

AEO 2013 Liquid Fuels Markets Working Group

August 27, 2012

Attendance (In Person)

Beth May, Mike Cole, Arup Mallik, Vish Mantri, Bob Kozak, Irene Olson, Sam Napolitano, Julie Harris, Paul Kondis, Michael Schaal, Andy Kydes, Tom White, Mac Statton, John Conti

Attendance (WebEx)

Adrian, Dale Nisbitt, Erik Shuster, David Hitchcock, Jose Benitez, Rodney Geisbrecht, John Pydrol, Meghan Gordon, On Location, Alan Weber, NETL PGH, Nancy Johnson, Dave

Notes by Slide

Slide 1

This is the first of two meetings and will cover some of the assumptions in AEO 2013. The next meeting will take place in October 2012 and will cover preliminary results.

Slide 6

Low Carbon Fuel Standard (LCFS) was not modeled last year but will be modeled this year

Under the LCFS Brazilian sugarcane Ethanol is favorable due to its carbon intensity (defined as grams of CO₂ equivalent / Mega Joule)

It may be expected to see an increase in Brazilian sugarcane imports to California

This increase also has impacts for the Renewable Fuel Standard (RFS) because Brazilian Sugarcane is considered an advanced biofuel

An increase in Brazilian imports is likely to affect prices as it is more expensive than corn based ethanol

Q: Is the California LCFS an attempt to exclude Canadian Oil Sands from the liquid fuels pool?

A: The LCFS has a carbon intensity for all liquid fuels

Q: What does the model assume for the corn price differential?

A: The model has an in-house developed supply curve and the differential is determined by the location on the supply curve.

Other Comments:

Brazil does not have much surplus ethanol due to the drought so it is likely that there will be an exchange of corn-based ethanol for sugarcane ethanol

Since Brazilian ethanol is more expensive it is likely that California prices will increase

Brazilian demand for ethanol is increasing due to fleet turnover and an increasing ethanol requirement

The model does try to capture the arbitrage between the US and Brazil

The impact of the LCFS depends on how the “sphere of influence” is defined whether it is strictly limited to California’s borders or a larger area

The impact of Electric Cars will be accounted for through other mechanisms like RINS, CO2 Prices, and RECS

The model should try to account for the arbitrage between RINS, RECS, and CO2 credits

Slide 7

The California AB 32 was not modeled last year but will be this year

It is a cap and trade system for Green House Gas (GHG)

It is anticipated to affect prices, production and more than just liquid fuels

Carbon Credits from outside the state of California will not count. Similar issue to the sphere of influence for liquid fuels

Under AB 32 firms would be responsible for CO2 generated outside of California, but cannot receive credits out of California

Q: What is the penetration of electric cars in California?

A: Low due to capital cost. A tax is still likely to be collected in the form of a mileage tax.

Slide 8

Most comments here were to keep RFS as is in the model

There was discussion of the penalty price and the arbitrage between production and the penalty price

A suggestion was given to look at the possible arbitrages between RECS and RINS