



BIODIESEL
Fueling Sustainability

A Breath Of Fresher Air

Biodiesel is a renewable, cleaner-burning diesel fuel replacement for any diesel engine.

Environmental Benefits:

- Reduces lifecycle greenhouse gases by 86%
- Lowers particulate matter by 47%, reduces smog and makes our air healthier to breathe
- Reduces hydrocarbon emissions by 67%
- For every unit of fossil energy it takes to produce biodiesel, 3.5 units of renewable energy are returned, the best of any U.S. fuel



Easing Oil Consumption, Boosting the Economy

- The U.S. biodiesel industry supports more than 60,000 green jobs
- Generates \$11 billion for the U.S. economy rather than spending on foreign oil
- Biodiesel turns free solar energy and atmospheric CO2 into fuel that displaces imports and adds real wealth to the economy



Water Conservation

- Biodiesel is nontoxic and biodegradable
- Biodiesel production reduces wastewater by 79% and hazardous waste by 96%
- One gallon of biodiesel stores enough solar energy to purify 2,000 gallons of seawater to drinking water standards

Biodiesel is the most diverse fuel on the planet, produced from agricultural by-products and co-products such as:

- Soybean, canola, and other plant oils
- Rendered fats
- Used cooking oil and other recycled grease



Food and Fuel

Biodiesel enhances the world's protein supply

Soybeans are the most efficient way to grow protein for the food supply. However, when we grow protein to feed the world, we get more soybean oil than we can possibly consume as food or livestock feed.



- Biodiesel decreases soy protein meal prices by \$20-\$40 per ton
- Saved livestock producers \$5 billion in reduced soy meal cost
- Reduces food costs for the consumer

“Biodiesel has several positive impacts on the food supply. For instance, biodiesel uses only the oil portion of the soybean, leaving the protein intact to nourish livestock and people. By increasing yield without increasing crop acres, we are growing more fuel and food from the same land.”

– Jim Duffield, USDA Agricultural Economist



Land Stewardship

The U.S. Department of Agriculture data shows overall U.S. acreage for crop production has not increased since 1959 and total farm acreage has decreased by 23 million acres since 2007.

“The efficiency of American agriculture shouldn’t be underestimated when we ask agricultural systems to provide both food and fuel. We’ve seen a 400-fold increase in soybean yield per acre during the last century. We’ve accomplished this with lower inputs of water and fertilizer per bushel, even as cropland has declined.”

- *Dr. Stephen Kaffka, University of California – Davis Department of Plant Sciences*

The federal Renewable Fuels Standard ensures sustainable resources are used in meeting the renewable fuel usage goals in the U.S. The Environmental Protection Agency only approves renewable fuels for the program if:

- Greenhouse gas emissions are significantly reduced compared to petroleum
- It is certified that land was not converted to produce the renewable fuel



Biodiesel is the first commercially available fuel to meet the EPA’s definition of an advanced biofuel. These requirements protect forests and native grasslands and ensure renewable fuels have multiple environmental benefits over fossil fuels.



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