

Today's U.S. Ethanol Industry

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EIA Energy Outlook, Modeling, and Data Conference

Washington, D.C.
March 28 2007



U.S. Ethanol Industry Today

- Annual production capacity in 2006 of 5.3 bgy
 - Actual 2006 production of 4.9 bgy
 - 2006 demand of approx. 6 billion gallons
- 114 plants in 19 states with 5.6 bgy capacity today (*March 2007*)
- 80 plants under construction, combined with 8 expansions, will increase industry capacity by an additional 6 bgy (*March, 2007*)
- Dozens of additional plants in various stages of development

Today's Transportation Fuels

- **Gasoline - 140 billion gallons**
- **Diesel - 45 billion gallons**
- **E85 – 50 million gallons**

- **Ethanol as an additive (E-10)**
 - **5.6 billion gallons**
 - **Extends Gasoline – blended in 46% of gasoline**
 - **Adds 300,000 barrels of supply**

RFS vs. RFA Projections

<u>Year</u>	<u>RFS</u>	<u>RFA Projections</u>
2006	4.0	5.3
2007	4.7	8.4
2008	5.4	11.1
2009	6.1	11.2 (1Q)
2010	6.8	
2011	7.4	
2012	7.5	

RFA Projections: Breakdown by Quarters

2007 (Millions of Gallons)

1Q:	671
2Q:	237
3Q:	814
4Q:	1354
Total:	3076

2008 (Millions of Gallons)

1Q	1362.5
2Q:	695
3Q:	610
4Q:	101
Total:	2768.5

2009 (Millions of Gallons)

1Q:	105
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What's Leading Industry Growth?

- Renewable Fuels Standard
- Sustained high gas and oil prices
- State ethanol programs
- E-85 growth
- Concerns about MTBE contamination
- Need to expand U.S. fuel supply
- Environmentally-friendly profile

What about Cellulosic Ethanol?

- **Technology and cost are limiting factors.**
- **Current technology for cellulosic ethanol is the acid hydrolysis process.**
 - Capital costs are almost 4 times that of dry mill ethanol.
 - Operating costs are 50% above corn dry mill costs.
- **Enzymatic process holds promise for lower costs, but is not yet commercialized.**
- **Cellulose ethanol will happen, but large scale production not likely in the near term.**
- **Cellulose ethanol expected to first be commercialized by current producers who have cellulosic feedstocks at their grain-based facilities.**

Policies Driving Cellulosic Ethanol

President's Advanced Energy Initiative (2006 State of the Union Address)

2012 Goal: Fund additional research in cutting-edge methods of producing ethanol, not just from corn, but from wood chips and stalks, or switch grass.

Our goal is to make this new kind of ethanol practical and competitive within six years.

2030 Goal: Replace 30% of our current gasoline consumption with ethanol.

President's "Twenty in Ten" Proposal (2007 State of the Union Address)

Alternative fuel standard will be set at 35 billion gallons of renewable and alternative fuels in 2017.

Alternative fuels would include: ethanol, biodiesel, methanol, biobutanol, hydrogen, and other alternative fuels.

Cellulose Ethanol Provisions in EPOA 2005

- Cellulose-based ethanol receives a 2.5 credit for every one credit for grain-based ethanol toward the RFS.
- Authorized federal loan guarantee programs for cellulose-based biorefineries (Title XV and Title XVII).
- Post-2012, the RFS includes a 250 million gallon per year cellulose ethanol requirement.
- Authorized spending for research and development for cellulose biomass ethanol.
- Bioenergy Programs – Biofuels & Bioproducts and Integrated Biorefinery Demonstration Projects.

Ethanol Industry 2007 Legislative Priorities

- Maintain and Extend VEETC (Blenders' Tax Incentive)
 - Maintain and Extend Credit Offset (Secondary Tariff)
- Increase Ethanol Market Opportunities
 - Higher Ethanol Blend Levels
 - E-85
 - ❖ Optimized FFV & Infrastructure Incentives
- Cellulosic Ethanol Commercialization
 - Fully fund and/or increase funding for EPA Act 2005 programs
 - Research & Development and Deployment and Commercialization
 - Grants and Loan Guarantees
 - Incentives
- RFS

VEETC and the Secondary Tariff

Preserve/Extend/Make Permanent VEETC and the Secondary Tariff

Reduce the risk associated with investment in new markets (biofuels) and new technologies (cellulose).

Permanency of VEETC and its current structure is an effective risk reducing instrument for investors and the financial community – necessary to further expansion of the domestic ethanol industry.

The secondary tariff prevents American taxpayers from subsidizing foreign ethanol industries.

- ❖ *RFA supports legislation such as the Pomeroy-Hulshof “Renewable Fuels and Energy Independence Promotion Act” (H.R. 196) to make permanent renewable fuels tax incentives.*

Increase Ethanol Market Opportunities

The industry is looking forward to new market opportunities such as higher ethanol blends (15-20%) and E-85.

Federal policies should, at a minimum, maintain:

- extend existing tax incentives for E-85 to allow for continued growth,
- expand tax incentives for E-85 refueling infrastructure, and
- increase new consumer-based tax incentives to encourage flexible fuel vehicles.

Cellulosic Ethanol Commercialization

Programs authorized by the Energy Policy Act of 2005, such as the loan guarantee (Title XV and Title XVII) and competitive grant program (Section 932), to accelerate the commercialization of cellulosic ethanol **must be fully funded**.

Develop demonstration and pilot programs to familiarize growers with new cellulosic crops (including management, harvest, transport and storage techniques).

Renewable Fuels Standard

The RFA supports allowing the current RFS to be fully implemented before addressing an increase in the mandate. If the market does not respond and feedstock availability is sufficient, the RFA would support a more aggressive RFS.

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