Assumptions and Expectations for Annual Energy Outlook 2013: Liquid Fuels Markets Working Group

AEO2013 Liquid Fuels Markets Working Group Meeting
Office of Petroleum, Natural Gas & Biofuels Analysis
August 27, 2012 | Washington, DC

WORKING GROUP PRESENTATION FOR DISCUSSION PURPOSES DO NOT QUOTE OR CITE AS RESULTS ARE SUBJECT TO CHANGE
Overview

• NEMS and LFMM
  – For AEO2012, LFMM was used in a single side case.
  – For AEO2013, LFMM will be used in all cases

• LFMM and the changing structure of the refining industry
  – AEO2012 final report: http://www.eia.gov/forecasts/aeo/IF_all.cfm#refiningind

• New/revised policy issues
  – California LCFS
  – California AB32
  – RFS
NEMS – a model of the U.S. energy economy
LFMM models the changing refining industry

**Primary Feedstocks**
- Crude Oil
- Other Fossil Fuels
- Biomass

**Refining Processes**
- Distillation
- Hydrocracking
- Coking
- Gasification
- Direct Liquefaction
- Gas Plant Fractionator
- Dry/Wet Mill
- Enzymes
- Gasification

**Refined Products**
- Liquids/Blendstock
- Chemicals
- Petroleum Solids
- Biomass Solids

**End-Use Products**
- LPG
- E85
- Gasoline
- Jet Fuel
- Diesel Fuel
- Heating Oil
- Residual Fuel
- Chemicals
- Asphalt
- Petcoke
- Agricultural
- Biomass Heat and Power
New/revised policies modeled for AEO2013

- California LCFS (Low Carbon Fuel Standard)
- California AB32 – Global Warming Solutions Act
- Renewable Fuel Standard (RFS2)
  - Not a new policy, but LFMM includes new assumptions
California Low Carbon Fuel Standard (LCFS)

- The LCFS, as regulated by the California Air Resources Board (CARB), requires “obligated parties” to reduce the average carbon-intensity of motor gasoline blends (E10, E85, etc.) and diesel placed into commerce.
- The maximum allowable carbon intensities decrease over time.
- Potential impacts on the liquid fuels market include interaction with the national RFS, increased imports of sugarcane ethanol from Brazil, motor fuel prices in California.
California AB32 – Global Warming Solutions Act

• “establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions, applicable from January 1, 2012, to December 31, 2020”

  Source: http://www.arb.ca.gov/cc/ab32/ab32.htm/

• This cap and trade approach applies to the liquid fuels production industry, other industries that emit GHG, and electricity production.

• AB 32 will likely impact liquid fuel prices and production levels in California, and may have a broader impact.
Renewable Fuel Standard (RFS2)

Revised assumptions for AEO2013 -
• Set hardship-based waiver prices for Total Biofuels and Advanced Biofuels, in case production cannot satisfy the mandate at reasonable cost
• Enables two-way ethanol trade between U.S. and Brazil
Contacts

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Next Working Group Meeting

Planned for October 2012, exact date to be determined.
Will present preliminary AEO2013 results.
For more information

U.S. Energy Information Administration home page | [www.eia.gov](http://www.eia.gov)

Short-Term Energy Outlook | [www.eia.gov/steo](http://www.eia.gov/steo)

Annual Energy Outlook | [www.eia.gov/aeo](http://www.eia.gov/aeo)

International Energy Outlook | [www.eia.gov/ieo](http://www.eia.gov/ieo)

Monthly Energy Review | [www.eia.gov/mer](http://www.eia.gov/mer)

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