Conflicting Federal Mandates Threaten Ethanol Industry and Ag Economy

June 28, 2012
Welcome!

Introduction and Objectives

Ernie Shea
25x’25 Project Coordinator
Webinar Objectives

1. Explain how the proposed EPA/NHTSA light-duty vehicle greenhouse gas emissions and corporate average fuel economy standards could affect future biofuel production

2. Review likely economic impacts the proposed rule could have on the ag economy

3. Explain what 25x’25 partners are doing to address deficiencies in the rule
Session Leaders

- **Ernie Shea**, 25x’25 Project Coordinator-moderator
- **Andrew Walmsley**, Director of Congressional Relations, American Farm Bureau Federation
- **Doug Durante**, Executive Director, Clean Fuels Development Coalition
- **Matt Roberts**, Associate Professor, The Ohio State University
Webinar Procedures:

- Lines will be muted during presentations to minimize background noise

- For presenters and Q&A, un-mute by pressing *6

- Will take questions at the end of the presentations

- To ask a question, either press *6 to un-mute or use the comment feature to submit a written question
“Conflicting Federal Mandates Threaten Biofuel Industry and Ag Economy”

Andrew Walmsley
Director, Congressional Relations
American Farm Bureau Federation
June 28, 2012
The Price of Oil in 2035 Will Be....

DOE Oil Price Forecasts 2010-2035

$2009

$125

Reference

High Oil Case

Low Oil Case

Source: EIA

AMERICAN FARM BUREAU FEDERATION®
Crude Oil – Short-Term Forecast

WTI Crude Oil Prices (2008 - 2013F)

5 year avg. (2008-Current) = $85.58/bbl.

Source: EIA 2012 June STEO
What Will Happen With the U.S. Economy?
What Will Happen With Greece...Spain...? The EU?
And Finally…What Will Happen With Iran?
The World According to Oil

- 41% oil imports

Countries highlighted:
- VENEZUELA
- IRAQ
- IRAN
- SAUDI ARABIA
- NIGERIA
- ANGOLA

Source: BP Statistical Review of World Energy 2010
Ethanol’s Impact on Oil Imports

U.S. oil import dependence with and without ethanol.

- 2011 U.S. ethanol production totaled **332 m. bbls.**
- Without ethanol, an additional **224 m. bbls.** of gas would have been needed
- **477 m. bbls.** of imported oil would be needed to refine 224 m. bbls. of gasoline
- Importation of **447 m. bbls.** of oil crude would have increased import dependence from **45% to 52%**
But, They Also Benefit Consumers

In 2011

United States = $1.09/gal

How much did the average American family save from biofuels?

About $340

Doug Durante
Executive Director
Clean Fuels Development Coalition
Why CAFE and FFVs?

• E10 Blend Wall is here and has a negative impact on existing and new projects in terms of investment & technology development necessary to meet RFS
• Appx. 13-14 bgpy being produced, already exporting 1 bgpy because conventional vehicles limited to E10
• Recent E15 Approval has limitations and may have less impact in terms of relief:
  - Various state and local restrictions
  - Automaker concerns/warranty
  - MY 2001 and newer
  - Small engine, marine, etc. opposition
• FlexFuel Vehicles, capable of using any combination become critical!
E85 and Blender Pumps: A Resource Guide to Ethanol Refueling Infrastructure

SPECIAL THANKS TO THESE ORGANIZATIONS FOR SUPPORTING THE DEVELOPMENT OF THIS GUIDE:
- DuPont Danisco Cellulosic Ethanol
- Maryland Corn Producers Utilization Board
- Minnesota Corn Growers Association
- Nebraska Corn Board
- Nebraska Ethanol Industry Coalition

Developed by the Clean Fuels Foundation and the Nebraska Ethanol Board
In cooperation with the U.S. Department of Agriculture and the Flex Fuel Vehicle Awareness Campaign
CAFE RULE OVERVIEW

• Current Rule is a hybrid of MPG and GHG Requirements
• Current 34 mpg result of a 2010 Rule resulting from the first change to the requirement in 15 years
• The proposed rule breaks new ground in terms of duration-- 2012 to 2025
• It is a significant regulatory action with total estimated cost of the 13 year program of $185 - $209 Billion!
• The efficiency improvements estimated at $6,600 over life of vehicle in consumer savings
Impacts

- Petroleum Savings of .6 to 1.0 million bpd
- RFS2 has the potential to reduce 1.0 million bpd
- The combined 1.6 - 2.0 mbpd by 2025 represents 20% decrease in oil consumption, or the equivalent of imports from the Persian Gulf
- Reduced demand drives down global oil cost, reduces trade deficit/balance of trade costs, increases domestic economy
Requirements

• Hybrid of mileage increase and greenhouse gas/carbon emission decreases

• Combined result in a petroleum equivalent reduction number going from current 34 to close to 54 mpg.
<table>
<thead>
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<th>Year</th>
<th>Average Fuel Economy for Cars (miles per gallon)</th>
<th>Average Fuel Economy for Light Trucks (miles per gallon)</th>
<th>Average Car Carbon Dioxide Emissions (grams/mile)</th>
<th>Average Light Truck Carbon Dioxide Emissions (grams/mile)</th>
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</table>
• Originally established in 1988, have been effective

• Additional cost to OEMs not passed on to consumers.

• More than 10 million FFVs on the road today
So What’s the problem?

- FFV Incentives Being phased out/down. 1.2 mpg now to zero by 2018
- EV Incentives disproportionately valued, essentially forcing one technology over another
- FlexFuel Incentives cost taxpayers/government nothing, no cost option to consumers
- EVs require significant public support (tax incentives) and increased consumer cost
- The Issue is not to discredit EVs but to create a parity and eliminate barriers for FFVs
- While no cost to consumers, FFVs have real costs that must be offset by benefit
• During phasedown OEMs required to demonstrate usage—and that's OK...
• Options to do so range from practical to potentially crippling
  - Simple assumption of ethanol above blend market going into FFVs
  - FFV credits divided among OEMs selling FFVs
• Alternatively, record keeping, data collection, etc. too burdensome and costly
• Our objective should be to make it easy and worthwhile for OEMs to continue
Biofuels Devalued in Rule

- Utility Factor, i.e. assumed amount of usage of ethanol in FFVs is low
- Corresponding credit of <5% GHG is low
  - Basic Path Ethanol in the RFS assumed to be <20% GHG, E85 should be 85% of 20!
- As the regulatory structure transitions to carbon and GHG reduction, ethanol and all biofuels need to claim that high ground.
- Future ethanol, i.e. advanced, must be <50% GHG!
- Even commenting on this helps establish a record and positions us for future discussion.
Economic Costs of Eliminating AFV Provisions in 2017-2022 CAFE

Dr. Matthew C. Roberts
The Ohio State University
How will AFV elimination affect economic activity?

• Create ‘homeless ethanol’ in excess of E10 blend wall.
Homeless Ethanol Compared to Total US Gasoline Consumption

- E10 in All Gas Consumed
- 'Homeless Ethanol'
- Motor Gasoline Consumption
How will AFV elimination affect economic activity?

• Create ‘homeless ethanol’ in excess of E10 blend wall.

• By 2020, there will be 15.8bn gallons of homeless ethanol.

• These 15.8bn gallons will require a minimum of 10.8m acres to fulfill.

• These 15.8bn gallons will require 300 to 600 new plants, plus associated logistics and farm equipment.
What are the effects?

• Compared to a world with the AFV, land prices will decline by 3.5% per year over the next 8 years.
• Global row crop prices will decline by 2.5% per year.
• These two effects alone will create large amounts of financial stress in the global farm economy.
What are the effects?

• The plants that need to be built to service RFS2 will provide 9,000 to 24,000 actual full-time jobs.

• Logistics and processing will provide another 18,000 to 48,000 direct jobs.

• From these direct jobs will be created more ‘indirect’ jobs—jobs that are created as incomes are spent.
Recommended Changes to the Rule

The remedy for addressing the lack of parity for FFVs and biofuels is clear: The agencies can and should provide a level playing field for each vehicle technology. Further, the life-cycle CO2 reductions that ethanol provides must be recognized, and the CAFE incentive for biofuels must be preserved in the combined EPA/NHTSA rule. To these ends, EPA should:

1. Either:
   a. Use the Society of Automotive Engineers “utility factor” methodology (based on vehicle range on the alternative fuel and typical daily travel mileage) to determine the assumed percentage of operation on gasoline and percentage of operation on the alternative fuel. This will provide equity in treatment of alternative fuels and create a sensible incentive for continued production of FFVs.

   Or:

   b. Adopt the recommendation offered by the Alliance of Automobile Manufacturers to maintain meaningful FFV credits in the final rule. By using this alternative methodology based on E85 usage in FFVs to calculate GHG emission reductions, a sensible incentive for continued production of FFVs is created.
Recommended Changes to the Rule

2. Add the life-cycle CO2 reduction benefits of ethanol to the CO2 compliance standards by providing a multiplier showing life-cycle CO2 reduction, rather than simply measuring tailpipe CO2 emissions, for all blends containing biofuels. This calculus must take into account at least the recognized minimum life-cycle CO2 reduction of 20% for the biofuel portion of any fuel blend. This would be a conservative recognition of ethanol’s GHG benefits in light of the fact that future ethanol must meet the requirement of advanced biofuels and achieve a 50 percent GHG reduction.

3. At blends of E85 or higher, a 0.15 multiplier must be used for CO2 calculations, in order to preserve existing statutory incentives for alternative fuels. The inclusion of this multiplier in CO2 standards would align with EPA’s mandate to reduce emissions of GHG and other pollutants, because it will promote investment into alternative engines and fuels that reduce CO2 on a life-cycle basis, while at the same time reducing a variety of other dangerous criteria pollutants.
Path Forward

- File comments with EPA and NHTSA
- Meet with agency representatives to discuss our concerns and offer suggested solutions for maintaining meaningful incentives for FFV production
- Inform and educate value chain stakeholders and policy makers
Questions and Discussion
25x’25 Partner Comments on CAFE/GHG Rule

- American Council on Renewable Energy
- American Farm Bureau Federation
- American Seed Trade Association
- Association of Equipment Manufacturers
- Biotechnology Industry Organization
- National Association of Wheat Growers
- National Farmers Union
- National Sorghum Producers

http://www.25x25.org/comments_to_EPA_NHTSA
Thank you!

[Image of 25x'25 logo]

www.25x25.org