



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 approximately 70 percent of all petroleum consumed. Even with the ongoing conflict in Iraq and turmoil throughout the Middle East, the U.S. continues its dangerous dependence on foreign sources of oil, particularly from this unstable region of the world.

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. Today, biodiesel is the fastest growing alternative fuel in America, and about 400 major fleets use the fuel nationwide. 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 U.S. produced 5.7 million barrels of crude oil a day in 2002.
- During that time, the U.S. consumed 19.7 million barrels of oil per day.
- Net oil imports for the period totaled 10.5 million barrels per day, or 53 percent of the total.
- Crude oil imports from the Persian Gulf totaled 2.2 million barrels per day in 2002.
- The top sources of crude oil imports for that period were: Saudi Arabia (1.51 million barrels per day); Mexico (1.5 million barrels per day); Canada (1.4 million barrels per day); Venezuela (1.2 million barrels per day).
- The United States consumed 5.9 quadrillion Btu of renewable energy in 2002, about 6 percent of total energy consumption. Hydropower made up around 45 percent of total U.S. renewable consumption in 2002, with biofuels (including wood and waste), solar, wind, and geothermal making up most of the remainder.
- 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.

With skyrocketing petroleum prices and near record low agricultural commodity prices, 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.

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.

Furthermore, 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 American-made fuels have an important role to play in strengthening our nation's energy security.