



Biodiesel and Energy Security

The United States consumes approximately 20 million barrels of oil a day, more than half of which is imported. The U.S. Department of Energy projects that by 2025, the U.S. will import close to 68 percent of all petroleum consumed. Even with the nation on the brink of war with Iraq, the U.S. continues its dangerous dependence on foreign sources of oil, particularly from the Middle East.

There is an alternative: a way to decrease this country's dangerous dependence on foreign oil while boosting the U.S. economy and protecting the environment. American fuels such as biodiesel are gaining momentum in the U.S. Government and private fleets are increasingly using these fuels because they are kinder to the environment than petroleum-based diesel. But, beyond the environmental and health benefits, biodiesel and ethanol can also help to free the U.S. from the hold of imported oil and stretch existing petroleum supplies.

Consider these energy statistics from the U.S. Energy Information Administration:

- The United States is the world's largest energy producer, consumer, and net importer. It also ranks twelfth worldwide in reserves of oil, sixth in natural gas, and first in coal.
- The U.S. produced 8.1 million barrels per day, of which 5.8 million barrels per day was crude oil between January and September 2002.
- During the same period, the U.S. consumed 19.6 million barrels per day.
- Net oil imports for the period totaled 10.3 million barrels per day.
- The amount of fuel consumed in family vehicles in the United States each year is enough to cover a regulation-size football field to a depth of about 40 miles.
- Crude oil imports from the Persian Gulf totaled 2.3 million barrels per day (around 26% of total U.S. crude oil imports) between January and August 2002.
- The top sources of crude oil imports for that period were: Saudi Arabia (1.49 million barrels per day); Mexico (1.46 million barrels per day); Canada (1.37 million barrels per day); Venezuela (1.14 million barrels per day).
- The United States consumed 6.2 quadrillion Btu of renewable energy in 2001, about 6% of total domestic gross energy demand, with the largest component used for electricity production. Hydropower made up around 39% of total U.S. renewable consumption in 2001, with biofuels (including

wood and waste), solar, wind, and geothermal making up most of the remainder.

On March 12, the International Energy Agency said the Organization of Petroleum Exporting Countries (OPEC) alone would not be able to make up for lost Iraqi oil exports that might be lost due to a war.

Currently, the U.S. economy remains sluggish and agricultural commodity prices are approaching record lows. At the same time, petroleum prices are nearing record highs. More can and should be done to utilize domestic surpluses of vegetable oils to help reduce U.S. dependence on foreign oil and increase national energy security. Currently there is a 1.5 billion pound surplus of vegetable oils in the U.S.

A November 2001 study by AUS Consultants -- based on U.S. Department of Energy projections -- assumed a realized national goal of 1.2 percent renewable fuel use in 2002 increasing to 4 percent by 2016 (these goals were based on legislation requiring a percentage of U.S. motor fuels to contain biodiesel or ethanol). The study concluded that a four percent level would displace the annual equivalent of 302 million barrels of crude oil by 2016, or nearly 2.9 billion barrels of crude oil between 2002 and 2016.

A 1998 U.S. Department of Energy and U.S. Department of Agriculture full lifecycle emissions study found that for every unit of fossil energy needed to make biodiesel, 3.2 units of energy are gained. In contrast, it takes 1.2 units of fossil resources to produce 1 unit of petroleum diesel.

Given these facts, and the growing uncertainty surrounding U.S. oil imports, biodiesel and other America fuels have an important role to play in strengthening our nation's energy security.