**“A path toward the broader use of Biofuels: Enhancing the federal commitment to research and development to meet the growing need”**

**Testimony of**
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Good morning, Chairman Lampson and Members of the Subcommittee. My name is John Berger and I am president and CEO of Standard Renewable Energy, ("Standard"). We are a global leader in renewable energy, serving commercial and residential customers with clean, renewable energy and energy efficiency technologies. Standard provides one-stop shopping for solar, wind, biofuels, hydrogen fuel cells and energy conservation devices on a nationwide scale. We are headquartered in Houston, Texas.

BioSelect Fuels is a division of Standard Renewable Energy and is a developer and operator of biodiesel production facilities, offering the highest quality biodiesel fuel to the global marketplace. The initial BioSelect plant is located on Galveston Island, Texas, and began operations in May 2007. BioSelect Galveston currently produces 20M gallons annually; however expansion is already underway to take the site to over 190M gallons by the first quarter of 2009.

Mr. Chairman, I am pleased to be here to discuss the future of our nation's biodiesel industry and how the "Biofuels Research and Development Enhancement Act" can help our country achieve its energy security goals, protect our environment and foster economic development through the expansion of renewable fuels.

**Background**

America relies on imports for 60 percent of its petroleum needs. Rising crude oil prices and political uncertainties in strategically sensitive regions of the world are focusing the public's attention on the need to enhance our nation's energy security. U.S. produced biodiesel expands domestic refining capacity. Every gallon of domestic, renewable biodiesel reduces the need for imported oil because it replaces diesel fuel refined from imported crude.

The biodiesel industry is made up of small businesses and has shown steady growth over the last 15 years. In 2006, the industry produced 250 million gallons of biodiesel. Today, there are 142 plants in operation with more than 50 new plants under construction or expansion, which will add an estimated new capacity of 1.7 billion gallons. The industry is on track to create at least 40,000 new jobs and add $24 billion to the U.S. economy.

Biodiesel is and will continue to be a strong partner in the growth of the biofuels industry and can be a substantial tool in the nation's overall move toward energy security as it:

- Directly replaces crude oil that is imported to produce diesel fuel;
- Opens up much needed U.S. "refining" capacity;
- Decreases greenhouse gas emissions;
- Contributes to cleaner burning diesel fuel; and
- Creates jobs and stimulates rural and urban economies;

Standard applauds the Subcommittee for its comprehensive approach to policies that will lead to increased education and exchange of information on research, development and demonstration of technologies related to the production of biofuels, the development of biorefineries and demonstrations of those technologies. The Subcommittee's Discussion Draft emphasizes the importance of active research, communication and development of a solid infrastructure toward building a strong biodiesel industry.

Our industry is witnessing a period of dramatic change in how Americans create and consume energy. The overlapping public concerns of national security, increased domestic energy

independence, global climate change and rural economic development have led to the need to dramatically increase domestic production of renewable fuels

BioSelect believes that it is imperative for the biodiesel industry to secure a targeted fuel standard that sets an ambitious, yet achievable, goal for the future production of biodiesel in this country. Standards should be designed to support existing biodiesel capacity and be progressive to encourage continued capacity growth. A biodiesel standard will aid to ensure short-term growth and long-term development of a sustainable domestic biodiesel market .We are confident that a federal Biodiesel Fuel Standard (BFS) that seeks to displace 5 percent of current domestic diesel consumption within the decade should be a principal policy objective for current legislative action. Such a goal will stimulate the demand for soybean oil and other oils, will help spur the development of new domestically produced feedstocks, will promote the development of production facilities in all regions of the country, and will encourage automakers to increase production of diesel-powered passenger cars for the U.S. market.

**Biofuel feedstock research**

BioSelect Fuels provides safe and superior renewable energy to consumers in a clean and efficient manner. We are led by a seasoned team and supported by strong partnerships with companies such as Chevron Corporation, and highly regarded academic institutions like Texas A&M University. The future of biofuels however, and the means by which to create a viable fuel source, is highly dependent on the continuous innovation, research and development in both private and public sectors.

Support for longer term clean energy goals will come by focusing on and funding a portfolio of research, development, and commercialization activities. Standard would like to see Congress focus on solving technical problems to overcome barriers to biofuels growth, including infrastructure, through forging strategic cost-shared partnerships with private industry, collaboration among relevant federal agencies, and working with the different regions of our country to bring the promise of biofuels to fruition. In addition, we believe that next generation feedstocks and production technologies should receive particular attention as they are the foundation of the future of the biofuel industry.

With feedstocks accounting for approximately 60 to 80% of the entire cost to produce biodiesel, BioSelect and our allied entities are focused on moving away from traditional edible oil feedstocks and existing arable land currently used for the cultivation of food crops like corn and soybeans. Together with the Engineering and Agricultural expertise of our partners at Texas A&M, we are actively pursuing the development of biofuel specific crops and lesser known seeds that can be grown in arid lands that are currently idle in regions such as West Texas. Specific areas of research that would benefit our industry include harvesting techniques for new feedstocks where manual labor costs are problematic and on longer term feedstock development projects such as oil-rich strains of algae which have long been recognized as a potentially abundant source of feedstock for biodiesel production.

Several barriers exist before realizing biofuels from diverse feedstocks, including but not limited to; access to more exotic seed crops, laboratory and equipment availability, open land and amenable farmers, length of time to conduct research and development and overall cost of implementation.

**Information and data sharing**

Although the public market is becoming more aware of biodiesel as a fuel, additional education is still necessary for business leaders to invest capital and advocate for future biodiesel production facilities and distribution infrastructure. A great deal of ambiguity exists in the renewable fuel marketplace today due to the fact that there is very little concrete factual data assigned to specific individual fuels; i.e. ethanol, biodiesel and renewable diesel.

Although we as an industry are diligently working towards uniform testing and standardized fuel criteria, Federal monitoring could help avoid inconsistencies. To date, uncertainty in the industry, negatively impacted biodiesel sales and the integration of biodiesel fuel strategies in public and private fleets, and inhibited progress towards meeting national renewable fuel goals.

The EPA is currently developing a complete emissions profile for biodiesel. As leaders in the renewable energy sector however, we ask that the Federal Government do more with the creation of a centralized database benchmarking and comparing all renewable fuels independently to a baseline conventional diesel fuel. We as an industry will benefit tremendously from factual data which compares biodiesel to conventional diesel. In addition, we believe it would be useful to have a scientific and factual description of renewable diesel and a comparison of biodiesel to renewable diesel and a comparison of renewable diesel to conventional diesel.

Federal coordination and cataloging of information from federal research on biofuels development processes as well as other aspects of the industry and related industries will be essential to the longer term goal of creating mainstream renewable fuel. Demystifying the fuels themselves will not only provide the general public with more information and confidence about utilizing renewables but also assist both Federal and State bodies in defining credit structures, future industry incentives, and other programs to promote renewable fuels.

**Research in Infrastructure**

Standard Renewable Energy's mission is to make it easy to use renewable energy, and for BioSelect, infrastructure is essential. We have located our first facility in the refining center of the United States because we believe in the logistical and distribution advantages that come along with our regional location. Our vision for BioSelect fuel is that of a low concentration blend of quality biodiesel into conventional fuel to be distributed on a nationwide scale. In support of this goal, Standard would like to see a number of infrastructure activities pursued on a Federal level, most likely through coordinated work from government agencies such as Department of Energy, the Department of Transportation, the Federal Regulatory Energy Commission, and the Environmental Protection Agency. Our primary focus at this time is the continued research and development of low blend biodiesel pipeline batch movements. Successful pipeline analysis testing has already been done, on several different pipelines, on several different occasions, yet we as an industry ought to be more involved in the process. BioSelect is eager to assist with this exciting project and offer assistance to the Committee and relevant Federal agencies to advance this type of necessary testing. Additional specific research needs currently facing the industry include but are not limited to: feasibility studies on tankage, pipe and pump options, cold flow properties, water issues, stability testing of fuel samples and advanced vehicle technologies. In addition, we believe there is a clear need for an overall general economic study of capital requirements to bring biodiesel to local retail pumps nationwide.

The goal of this extensive research is to produce the data necessary to gain the acceptance and approval from environmental agencies, engine manufacturers, public and private sectors and most importantly develop consumer confidence from the refinery to the retail level where you and I buy our fuel each day.

**Standardization**

Standardization of all biofuels, is imperative to ensure fungibility into conventional fuel pool and towards longer term acceptance as mainstream fuel. Biodiesel producers and marketers are primarily concerned with two American Society for Testing and Materials Standards (ASTM) International standards, ASTM D 975, which covers diesel fuels and may soon include biodiesel blends up to B5, and ASTM D 6751, which sets the minimum standards for B100.

Implementation of these standards and continued growth of the industry requires top engineers, the same individuals that we must compete against high paying large Oil and Gas companies to recruit. In our Galveston facility we have been fortunate to find strong talent that were instrumental in taking us from construction to start-up but we are already finding more difficulty in identifying qualified workers for our expansion. BioSelect views market stability, and targeted education and outreach about biodiesel as keys to attracting good talent.

As the biodiesel industry develops, the demand for highly skilled trained labor is on the rise. Industry professionals have observed that safety concerns have been raised when smaller start-up plants have shortcuts out of ignorance or to cut time and cost. In October 2006, the National Renewable Energy Laboratory (NREL) released a report showing that out of 32 biodiesel samples collected nationally, half failed to meet ASTM quality requirements. BioSelect believes that each and every U.S. biodiesel manufacturer is responsible for knowing what can go wrong in their manufacturing processes and how that can lead to impurities in the finished product. As a large-scale producer however, we at BioSelect know that compliance costs money, and we have focused substantial time, energy and a great deal of capital on the implementation of first-class safety and quality assurance on all aspects of our facility, from the people all the way through the process. In addition to the training of operators and other industry personnel, BioSelect enforces compliance with our own codes and have an internal team that act as a forum for exchanging safety suggestions, violations, remediation and investigative reports, as exists in the chemical industry. With over 300 years of experience in the petrochemical and refining industries, BioSelect knows that a unified approach to train workers while also adopting best safety practices is nothing more than being on par with similar industries. This process has prepared both our facility and operators to meet the industry standards set forth by ASTM. BioSelect is currently in the process of obtaining our BQ9000 certification from the National Biodiesel Accreditation Commission (NBAC.)

According to the National Biodiesel Board, there are currently 17 accredited biodiesel producers and six certified biodiesel marketers, which account for 40 percent of the biodiesel production capacity in the United States. In addition, half of the states in the country have implemented the ASTM D-6751 specification as part of their fuel quality regulations, and an additional 13 states are either planning to accept the specification or studying it. Ten states now proactively test biodiesel or biodiesel-blended fuels.

**Conclusion**

Thank you for the opportunity to speak with you today and for your continued commitment to expand the use of renewable fuels. Promoting innovation and proactive leadership to create new energy sources, like the added domestic refining capacity at BioSelect Galveston, is critical to meet the growing energy demand of the future and in securing our nation’s energy security. Standard Renewable Energy looks forward to working with you to further develop this important legislation.