

Ethanol & Rural Development



An Ethanol Across America White Paper

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Alternative Fuels Key to a Rural Renaissance

The outlook for rural America has never been brighter; we are at the nexus of a rural renaissance. Renewable energy, especially ethanol, is the cause. Over the past five and a half years, working for Rural Development as part of the Bush Administration, it has been my privilege to see this renewal first hand, and to tour many of the plants and meet with producers who are creating wealth and opportunity by converting corn into ethanol and soybeans, vegetable oils and animal fats into biodiesel.

The ethanol business is booming and significant growth will continue in the future. In the past, support from agencies like Rural Development was critical to the effort to get this industry off the ground, but now a combination of factors, including high oil prices and a shift from MTBE as a fuel additive, along with government policies designed to diversify our energy supply sources, have moved this industry into the main stream.

The renewable fuels industry is expanding all across the country. Ethanol now accounts for about 3% of total annual gas consumption. About 14% of the U.S. corn crop was used to make ethanol in 2005-06 and in the current crop year that figure is expected to reach 20%.

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Tom Dorr is Under Secretary for Rural Development within the U.S. Department of Agriculture. He oversees USDA Rural Development policies and programs. Rural Development consists of three program areas — business, utilities and housing — that provide \$14 billion annual funding authority for loans, grants and technical assistance to rural residents, communities and businesses, and an \$87 billion portfolio of existing business, housing and infrastructure loans to rural America. Mr. Dorr has served as a member of the Board of Directors of the 7th District Federal Reserve Bank of Chicago, the Iowa Board of Regents and as a member and officer of the Iowa and National Corn Growers Associations. Prior to his current service at the U.S. Department of Agriculture, he was the President of a family agribusiness company consisting of a corn and soybean farm, a state licensed commercial grain elevator and warehouse and two limited liability companies.

Mr. Dorr, from Marcus, Iowa, graduated from Morningside College with a Bachelor of Science degree in business administration.

Meeting of Industry Leaders

In 2005, President Bush signed the Energy Policy Act into law. That bill is the most comprehensive overhaul of energy policy in over a decade and will help spur enhanced energy security. He followed it by introducing the Advanced Energy Initiative, which seeks to diversify our energy production system.

To further this initiative, USDA and the Department of Energy will sponsor a conference, "Advancing Renewable Energy, an American Rural Renaissance." This gathering, which will be in St. Louis, Missouri, Oct. 10-12, will bring together industry leaders to explore ways to create breakthroughs and promote an increase in energy production from renewable sources.

I hope you'll be able to attend.

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According to USDA Chief Economist Keith Collins, by 2010, 30% of America's corn could be used for ethanol production—that's 10 billion gallons a year! Currently, there are more than 100 U.S. ethanol plants and 30 more plants are under construction. On top of that, the number of biodiesel plants has increased from 10 in 2000 to 65 today and another 58 plants are under construction. From a start of about half a million gallons a year in 1999, biodiesel production in 2006 is expected to total 245 million gallons.

USDA Rural Development has done its part to get many of these projects started. Through our various business programs, including our Renewable Energy and Energy Efficiency program, and our Value Added Producer Grant program, we have funded more than 650 energy projects at a program level of \$356 million. Matching funds provided by the private sector to support projects funded through these loans and grants totaled \$1.3 billion.

Although the industry is attracting private investment, it's important that the government continue to encourage the growth of ethanol and renewable fuel production. The rising cost of energy affects every American, but rural America in particular takes a hard hit. For example, electricity, fuel, fertilizers and other energy-related expenses account for 15% of total farm cash production expenses. In 2006, energy-related expenses are forecast to climb nearly \$30 billion. That's an increase of about 50% in the last three years.

Some of the best and most rewarding technology for producers is still in the research stage. In his State of the Union Address, President Bush called for the development of technology to produce ethanol from materials such as switchgrass. This process is called cellulosic conversion. When developed, it will enable grasses, stover, wood chips and other readily available commodities to be converted into ethanol.

In early August, the U.S. Department of Energy announced plans to spend \$250 million to create two research centers to develop technology to produce cellulosic ethanol along with energy from other non-oil sources. While production from corn ethanol is important, and will continue to be, cellulosic is a step toward meeting our goal of replacing 30% of our transportation fuels with biofuels by 2030.

Energy and rural America have always been closely linked, but now we face an unprecedented opportunity to create wealth, new jobs and increased economic activity through production, instead of consumption. The 2002 Farm Bill was the first one to contain an energy title. The next farm bill is also expected to address America's energy needs.

With that in mind, Agriculture Secretary Mike Johanns in August released a 31-page analysis called "Energy and Agriculture." It's available at www.usda.gov/documents/Farmbill07energy.pdf. The paper is a direct product of more than 50 Farm Bill listening sessions held around the country by USDA in 2005. While it doesn't make policy recommendations, it outlines discussion areas for the energy component of the next farm bill. Anyone with an interest in energy policy or rural policy should read it.

Even before he took office, President Bush spearheaded the drive to put this nation on the road to energy independence. A year ago he signed the Energy Policy Act into law. That bill is the most comprehensive overhaul of energy policy in over a decade and will help spur enhanced energy security. He followed it by introducing the Advanced Energy Initiative, which seeks to diversify our energy production system.

Let me conclude by commending the Clean Fuels Development Coalition and the Nebraska Ethanol Board for the outstanding job they did in creating the recently released "Guide for Evaluating the Requirements of Ethanol Plants." This well-researched document, which is being distributed through the *Ethanol Across America*

campaign, will go a long way toward advancing our drive to improve the rural economy and will promote greater energy independence through ethanol production and research.

USDA's commitment to energy development is long-standing and firm. Between 2001 and 2005 we spent nearly \$1.7 billion on energy-related programs. In 2006 alone our economists estimate that USDA will spend about \$270 million more. Working with our partners, public and private, we're doing everything possible to promote energy independence as part of a strong and clear rural policy.

Corn Supplies Growing With Demand

Concerns about having enough corn to satisfy the needs of the fuel and food — or livestock feed — industries is an issue that has received some attention recently.

The National Corn Growers Association noted that even though corn demand is growing because of ethanol, corn production is growing, too. It said corn demand and supply are both increasing at a steady rate, with corn production over the past two years being the largest in U.S. history, leaving plenty of corn for fuel, food and feed. In fact, there were 2.2 billion bushels of corn "left over" from the 2005 crop.

Increases in corn production can be attributed, in part, to the continued adoption of biotech crops, which can better tolerate poor weather and resist insects. Improved crop management techniques also play a role. In the near future, biotech crops will allow corn acres to expand due to drought tolerant and other improved varieties. Increased efficiencies will allow a bushel of corn to produce more ethanol than today.

It is important to note, too, that ethanol is made mostly from yellow dent corn historically grown for livestock feed. Corn grown more directly for humans, such as sweet corn or white corn for corn chips, does not go to ethanol production.

Helping to feed livestock not only in the U.S. but around the world is the ethanol co-product distillers grains, which are rich in protein and energy. For each 56-lb. bushel of corn used for ethanol, 18 lb. of distillers grains are produced. In turn, those distillers grains replace some of the corn needed for animal feed.

Certainly there will be challenges as ethanol production expands in the future, but corn producers have been up to the challenge in the past and will be in the future. In the eye of the corn grower, it is not food versus fuel. It is food and fuel.