



Union of Concerned Scientists

Citizens and Scientists for Environmental Solutions

Statement of

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before the
Science Advisory Board, US Environmental Protection Agency

concerning the
Draft Accounting Framework for Biogenic CO₂ Emissions from Stationary Sources

Hyatt Regency Hotel
Washington, DC
October 25, 2011

My name is Marchant Wentworth and I am the Deputy Legislative Director for the Climate and Energy Program of the Union of Concerned Scientists.

Thank you for the opportunity to speak at this public meeting regarding biogenic carbon emissions. The Union of Concerned Scientists (UCS) applauds the EPA for taking an important first step by recognizing that biomass energy should be regulated under the Prevention of Significant Deterioration and Title V programs.

UCS agrees with the July 2009 Science Magazine article from several prominent bioenergy experts that identifies several sources of biomass that can result in beneficial emissions reductions. However, it is also clear that some sources of biomass are unsustainable and can actually result in a net increase in carbon emissions. We agree with the EPA that using an accounting approach based on the type of feedstock and land use could adjust carbon smokestack emissions.

But UCS is concerned that EPA has created a flawed process. Instead of allowing the Scientific Advisory Board to independently investigate the science and arrive at its own conclusions, EPA has created an overly prescriptive and flawed methodology that could predetermine the outcome. We believe that this will make the Agency's job of examining a complex and highly politicized issue even more difficult.

We urge the Scientific Advisory Board to independently develop their own methodology in order to be scientifically accurate and to develop a credible rationale for regulating biogenic stationary source emissions under the Clean Air Act.

In our view, the report contains at least four major flaws. First, the recommended baseline that was originally developed to estimate payback times for emission benefits was inaccurately used as a surrogate biogenic accounting factor for smokestack carbon emissions. However, a payback time for emissions benefits is not equivalent to a biogenic accounting factor.

Second, EPA's accounting framework is so vague that it fails to reflect actual lifecycle emissions. Under the EPA framework, the level of smokestack emissions that must be offset depends on the definition of the landscape boundaries, not the carbon content of the feedstock or the rate at which the harvested forest regrows.

We believe a better approach that avoids these complications is to use a stand scale which discounts emissions based on the rate that the harvested forest grows back after being harvested for bioenergy.

Third, although the report acknowledged land use change could occur, it failed to quantify the impact of land use change. This could result in significantly underestimating emissions.

Finally, the report failed to account for leakage or the idea that bioenergy producers may be able to outcompete pulp and paper or food production subsequently leading to additional carbon emissions.

For these reasons, EPA's accounting scheme fails to achieve its stated goal of developing a framework to accurately account for biogenic emissions.

We believe that there are good sources of biomass that can and should be used for energy. Sustainably harvested crop and forest residues or energy crops that don't displace food production or trigger land use change could reduce atmospheric carbon levels. In contrast, it appears that large diameter whole trees could be considered carbon neutral under this framework. But, when used for bioenergy, using whole trees may actually increase atmospheric carbon levels for many decades.

In summary, we applaud the EPA for taking an important first step in recognizing that different types of biomass result in different levels of emissions, but recommend that the EPA revise its process to allow the Scientific Advisory Board to independently investigate the science and arrive at its own conclusions for a defensible framework.

Thank you for considering these comments.