

Fact Sheet: Gas Prices and Oil Consumption Would Increase Without Biofuels

Secretary of Energy Samuel W. Bodman and Secretary of Agriculture Edward T. Schafer sent a letter on June 11, 2008 to Senator Jeff Bingaman addressing a number of questions related to biofuels, food, and gasoline and diesel prices. The letter is available at <http://www.energy.gov> <<http://www.energy.gov>>

Without Biofuels, Gas Prices Would Increase \$.20 to \$.35 per Gallon.

- The U.S. Department of Energy (DOE) estimates that gasoline prices would be between 20 cents to 35 cents per gallon higher without ethanol¹, a first-generation biofuel.
- For a typical household, that means saving about \$150 to \$300 per year.
- For the U.S. overall, this saves gas expenditures of \$28 billion to \$49 billion based on annual gasoline consumption of roughly 140 billion gallons.
- Ethanol use has exceeded the requirements of the Renewable Fuel Standard (RFS), established in the Energy Policy Act of 2005, demonstrating that refiners and gasoline marketers have an economic advantage to use more ethanol than is required by law.

Biofuels are Reducing America's Dependence on Oil.

- Without biofuels, DOE estimates that the United States would have to use 7.2 billion more gallons of gasoline in 2008 in order to maintain current levels of travel (a 5 percent increase). This increased demand for gasoline would drive up the price Americans pay at the pump due to basic supply and demand.

Biofuels are Reducing Greenhouse Gas Emissions.

- DOE scientists found that corn ethanol from the U.S. reduced greenhouse gas emission 19 percent compared with gasoline, when the full "life cycle" of the fuel is considered – from growing it to producing the fuel and burning it.
- DOE scientists estimate that 13 million tons of greenhouse gases were avoided in 2007 due to biofuels production and use.
- The next generation of biofuels—cellulosic—made from switchgrass, corn stover, wood chips and other non-food sources promises even more significant reductions in greenhouse gas emissions than corn-based ethanol – reductions of more than 86 percent compared with gasoline.

Today's Biofuels Account for Only a Small Percentage of the Increase in Global Food Prices.

- Other factors are responsible for the majority of the increase in global food prices:
 - Higher oil and gas prices leading to increased costs of fertilizer, harvest, and transportation;
 - Increased demand as developing countries grow and people improve their diets;
 - Two years of bad weather and drought leading to poor harvests in parts of the world;
 - Export restrictions imposed by some countries.

Future Biofuels Will Alleviate Much of the Concern about Competition

Between Food and Fuel.

- Cellulosic biofuel feedstocks can be produced on land not suitable for crops or it can be collected from forest residues.
- The Administration has announced more than \$1 billion for the research, development, and demonstration of new biofuels technology, with a special focus on cellulosic biofuels. Funding supports:
 - Bioenergy Research Centers where scientists work together to make the conversion of plant fiber to fuel more cost-effective and efficient.
 - Commercial-scale and small-scale biorefineries, to chart the course toward commercialization of these technologies and test breakthroughs and novel processes.

[1] This estimate relies on data on the current price difference between ethanol and gasoline and the elasticity of supply for petroleum. Consequently, a range is presented.