February 2009)

<http://epa.gov/climatechange/emissions/usinventoryreport.html> is currently out for public review. In accordance with IPCC practices, the US EPA inventory approach tracks 'Biomass-wood' under the 'Energy' sector but does not put it into the emission totals as it is a 'carbon neutral' emission (<http://epa.gov/climatechange/emissions/downloads09/07ES.pdf> - p 5-6). Based on IPCC and current US EPA accounting methodologies, the emissions from the 'harvest slash- bioenergy' should not be counted as an emission due to its 'carbon neutral' nature. In addition, the wood waste from product decomposition would 1) seem to be better considered in the 'Waste and Recycling' sector and 2) is a potentially major source of RPS-eligible renewable energy. Given that roughly 5x as much wood products are used in California on an annual basis are harvested in California, it is not surprising that there could high levels of emissions.

The recent publication produced by the California Biomass Collaborative, "An Assessment of Biomass Resources in California, 2007" (March 2008) CEC-PIER Contract 500-01-016, provides some useful estimates of the magnitude of additional climate benefits that could come from increased generation of RPS electricity. Table 2.3.1. "Composition and properties of MSW" (p 66) in the report estimates that there are 8.0 million bone dry tons (BDT) of paper and 3.6 million BDT of construction and debris lumber into landfills produced annually in California. They assume that half of the gross amount is technically available for collection and use. If an additional 5-6 million bone dry tons of 'biomass-wood' was collected and used in combined heat and power facilities in urban areas to generate RPS electricity, that would be equivalent to an additional 5-6 million tons of avoided CO2 emissions if natural gas was replaced. The climate benefits would be even greater if the facilities were in the Los Angeles area where coal is currently a major fuel for their electricity. The California Biomass Collaborative report done for the CEC also points out that equally large potential for more renewable energy that could be collected from forest slash and thinning.

In sum, an IFWG focus on improving the inventory methodologies could provide the opportunity to ensure that California accounting of the biomass generated electricity and related climate benefits are tracked in the same manner as the US EPA is tracking them on a national level. If there are needs for additional information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink that reads "William Stewart". The signature is fluid and cursive, with the first name "William" and the last name "Stewart" clearly legible.

Forestry Specialist
University of California, Berkeley