

Industrial team plans for AEO2015



Macro Industrial Working Group (MIWG)

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WORKING GROUP PRESENTATION FOR DISCUSSION PURPOSES

DO NOT QUOTE OR CITE AS RESULTS ARE SUBJECT TO CHANGE

AEO2015 lite year additions

- Process flow status (complete AEO2016)
- Data updates
- Regulation changes
- Ethane / propane price modeling

Process flow models

- General:
 - Replace energy consumption based on engineering judgment with specific technology or equipment choice e.g. anode production for primary aluminum
 - Also can choose technology diffusion
 - Technologies are primarily based on CIMS (Consolidated Impacts Modeling System) data from DOE's (PNNL) Pacific Northwest National Laboratory
- Sub-modules completed: Cement & Lime, Aluminum, Glass
- Project completion for AEO2016
 - Steel submodule – in progress, coding in a few months
 - Paper submodule – commence in August

Data updates & regulation

- Data

- CHP historical data
- Benchmarking **total** industrial consumption
 - SEDS (State Energy Data System)
 - MER (Monthly Energy Review)
 - STEO (Short Term Energy Outlook)
- Rebase macro input to 2009\$

- Regulation

- California GHG cap & trade scoping plan & regulations updated; does not affect IDM modeling
- 111(d) NOPR – not modeling for AEO2015; may not be applicable to CHP
 - Size: greater than or equal to ~25MW electric in the thermal input cycle; industrial CHP not that large
 - Industrial CHP not designed to sell significant proportion of electricity to grid.

Ethane/Propane Price Modeling

- Why important
 - Influence on macro bulk chemical shipments
 - Driver of HGL supply (drilling)
 - The ‘new world’ of HGL supply in the U.S.
- AEO2014 model
 - Propane: Dynamic Linear Model (DLM) based on gas and oil prices
 - Ethane: linear regression using organic & resin shipments as drivers
- AEO2015 new model
 - DLM joint pricing model of ethane and propane
 - Automated updating of parameters
 - Drivers will include exports, chemical shipments, and “total” ethane supply

Memo on this meeting and presentation can be found here in about a month:

<http://www.eia.gov/forecasts/aeo/workinggroup/macroindustrial/>

Thank you for your attention!

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