

Current Ethanol Policy Framework

What Is Needed – From Producers' and Growers'
Perspective

Samantha Slater
Renewable Fuels Association

USDA Agriculture Outlook Forum

Washington, D.C.
March 1, 2007



U.S. Ethanol Industry Today

- Annual production capacity in 2006 of 5.4 bgy
 - Actual 2006 production of 4.9 bgy
 - 2006 demand of approx. 6 billion gallons
- 112 plants in 19 states with 5.5 bgy capacity today (*February, 2007*)
- 78 plants under construction, combined with 7 expansions, will increase industry capacity by an additional 6.1 bgy (*February, 2007*)
- Dozens of additional plants in various stages of development

What's Leading Industry Growth?

- Renewable Fuels Standard
- Sustained high gas and oil prices
- State ethanol programs
- E85 growth
- Concerns about MTBE contamination resulting in new East Coast markets
- Need to expand U.S. fuel supply
- Environmentally-friendly profile

Existing Policies

- **VEETC and the Credit Offset (Secondary Tariff)**
 - Tax refund to refiners/blenders of 51 cents per gallon on each gallon of ethanol blended with gasoline
- **Renewable Fuels Standard**
 - Begins at 4 billion gallons in 2006 and increases to 7.5 billion gallons in 2012
- **Small Ethanol Producer Tax Credit**
 - Small ethanol producers are allowed a 10 cents per gallon production income tax credit on up to 15 million gallons of production annually

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	10.6
2009	6.1	11.5
2010	6.8	
2011	7.4	
2012	7.5	

President Bush's Advanced Energy Initiative (AEI)

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.

State of the Union Address

“Twenty by Ten”

January 23, 2007

Reducing Gasoline Consumption Through The Growth Of Alternative Fuel Sources

- Under the President's proposal, the alternative fuel standard will be set at 35 billion gallons of renewable and alternative fuels in 2017
- This will displace 15 percent of projected annual gasoline use in 2017
- Alternative fuels would include: ethanol, biodiesel, methanol, biobutanol, hydrogen, and other alternative fuels

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.**

Cellulose Ethanol Provisions in EPAct 2005

- Cellulose-based ethanol receives a 2.5 credit for every one credit for grain-based ethanol toward the RFS.
- Authorized a federal loan guarantee program for cellulose-based biorefineries up to \$250 million.
- Post-2012, the RFS includes a 250 million gallon per year cellulose ethanol requirement (“carve out”).
- Authorized spending for research and development for cellulose biomass ethanol, including:
 - Two five-year funding packages for cellulose bioenergy research and development centers.
 - Cost-shared funding over three years to construct up to three biorefineries in the U.S.

The Future is Now for Cellulose Ethanol

■ Abengoa

- Demonstration-scale (1 mgy) cellulose ethanol facility under construction in Salamanca, Spain (wheat straw)
- Pilot cellulose ethanol plant planned in York, Nebraska
 - ❖ Co-located with grain-based ethanol facility

■ Broin

- Commercial-scale (125 mgy) biorefinery planned in Emmetsburg, Iowa (corn fiber and corn stover)
- Convert a 50 mgy grain-ethanol facility
- Utilize advanced corn fractionation and lignocellulosic conversion technologies

■ logen

- Built and operates demonstration-scale (1 mgy) cellulose ethanol facility in Ottawa, Ontario (wheat, oat and barley straw)
- Proposed commercial-scale cellulose ethanol facility in southeastern Idaho (wheat straw)

USDA Farm Bill Proposal

January 31, 2007

- The Energy and Research Titles included \$1.6 billion in new renewable energy funding targeting cellulosic ethanol production. (All funding reflects 10-year totals.)
 - Provide \$210 million to support an estimated \$2.17 billion in Loan Guarantees for cellulosic ethanol projects in rural areas to advance the development of cellulosic ethanol production.
 - Initiate a new, temporary program (“Cellulosic Bioenergy Program”) to provide \$100 million in direct support to producers of cellulose ethanol, modeled after the CCC Bioenergy Program that expired in 2006.
 - Provide \$150 million for biomass research competitive grants, focusing on cellulosic ethanol.

Ethanol Industry 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

Farm Bill Concepts

- Refocus the CCC Bioenergy Program to incentivize cellulosic feedstocks for ethanol production and energy production of ethanol plants
- Pilot and demonstration programs to familiarize growers with new cellulosic crops (including harvest, transport and storage)
- Pilot and demonstration programs to help growers identify and grow the most suitable crops for cellulosic feedstock production
- Industrial-based research and development and commercialization-focused structure
- Loan guarantee program at USDA for cellulosic energy projects

Contact Information

Renewable Fuels Association
(202) 289-3835

sslater@ethanolrfa.org

Web site: www.ethanolRFA.org

