



October 19, 2017

The Honorable Pat Roberts
Chairman
Senate Committee on
Agriculture, Nutrition and Forestry
Russell 328A Senate Office Building
Washington, DC 20510

The Honorable Debbie Stabenow
Ranking Member
Senate Committee on
Agriculture, Nutrition and Forestry
Russell 328A Senate Office Building
Washington, DC 20510

The Honorable K. Michael Conaway
Chairman
House Committee on Agriculture
1301 Longworth House Office Building
Washington, DC 20515

The Honorable Collin C. Peterson
Ranking Member
House Committee on Agriculture
1301 Longworth House Office Building
Washington, DC 20515

Dear Chairman Roberts, Chairman Conaway, Ranking Member Stabenow, and Ranking Member Peterson:

On behalf of the biotechnology industry, we are writing to encourage your support for the reauthorization of Section 9003, *the Biorefinery, Renewable Chemical, and Biobased Manufacturing Assistance Program*, which would accelerate the commercialization of standalone renewable chemical manufacturing processes, as you write the 2018 Farm Bill. Congress must fully and unconditionally allow renewable chemical standalone manufacturing facilities to receive United States Department of Agriculture (USDA) loan guarantees without requiring the production of any level of advanced biofuels and irrespective of advanced biofuels feedstocks.

Industrial biotechnology is enabling the production of a new generation of renewable chemicals and biobased products produced from biomass, which can supplement or replace traditional fossil fuel-based chemicals, expand a biorefinery's capability beyond biofuels, and facilitate the evolution of fully integrated biorefineries. Section 9003 is a key Farm Bill provision that helps grow the 21st Century biobased economy, creating high value careers and new income streams for American farmers. The program accelerates the commercialization of renewable chemicals and biobased products and will instigate the building of domestic stand-alone renewable chemical manufacturing facilities, increasing rural America's economic growth.

Biorefineries are equivalent to oil refineries; however, unlike oil refineries, these biorefineries are still at an early evolutionary stage and will still require considerable time to reach the level of operation as production scale oil refineries working at peak efficiency. While only 3 percent of oil is converted to traditional chemical products, traditional chemicals have a value of \$3.75 trillion nearly equivalent to the \$3.85 trillion in transportation fuels that come from oil. This data demonstrates that traditional chemicals offer significantly higher value per unit volume relative to fuels. Renewable chemicals can also generate a high value relative to transportation fuels, which will provide economic stability for the construction of the entire biorefinery. Therefore, these renewable chemical standalone manufacturing facilities need to be constructed first and operated with



innovative technologies to build the economic value to support advanced biofuels, which is a component in the biorefinery.

Robert Carlson, writing in *Nature Biotechnology* in 2016, estimates that U.S industrial biotechnology industry revenues has reached \$105 billion at an annual growth rate of 12 percent, and renewable chemicals contributed \$66 billion. For more than a decade, renewable chemicals have been recognized as having environmental, economic, and performance advantages when compared to fossil fuel-based chemicals. Biotech synthetic pathways to renewable chemical production are inherently consistent with the principles of green chemistry. A report in 2016 entitled *Federal Activities Report on the Bioeconomy*, released by the Biomass Research and Development Board – co-chaired by senior officials from the United States Department of Energy and USDA and composed of interagency senior federal agency decision makers and the White House Office of Science and Technology Policy – estimates that the U.S. share of the biobased economy is approximately \$50 billion, with more than a quarter million U.S. workers employed in the industry.

Several renewable chemical startups and mature chemical companies are waiting to build their first-of-a-kind manufacturing facilities in the United States from homegrown biomass and technologies and will do so with the proper federal policy support. These renewable chemical manufacturing facilities will pay strong dividends in the future of U.S. chemical manufacturing and, in turn, they will improve the trade balance, maintain U.S. leadership in renewable energy and manufacturing, create thousands of high quality U.S. jobs, provide value-added crop for products, and reduce dependence on foreign oil.

In addition to Section 9003, all the core Farm Bill energy title programs, Section 9002 – Biobased Markets Program, Section 9004 – Repowering Assistance, Section 9005 – Bioenergy Program for Advanced Biofuels, Section 9007 – Rural Energy for America Program (REAP), Section 9008 – Biomass Research and Development, and Section 9011 – Biomass Crop Assistance Program (BCAP), contribute toward the creation of robust biorefineries and the biobased economy. These programs leverage technology development, market opportunity, infrastructure, and enhance our national security. The important role of these programs is outlined in the 2017 Agriculture Energy Coalition’s white paper titled *Rural America’s Role in Expanding Energy Independence, Dominance, Innovation and Jobs: Recommendations for the New Farm Bill*.

We respectfully request that the Committee strongly consider these recommendations and work to ensure standalone renewable chemical advanced manufacturing facilities technologies are not restricted in reaching full commercial scale, nor impeded by the need to produce any level of advanced biofuels. Moreover, we urge your Committees to provide stable mandatory funding for all the core energy title programs that will continue the development of biorefineries, positively impacting the biobased economy and creating thousands of rural jobs. We look forward to working with you through the Farm Bill writing process.

Sincerely,





ALGENOL



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BFSI



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life sciences association





