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# Ethanol: Here To Stay

In spite of the threat from Tropical Storm Ernesto, more than 300 people attended a Farm-to-Fuel Summit in Orlando in late August. The Florida Department of Agriculture and Consumer Services (FDACS) organized the meeting to promote the production and use of renewable fuels. Goals of the meeting were to expand the market for Florida's crops and reduce U.S. dependence on foreign oil. Florida can potentially lead in the effort to produce energy from crops because of the large amount of farm land in the state. Florida's warm climate also allows crops to be grown and harvested nearly year round.

## Ethanol Takes Center Stage

Though the conference covered many aspects of alternative energy, ethanol was given particular attention. Most fuel ethanol in the U.S. is made from corn in the Midwest. However, there is particular interest in emerging technologies (some developed by the University of Florida [UF]) that would enable production of ethanol and other alternative fuels from many Florida-grown crops. Speakers at the summit included representatives from several government agencies, the petroleum industry, agriculture, General Motors, and UF. Many participants agreed that the potential for alternative fuels in Florida is great, and Florida is already moving toward some ethanol production.

Besides high gasoline prices, several factors have caused ethanol production to increase noticeably in the past five years. As a fuel additive, ethanol can increase octane levels in gasoline. In some cases, ethanol is replacing Methyl tert-Butyl Ether (MTBE), one of the fuel additives that is being phased out because of concerns about MTBE causing ground-water contamination.

## Demand On The Rise

Several speakers from petroleum companies talked about the potential for ethanol. R.B. Hoover of Gate Ethanol indicated that Florida's annual gasoline consumption is 8.5 billion gallons. The potential for ethanol in Florida for E10 (gasoline blended with 10% ethanol) would therefore be 850 million gallons. Most new cars can run on E10, and newer flexible fuel vehicles (FFVs) can run on E85 (gasoline with 85% ethanol). Recently, the first public E85 ethanol pump in Florida opened in Tallahassee.


Building a 50-million gallon per year ethanol facility costs $100 to $160 million or more. Some lending agencies — such as Farm Credit — are willing to loan funds for construction of corn fermentation plants because these plants use known existing technology that works. Corn fermentation allows not only for the production of fuel-grade ethanol, but also the production of animal feed ingredients including high protein distillers, dried grains, and food products — such as corn oil and carbon dioxide. These byproducts help improve the economics of building ethanol plants. Other technologies that produce ethanol from cellulose will presumably become more economically feasible in the future.

## Producing Plants

Because of the potential demand, several companies are planning to build ethanol plants in Florida. U.S. EnviroFuels plans to build the first fuel-ethanol production plant in Florida at the Port of Tampa. Ethanol production is projected to start in late 2007. Gate Ethanol had planned to build a plant near White Springs in north Florida that would produce 50 million gallons per year. However, Gate recently cancelled its plans to build the plant because the costs of some specialized equipment became too high.

While there was great enthusiasm expressed for ethanol and the role of agriculture at this meeting, one member of the audience pointed out a recent article in *Consumer Reports* called "The Ethanol Myth." Ethanol has less energy per gallon than gasoline, and therefore FFVs get fewer miles per gallon.

A number of the participants agreed with Dan Moenter, of Marathon Petroleum, that ethanol is here to stay and ethanol use will grow. He also indicated that Florida would be part of the expansion of ethanol, but that customers would make the final decision on ethanol use. FLG