



**STATEMENT OF THE
AMERICAN SOYBEAN ASSOCIATION**

To the

**HOUSE AGRICULTURE SUBCOMMITTEE ON
CONSERVATION, CREDIT, ENERGY, AND RESEARCH**

On

**THE IMPACT OF THE INDIRECT LAND USE AND RENEWABLE BIOMASS
PROVISIONS IN THE RENEWABLE FUEL STANDARD**

May 6, 2009

The American Soybean Association (ASA) thanks the Subcommittee for holding this hearing to examine the impact of indirect land use and renewable biomass provisions in the expanded Renewable Fuel Standard (RFS-2).

Importance of Biodiesel

ASA has a great interest in the development and implementation of the RFS-2, especially for biodiesel. Biodiesel is the cleanest burning biofuel currently used in commercial markets. Biodiesel is a renewable and sustainable energy source that can play a significant role in our national efforts to increase our energy security and improve our environmental footprint. Biodiesel has also provided a significant market opportunity for U.S. soybean farmers and jobs and economic development for rural communities. These facts make it difficult to understand why soy biodiesel would be excluded from the RFS-2.

Biodiesel production in the United States has predominantly utilized soybean oil as a feedstock. While other feedstocks are becoming more viable, soybean oil remains the primary feedstock of choice for U.S. biodiesel production. As a result, biodiesel has provided a significant market opportunity for U.S. soybean producers by increasing demand for soyoil. Soybeans are produced primarily for the soy meal that is used in the feed and food market. Historically, there have been surplus stocks of soyoil that have resulted in depressed prices for soybeans and restricted markets for soybean farmers.

The biodiesel industry is creating valuable green jobs and making a positive contribution to the economy. In 2008 alone, the U.S. biodiesel industry supported over 51,000 jobs, added over \$4 billion to the nation's Gross Domestic Product (GDP) and generated over \$866 million in tax revenue for federal, state and local governments.

Despite the many benefits it provides, the U.S. biodiesel industry is facing severe economic hardship today. The difficulty accessing operating capital as a result of the current credit crisis, the volatility in commodity markets, reduced demand, and inability to compete in the European marketplace are making it difficult for producers to sell their fuel. In addition, uncertainty over federal policy, such as the extension of the biodiesel tax credit and the implementation of the RFS-2, is undermining investor confidence in the industry.

The National Biodiesel Board (NBB) estimates that absent any change in federal policy, U.S. biodiesel production will likely fall to 300 million gallons in 2009, which would cost the U.S. economy more than 29,000 jobs. If prolonged, this downturn will lead to a severe retraction in U.S. biodiesel production capacity.

Renewable Fuel Standard (RFS-2)

ASA believes that an expanded RFS-2 that includes a specific minimum use requirement for biomass-based diesel is a necessary and beneficial program. The RFS-2 is necessary to move the country toward our goals of energy independence and clean, renewable energy production. As the current market demonstrates, the production and use of biofuels is not economically viable when petroleum prices are low. Coupled with the extension of the biodiesel tax credit, the RFS-2 could provide some much-needed market certainty for U.S. biodiesel production.

Under the Energy Independence & Security Act (EISA) of 2007, to be eligible for the new RFS-2, biodiesel must meet a 50% greenhouse gas (GHG) reduction relative to petroleum diesel. When calculating the life cycle GHG impact of biofuels, the statute directs EPA to consider direct and indirect emissions, including indirect land use, of all stages of the fuel and feedstock production. As a point of reference, under the existing GREET model used by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy, biodiesel achieves a 78% GHG reduction relative to petroleum diesel. The primary area of concern and disagreement has emerged over the international indirect land use assumptions that EPA has proposed to use in conducting their updated life-cycle GHG analysis.

Indirect Land Use

Indirect Land Use Change (ILUC) refers to the GHG emissions caused by land converted to crop production globally. While we have not had time to fully assess the EPA Proposed Rule on RFS-2 implementation, our initial review suggests that it is significantly flawed, and it does unnecessary harm to the competitive position of the U.S. soy biodiesel industry. EPA has included, in the proposed rule, numbers on the life-cycle greenhouse gas emissions of soy oil biodiesel that are derived from faulty assumptions, flawed analysis, and misplaced penalties.

Flaws in EPA Assumptions

We see numerous potential flaws in the approach EPA is using for indirect land use changes in its proposed rule. Further, there are numerous factors that we believe refute the possibility that significant international indirect land use change would result from the relatively small increase in U.S. biodiesel production called for under the RFS-2:

1. The method used by EPA to measure indirect land use is new and untested. There are currently no accepted scientific methods for measuring indirect land use change. The International Standards Organization (ISO) has not published standards for analyzing indirect effects, and there is no accepted methodology.

2. Land use change has been going on around the world for many years, long before biodiesel was produced in the U.S. The EPA analysis uses land converted to cropland from 2001-2004 and extrapolates that into the future. Since there was very little U.S. soy biodiesel produced from 2001-2004, it is unclear how EPA justifies attributing future land conversion to soy biodiesel. Other market factors (urbanization, world population growth and dietary changes, timber and hardwood prices, etc.) impact and drive land use change decisions. In a recent interview Paulo Adario, director of Greenpeace's Amazon deforestation campaign said, "Biodiesel demand for soy oil is not seen as a significant driver of Amazon deforestation. Most of the soya grown in Brazil, including what is grown on illegal plantations, is for animal and human consumption; and right now, the Brazilian government is investing in other feedstocks for the development of its biofuels program."¹ Clearly soy biodiesel is not driving land use change and any land use change that is occurring certainly cannot be solely attributed to U.S. biofuels.
3. Other market factors, including input and transportation costs, determine to what use farmers will put their land.
4. As an example, if Brazilian land use change is a key factor, then past and recent trends in Brazilian soy planted area should be a telling data point. In fact, Brazilian soy area increased most significantly in years prior to the existence of U.S. biodiesel production. In the last five years, when U.S. biodiesel production has increased exponentially, Brazilian soy area has remained relatively flat.
5. Yield increases by U.S. soybean farmers will play a significant role in meeting biofuel feedstock demand by producing more soybeans on the same amount of land. Historical data tell us that productivity gains and yield increases occur for U.S. agriculture. Over the 25 year period from 1981-2006, U.S. soybean farmers increased their yield from 30 bushels per acre to 43 bushels per acre. This equates to an average yield increase of one-half bushel per acre per year. This represents the minimum productivity increase that is likely to occur. With technologies currently in development, the yield increases going forward are expected to surpass those we have achieved over the past 25 years. U.S. seed technology companies are projecting that current soybean yields will double by 2030.
6. An increase of 300 million gallons of biodiesel (from 700 million to 1.0 billion gallons) under the RFS-2 should not result in the substantial land use "penalty" being ascribed to U.S. soy biodiesel by EPA. From a starting point of 78% GHG reductions under the GREET model, any reasonable land use "penalty" that might be justifiably attributed to U.S. soy biodiesel should certainly not result in pushing soy biodiesel below the 50% GHG reduction threshold required under the statute.
7. Other measures are being implemented to address land use change for certain sensitive areas, such as the Amazon region in Brazil. An example is the Soy Moratorium, a pact signed by multinational soybean trading companies, Non-Governmental Organizations (such as Greenpeace and The Nature Conservancy), and the Brazilian Ministry of Environment which restricts the marketing or purchasing of soybeans from any newly deforested areas in the Amazon. The trading companies that signed onto the moratorium account for 95% of the soybeans marketed from the primary soybean growing region of Brazil.

¹ Nicholas Zeman, "Greenpeace: Biodiesel Not Seen as Significant Driver in Amazon Deforestation" *Biodiesel Magazine*, May 4, 2009.

8. We question whether the indirect emissions of diesel (the baseline against which biodiesel is being measured) are adequately factored into the baseline.
9. The statute does not require EPA to include *international* indirect emissions in their life-cycle analysis for biofuels. There appears to be a far greater degree of confidence among the scientific community in the ability to measure ILUC that may or may not occur in the United States as a result of biofuel demand. Extending the ILUC analysis globally creates far more uncertainty. Since the EISA statute only requires that EPA measure, “...the aggregate quantity of greenhouse gas emissions (including direct emissions and significant indirect emissions such as significant emissions from land use changes), as determined by the Administrator,” we do not believe that an EPA life-cycle analysis that attempts to measure *international* ILUC would be necessary or appropriate at this time.

Intent of Congress

It was not the intent of Congress for soy biodiesel to be excluded from the RFS-2. If soy biodiesel is excluded, the biomass-based diesel schedule under RFS-2 cannot be achieved. There are simply not enough of other biodiesel feedstocks to produce the amount of biodiesel called for in the RFS-2. This is a clear indication that Congress did not intend to exclude soy biodiesel from the RFS-2. The 50% GHG level that biodiesel must meet to qualify for the RFS-2 is arbitrary. The GHG thresholds were established at different levels for different fuels and existing ethanol plants were exempted from the GHG threshold altogether.

Conclusion

ASA has a great interest in the development and implementation of the RFS-2, especially for biodiesel. Soy biodiesel is one of the cleanest burning biofuels in commercial existence today. It is a renewable and sustainable energy source that can play a significant role in our national efforts to increase our energy security and improve our environmental footprint. Biodiesel has also provided a significant market opportunity for U.S. soybean farmers and jobs and economic development for rural communities.

The approach EPA is using for their proposed rule on RFS-2 implementation appears to be significantly flawed and would do unnecessary harm to the competitive position of the U.S. soy biodiesel industry.

Again, ASA thanks the subcommittee for holding this hearing to examine the impact of indirect land use and renewable biomass provisions in the RFS.

Attached:

Graph: U.S. Biodiesel Production & Brazilian Soy Area
USDA FAS – Brazil Oilseeds and Products Update – July 2008