

# ENERGY MATTERS

Facts & Tips from the U.S. Department of Energy

## The Power Of Biofuels

(NAPSA)—Good news about reducing our dependence on foreign oil may be found in our own backyard. An alternative to high priced gas and reliance on foreign oil—that doesn't require new kinds of car engines—can be found in home-grown biofuels.

Biofuels are liquid transportation fuels made from plants instead of petroleum. Ethanol and biodiesel—the primary biofuels today—can be blended with or substituted for gasoline and diesel for use in unmodified automobiles and trucks at low blend levels. The big-three American automakers all offer several models of flex-fuel vehicles capable of using up to 85 percent ethanol blended with gasoline at no price premium over similar cars.

Using these biofuels can reduce air pollution, greenhouse gas buildup, dependence on imported oil and trade deficits, while supporting agriculture and the American economy.

### Understanding Ethanol

Ethanol, also known as grain alcohol, is made from corn and other grains. Ethanol contains approximately one-third more energy than is required to produce it and deliver it to fueling stations. In the near future it will also be made from rice straw, cornstalks, municipal solid waste, and energy crops such as switchgrass.

There are other benefits. Ethanol burns cleaner, emitting less carbon monoxide and hydrocarbons than plain gasoline.

### Biodiesel

Biodiesel, which is used in diesel-powered vehicles as well as



**America is exploring ingenious ways to deal with rising gasoline costs.**

stationary generators, is made from such things as oil from soybeans and used cooking oil.

The amount of used cooking oil now disposed of in the U.S. exceeds the current potential demand for biodiesel fuel, making it an abundant resource. Another advantage of biodiesel is its high lubricity which helps the moving parts of engines to last longer.

Biodiesel dramatically cuts air toxins, carbon monoxide, soot, small particles and hydrocarbon emissions in half.

Furthermore, since the raw materials for ethanol and biodiesel are produced domestically, using these fuel sources helps American farmers. In fact, experts estimate about a third of our transportation fuel needs can be met by domestically produced biofuels.

### Learn More

To learn more about ethanol, biodiesel and other alternative fuels, go to [www.eere.energy.gov/vehiclesandfuels/](http://www.eere.energy.gov/vehiclesandfuels/) or [www.eere.energy.gov/biomass](http://www.eere.energy.gov/biomass).