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May 11, 2009

Mr. John Nickerson  
California Climate Action Registry  
523 W. Sixth Street, Suite 428  
Los Angeles, CA 90014

RE: Comments on the April 2009 Forest Project Protocol version

Dear Mr. Nickerson:

I would like to provide a few comments on the revised forest project protocols about a few issues that have changed since January 2009.

As the CCAR Forestry Protocols have been revised, a number of aspects have become clearer. Some of the financial implications will remain poorly understood until there is more experience with the costs of measuring, verifying, and monitoring as well as the potential risks that can be covered by insurance, purchasers, or the forest owners. We presume that the financial aspects, and especially who bears the financial risks of future revaluations, will become clearer over time as more project level data is released. If CAR is not going to have protocols for renewable energy this year, I would also like to point out that it may be advisable to treat carbon-neutral energy the same way that landfill carbon storage is considered – accounted for but not credited under this protocol.

It would appear that the April 15, 2009 Climate Action Reserve Forest Protocols count only two of the four directly measurable categories of climate benefits from managed forests that are currently recognized in the April 2009 US EPA Greenhouse Gas Inventory , (<http://epa.gov/climatechange/emissions/usinventoryreport.html> , (U.S. Environmental Protection Agency 2009). In-forest carbon stocks and average carbon stocks in long-lived products over 100 years are included, but carbon stored in landfills and more importantly, the carbon-neutral energy produced from forest slash, sawmill residues and post-consumer waste are not credited. In the case of landfill storage in the ‘still under discussion’ forest product protocols, it appears that the climate benefits will be accounted for in both baseline and project cases, but not credited as part a forest project that would be registered and verified by CAR.

If the carbon-neutral energy benefits are not counted in both the ‘without project’ baseline and the with project’ conditions, the estimated climate benefits of a project that reduces the volume to wood chips harvested could be inflated and eventually downgraded if the 2009 US EPA

accounting rules are applied. This could be a serious problem for family forest owners who could be interested in participating in programs.

The following figure summarizes climate benefits from both the annual additions to carbon stored in products, landfills, and the above ground biomass in forests as well as an estimate of the climate benefits if all the wood chip based energy is valued as if it replaced the burning of natural gas. The take home message is that the US EPA counts all four types of benefits, so it would be logical for the Climate Action Reserve to do likewise.

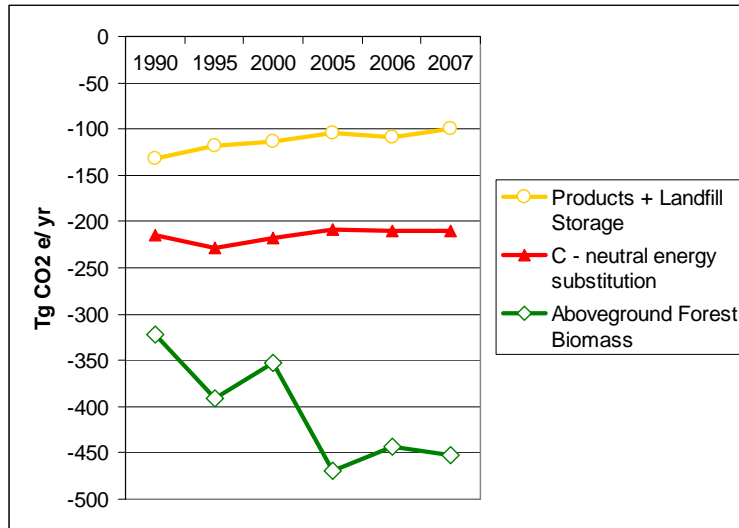


Figure 1: Summary of Three Major Sources of Forest Based Climate Benefits in US EPA Greenhousegas Inventory (April 2009)

Around 65% of those benefits occur in the industrial sector, primarily in sawmills and papermills that use wood chips as their main source of power (U.S. Environmental Protection Agency 2009). In the accounting terminology used by Smith et al. (2006) that is the basis of the DOE 1605 (b) report, four categories - in use, landfills, energy, and emitted without energy - only 'emitted without energy' would qualify as a mill inefficiency related to climate benefits. The CAR protocols correctly note that only 67% of the carbon goes into finished products but neglects to note the 17% of carbon that is used for energy within the sawmill based on historical data used in the USFS report. A survey of the remaining sawmills in California would undoubtedly show a much smaller fraction of total carbon exiting as landfill deposits or waste piles that are captured in the 'emit without energy' category. As currently stated, the protocols undercount the climate benefits related to wood production and therefore would overestimate the climate benefits of increasing forest inventories by reducing harvest volumes sent to sawmills. The problem will be greater where the forest slash from commercial thinnings and commercial harvests are collected and used in wood fired biomass plants that generate RPS-eligible energy.

In 2007, the IPCC report pointed out the advantages of sustainable forestry for producing a wide array of climate benefits (Nabuurs et al., 2007). Schlamadinger (2008) also suggests the bioenergy has many advantages over a pure forest sequestration strategy. Without an

accounting of carbon-neutral energy in both the baseline and project scenarios, it is possible that the CAR will come up with very different estimates of net climate benefits.

The proposed CAR protocols have mechanisms to deal with catastrophic loss from wildfire or massive insect or disease loss. However, if the harvested carbon goes into biomass feedstock for RPS electricity, it gets no credit under the CCAR Forest Protocol rules but will show up as a loss of carbon inventory for the project. This could be a perverse incentive for landowners to avoid undertaking actions to reduce the future probability of loss to fires, insects, and disease.

If you need any further technical information, I would be pleased to assist.

Sincerely,



Forestry Specialist  
University of California, Berkeley

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