

Good morning, Mr. Chairman and Members of the Committee. My name is Bob Dinneen and I am president of the Renewable Fuels Association, the national trade association representing the U.S. ethanol industry.

This is an important and timely hearing, and I am pleased to be here to discuss the unprecedented growth in the domestic ethanol industry, and the attendant economic, energy and environmental benefits resulting from that growth. Ethanol today is the single most important value-added market for farmers. The rapidly increased demand for grain used in ethanol processing has increased farm income, created jobs in the agricultural sector, and revitalized numerous rural communities where ethanol biorefineries have been located.

Background

Today's ethanol industry consists of 97 biorefineries located in 19 different states with the capacity to process more than 1.7 billion bushels of grain into nearly 4.5 billion gallons of high octane, clean burning motor fuel and 9 million metric tons of livestock and poultry feed. It is a dynamic and growing industry that is revitalizing rural America, reducing emissions in our nation's cities, and lowering our dependence on imported petroleum.

Ethanol has become a ubiquitous component of the U.S. motor fuel market. Today, ethanol is blended in more than 40% of the nation's fuel, and is sold virtually from coast to coast and border to border.

In 2005, the U.S. ethanol industry consumed more than 1.4 billion bushels of corn in the production of 4 billion gallons of ethanol. That represents approximately 12% of last year's 11 billion bushel crop. The industry also used 55 million bushels of sorghum, or about 14% of that crop. Finally, ethanol is produced from a variety of agricultural waste products, including cheese whey, beer and beverage waste.

The 4 billion gallons of ethanol produced and sold in the U.S. last year contributed significantly to the nation's economic, environmental and energy security. According to an analysis completed for the RFA, the 4 billion gallons of ethanol produced in 2005 resulted in the following impacts:

? Added \$32 Billion to gross output;

? Created 153,725 jobs in all sectors of the economy;

? Increased economic activity and new jobs from ethanol increased household income by \$5.7 Billion, money that flows directly into consumers' pockets;

? Contributed \$1.9 Billion of tax revenue for the Federal government and \$1.6 Billion

for State and Local governments; and,

? Reduced oil imports by 170 million barrels of oil, valued at \$8.7 Billion.

In addition, because the crops used in the production of ethanol absorb carbon dioxide, the 4 billion gallons of ethanol produced in 2005 reduced greenhouse gas emissions by nearly 8 million tons. That's the equivalent of taking well over a million vehicles off the road. As the industry has grown, it has also changed. Today, the single largest ethanol producer, taken as a whole, is the farmer-owned ethanol plant.

Energy Policy Act Has Stimulated Significant New Ethanol Production

Mr. Chairman, in large part because of the Energy Policy Act of 2005 (EPAct), the U.S. ethanol industry is today the fastest growing energy resource in the world. As you know, EPAct included an historic new direction for U.S. energy policy, requiring refiners to utilize an increasing percentage of renewable fuels. The Renewable Fuels Standard (RFS) began in January and requires refiners to utilize at least 4 billion gallons of ethanol and/or biodiesel this year. The RFS gradually increases to at least 7.5 billion gallons of renewable fuels by 2012. The RFS has been a clarion call to the ethanol industry and the financial community that demand for ethanol and biodiesel was no longer uncertain, allowing the renewable fuels industry to grow with confidence.

Indeed, there are currently 35 plants under construction. Twenty-one of those have broken ground just since last August when President Bush signed EPAct into law. With existing biorefineries that are expanding, the industry expects more than 2.2 billion gallons of new production capacity to be in operation within the next 12 to 18 months. The following is our best estimate of when this new production will come on stream.

This chart reflects eight plants and three expansions we believe will be complete before July, representing more than 500 million gallons of production capacity; and another 16 plants and 2 expansions that will be complete before the end of the year, adding about 900 million gallons more. This new 1.4 billion gallons of new capacity represents a 32% increase in production, a phenomenal rate of growth, particularly when viewed in light of the 20-plus percent growth the industry has already achieved in each of the past several years.

Rapidly Increasing Demand

While ethanol supply is growing exponentially, ethanol demand is increasing as well. Indeed, ethanol demand in 2006 is significantly higher than that required by EPAct. The reason for that is refiners have chosen to eliminate the use of MTBE in many of the reformulated gasoline areas where it has not already been removed. Those areas include the Mid-Atlantic, New England and Texas. The Energy Information Administration believes as much as 130,000 barrels per day of ethanol will be needed to meet the demand created by refiner decisions to replace MTBE.

Some have questioned the ability of the ethanol industry to meet such rapidly increased demand. But most analysts now agree there will be sufficient ethanol supplies. In addition to increased production, ethanol supplies will flow from existing conventional gasoline markets to MTBE replacement markets where it is needed more. The market will also encourage increased imports in the short-term.

In addition, the ethanol industry is working diligently with our refiner customers, gasoline marketers, terminal operators and the fuel distribution network to assure a successful transition from MTBE to ethanol in these areas.

Over the past several years, the ethanol industry has worked to expand a "Virtual Pipeline" through aggressive use of the rail system, barge and truck traffic. As a result, we can move product quickly to those areas where it is needed. Many ethanol plants have the capability to load unit trains of ethanol for shipment to ethanol terminals in key markets. We are also working closely with terminal operators and refiners to identify ethanol storage facilities and install blending equipment.

There is no question that the dramatically accelerated removal of MTBE has challenged the marketplace. But the ethanol and petroleum industries have done this successfully before in New York, California and Connecticut. We know we can do it again. As one industry analyst observed recently, "The very fact that these companies are on the record as discontinuing MTBE and replacing it with ethanol tells us one very important fact - they are prepared."

It is important to note that no provision of the Energy Policy Act or the Clean Air Act requires refiners to eliminate MTBE, nor are they required to use ethanol. This is a decision refiners are making because replacing MTBE with ethanol is the most cost-effective means of meeting Clean Air Act standards while maintaining the octane and performance consumers expect.

Some have suggested repealing the secondary tariff on imported ethanol is necessary to increase supplies. In fact, the secondary tariff is not a barrier to entry. Approximately 130 million gallons of ethanol were imported in 2005, and even higher imports are expected this year. The secondary tariff merely offsets the tax incentive oil companies receive for blending ethanol, regardless of its source. Eliminating the secondary tariff, without changing the structure of the tax incentive would only result in U.S. taxpayers subsidizing already subsidized foreign ethanol. At a time when Congress is contemplating reduced domestic farm programs, it is neither wise nor necessary to begin subsidizing foreign ethanol and foreign sugar growers.

New Technologies

The only thing more astonishing than the growth in the ethanol industry is the technological revolution happening at every biorefinery and every ethanol construction site across the

country. Plants today are using such innovations as no-heat fermentation, corn fractionization and corn oil extraction. With today's natural gas prices, plants are also looking toward new energy sources, including methane digesters and biomass gasification. In short, the ethanol industry is unrecognizable from what it was just five years ago, and it will be unrecognizable again five years from now.

To continue this technological revolution, however, continued government support will be critically important. DOE's biomass and biorefinery systems research and development program has been essential to developing new technologies. Competitively awarded grants provided by this program have played a very important role in developing new technology.

Recently, DOE informed the renewable fuels industry that it was canceling research contracts. Many of the grants provide technologically promising projects that would help move the industry forward. The RFA encourages Congress to continue to provide additional funds for competitive solicitations.

New Feedstocks

To date, the ethanol industry has grown almost exclusively from grain processing. In the future, ethanol will be produced from other feedstocks, such as cellulose. Cellulose is the main component of plant cell walls and is the most common organic compound on earth. However, it is more difficult to break down cellulose and convert it into usable sugars for ethanol. Yet, making ethanol from cellulose dramatically expands the types and amount of available material for ethanol production. This includes many materials now regarded as wastes requiring disposal, as well as corn stalks, rice straw and wood chips or "energy crops" of fast-growing trees and grasses. Cellulosic ethanol production will augment, not replace, grain-based ethanol, but ultimately exponentially expand potential ethanol supplies.

Many companies are working to commercialize cellulosic ethanol production. Indeed, there is not an ethanol biorefinery in production today that does not have a very aggressive cellulose ethanol research program. The reason for this is that they all have cellulose already coming into the plant. If they can process that material into ethanol, they will have a significant marketplace advantage.

Many companies are working to commercialize cellulosic ethanol. Iogen, Inc., a Canadian enzyme company, has been producing cellulosic ethanol from wheat straw since 2004 at a one million gallon plant in Ontario. The company is planning to begin construction of a commercial facility in the U.S. during the summer of 2007. Abengoa Bioenergy Corp., which operates four biorefineries in the U.S. today, has begun construction of a grain and cellulose ethanol plant in Spain. The company plans to bring that technology to the U.S. as soon as the technology is proven successful. Numerous other companies are moving toward commercialization and I am confident cellulosic ethanol will be a reality quite soon.

New Markets

Ethanol today is largely a blend component with gasoline, adding octane, displacing toxics and helping refiners to meet Clean Air Act specifications. But the time when ethanol will saturate the blend market is on the horizon, and the industry is looking forward to new market opportunities such as E-85 and ethanol fuel cells.

Today there are approximately 5 million flexible fuel vehicles (FFVs) on the road capable of using E-85, a mix of 85% ethanol and 15% gasoline. There are about 600 E-85 refueling stations across the country. Frankly, we can and must do better.

Five million FFVs represent less than 2% of the total U.S. motor vehicle fleet. This year, the U.S. will purchase about 17 million vehicles. Approximately 500,000, or roughly 3% of those, will be FFVs. In contrast, more than 60% of the vehicles produced and sold in Brazil this year will be FFVs.

Clearly, U.S. auto manufacturers have made a significant commitment to FFV technology, and their commitment is increasing. Ford, General Motors and DaimlerChrysler have made significant strides in producing and promoting FFVs. But we can do better.

Senators Tom Harkin (D-IA) and Dick Lugar (R-IN) have introduced legislation (S.1994) requiring a gradual increase in the production of FFVs by all auto companies. The RFA supports this legislation. If consumers are to have options during times of gasoline price volatility, FFV technology must be more widely available. There may be other approaches to encourage auto manufacturers to maximize FFV production as well, and we remain open to a dialogue with stakeholders that will assure the objective of increased FFV availability is met.

As FFV vehicles are commercialized, it is important to encourage the most efficient technologies. Some FFVs today experience a reduction in mileage when ethanol is used because of the difference in BTU content compared to gasoline. But that debit can be addressed. General Motors has introduced a turbo-charged SAAB that experiences NO reduction in fuel efficiency when ethanol is used. That's the kind of innovation the government should be rewarding in any program designed to encourage E-85 use.

Of course, FFVs will be wasted without a commensurate increase in E-85 fuel availability. Reforms of the ethanol tax incentive authored by Senator Chuck Grassley (R-IA) and passed by Congress last year have made it much easier for ethanol producers to work with gasoline marketers directly to promote E-85. Ethanol producers such as Chippewa Valley Ethanol Company (CVEC) and VeraSun have moved aggressively to market E-85. As a result, there was more E-85 sold last year than ever, and sales continue to grow.

Still, convincing gasoline marketers to sell E-85 under their canopies remains a challenge. Senators John Thune (R-SD) and Barack Obama (D-IL) have introduced legislation (S. 2446) 6 In Minnesota alone, the only state for which there is reliable data, approximately 8 million gallons of E-85 were sold in 2005. About 200 E-85 stations are located in Minnesota.

This legislation will be essential to any effort to expand E-85 use.

In the final analysis, many things have to happen for E-85 to become a more consequential component of the U.S. motor fuel marketplace. There must be more vehicles. There must be more refueling pumps. And there must be more ethanol to supply this market, which likely means cellulosic ethanol capacity. But the need to develop meaningful alternatives to gasoline has never been more apparent. And we must invest now, or that future will never materialize.

In addition to E-85, we believe a necessary component of a national energy strategy must include hydrogen from renewable resources. Today's fuel cells and hydrogen platforms are powered by fossil fuels (generally natural gas). In order to truly capture the benefits of emission free hydrogen, renewable resources like ethanol must be utilized. Furthermore, hydrogen from ethanol is not constrained by natural gas pipelines, which make an electricity generating fuel cell powered by ethanol more accessible and useable in rural America. The RFA has advocated a competitively based ethanol-powered fuel cell demonstration program as part of the fiscal year 2007 agriculture appropriations funding.

Conclusion

In his State of the Union Address, President Bush acknowledged the nation "is addicted to oil" and pledged to greatly reduce our oil imports by increasing the production and use of domestic renewable fuels such as ethanol and biodiesel. The Energy Policy Act of 2005 clearly put this nation on a new path toward greater energy diversity and national security through the RFS. Additional and more focused research, targeted incentives for E-85 vehicles and refueling infrastructure, and the continued commitment of this Committee will make the President's vision of a more energy secure America a reality.

Thank you.