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Are biofuels actually a good idea?

BIOFUELS ARE a wide range of fuels derived from biological material such as corn, soybeans and other crops, wood and/or waste. They are being used increasingly as gasoline additives to power vehicles and to heat homes and businesses. In the United States, the federal government called for an increase in the currently mandated level of biofuel production, from 36 billion gallons by 2022 to 60 billion gallons by 2030.

Supporters say that, unlike fossil fuels, biofuels are sustainable and renewable. They are less polluting than fossil fuels and safer than nuclear energy.

Critics argue that using and producing biofuel is not environmentally friendly and that its use is driving up prices for food crops.

What do you think?



Find out more about this topic on the Web:

- <http://e360.yale.edu> (search "biofuel")
- www.scientificamerican.com (search "biofuels")
- <http://biomechanism.com/biofuels-advantages-and-disadvantages>
- <http://en.wikipedia.org/wiki/Biofuels>
- www.environmentalleader.com (search "biofuels")

YES

from members:

Sharon Paradise
St. Paul, MN



Biofuels provide one more alternative to our increasing need for additional fuel sources [and] lessen our dependence on fossil fuels.

Chris Cavatorta
Arlington, MA



Brazil manages to produce a large percentage of their needs with biofuel [from] sugar cane. Why can't America do as much?

Celia Campoli
Irving, TX



Corn is genetically modified and one of the worst vegetables for human consumption. Let's use it for fuel rather than as part of our diets.

NO

from members:

Anthony Aquila
Surprise, AZ



Utilizing today's technology, biofuel production raises fuel prices and uses much needed corn crops that are more useful for food production.

Louise Duval
Lihue, HI



Using soy and corn for fuel drives up the cost for food. [And] the cost of making fuel from soy and corn costs more than refining oil.

Paul Giam
Schaumburg, IL



The production of the major biofuel, ethanol, produces a lot more by-product (CO₂, pollution) and uses a lot of fossil fuel in the process.

from an expert in the field:



Matt Hartwig is the director of public affairs for the Renewable Fuels Association (www.EthanolRFA.org), the national trade association representing the U.S. ethanol industry.

AS OIL PRICES reach record heights, and turmoil sweeps North Africa and the Middle East, Americans have an alternative to imported oil.

Last year, the U.S. produced 13 billion gallons of ethanol. This domestic biofuel was blended into nearly every gallon of gasoline sold in the U.S., mostly as E10 (10 percent ethanol and 90 percent gasoline), keeping pump prices lower than they would be otherwise.

The most recent analysis by economists at Iowa State University and the University of Wisconsin found that increased use of ethanol reduced gasoline prices by an average of 89 cents per gallon last year. For the average American family, that translates to more than \$800 that wasn't spent at the pump. On average for the past 10 years, ethanol has kept gasoline prices 25 cents per gallon cheaper than they otherwise would have been, saving nearly \$35 billion annually.

Why? First, ethanol is less expensive than gasoline. Second, by replacing billions of gallons of gasoline, the nation reduces the demand for oil, one of the few factors holding gasoline prices down.

Producing and using 13 billion gallons of ethanol also meant that the nation needed to import 445 million fewer barrels of oil in 2010. That's more oil than the U.S. imports from Saudi Arabia each year.

American ethanol helps make the U.S. more self-reliant because it's made in America by American farmers and workers. According to the economic consulting firm Cardno Entrix, 70,600 Americans are employed directly in producing ethanol and in industries providing goods and services to ethanol producers. Meanwhile, the economic activity generated by ethanol production supports a total of more than 400,000 jobs nationwide and adds tax revenue that lets state and local governments invest in roads, schools and first responders.

The real promise of domestic renewable fuels such as ethanol is the evolution of the industry. New technologies and better efficiencies are making ethanol even more environmentally friendly and cost competitive. Before long, ethanol production will involve a wide range of sources, including grasses, wood waste and even yard clippings that find their way to the city dump.

Lower prices at the pump. More jobs that stay in the USA. And less dependence on dictators from Tehran to Caracas. American biofuels are good for America. [E]

from an expert in the field:



C. Ford Runge is the McKnight University Professor of Applied Economics and Law at the University of Minnesota and has written for *Foreign Affairs* (www.foreignaffairs.com).

A CLOSE LOOK at ethanol's impact on food security and the environment suggests that the biofuel bandwagon is anything but green.

In the U.S., biofuel production is soaring even as food crop export demand remains strong, driving prices upward. In 2005 the average price of corn was \$1.96 a bushel. In mid-April 2011, it was \$7.78.

Biofuels are propped up by mandates, known as "renewable fuel standards," to force production to 36 billion gallons by 2022. In the U.S., blenders are paid a 45-cent-per-gallon "blender's tax credit" for ethanol—the equivalent of more than \$200 per acre to divert scarce corn from the food supply into fuel tanks. The federal government also pays a \$1-per-gallon credit for plant-based biodiesel and "cellulosic" ethanol. Finally, there is a 54-cent-per-gallon tariff on imported biofuel to protect domestic production from competition.

The rapid increase in grain and oilseed prices due to biofuel expansion has been a shock to consumers worldwide. In March 2011, the Food Price Index of the Food and Agriculture Organization of the United Nations was 37 percent above its 2010 level. It is in poor countries that these price increases pose direct threats to disposable income and food security.

In the U.S., water shortages due to the huge volumes necessary to process grains or sugar into ethanol are not uncommon.

A 2008 study in *Science* focused on the question of greenhouse gas emissions due to land-use shifts resulting from biofuels. It said that if land is converted from rain forests, peat lands, savannas or grasslands to produce biofuels, it causes a large net increase in greenhouse gas emissions for decades. Another study, by Nobel Prize-winning chemist Paul Crutzen in 2007, emphasized the impact of the heavy applications of nitrogen needed to grow expanded feedstocks of corn and rapeseed. The nitrogen necessary to grow these crops releases nitrous oxide—a greenhouse gas 296 times more damaging than carbon dioxide—into the atmosphere and contributes more to global warming than biofuels save through fossil fuel reductions.

Sadly, as in so many areas of policy, Congress and the administration prefer to reward inefficiency and political influence more than pursuing cost-effective, and sustainable, energy strategies. [E]

JUNE DEBATE RESULTS: Should you seek medical advice online?



Percentage reflects votes received by June 10, 2011.

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MAY DEBATE RESULTS: Should literary classics be sanitized?

YES: 3% NO: 97%

Percentage reflects votes received by May 31, 2011. Results may reflect Debate being picked up by blogs.



See Dialogue pages for more debate responses

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