15 April 2010

Dear Senators Kerry, Graham, and Lieberman:

The Biotechnology Industry Organization (BIO) strongly supports efforts to incentivize biotechnology applications to help reduce and mitigate greenhouse gas (GHG) emissions. Comprehensive climate change legislation has the potential to greatly accelerate deployment of these vital technologies. To that end, BIO is committed to working with you as you develop landmark climate legislation.

BIO urges, therefore, that any comprehensive climate change legislation include appropriate incentives for, and recognition of, biotechnology solutions that produce clean and sustainable fuels and products, enhance industrial energy efficiency, and protect and enhance soil carbon. To advance the growth in use of biotech tools for GHG abatement and mitigation, the following features should be included in any comprehensive climate legislation:

1. **An Inclusive and Sustainable Definition of Renewable Biomass Should be Applied**. Comprehensive climate legislation should apply an inclusive and sustainable definition of renewable biomass, such as that adopted in the 2008 Farm Bill and Waxman-Markey climate legislation (H.R. 2454). Such a definition will ensure that all sustainable feedstocks are available and continuing to protect sensitive lands without imposing restrictions that would foreclose market opportunities or introduce new federal regulation of private lands that could be sustainably utilized.

2. **Sustainably Produced Biofuels Should Not be Subjected to a Linked Fee**. Sustainably produced biomass, such as that described by the renewable biomass definitions in the 2008 Farm Bill and Waxman-Markey climate legislation (H.R. 2454), has no direct net carbon emissions due to the recycling of carbon in biomass. Any fossil-derived emissions associated with the production of such biofuels are adequately accounted for. Therefore, if a linked fee is proposed to deal with GHG emissions generated from the transport sector, this fee should not apply to biofuels derived from renewable biomass.

3. **Advanced Biofuel Development Should be Supported With Linked Fee Revenue**. A substantial portion of the revenue resulting from a linked-fee approach should be used to fund existing DOE and USDA advanced biofuels and biorefinery programs. A strong suite of federal programs exists to support the research, development and deployment of advanced biofuels and biobased products, but few are funded at levels sufficient to drive the rapid commercialization necessary to achieve needed GHG reductions.

4. **Incentives Should be Included for the Development of Biobased Products**. Biobased products, such as chemicals and plastics produced from renewable biomass rather than from fossil fuels, provide superior greenhouse gas and energy independence benefits as compared to traditional products made from petroleum feedstocks. In fact, many biobased products are carbon negative on a lifecycle basis by sequestering atmospheric carbon within the product itself. Furthermore, biotechnology is helping to reduce energy consumption and GHG emissions associated with carbon capture from electric power and industrial facilities. Comprehensive climate legislation should recognize and reward these lifecycle GHG benefits to provide the necessary market signal to drive investment in critical low-carbon biobased products.

Attainment of desired GHG reductions will require our economy to transition to cleaner and sustainable energy resources and to achieve much higher levels of energy efficiency. BIO represents advanced technology companies that are developing innovative biological-based fuels, products and processes that will enable our economy to achieve these objectives. Among the technologies being developed commercially by BIO members are:

- Advanced biofuels utilizing cellulosic biomass, algae, and other non-food feedstocks;

- Advanced biocatalysts that improve the efficacy of post-combustion carbon capture; and next generation crop varieties that improve land use efficiency and enhance soil sequestration of CO_2;

- Advanced biobased products such as bioplastics and renewable chemical intermediates; and

- Biotech manufacturing processes that sharply reduce energy use in industrial production and consumer applications.

Biotechnologies advance multiple goals consistent with reductions in greenhouse gas emissions and lessening dependence on non-renewable sources of energy:

Renewable. Biotechnology solutions use biomass, a renewable resource, and displace use of conventional fossil fuels.

Sustainable. Biotechnology solutions, such as high-yielding seeds and advanced biofuel technologies, encourage more efficient and sustainable land use, reducing pressures for deforestation and without interfering with food and fiber crops.

Energy efficient. Biotechnology solutions use substantially less energy, markedly reducing demand for conventional fossil fuels.

Energy independent. Biotechnology solutions lessen our dependence on imported foreign oil and petroleum-based products.

Carbon capture and sequestration. Advanced biocatalysts are offering highly efficient, cost-effective solutions to vastly improve the separation and capture of carbon dioxide in flue gas at industrial facilities. Biobased plastics and polymers sequester atmospheric carbon in renewable alternatives to fossil-based materials.

Next generation energy crops, such as switchgrass and Miscanthus, can increase long-term sequestration of atmospheric CO_2 in soils, and biotech crop varieties can substantially improve yields, leading to reduced deforestation.

The successful development of biotechnologies and their rapid deployment throughout the economy could advance the nation's goals of both sharply reducing greenhouse gas emissions and encouraging cleaner and more sustainable energy resources. BIO urges you to value the vital contribution that biotechnology solutions can make to achieving these goals by giving the above recommendations your strongest consideration.

Sincerely,

Brent Erickson,
Executive Vice President
Biotechnology Industry Organization