



**Testimony of the Honorable James C. Greenwood  
President and CEO, Biotechnology Industry Organization  
Subcommittee on Conservation, Energy, and Forestry  
Committee on Agriculture  
U.S. House of Representatives**

**May 18, 2012**

The Biotechnology Industry Organization (BIO) is the world's largest biotechnology organization, with more than 1,100 members worldwide. Within its broad membership, innovative industrial and agricultural biotechnology companies are developing new feedstocks and biological catalysts for production of advanced biofuels, renewable chemicals, and biobased products. Because these feedstocks, manufacturing methods, and products are based on plants and biological processes, they are more efficient, sustainable and environmentally friendly. Importantly, the development and use of biomass for fuels and chemicals in an American bio-based economy, by necessity, cannot be outsourced to other countries.

Ten years ago this week, less than a year following the attacks of September 11, 2001, President George W. Bush signed into law a Farm Bill that, for the first time, embraced the vital role American farmers and foresters can – and must – play in producing domestic energy and therefore improving national security and rural economic prosperity.

Because of bipartisan Congressional support in 2002, and again during the 2008 Farm Bill, agricultural energy programs are revitalizing rural economies, reducing farmer dependence on commodity support programs, and ushering a new generation of advanced biofuels, renewable chemicals, and biobased products to the cusp of commercialization. In short this program is working and our member companies are beginning to put steel in the ground. Please allow me to share a few examples:

(1) INEOS Bio and its joint venture partner, New Planet Energy, are preparing to open the Indian River County BioEnergy Center near Vero Beach, Florida, pictured here [point to picture], later this year. This biorefinery is a major landmark for the country – the first commercial cellulosic biorefinery.

The Biorefinery Assistance Program, which is a valuable Farm Bill energy initiative, helped INEOS Bio obtain debt financing from a farm credit agency with a long history of working with USDA lending programs. Lending, in turn, created over \$130 million in private investment for a project that will produce 8 million gallons of cellulosic ethanol and 6 megawatts of renewable electricity per year from renewable biomass, such as yard waste or municipal solid waste, and create 380 direct or indirect jobs. Raising private capital investment to build this first-of-a-kind

facility would have been nearly impossible in today's financial environment without the Biorefinery Assistance Program.

(2) ZeaChem, based in Lakewood, Colorado, is using biotechnology breakthroughs to convert fast-growing poplar trees to chemicals and cellulosic ethanol in central Oregon. Another valuable Farm Bill energy program, the Biomass Crop Assistance Program, or BCAP, helps farmers in the county surrounding the facility to grow the trees that will feed both the demonstration project and the commercial facility when it is completed in the next few years. ZeaChem's commercial biorefinery will employ 100 people and invest several hundred million dollars in local infrastructure; it will also provide employment opportunities to another 442 people.

(3) Coskata, based in Warrenville, Illinois, is leveraging the Biorefinery Assistance Program to secure private capital for a cellulosic biorefinery in Greene County, Alabama, that is expected to create as many as 1,000 new jobs.

Farm Bill energy programs, such as the Biobased Markets Program, are also fostering innovation and domestic job creation in the renewable chemicals and biobased products sector. Myriant, for example, is one BIO member investing in the United States by building a 30 million pound per year commercial succinic acid biorefinery in Lake Providence, Louisiana. The biorefinery will create 50 full time jobs and will revitalize the Port of Lake Providence. The Biobased Markets Program is expanding consumer awareness of these promising alternatives to petroleum-derived chemicals and products through consumer labeling and preferred procurement procedures.

Biotechnology is unlocking the potential of agriculture and forestry to create new opportunities like these for rural economic prosperity and energy security. Farm Bill energy programs, such as the Biorefinery Assistance Program, BCAP, and the Biobased Markets Program, in combination with complimentary federal policies like the Renewable Fuel Standard and supportive tax policies, are speeding technologies to commercial reality. We must continue investments in America's energy and agricultural future, much like the Senate Agriculture Committee acknowledged when it passed mandatory funding for these programs in the bipartisan bill that passed the committee last month on a vote of 16 to 5. I urge this committee to do its part as well and to reauthorize Farm Bill energy programs with meaningful mandatory funding.

For purposes of my written testimony, I attach hereto the following supporting documents as references to the subcommittee:

#### Appendices

Appendix A – Timeline and photo book of energy title program results

Appendix B – Energy Title “program-by-program” job creation and other statistics

Appendix C – Detailed justification of Biorefinery Assistance Program

Appendix D – USDA analysis of BCAP program reforms under final rulemaking

Appendix E – Letter of support for Farm Bill energy programs signed by over 100 organizations



INEOS Bio New Planet Energy  
Indian River Bioenergy Center  
Vero Beach, Fla. April 3, 2012



ZeaChem, Inc.



Cellulosic Biofuel Demonstration Biorefinery  
Boardman, Ore. August 2011





Myriant

Bio-Succinic Acid Commercial Biorefinery  
Lake Providence, La. April 2012

