

U.S. Heating Fuels Market Outlook



For

State Heating Oil and Propane Program Workshop

July 13, 2016

Washington, DC

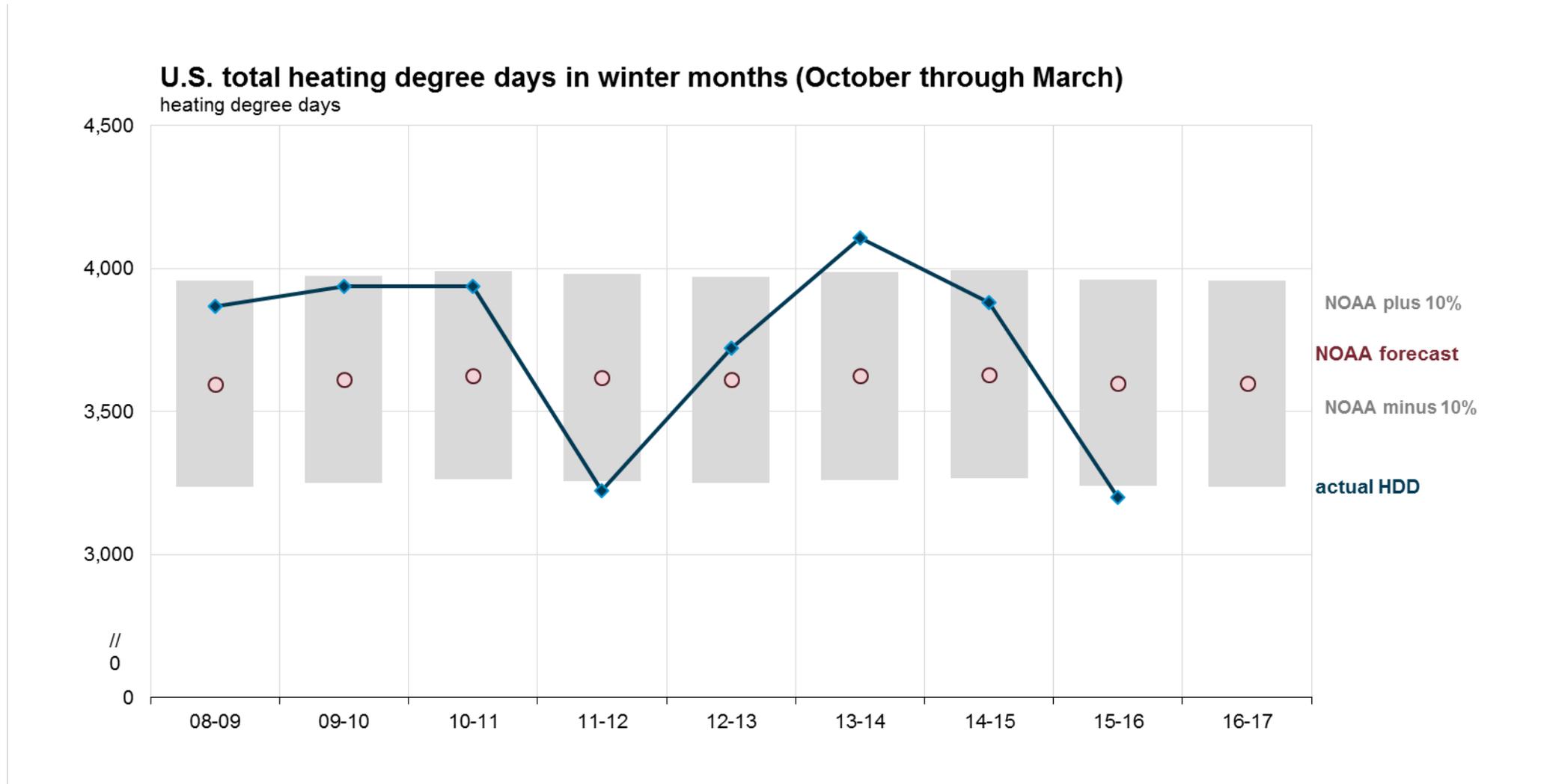
By

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Summary

- This briefing is an overview of the heating fuels outlook as it stands now. EIA publishes its Winter Fuels Outlook in the October edition of the Short-Term Energy Outlook (STEO).
- This briefing will cover:
 - Past and present weather/heating demand forecast
 - Regional reliance on various heating fuels
 - A summary of outlooks for:
 - Heating oil
 - Propane
 - Electricity
 - Natural gas

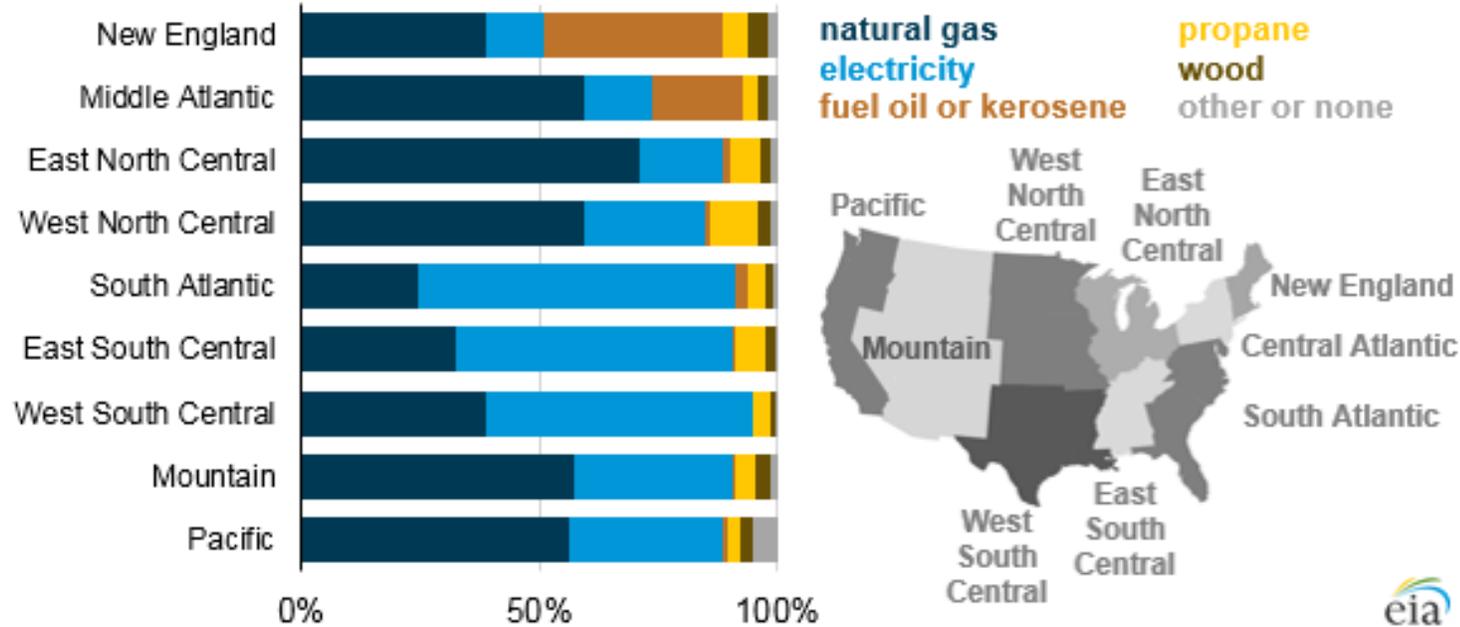
Weather is always a big wild card for the heating fuels outlook



Source: U.S. Energy Information Administration, National Oceanic and Atmospheric Administration, [Climate Prediction Center](#).

Each region relies on a different mix of heating fuels, so cold weather has a different effect on each region

U.S. household heating fuel shares in each Census Division, 2014
percent of division total

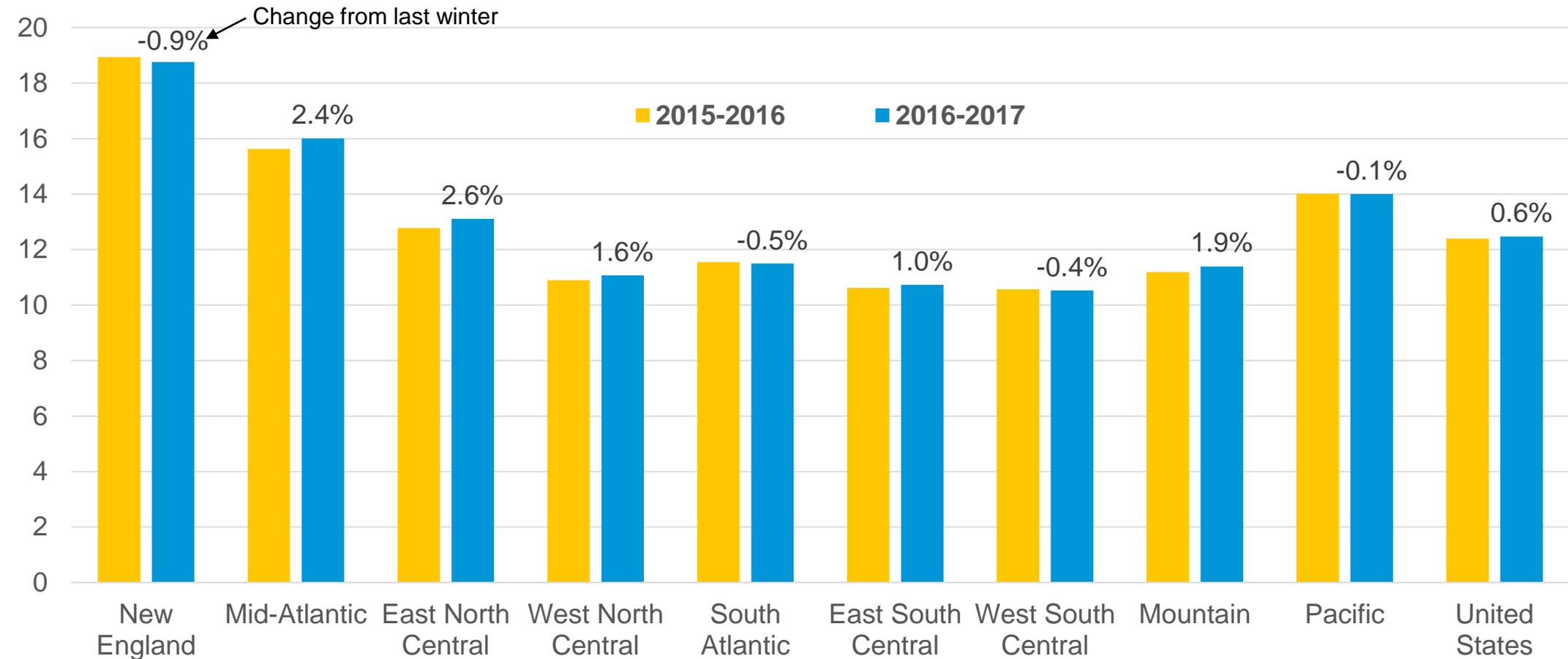


Source: U.S. Energy Information Administration, based on U.S. Census Bureau 2014 American Community Survey.

Electricity Outlook

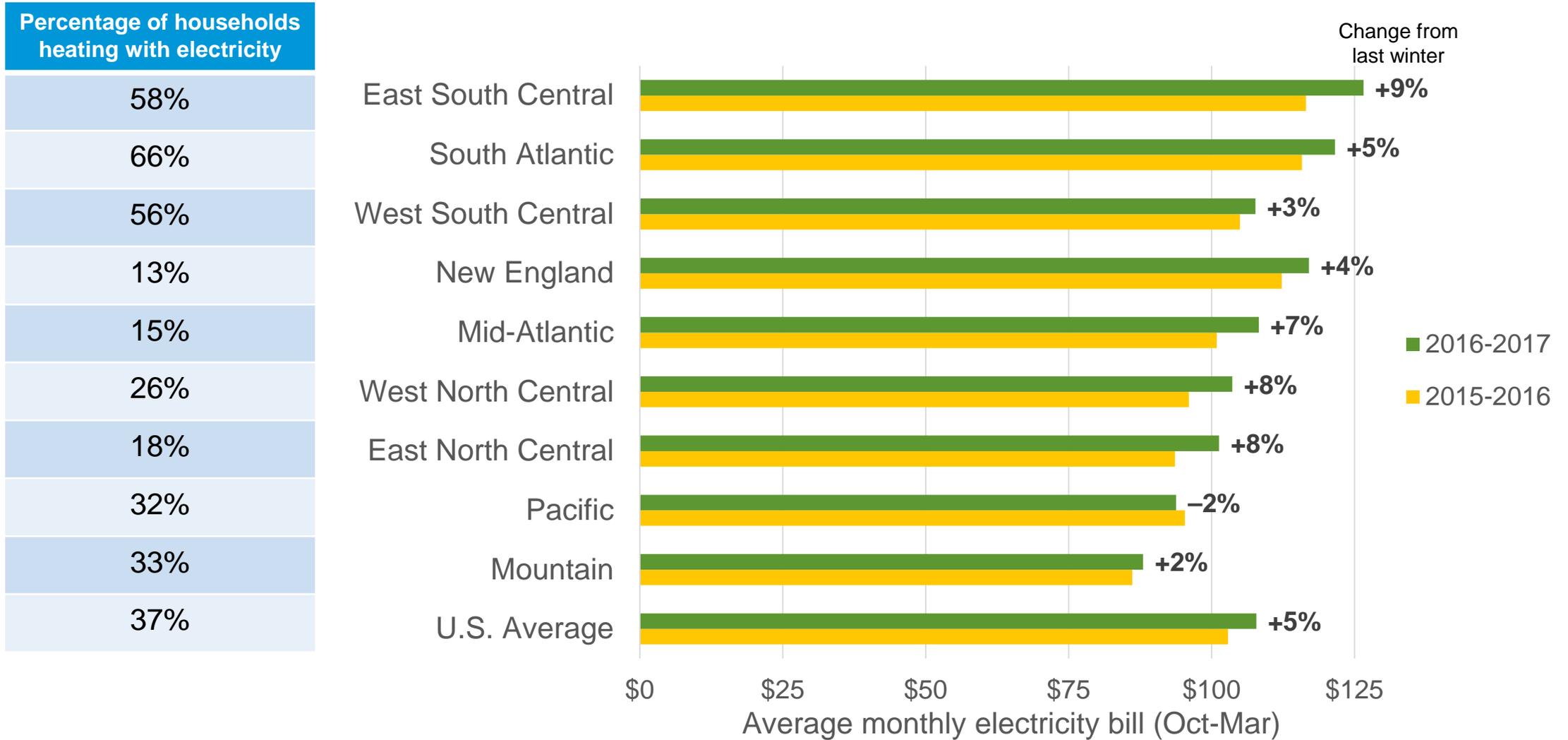
Most areas of the United States are forecast to experience modest increases in winter retail electricity prices

Cents per kilowatthour



Source: July 2016 Short-Term Energy Outlook

Average monthly residential electricity bills higher this winter primarily because of expected colder temperatures, especially in southern states

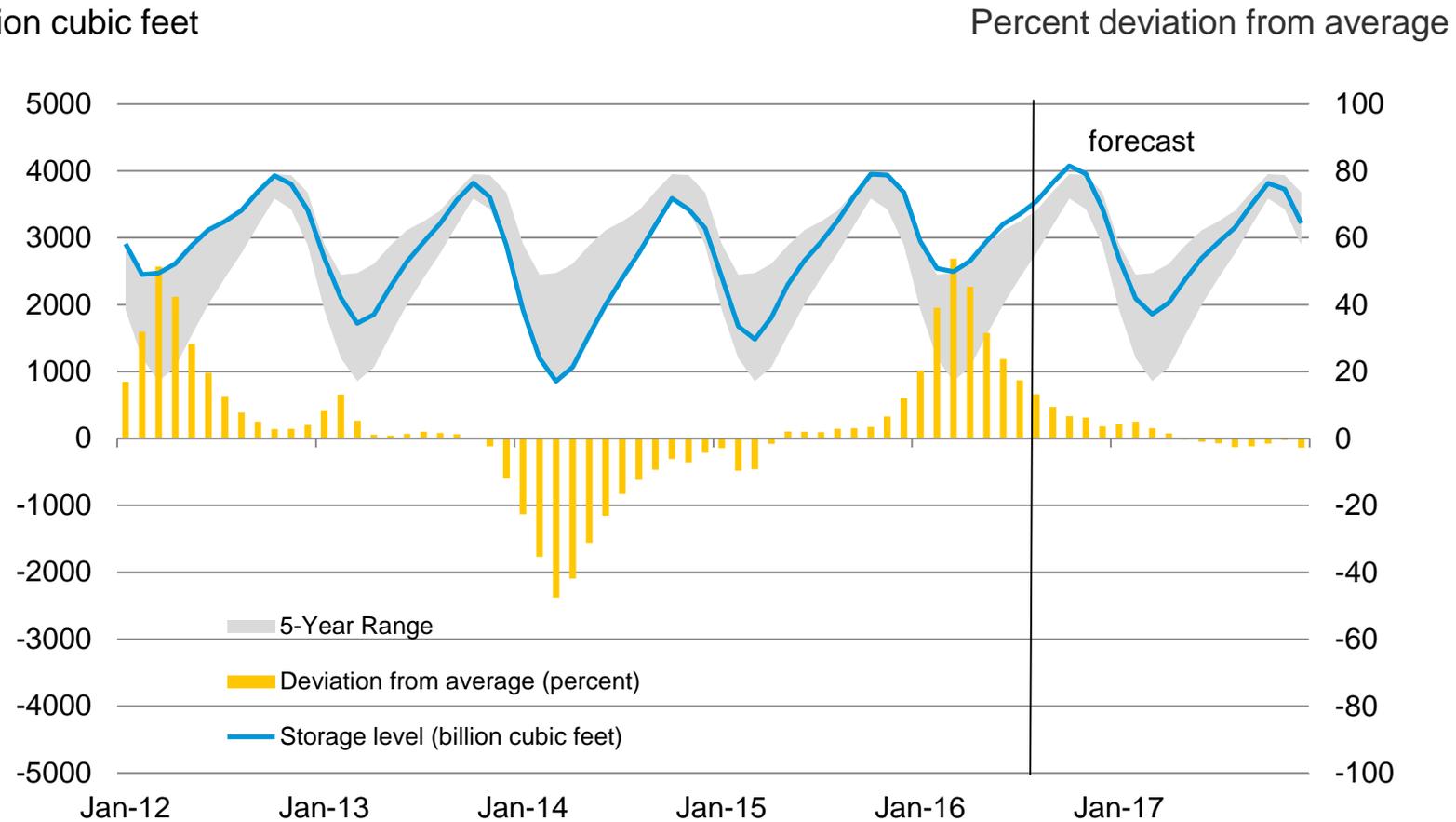


Source: July 2016 Short-Term Energy Outlook

Natural Gas Outlook

EIA expects storage inventories heading into the winter will be at record highs

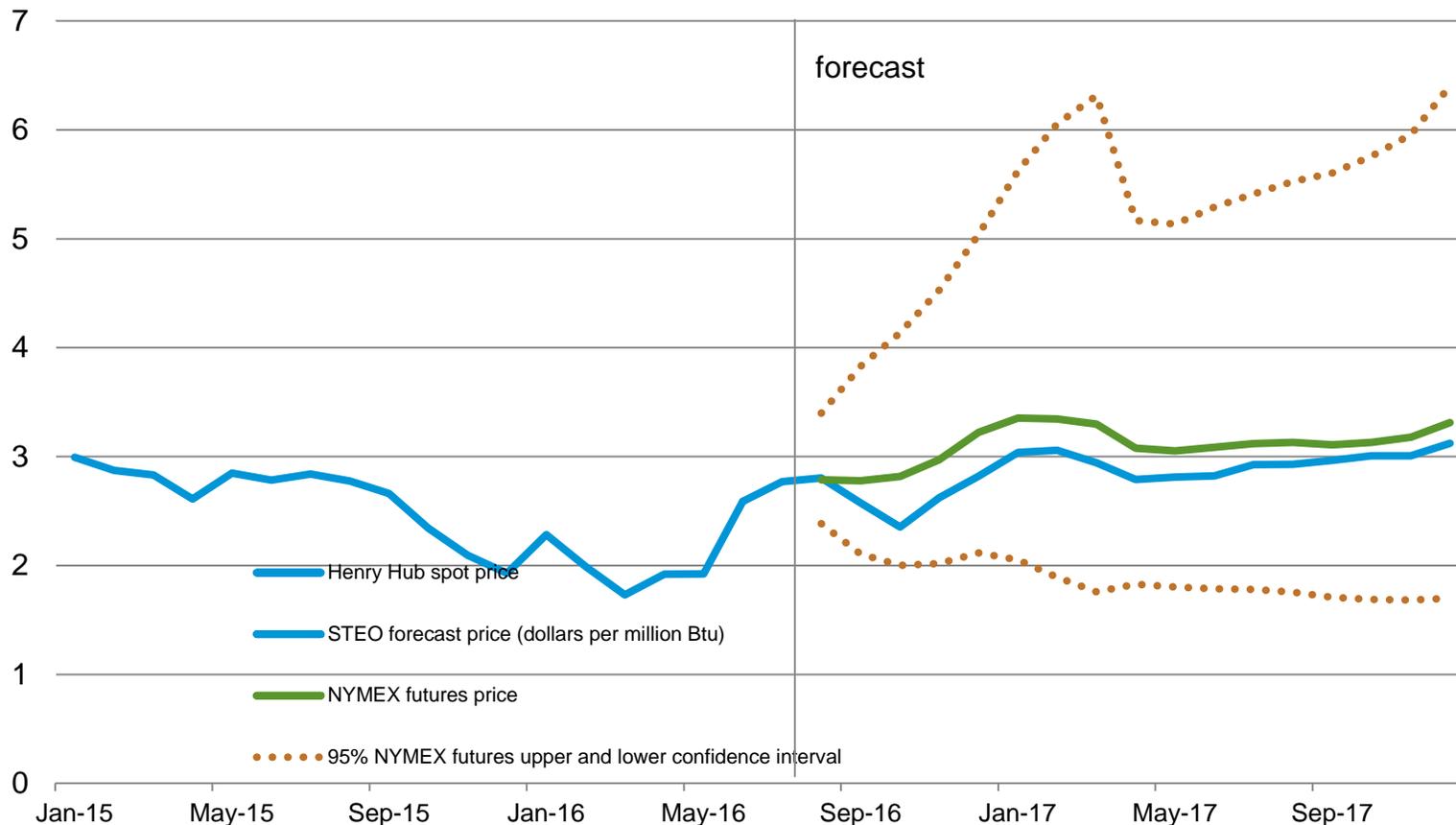
Working natural gas storage inventories 2012 – 2017
billion cubic feet



Source: Short-Term Energy Outlook, Natural Gas Monthly

EIA expects prices will rise slightly, but market participants expect a broad range of outcomes

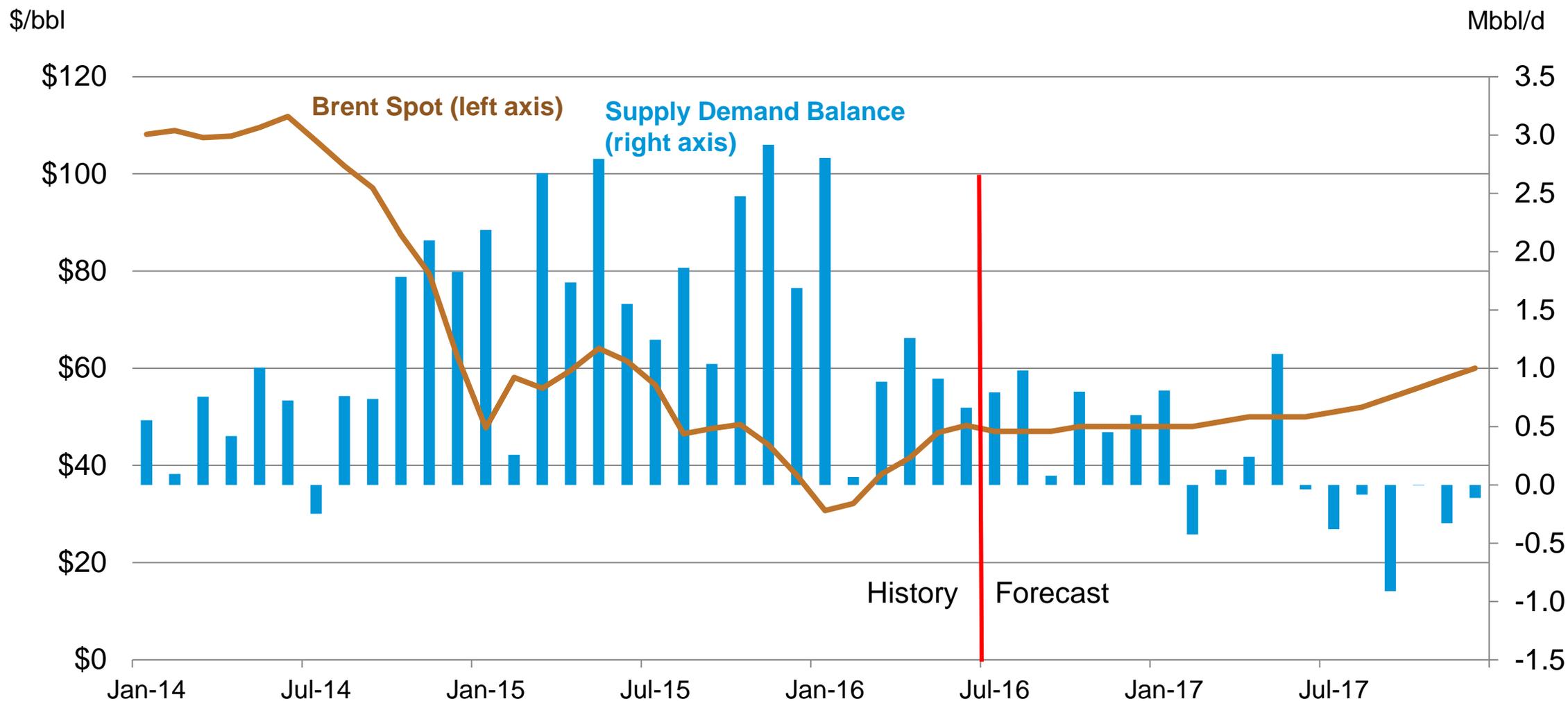
Henry Hub price, January 2015 – December 2017
dollars per million Btu



Source: *Natural Gas Monthly, Short-Term Energy Outlook*

Note: Confidence interval derived from options market information for the 5 trading days ending XX XX, 2016.

Brent crude oil prices still being driven by fundamental balances long-term

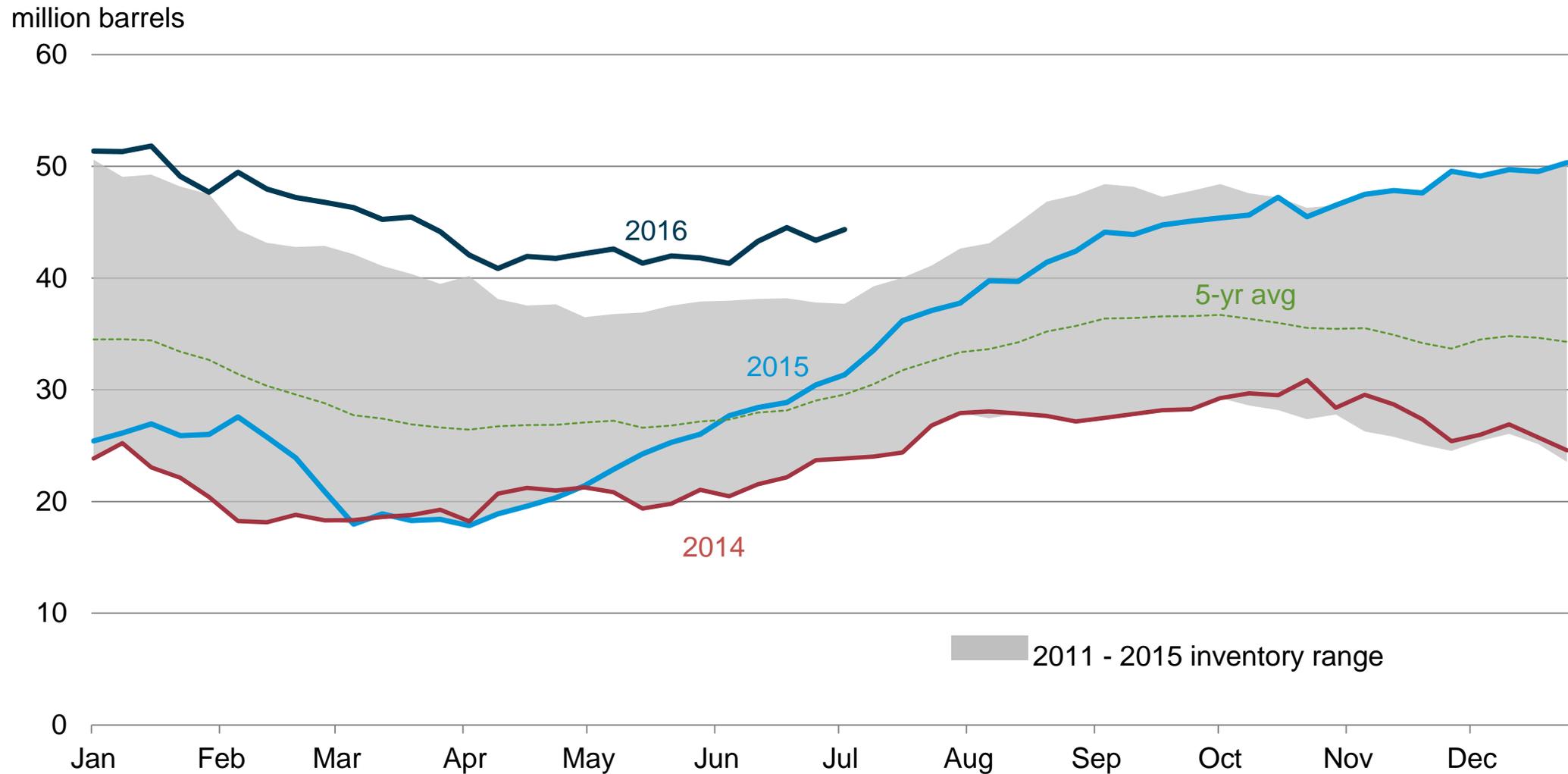


Heating Oil Outlook

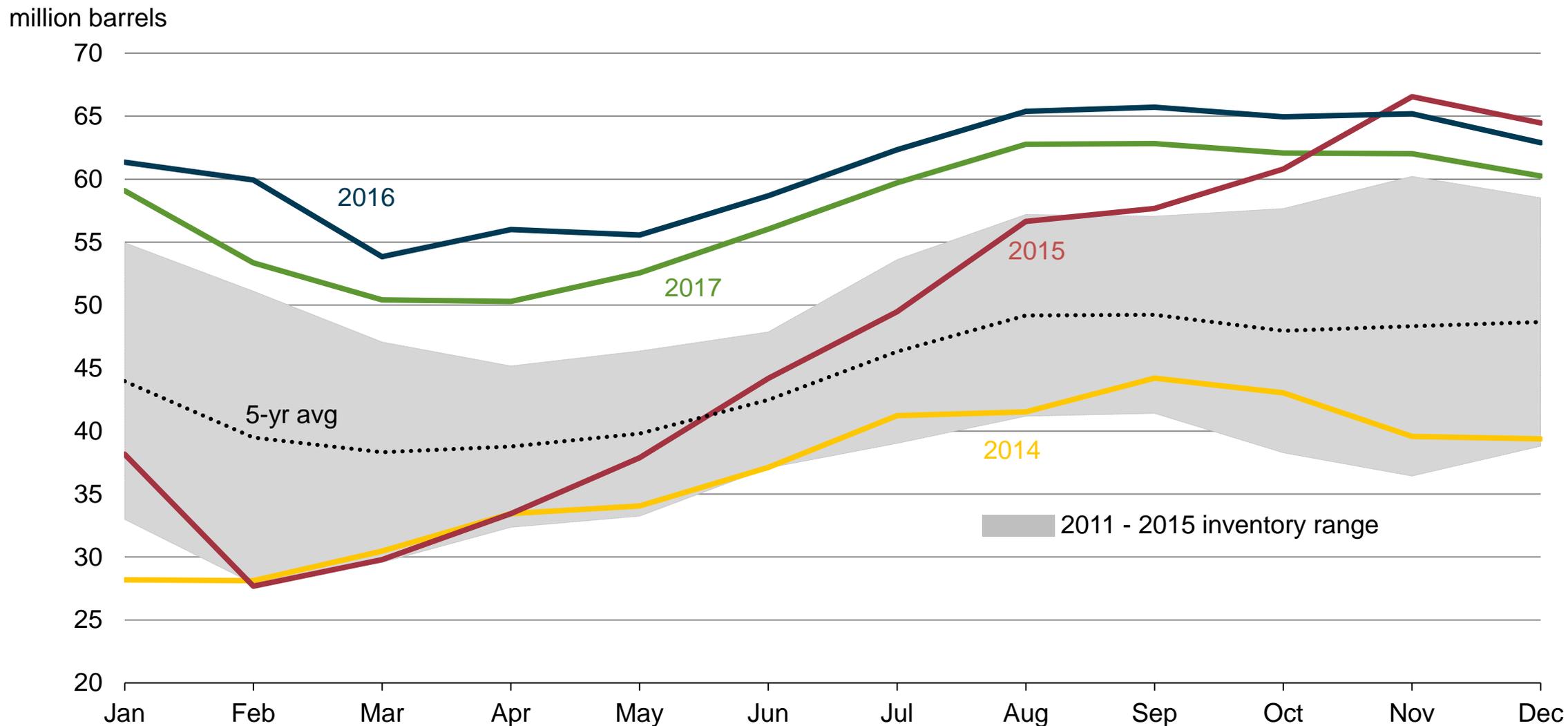
Summary

- Crude prices and supply overhang still main driver of heating oil price forecast.
- Inventories still very high but demand for distillate fuel is growing
 - Diesel refining margins are historically low, but rising and approaching 5-year average.
- Variables: Colder than normal weather or wet/heavy crop drying season
 - Inventories in the Midwest currently near 5-year average. Potentially wet crop/drying season could push them below

Northeast (PADDs 1A and 1B) Distillate Inventories above 5-year average

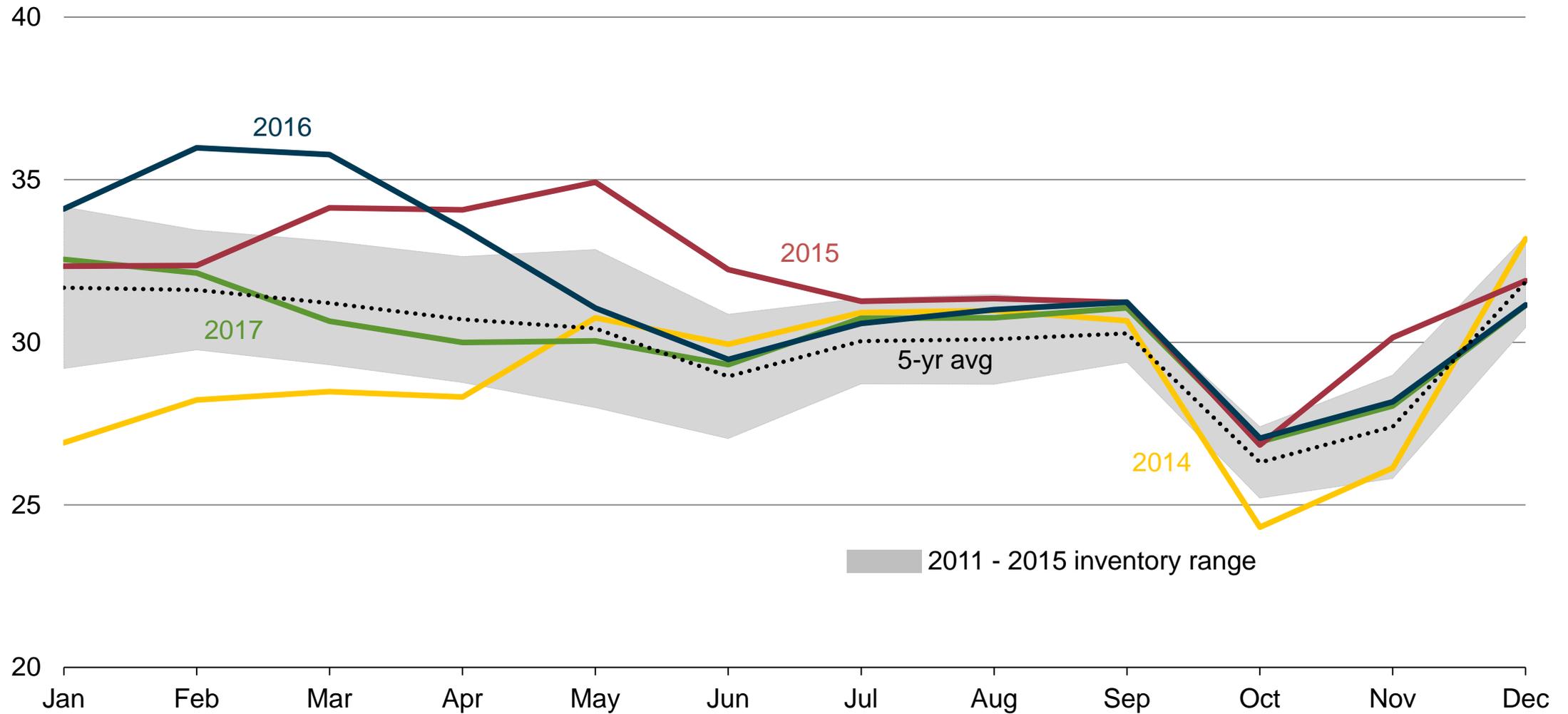


PADD 1 Distillate inventories forecasted to remain well above historical ranges

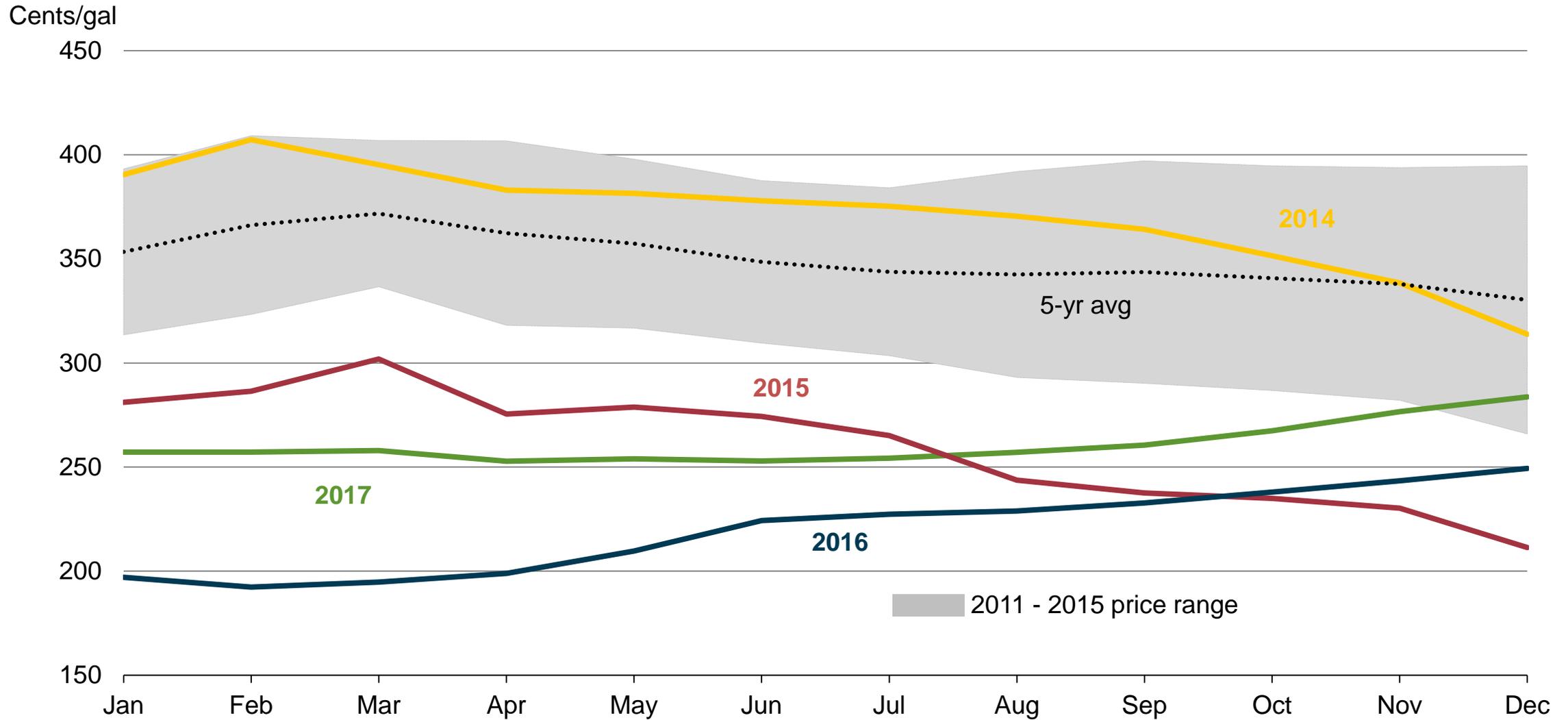


PADD 2 Distillate inventories returning to within historical ranges

million barrels

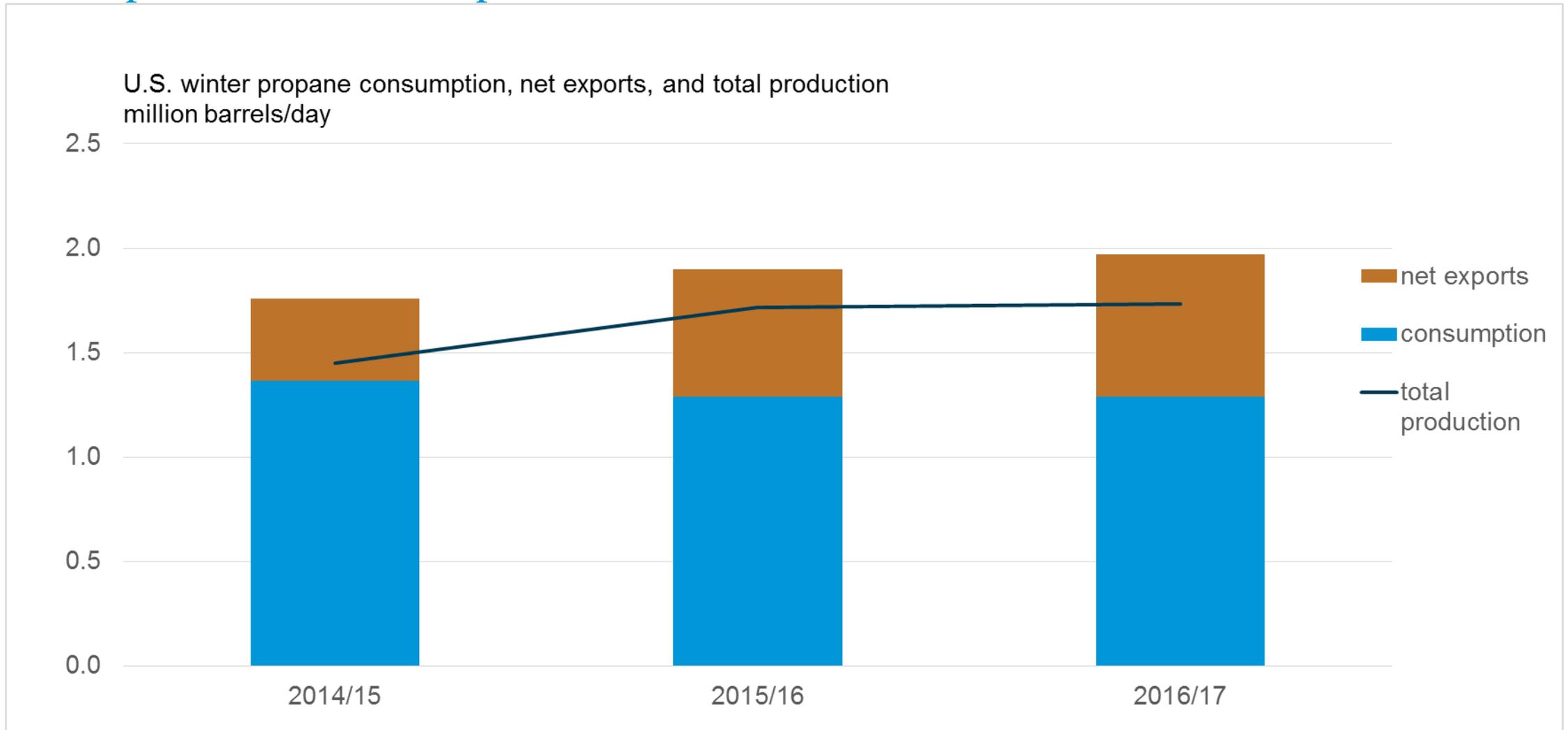


Forecasted U.S. average heating oil prices expected to be higher than last winter



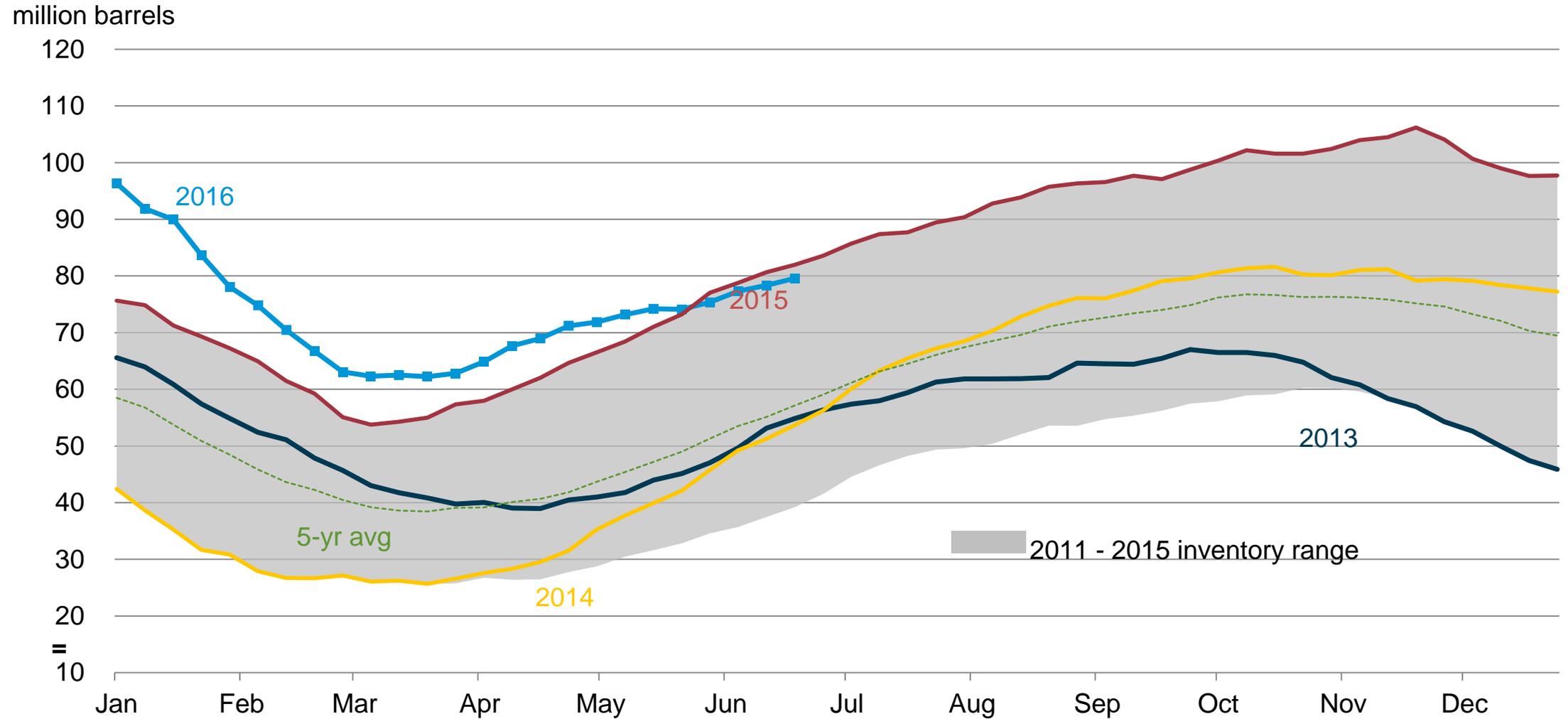
Propane Outlook

Propane production growth expected to slow next winter while net exports continue to expand



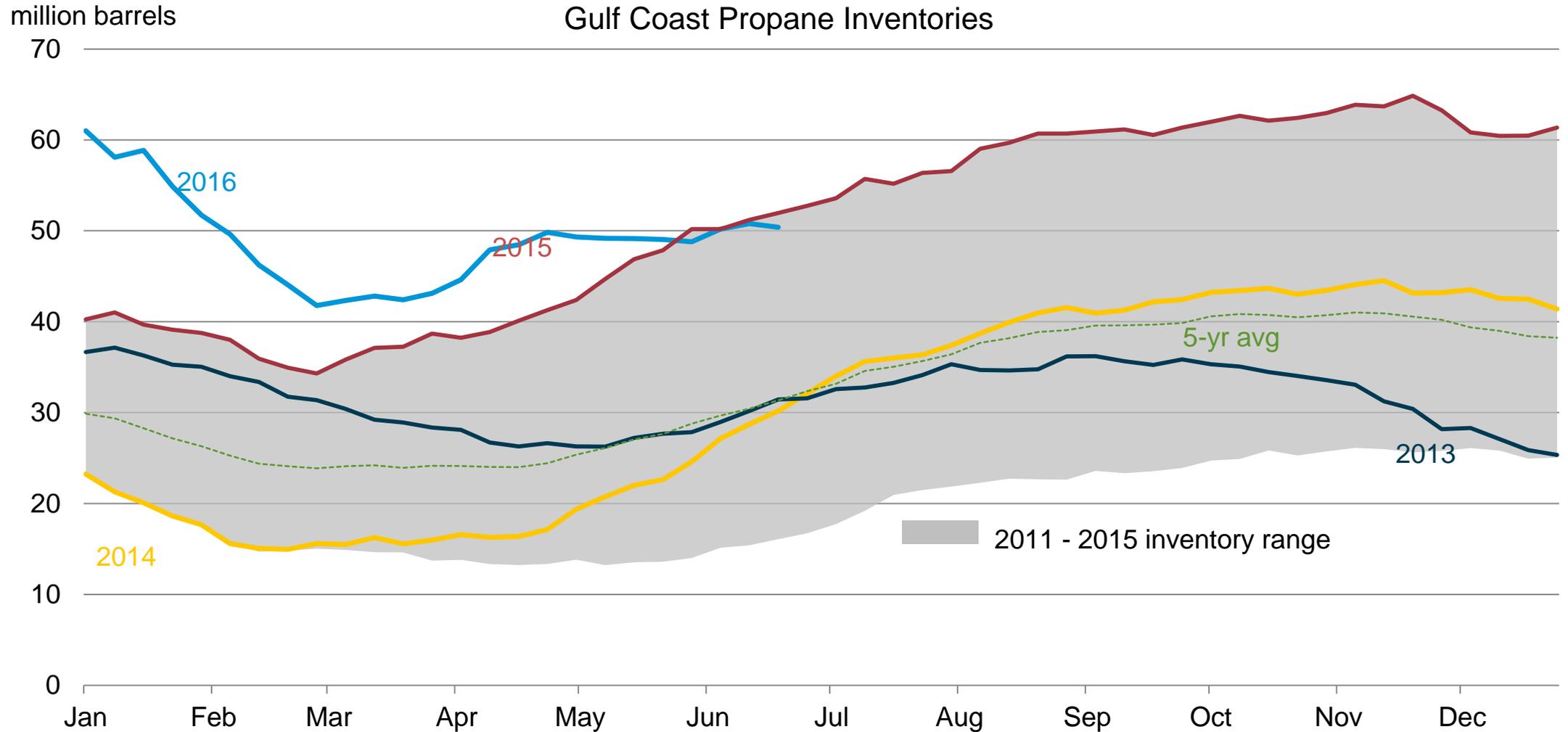
Source: Short-Term Energy Outlook, July 2015

U.S. total inventories have been high for the past 18 months but returned to the normal 5-year range at the end of May



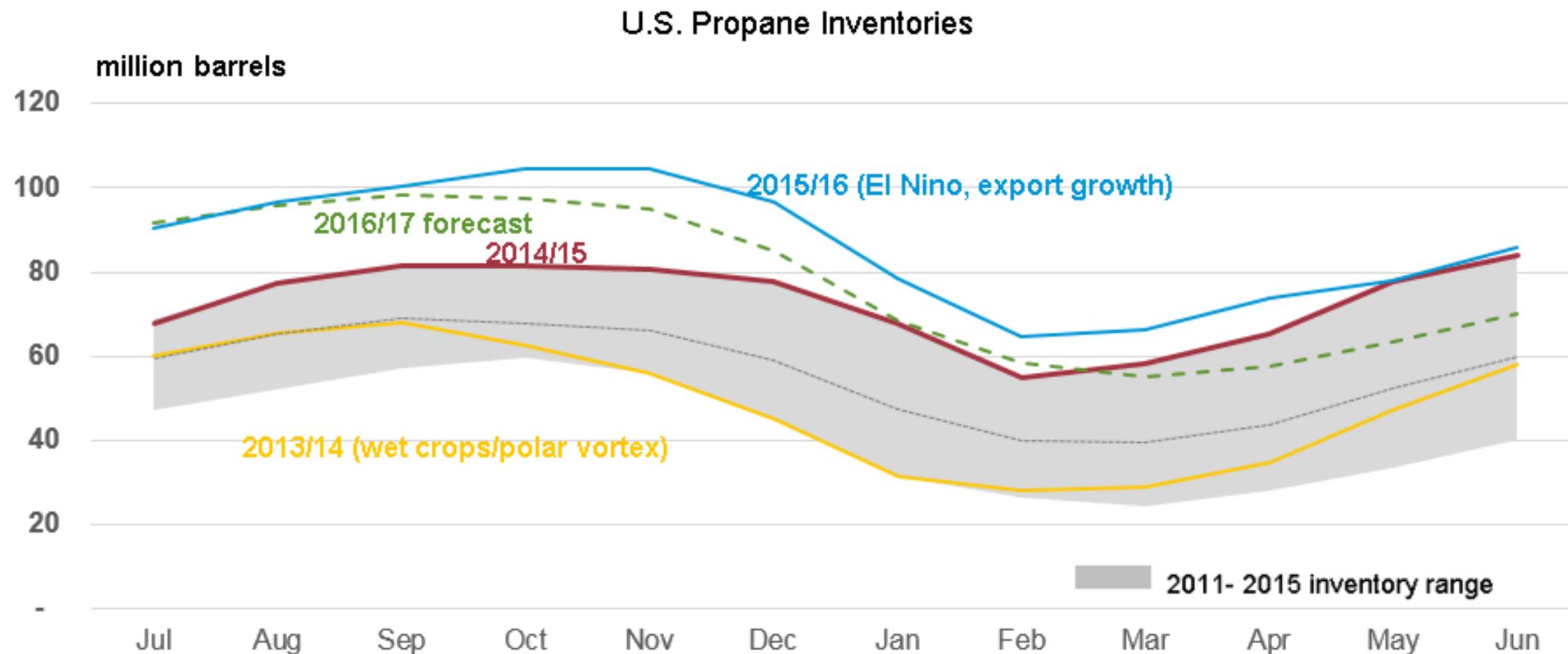
Source: EIA, U.S. propane and propylene stocks at refineries, bulk terminals, and natural gas plants

Gulf Coast inventory builds have slowed, bringing inventories within 5-year range



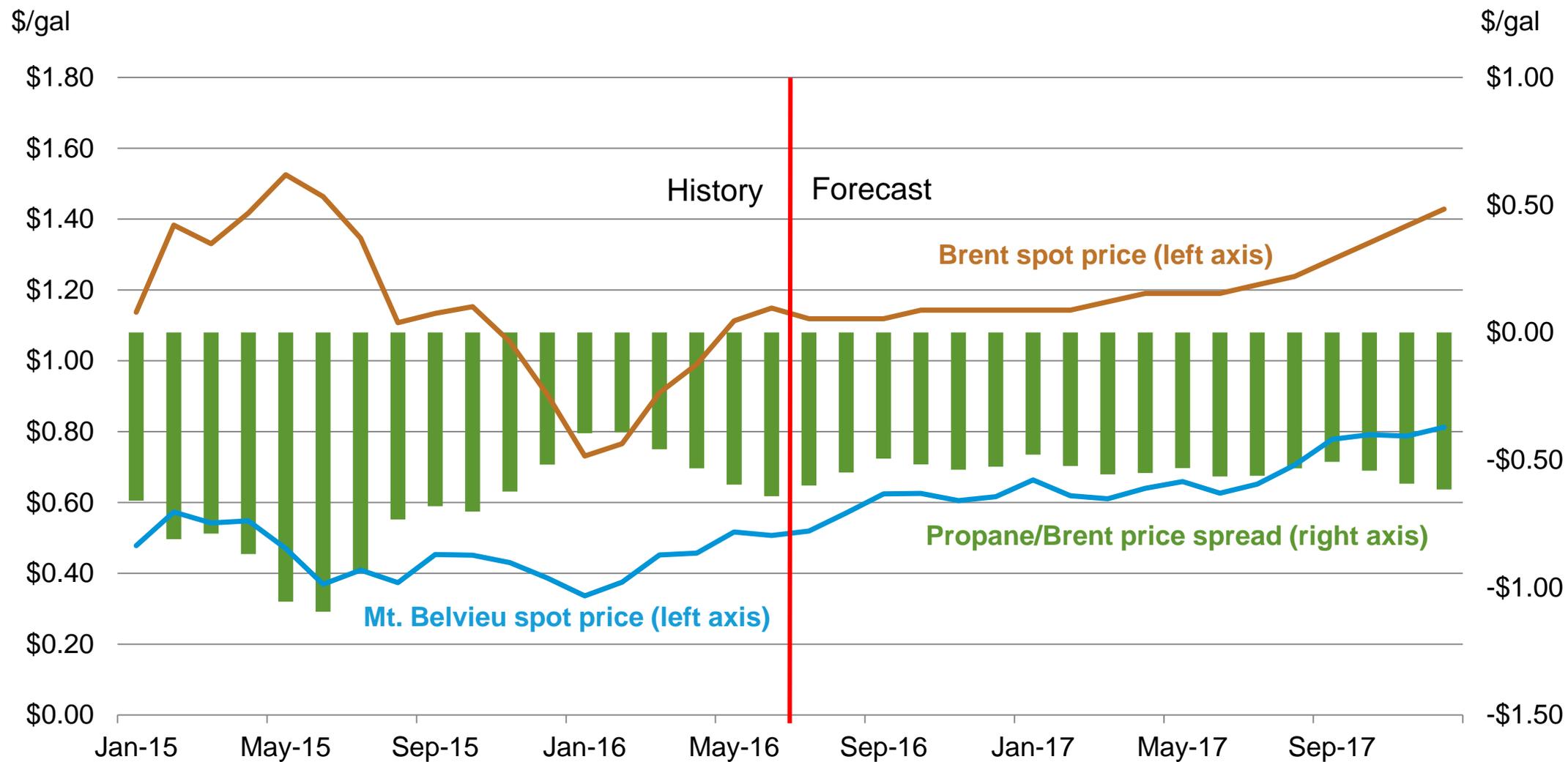
Source: EIA, U.S. propane and propylene stocks at refineries, bulk terminals, and natural gas plants

Another strong draw on inventories is expected in winter 2016/17, bringing inventories back into the 5-year range

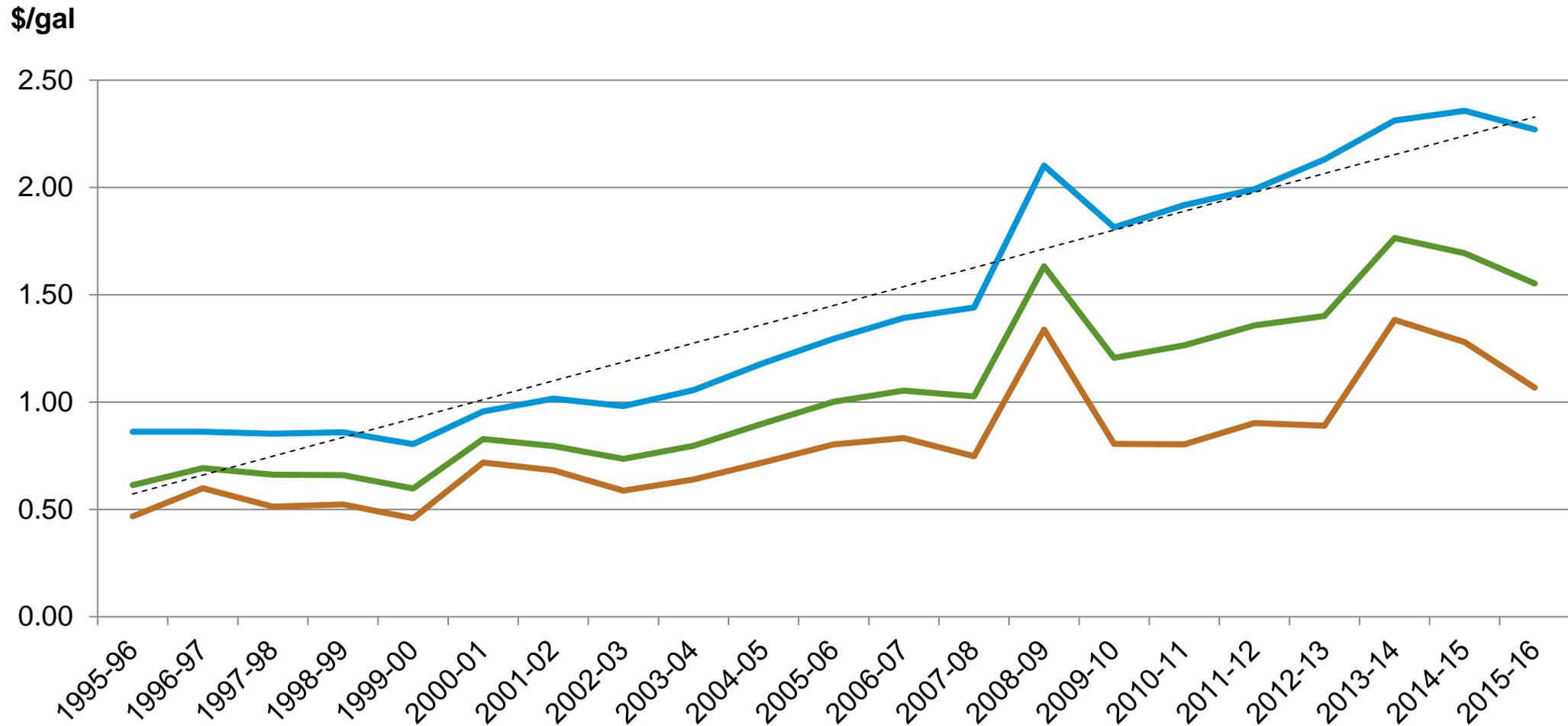


Source: EIA, Short-Term Energy Outlook, July 2016, U.S. propane and propylene stocks at refineries, bulk terminals, and natural gas plants

Mt. Belvieu prices forecasted to rise gradually through 2017 with crude oil

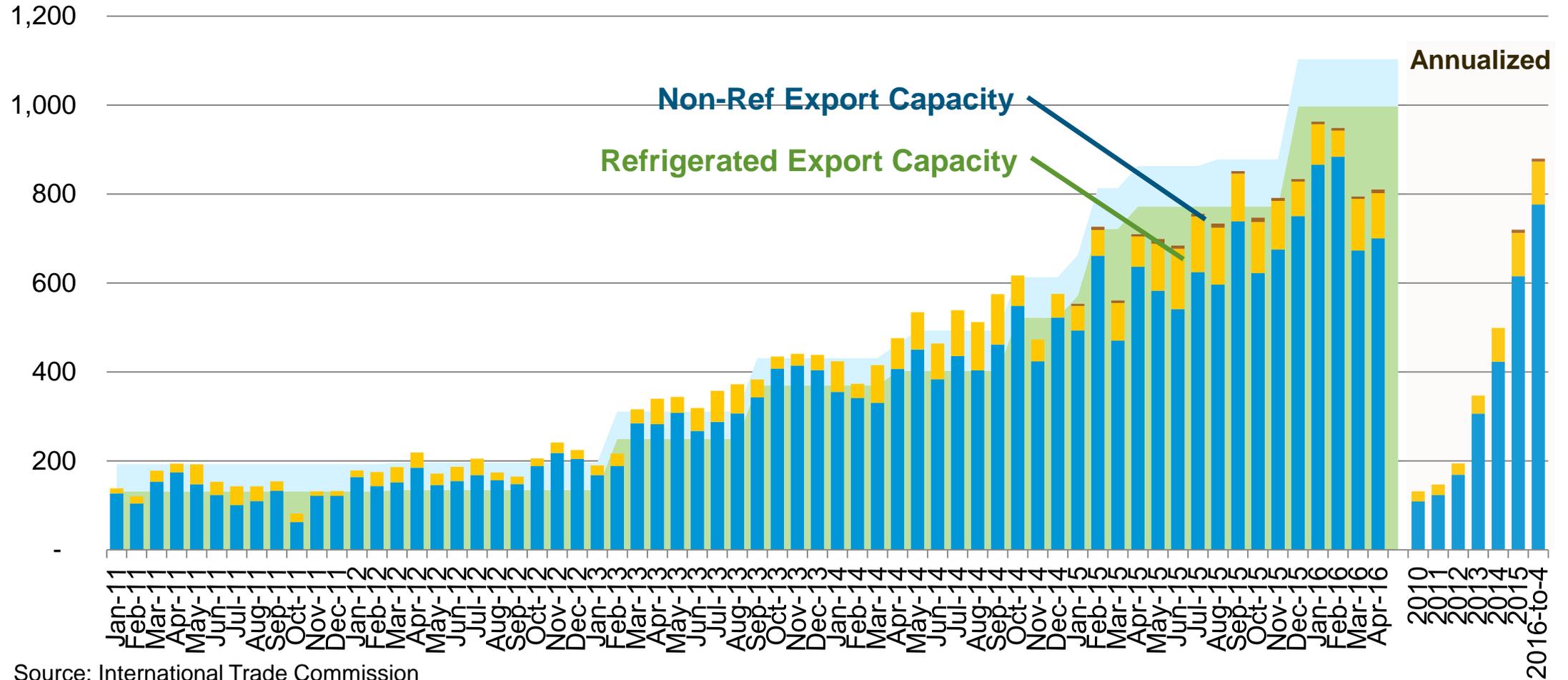


Propane retail price/Mt. Belvieu spreads trending upward historically, but leveling out.



Supplemental

Gross propane and butane exports and export capacity
thousand b/d



Source: International Trade Commission

Mt. Belvieu price spread with Henry Hub widens over forecast period

