

**United States House of Representatives  
Small Business Committee's  
Subcommittee on Rural and Urban Entrepreneurship**

**Hearing on  
"Second Generation Biofuels: The  
New Frontier for Small Businesses."**

**Testimony of Jeff Trucksess  
EVP, Green Earth Fuels, LLC**

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Mr. Chairman, members of the committee, I would like to thank you for this opportunity to speak with you today. I am Jeff Trucksess, Executive Vice President of Green Earth Fuels. Green Earth is a Houston-based company dedicated to lessening our country's dependence on foreign oil and increasing the diversity of America's fuel sources by the production, distribution, and use of biodiesel. We operate a state-of-the-art biodiesel production and storage facility in the port of Houston, and have plans to expand our operations nationwide. We are also making significant investments in second generation crop development.

With your support, I am proud to report that the production of biodiesel in America not only will increase our nation's energy independence, but also strengthen our nation by adding to the economic security of our country's rural communities and small businesses.

Allow me a moment to explain a few facts about biodiesel. It is a renewable, clean-burning, alternative fuel derived from select plant oils and animal fats. I believe it to be the fastest growing and most efficient alternative fuel in America. Biodiesel typically is blended with petroleum diesel for use in diesel vehicles, but it is important to note that the lower biodiesel blends most commonly used today require no engine modifications for our cars, trucks or diesel-vehicle fleets. Biodiesel has demonstrated significant environmental and economic benefits for consumers. It is biodegradable and nontoxic. Biodiesel reduces greenhouse gas emissions and other harmful organic compounds found in traditional fuel, and, equally important, biodiesel has the highest life-cycle energy balance of any commercially available fuel.

There are a myriad of facts on the benefits of biodiesel that I might provide the Committee, but I am here today to address the importance of biodiesel and second generation biofuels to small business and small communities in America.

Currently, soybeans are the major source of biodiesel in the U.S. But this will not always be the case. Biodiesel can be generated from fats, vegetable oils, recycled cooking grease and dedicated non-food energy crops. This is important. Increasing

production of biodiesel does not necessarily impact food industries as is often errantly reported. Research shows that new crops like camelina, jatropha and algae can play a significant role in fueling our nation. And these are crops well suited for rural communities and small businesses with dry land currently out of production. These are crops that have low environmental impact and require little water, but offer potentially commercially significant yields in parts of the United States such as Washington, Oregon, Montana, Colorado, North Dakota and Minnesota. It is also appropriate as a winter crop in warmer climates such as New Mexico and Texas. For example, camelina can yield over 100 gallons per acre with less than 16 inches of rain per year. That is roughly double the yield of most current crops.

While most of the research on camelina has been done in the Northern Great Plains states, early research also suggests that certain varieties of camelina can be grown across the country. In states such as Georgia, camelina, or a similar crop could be an excellent rotation crop for Cotton, and can add to the economic stability of small communities and businesses throughout the South.

Increasing the use of biodiesel will result in increasing the potential for small businesses throughout America, particularly small rural businesses, to become major players in the production of biodiesel feedstocks.

I recently spoke at a biodiesel conference in Albuquerque, New Mexico that included scientists from our national laboratories, as well as the foremost agricultural experts in our field. The conference made clear, as does an abundance of research, that the use of alternative feedstock sources such as algae, cellulosic materials, or biomass, and other non-food feedstocks – such as camelina and jatropha – in the production of biodiesel demonstrate exceptional promise for long-term sustainability. This means that a dry-land farmer in Washington can rotate in camelina, or a cattleman in New Mexico can plant jatropha in his grazing land, and increase the profitability of his small business. It means that the cotton farmer in Georgia can rotate camelina and make a better living. Biodiesel translates directly into a more stable economy for the small businessman.

I have no doubt that non-food crops such as camelina, algae and jatropha, for example, can produce biodiesel and preserve America's and the world's food supply. Camelina can prove to be a high-quality, competitively priced energy crop; while boosting small businesses and farm revenues. It can benefit both the environment and national energy security. Farmers can rotate camelina on land as a rotation for cereal crops such as wheat, rather than periodically leaving such acres fallow, or on marginal lands where traditional crops are too input-intensive or uneconomic to grow. The meal produced from crushing the camelina to create the oil can even be used in the production of high omega-3 enriched feedstock for livestock.

The beauty of camelina, and similar non-food crops such as jatropha, is that they are here today and don't require new technology breakthroughs. Indeed, they only need your commitment to see them succeed.

I would be remiss if I did not remind the committee that Biodiesel significantly reduces greenhouse gas emissions. A staggering amount of data demonstrates the carbon benefits of biodiesel. For every unit of energy it takes to make domestic biodiesel, 3.5 units are gained, giving biodiesel the highest energy balance of any commercial liquid fuel. Many crops for biodiesel have even higher energy balance ratios.

Biodiesel also has a 78 percent life-cycle carbon dioxide reduction, according to the U.S. Department of Agriculture and Department of Energy. This takes into account everything from planting the soybeans to delivering biodiesel to the pump. Additionally, the use of biodiesel substantially reduces unburned hydrocarbons, carbon monoxide, and particulate matter.

In 2007, biodiesel's contribution to reducing greenhouse gas emissions equaled the removal of 700,000 passenger vehicles from America's roadways. Biodiesel helps extend domestic energy supplies, minimizes diesel fleet conversion costs, and reduces America's dependence on foreign oil.

Another lesser known fact about biodiesel is its potential to be integrated into the oil and gas infrastructure system. Test runs have demonstrated that biodiesel can be shipped through the oil and gas pipelines; Europe is already running biodiesel through certain pipelines. While there remain a few regulatory and technical hurdles to overcome, the U.S. has the very real possibility of shipping biodiesel blends in its pipelines within a year. This form of distribution will reduce costs and dramatically reduce the number of trucks, trains, and ultimately energy and emissions required to distribute the fuel.

It is a fact that biodiesel fuel production can be environmentally and economically advantageous. Feedstock sustainability for biodiesel production is abundant and viable; biodiesel has the potential to reduce carbon and other emissions; add good-paying, green jobs to the small business economy; decrease dependence on foreign oil; and increase the availability of protein for humans and animals to eat, resulting in a positive energy balance that is good not only for America, but for the future of our planet.

Thank you for this opportunity to speak with you today. I look forward to your questions.