AMERICAN MEAT INSTITUTE

FACT SHEET

Corn-Based Ethanol and Biofuels

What is ethanol?

According to Merriam Webster's Collegiate Dictionary: Ethanol: "A colorless volatile flammable liquid (C2H5OH) that is the intoxicating agent in liquors and is also used as a solvent called also ethyl alcohol, grain alcohol. As a fuel, it has a BTU content of approximately 77,000 BTU per gallon. For reference, conventional gasoline has BTU content of 129,000 BTU per gallon. Higher BTU content means more energy per gallon. A bushel of corn can produce approximately 2.8 gallons of ethanol and 17 pounds of distillers grains.

How is ethanol used as fuel?

Ethanol is currently blended with gasoline to improve its oxygen content in volume levels ranging from 2 percent to 10 percent. There is also a blend called E85, which is between 80 and 85 percent ethanol and 15 to 20 percent gasoline. Increasing the oxygen content in gasoline can improve the burn and reduce engine knock.

What is the impact of corn-based ethanol mandates?

The federal government mandate to increase our production of corn-based ethanol from 9 billion gallons in 2008 to the current 10.5 billion gallons in 2009 to 15 billion gallons in 2015 will continue to drive food prices up, since corn is the major input cost for the animals we eat.

This food-to-fuel mandate diverts a quarter of the 2007 United States corn crop into fuel production and nearly a third of the United States corn crop in 2008. By 2012 as much as 40 percent of our corn and 30 percent of our vegetable oils could be diverted to fuel production. These mandates and subsidies could drive U.S. and world grain prices to record levels.

"According to the USDA, from 2006 to 2008, livestock producers saw feed prices nearly double, in part because of increasing use of corn for ethanol," a GAO report on the potential effects of biofuels states.

It's not just corn – food-to-fuel policies create a ripple effect for all agricultural products, also increasing prices for basic staples like bread, eggs and milk. U.S. food prices are projected to rise, on average, by 9 percent annually between 2008 and 2012 unless mandates are addressed, according to Bill Lapp, a leading economist on the issue.

Historically high grain prices in 2008 pushed beef cow slaughter up 14 percent above the previous year. That will spell higher beef prices for consumers as availability of beef constricts over the next few years.

Because a large share of their income is used to purchase food, food price inflation hits the world's most vulnerable populations hardest.

What are the keys to a balanced food and fuel policy?

Achieving balanced food and fuel policy is essential to increasing energy independence while maintaining food affordability and can be achieved by enacting the following:

- Freeze the Federal Mandate for Ethanol Production: The federal mandate for biofuel production should not be increased until alternative fuels are developed that are not made from food or feedstuffs.
- Remove Import Tariffs: Market forces should be allowed to come to bear on shaping the most viable biofuels for America's future. Tariffs distort the marketplace and should be allowed to expire.
- Blender's Subsidy: Subsidies and tax credits made available for corn-based ethanol generated from food or feedstuffs should be phased out and made available to the next generation of alternative fuels that are not derived from food or feedstuff sources.
- Renewable Energy and Byproduct Research Neutrality: Federal research funding should not favor one type of renewable energy over others. Federal research funding should be provided broadly to research renewable energy technologies, economics, and by product safety, quality and usability.

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- Emerging Bio-Energy Mandates For Non-Feedstocks: New bio-energy mandates (such as increasing the RFS) should be limited to energy from emerging bio-based sources (i.e. cellulosic, methane) that do not adversely impact animal feed availability.

- Conservation Reserve Program (CRP) Flexibility: Policymakers should provide producers regulatory and legislative policy options to elect out of CRP to respond to market forces. Support a working lands approach to reintroduce acres into crop production.

- Energy Infrastructure Incentives: . Infrastructure incentives should be source/feed stock and renewable energy neutral.

Important Reading

Elam, Thomas, "Issues with an Ethanol Blend Rate Increase"
http://www.balancedfoodandfuel.org/ht/a/GetDocumentAction/i/49474

Elam, Thomas, "Biofuel Support Policy Costs to the U.S. Economy"
http://www.balancedfoodandfuel.org/ht/a/GetDocumentAction/i/10560

Tokgoz, Simla, "Emerging Biofuels: Outlook of Effects on U.S. Grain, Oilseed and Livestock Markets"
http://www.card.iastate.edu/publications/synopsis.aspx?id=1050

GAO Biofuels Report: Potential Effects and Challenges of Required Increases in Production and Use
http://www.balancedfoodandfuel.org/ht/a/GetDocumentAction/i/56044

Helpful Links

Follow the Science
www.followthescience.org

Coalition for Balanced Food and Fuel
www.balancedfoodandfuel.org

Food Before Fuel Campaign
www.foodbeforefuel.org

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