



James C. Greenwood
President & CEO

May 17, 2011

The Honorable Rodney Frelinghuysen
House Appropriations Subcommittee on
Energy And Water Development
2362B Rayburn Office Building
Washington, DC 20515

The Honorable Peter Visclosky
House Appropriations Subcommittee on
Energy And Water Development
1016 Longworth House Office Building
Washington, DC 20515

Dear Chairman Frelinghuysen and Ranking Member Visclosky:

On behalf of the Biotechnology Industry Organization (BIO), I am writing to encourage you to support advanced biofuels and biobased products programs and initiatives during consideration of the Fiscal Year (FY) 2012 Energy & Water Appropriations bill. Industrial biotechnology is the key enabling technology that is causing a dramatic paradigm shift in the production of fuels and chemicals. By building modern biorefineries and using industrial biotechnology our nation could significantly reduce its dependence on foreign sources of oil.

BIO represents more than 1,200 biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations. BIO members are involved in the research and development of innovative healthcare, agricultural, industrial and environmental biotechnology products.

The current economic environment has made commercializing the advanced biofuels and biobased products industries more difficult. Due to the general lack of available private funding, federal investment in the entire value chain of advanced biofuels and biobased products commercialization is needed to move advanced biofuels and emerging biobased materials to market, including research, development, demonstration and deployment. Areas requiring major investment include, but are not limited to: enzymes and fermentation organisms; feedstock development; collection, delivery and transportation of feedstocks and products; pre-processing technologies; alternative fuel distribution networks and vehicles; and biorefinery construction. A broad set of policies, including grants, loans, loan guarantees and tax incentives should be made available to assist a broad range of technology developers and business models.

While we recognize the current constraints on government spending, the United States' economic future as well as our energy and national security rely upon commercializing domestic industries that cannot be moved overseas. Advanced biofuels, biobased products and renewable specialty chemicals contribute significantly to the national objectives. There are currently over 25 commercial or demonstration scale biorefineries planned in 17 states.¹ The projected total job creation anticipated from optimization of our

¹ Existing and Planned U.S. Cellulosic Biofuel Biorefineries

http://maps.google.com/maps/ms?hl=en&ie=UTF8&msa=0&msid=114833920384672107621.0004573f4767c96126a4d&ll=37.020098,-95.712891&spn=19.944227,53.938504&source=embed&s=AARTsJpav9C0v8IRN_b6Rbxbt8tzDxGzw



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potential capacity to construct and operate biorefineries, based on Renewable Fuel Standard (RFS) volumes, is 123,000 jobs by 2012 and 807,000 by 2022².

Please consider and support the following requests as you move forward on the FY 2012 Energy and Water Development Appropriations Act:

DEPARTMENT OF ENERGY

Loan Guarantee Program for Advanced Biofuels: The Innovative Technology Loan Guarantee Program (Title XVII of EAct) authorized DOE to issue loan guarantees for projects that employ new or significantly improved energy technologies. In FY 2011, the program issued its first loan guarantees for advanced biofuel biorefineries.

BIO supports the President's FY 2012 request for \$200 million to fund credit subsidy costs for awards issued under the Loan Guarantee Program.

Biomass and Biorefinery Systems R&D Program: The Biomass and Biorefinery Systems Research and Development Program is the core program at the DOE to convert our nation's biomass resources into clean, renewable fuels, chemicals and industrial products. Competitively-awarded grants under this program have been critical in drastically reducing the cost of advanced biofuels production over the past five years. Full, dedicated funding of this program is essential to achieving the Department's objectives of cost-competitive advanced biofuels production by 2012, and to reducing our gasoline usage 20% by 2017. Therefore, we request the Committee fund this program at the full amount of the President's request for the program, \$340.5 million, including \$150 million to rapidly accelerate deployment of cellulosic biofuels through the Cellulosic Biofuels Reverse Auction Program.

Advanced Research Projects Agency-Energy (ARPA-E): The Advanced Research Projects Agency-Energy (ARPA-E) (P.L. 110-69 §5012) is authorized to support and incentivize transformational energy technology research projects in order to reduce energy imports, reduce energy-related greenhouse gas emissions, increase U.S. energy security and ensure that the U.S. maintains a technological lead in developing and deploying advanced energy technologies. This April, ARPA-E announced a new round of funding opportunities to include up to \$30 million for the Plants Engineered To Replace Oil (PETRO) program which aims to encourage the creation of new or modified plants that "capture more energy from sunlight and convert that energy directly into fuels." ARPA-E funding will be crucial to accelerate the development and commercialization of nascent advanced biofuels technologies. BIO supports the President's request for \$550 million to remain available until expended to carry out the goals and mission of the ARPA-E program, especially as it relates to advanced biofuels and bio-based products.

Industrial Technologies: The Industrial Technologies program is an important DOE initiative that provides funding to accelerate innovative, cost-effective and energy efficient manufacturing technologies and next generation materials, including for the industrial biotechnology sector. BIO supports the President's FY2012 request of \$320 million for this important program.

Genomics: GTL Bioenergy Research Centers – Biological and Environmental Research Programs (Office of Science): The Bioenergy Research Centers are designed to further the GTL program objectives more rapidly, more effectively, and at a reduced cost by concentrating appropriate technologies and scientific expertise. Research at the Centers will develop the science behind biofuel production that

² James Newcomb, U.S. Economic Impact of Advanced Biofuels Production: Perspectives to 2030; bio-era, BIO Economic Research Associates (2009) pg 11 <http://bio.org/ind/EconomicImpactAdvancedBiofuels.pdf>

will result in making technology that is deployable in the nation's energy economy. A major emphasis of these Centers will be making the conversion of biomass to biofuels more cost-effective. Therefore, BIO requests that the Centers be funded at their authorized level in FY 2012.

Thank you for your consideration of this request. Should you have any questions or comments, please feel free to contact Tracey LaTurner, Director of Federal Government Relations at (202) 962-6696.

Best regards,

A handwritten signature in black ink that reads "Jim Greenwood". The signature is written in a cursive style with a large, looping initial "J".

James C. Greenwood
President and CEO
Biotechnology Industry Organization