Comments of Biotechnology Industry Organization on
EPA's draft Accounting Framework for
Biogenic CO2 Emissions from Stationary Sources

October 27, 2011

The Biotechnology Industry Organization (BIO) appreciates the opportunity to submit comments on the Environmental Protection Agency's (EPA) draft Accounting Framework for Biogenic CO2 Emissions from Stationary Sources. BIO is the world's largest biotechnology organization, with over 1,100 member companies worldwide. BIO's members are the leaders in the development and production of conventional and advanced biofuels, bioplastics, and other bioproducts, processes, biocatalysts, and next generation energy crops, such as switchgrass, miscanthus, short rotation woody crops, and algae.

BIO commends the EPA on its efforts to consider the scientific and technical issues associated with accounting for emissions of biogenic carbon dioxide (CO2) from stationary sources, and to develop a framework to account for those emissions (accounting framework).[1] One of the main policy goals of the current Administration is to work to increase U.S. energy independence and security. Recent federal policies, including the Energy Independence and Security Act of 2007 and the Food, Energy and Conservation Act of 2008 (2008 Farm Bill) are designed to facilitate the research, development and commercialization of domestically produced and sustainable sources of energy.

EPA's final accounting framework for biogenic carbon dioxide from stationary sources should be consistent with these recent federal policies and the broad energy independence and security goals of this country. BIO is concerned that the complexity of the proposed accounting framework may effectually disincentivize the use of sustainable biomass for biofuels, biopower and other forms of bioenergy. BIO encourages the EPA and its Science Advisory Board Panel to work toward streamlining and simplifying the requirements of the accounting framework to help better support industry's efforts to transition to and utilize sustainable biomass, thereby helping to increase U.S. production and use of domestically produced alternative energy.

Renewable Biomass Carbon Credit

As BIO has mentioned in previous comments to the EPA[2], combustion of fossil fuels permanently and irreversibly leads to increased concentrations of CO2 in the atmosphere.

[1] U.S. Environmental Protection Agency, *Accounting Framework for Biogenic CO2 Emissions From Stationary Sources* (Sept. 2011).
[2] BIO Comments to EPA, EPA Docket # EPA-HQ-OAR-2010-0560 (Sept. 2010).

Combustion of biofuels and other biogenic energy sources recycles CO2 emissions through renewable biomass feedstocks. If sustainably sourced, such combustion does not result in lasting increases in CO2 concentrations in the atmosphere. Other uses of biogenic carbon, such as biochemicals and bioplastics, may even sequester CO2, reducing atmospheric GHG concentrations. These inherent benefits of utilizing renewable biomass feedstocks versus traditional fossil fuel consumption should be recognized in the accounting framework. Indeed, when regulating biofuels, life-cycle based methodologies should start from the premise that all renewable biomass gets full credit for recycling carbon. Deviations from this premise should be considered only as consistent with internationally recognized methodologies for taking into account all direct life-cycle emission impacts.

Indirect Land Use Change Calculations

A recently published report by the National Academy of Sciences highlights important concerns with calculating ILUC for biofuels.[3] Generally, as the report points out, there are significant uncertainties inherent with ILUC for several reasons, including the fact that it is very difficult to make the causal links necessary to calculate ILUC – especially the ILUC of biofuels.[4] The report further explains that the range of ILUC greenhouse gas (GHG) emissions estimates for biofuels is so great because of the difficulty of separating biofuels from other drivers.[5] It suggests that in order to understand the differential, a reference scenario of a world without biofuels, potentially including GHGs from oil sands and other nonconventional sources of oil, would be needed.[6]

Indirect emission impacts, such as indirect land use change or sectoral opportunity costs should not be included in life-cycle analysis absent internationally recognized methodologies that enjoy widespread consensus in the scientific and economic communities. Indirect impacts that are appropriately taken into account in life-cycle analyses are not appropriate for inventory-based, point-source regulatory programs similar to Title V programs.

EPA Should Clarify the Proposed Methodology for Switchgrass

Currently, the EPA asserts in the methodology for switchgrass that it is not including a leakage calculation, but it shows examples of leakage calculations in the footnote on page 122 and in Table 2 on page 125. It is important that EPA make clear that it is not using a leakage calculation in its switchgrass methodology.

[3] *See* National Academy of Sciences, *Renewable Fuel Standard: Potential Economic and Environmental Effects of U.S. Biofuel Policy*, 266, "indirect cause and effect can never be attributed with high certainty" (Oct. 2011).
[4] *See id.*, 210-11.
[5] *See id.*, 211, 215.
[6] *See id.*, 215.

Questions for consideration

- BIO seeks clarification on the methodology used to identify the time scale of carbon cycles.
- What methodology is EPA using to create a baseline for each feedstock as outlined on page vii?
- Will EPA ensure consistency with other EPA approved methodologies for dealing with biogenic carbon emissions?

Thank you for your consideration of these comments.