

Assumptions for *Annual Energy Outlook 2017*: Liquid Fuels Markets Working Group



AEO2017 Liquid Fuels Markets Working Group Meeting #1
Office of Petroleum, Natural Gas, and Biofuels Analysis
August 25, 2016 | Washington, DC

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DO NOT QUOTE OR CITE AS RESULTS ARE SUBJECT TO CHANGE**

Discussion topics

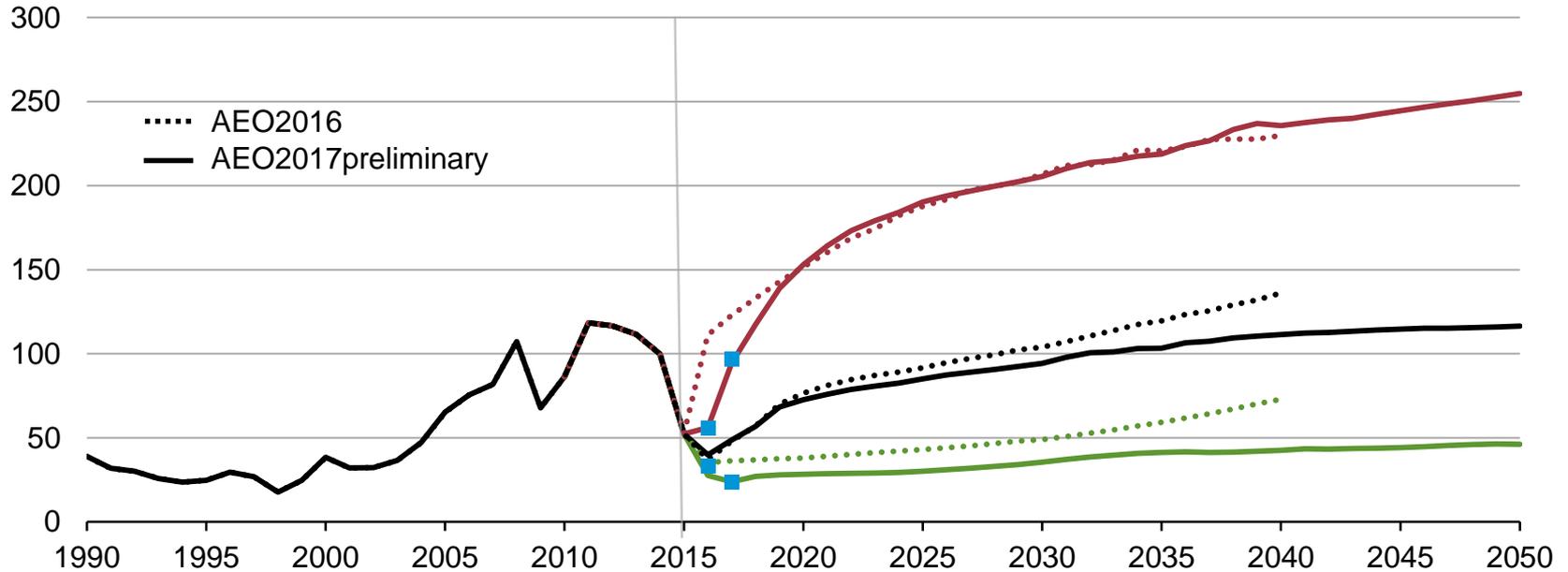
- “Short” *AEO2017*
- World Oil Price Path
- Assumptions/changes for *AEO2017* – petroleum
- Assumptions/changes for *AEO2017* – biofuels/non-petroleum

“Short” AEO2017

- In general, restricted to historical data updates and major policy changes
- Can include design updates that help to better represent current events – none are planned for LFMM / IEM
- AEO cases are limited
 - Reference price case
 - High and low price cases
 - High and low economic cases
 - High and low resource and technology cases

Crude oil price lower for AEO2017

Brent crude oil spot price
2015 dollars per barrel



Source: EIA, Annual Energy Outlook 2017 and Annual Energy Outlook 2016

Reference world oil price path significantly lower than last year

- Liquids supply is more optimistic, mostly due to reductions in longer-term expectations of the marginal cost of production
- Liquids demand is mostly unchanged – factors leading to greater demand are offset by other factors that lead to reduced demand

AEO2017 petroleum assumptions/changes

- Key assumptions maintained from *AEO2016*
 - All crude types are allowed to be exported for all cases
 - Maintain methodology for crude price response, and interaction between crude/product prices
 - State level mandates and policies are maintained at *AEO2016* levels
- Extend model projection year to 2050
- Annual historical and Short Term Energy Outlook (STEO) data updates
 - September 2016 STEO will be represented

AE02017 petroleum assumptions/changes (continued)

- Crude and product import and export curve updates
 - For Reference, Oil Price cases, and Resource and Technology cases
 - Extend curves through 2050
 - May require adjustments to how crude and product prices are connected
 - Will pay close attention to impacts on key refinery unit utilization levels
- Existing US refinery capacity from EIA's Petroleum Supply Annual (PSA) not Oil and Gas Journal (O&GJ)
 - Need to establish rules for defining and dividing some PSA refinery unit classifications into categories represented in the LFMM
 - Semi regenerative vs Continuous reformers (done)
 - Hydrogen production vs hydrogen recovery (all production)
 - Distillate hydrotreater, distillate deaeromatizer, catalytic polymerization

AE02017 petroleum assumptions/changes (continued)

- Miscellaneous updates
 - End-use price markup data (based on historical calculations)
 - Motor gasoline and distillate market share data (based on historical calculations)
 - Changes to smooth transition off STEO years for selected items

AEO2017 biofuels/non-petroleum assumptions/changes

- Key assumptions maintained from *AEO2016*
 - Ethanol and biodiesel tax credits are not extended beyond current end dates
 - GTL, CTL, BTL (xTL Fischer-Tropsch) expansion are restricted until 2025 at the earliest
 - No changes to California low carbon fuel standards (LCFS) representation
- E15 penetration limited to 50% of E10 pool by 2050
- Renewable fuels standards (RFS)
 - Policy updates based on May 2016 NPRM (EPA final ruling not available until November)
 - Will continue to exclude cellulosic-compliant renewable fuel oil and biogas in *AEO2017*

Contacts

John Staub: john.staub@eia.gov

Mindi Farber-DeAnda: mindi.farber-deanda@eia.gov

Beth May: elizabeth.may@eia.gov

Adrian Geagla: adrian.geagla@eia.gov

Next Working Group Meeting

Tentatively planned for late September 2016.

Will present preliminary results for *AEO2017*.