



**W**e are following up on a story on ethanol that appeared in the third-quarter 2006 issue of *EconSouth*. That article proposed some answers to the question the title posed: “The Energy Debate: Is Ethanol the Answer?” In this issue, we look at this question again to determine if ethanol was in fact the magic elixir that would help the United States attain energy independence while also spurring economic growth for farmers growing corn and entrepreneurs operating processing plants. We also look at some promising directions that the search for alternative fuels is taking us.

At the time of the story, the demand for ethanol was rising quickly, mostly because environmental legislation required the industry to replace a compound called methyl tert-butyl ether with ethanol, which works as an oxygen aid to help gasoline burn cleaner. Also at the time, about 40 ethanol factories were under construction in the United States to meet the growing demand, one in Camilla, Georgia. Since then, however, corn ethanol factories have met the demand and construction has fallen off, according to Jill Stuckey, director of the Georgia Center for Innovation. Furthermore, demand did not reach anticipated levels because flex-fuel vehicles, which burn a fuel blend containing 85 percent ethanol and 15 percent gasoline and which appeared to be the next step in the auto industry, have not seen strong adoption.

Corn remains the most common component in ethanol production, but the debate over the efficiency of using this crop has grown increasingly heated. Basically, the increased demand for corn

ethanol has meant that more agricultural land and output are being used for energy production rather than for the food supply. The resulting higher agricultural and retail prices have led to discontented consumers (this is sometimes referred to as the “food versus fuel” argument).

In addition, as we noted in the original article, “[m]ost experts concede it takes a significant amount of energy and money” to produce ethanol from corn. In fact, it takes so much energy to produce ethanol from corn that the net energy creation is much lower than it is from some other potential sources.

Many researchers are now looking at products known as drop-in fuels, so called because of their ability to be “dropped in” to existing infrastructure. These alternative fuels can run in most vehicles on the street without necessitating equipment modifications. “Researchers are trying to take biomass and convert it instantaneously into crude oil. That oil is then cracked and refined into liquid fuels that can be used to replace gasoline and jet and plane fuels,” Stuckey said.

After seven years, ethanol may not have fulfilled the hopes many had for it, but this setback hasn’t blocked the path toward alternative fuels. Instead, the road has been recharted. ■

*By Elizabeth Bruml, an economics major at Emory University in Atlanta, who contributed to this article as part of her internship at the Federal Reserve Bank of Atlanta*