

Propane Update



November 22, 2017 | Washington, DC

(Inventory data as of 11/17/17; residential heating fuel prices as of 11/20/17)

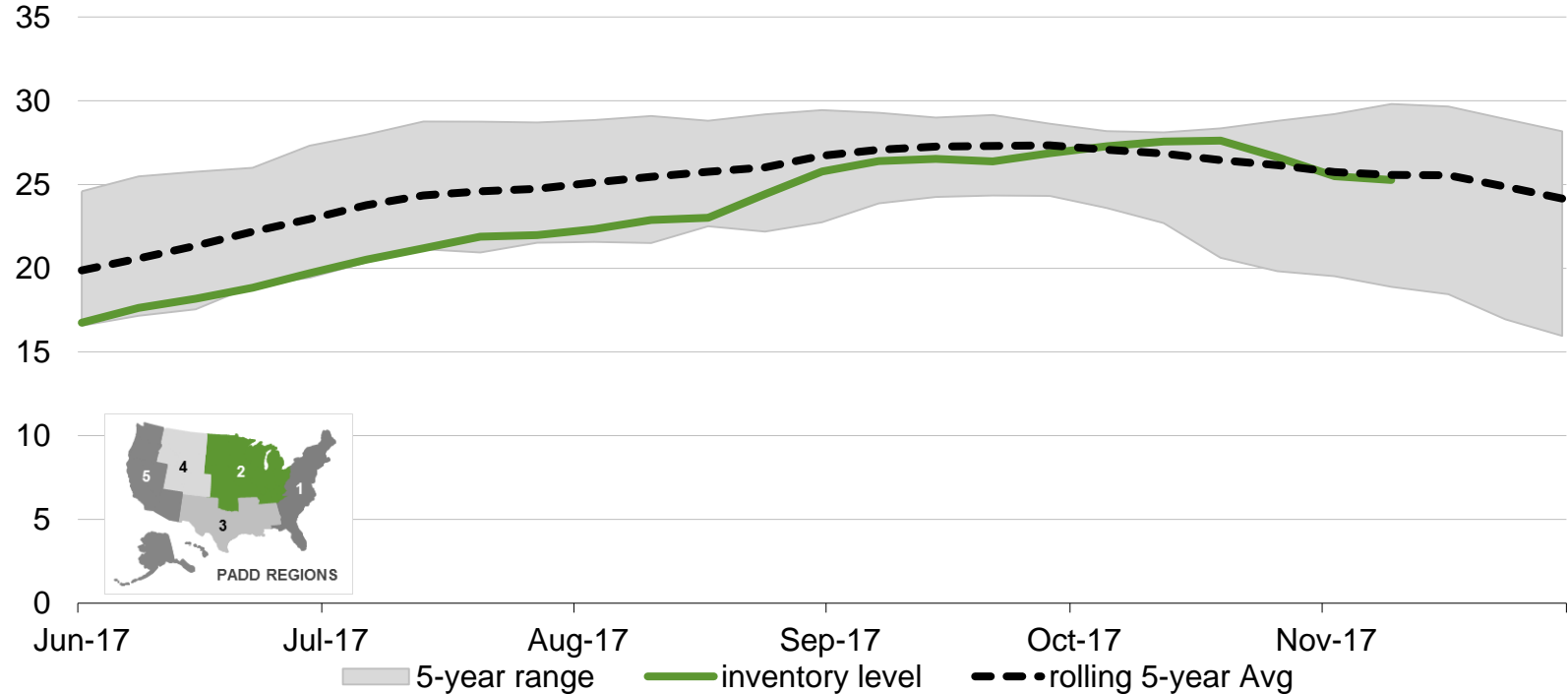
By

U.S. Energy Information Administration

PADD 2 (Midwest) propane inventories within the 5-year range

PADD 2 propane* inventories

million barrels



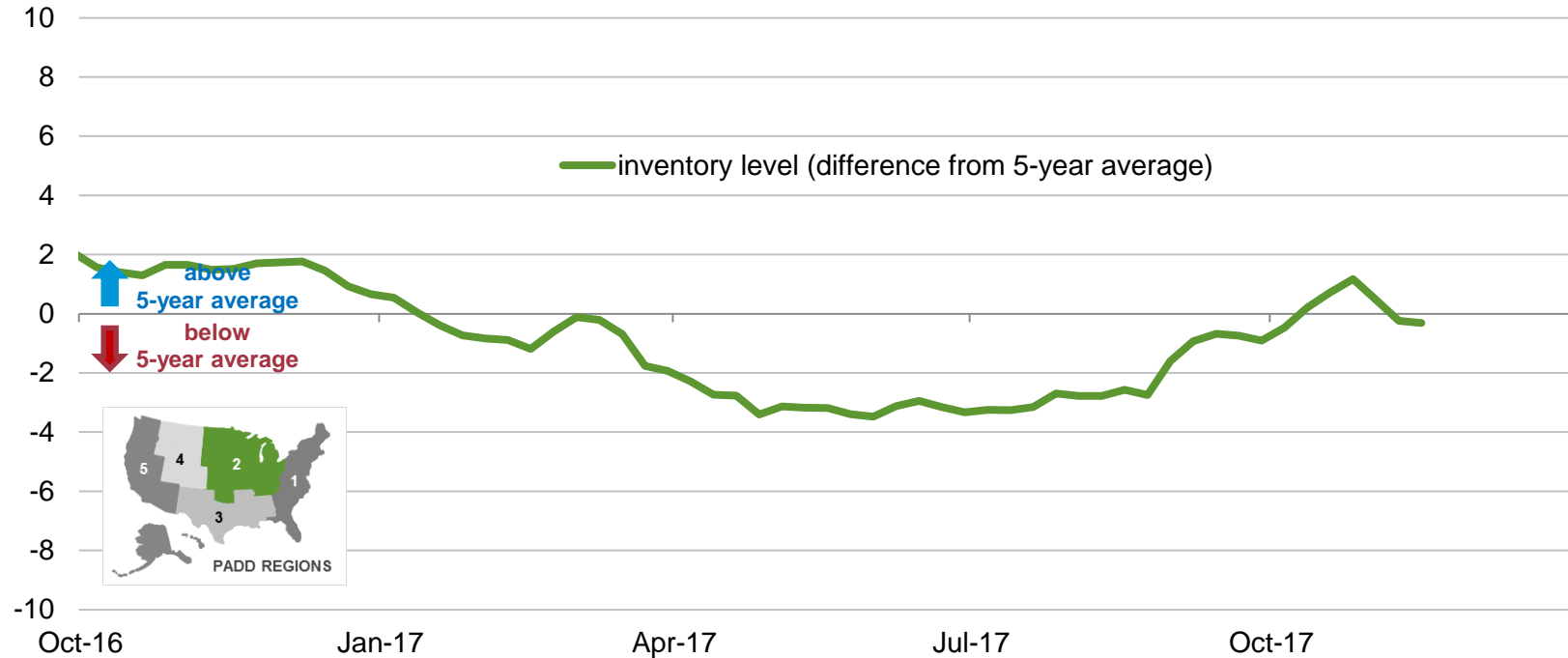
Source: EIA, Weekly Petroleum Status Report, data through November 17, 2017

*propane/propylene for fuel use only

PADD 2 (Midwest) propane inventories below 5-year-average levels

PADD 2 propane* inventories, difference from 5-year average

million barrels

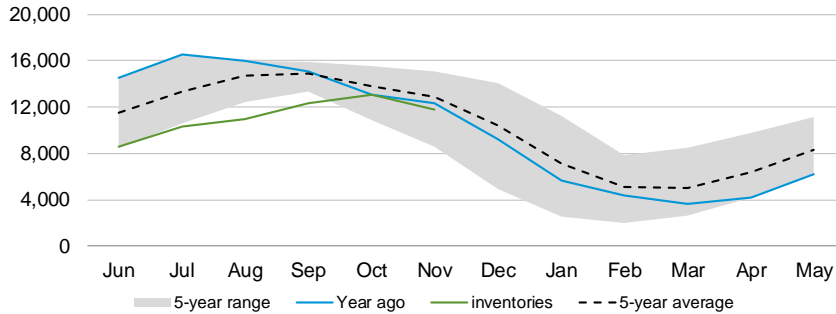


Source: EIA, Weekly Petroleum Status Report, data through November 17, 2017

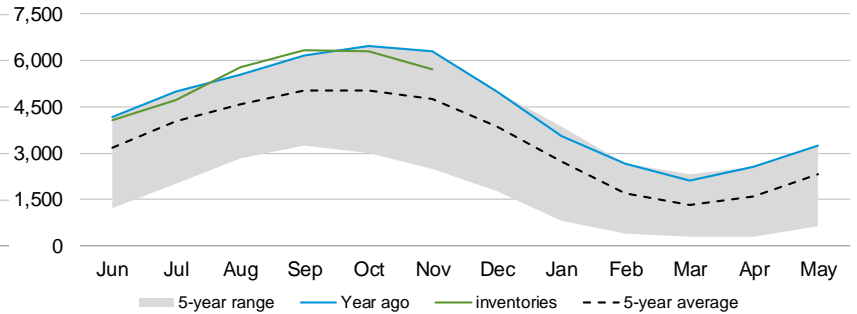
*propane/propylene for fuel use only

Selected state propane* inventories

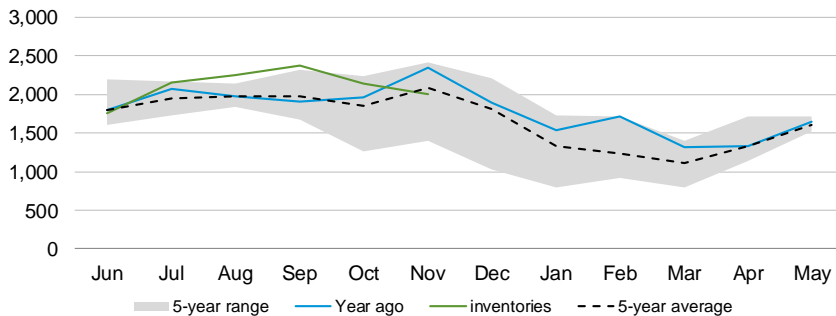
Kansas propane stocks
thousand bbls



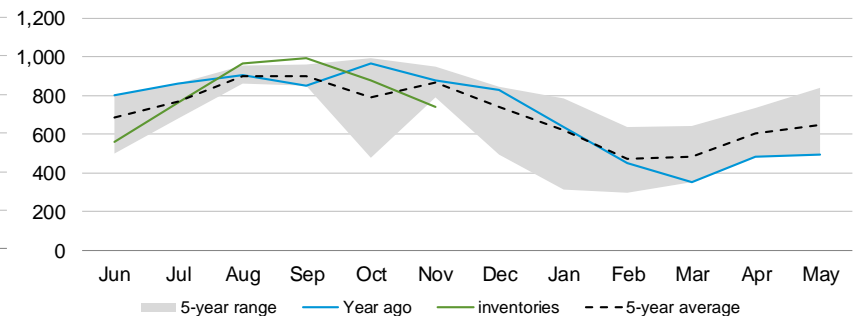
Michigan propane stocks
thousand bbls



Illinois, Indiana, Ohio propane stocks
thousand bbls



Iowa, Minnesota, Wisconsin propane stocks
thousand bbls



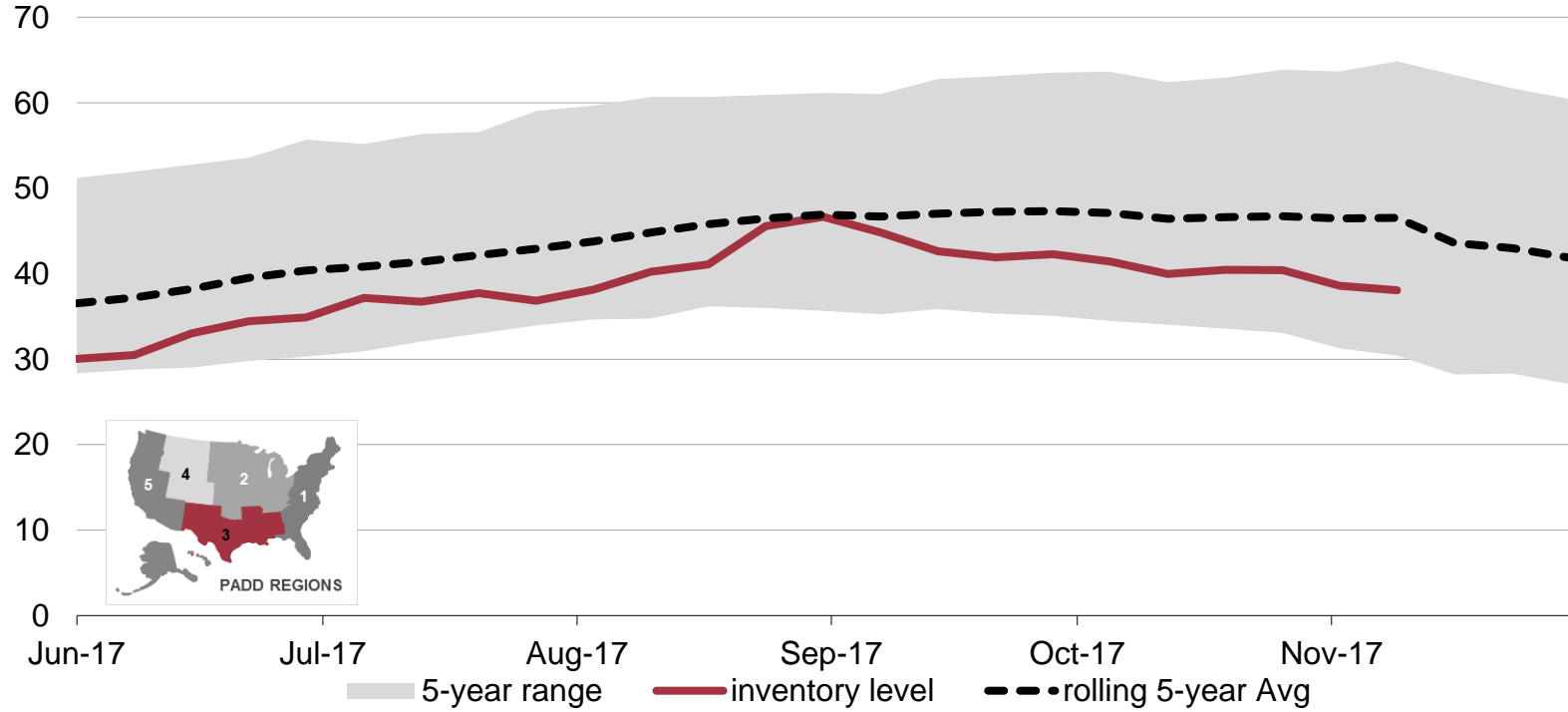
Source: EIA, Weekly Petroleum Status Report, data through Nov. 17, 2017

*propane/propylene for fuel use only; inventories include stocks at terminals, gas plants, and refineries only

PADD 3 (Gulf Coast) propane inventories within the 5-year range

PADD 3 propane* inventories

million barrels



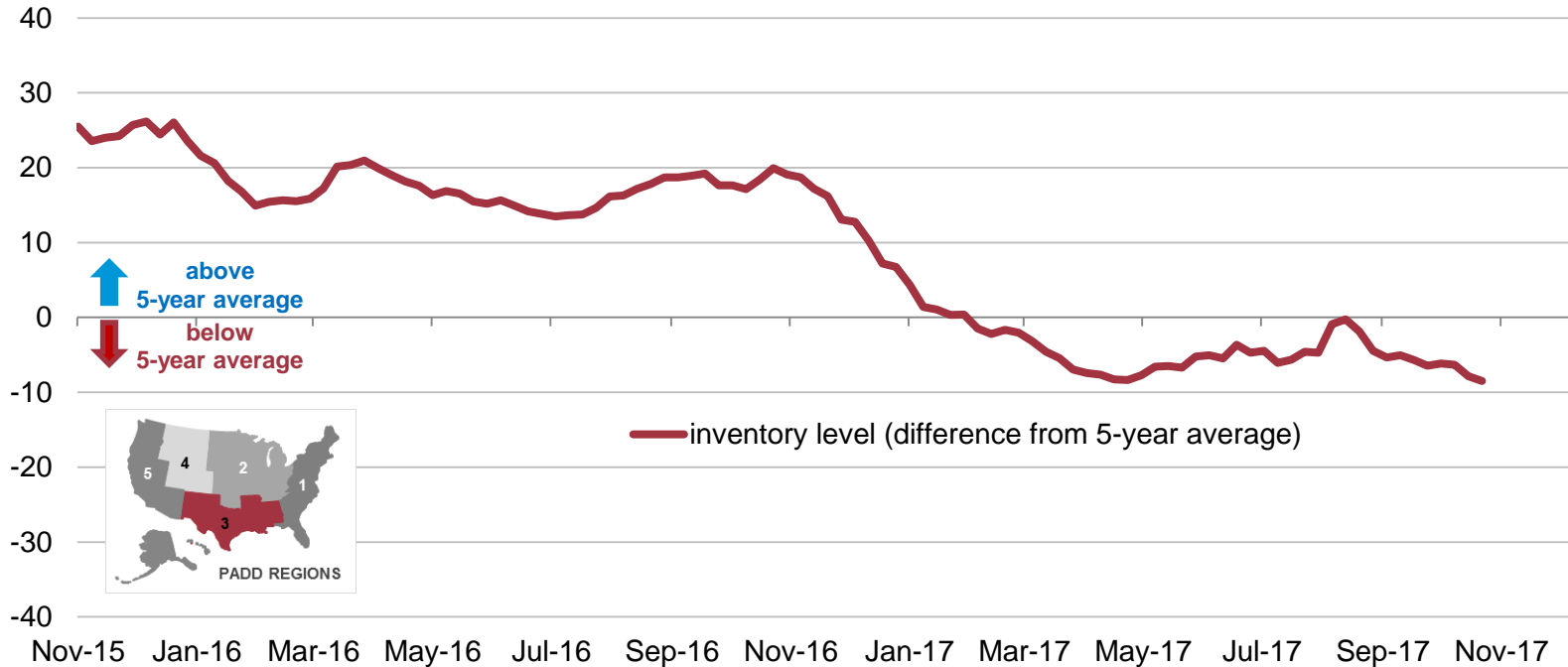
Source: EIA, Weekly Petroleum Status Report, data through November 17, 2017

*propane/propylene for fuel use only

PADD 3 (Gulf Coast) propane inventories below the 5-year average

PADD 3 propane* inventories, difference from 5-year average

million barrels



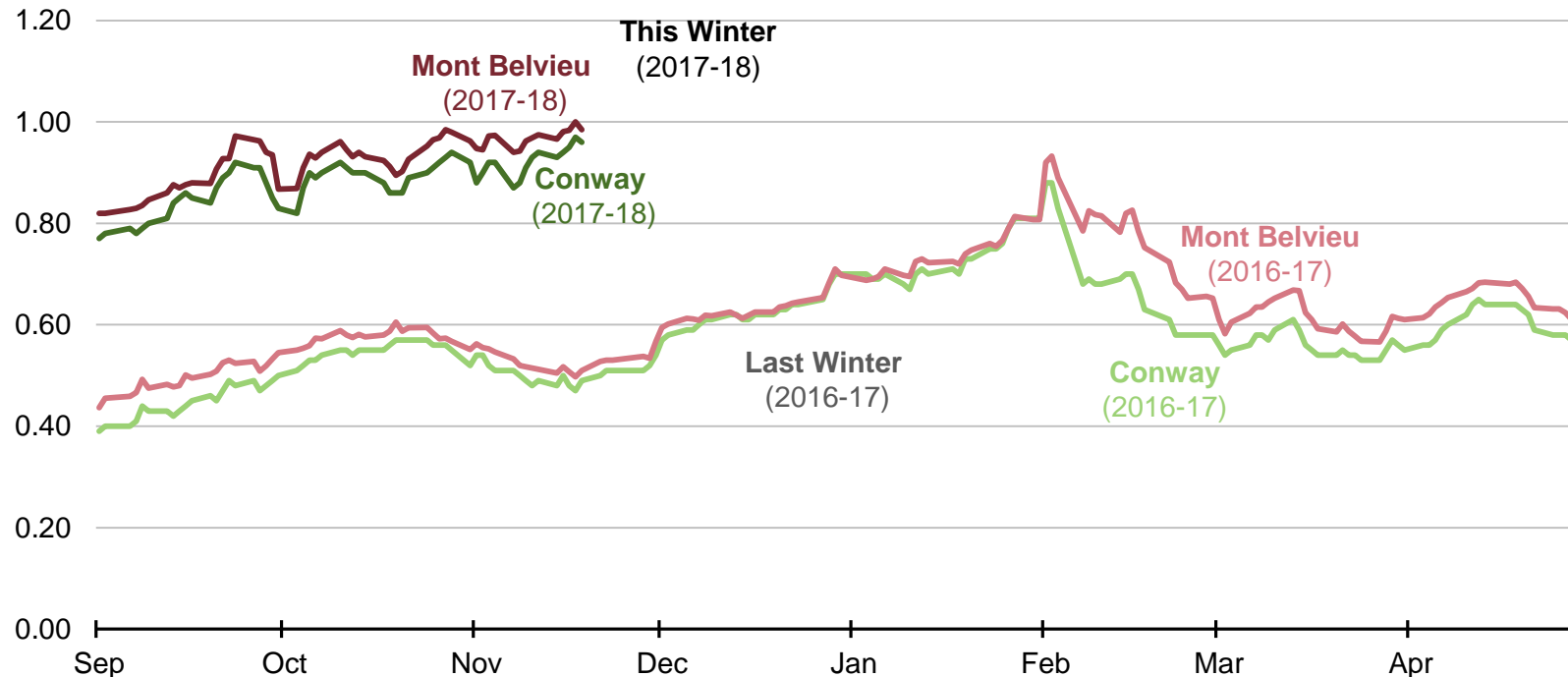
Source: EIA, Weekly Petroleum Status Report, data through November 17, 2017

*propane/propylene for fuel use only

Propane spot prices remain above prices at same time last winter; Conway, KS now at ~3¢/gal discount to Mt. Belvieu, TX

Propane spot prices (Conway, KS and Mont Belvieu, TX)

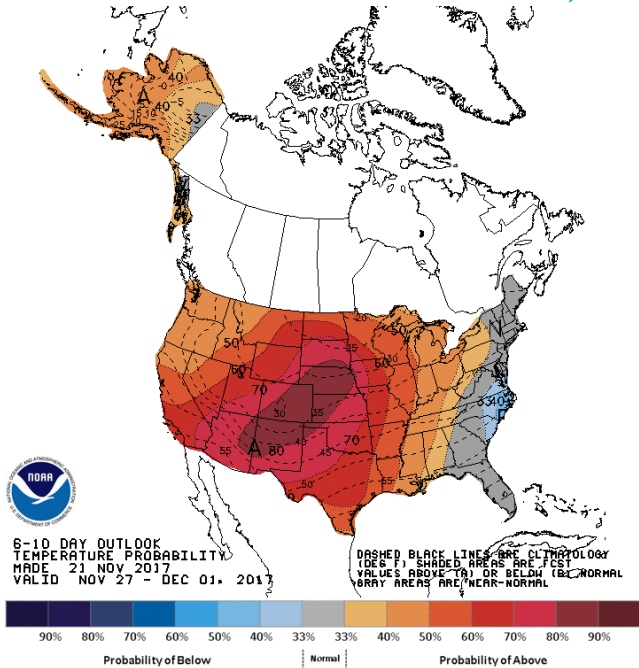
dollars per gallon



Source: EIA, Bloomberg, data through November 20, 2017

NOAA's projected temperatures:

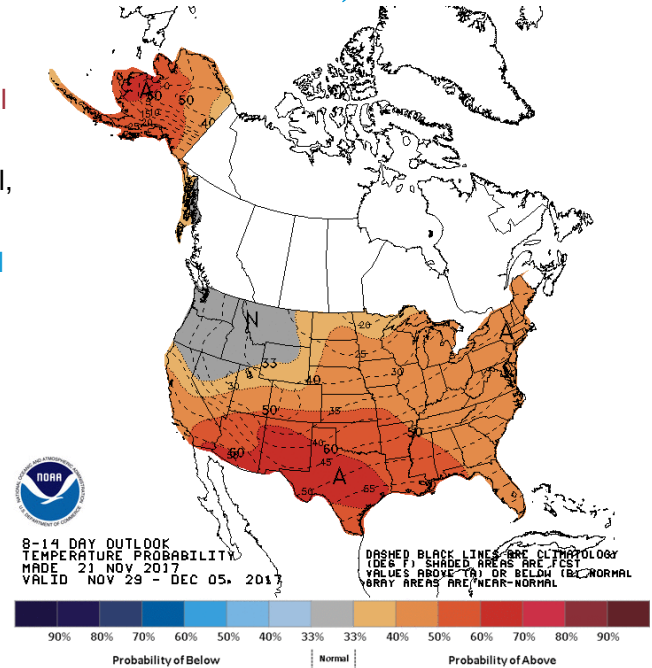
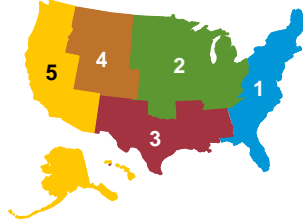
November 27 – Dec. 1, 2017, and November 29 – Dec. 5, 2017



A = temperatures above normal
N = equal chance that temperatures are above normal, normal, or below normal
B = temperatures below normal

Source: NOAA, Nov. 21, 2017

Petroleum Administration for Defense Districts (PADDs)



- NOAA forecasts above-normal temperatures across the country with the exception of PADD 1 earlier in the forecast, with warmer temperatures moving east, ending with PADD 1 at above-normal and the Pacific Northwest at normal
- Propane demand for heating is likely to be depressed across the country, with some demand at normal or above-normal levels in the Mid-Atlantic and Pacific Northwest regions

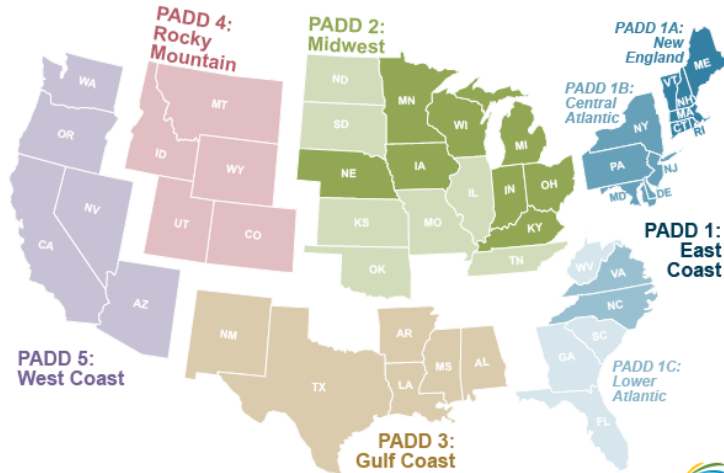
State Heating Oil and Propane Program (SHOPP) updates

- SHOPP is a collaborative program between states and EIA that provides weekly wholesale and retail prices for heating oil and propane at the state level
- EIA has extended SHOPP (beginning October 2014) to include 14 additional states in propane price data collection
- 10 new states were added to the wholesale propane price survey in 2016. This should be taken into consideration when comparing the average prices for last year (2015-2016 season) for the U.S., PADD 1, PADD 1B, PADD 1C, and PADD 2 averages
- EIA is providing more granular inventory data to states on a weekly basis since the 2016/2017 heating season
- New winter fuels page provides easier access to state-level information:
www.eia.gov/special/heatingfuels

Maps of states participating in Winter Fuels Survey

Petroleum Administration for Defense Districts

Winter Heating Fuels Survey — PADD 1 and 2 represented States



HEATING OIL



PADD 1: East Coast

PADD 1A: New England
Connecticut New Hampshire
Maine Rhode Island
Massachusetts Vermont

PADD 1B: Central Atlantic
Delaware New Jersey
District of Columbia New York
Maryland Pennsylvania

PADD 2: Midwest

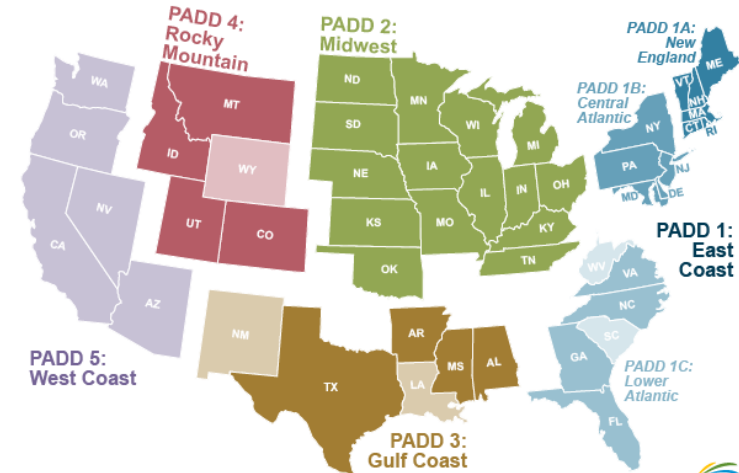
Indiana Minnesota
Iowa Nebraska
Kentucky Ohio
Michigan Wisconsin

PADD 1C: Lower Atlantic

North Carolina Virginia

Petroleum Administration for Defense Districts

Winter Heating Fuels Survey — PADD 1, 2, 3, and 4 represented States



PROPANE



PADD 1: East Coast

PADD 1A: New England
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

PADD 1B: Central Atlantic
Delaware
Maryland
New Jersey
New York
Pennsylvania

PADD 1C: Lower Atlantic
Florida
Georgia
North Carolina
Virginia

PADD 2: Midwest

Illinois Nebraska
Indiana North Dakota
Iowa Ohio
Kansas Oklahoma
Kentucky South Dakota
Michigan Tennessee
Minnesota Wisconsin
Missouri

PADD 3: Gulf Coast

Alabama Mississippi
Arkansas Texas

PADD 4: Rocky Mountain

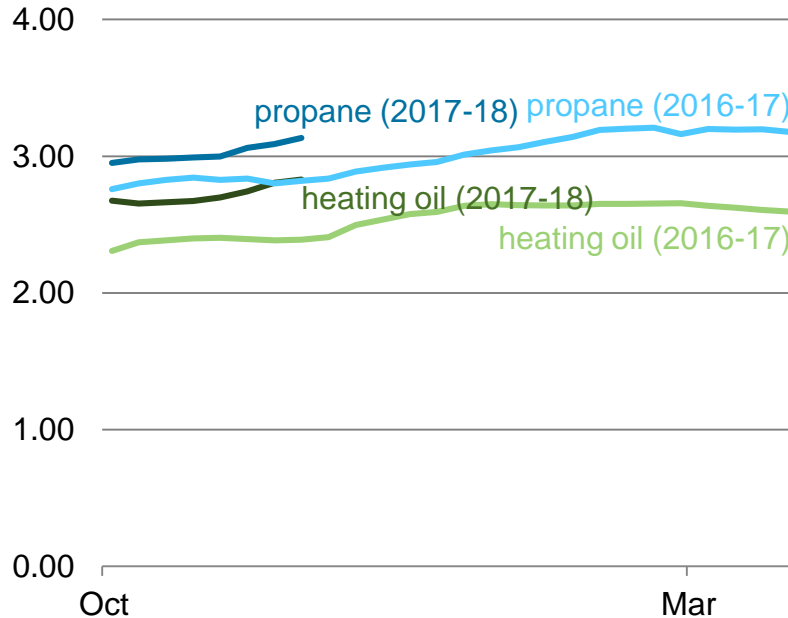
Colorado Montana
Idaho Utah

Source: EIA, [Heating Oil and Propane Update](#)

Retail propane prices this heating season in PADD 1 and PADD 2 are above prices reported for the same week last year

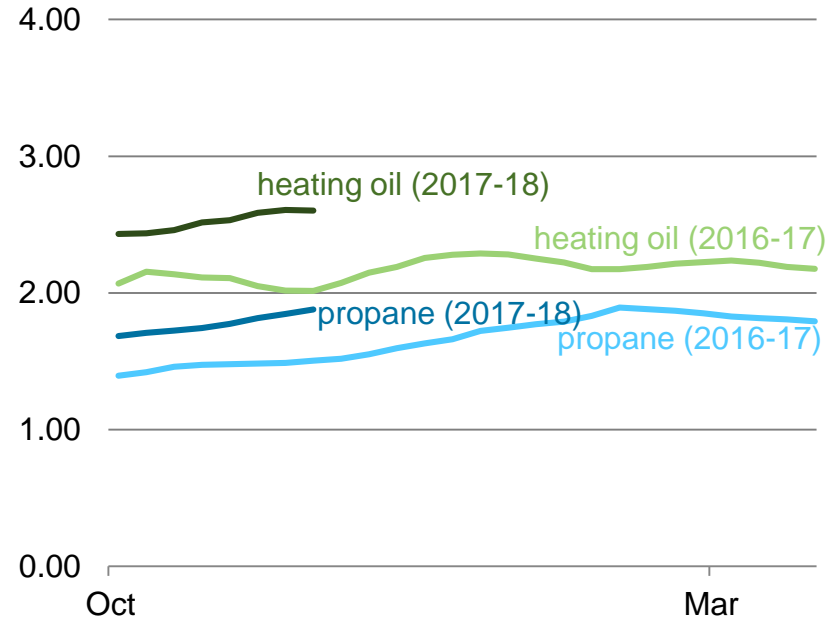
PADD 1

dollars per gallon



PADD 2

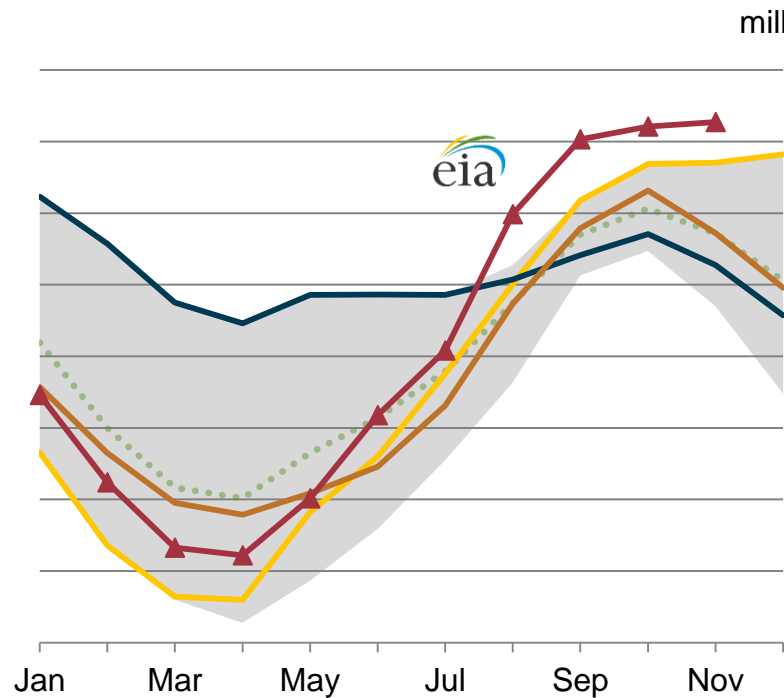
dollars per gallon



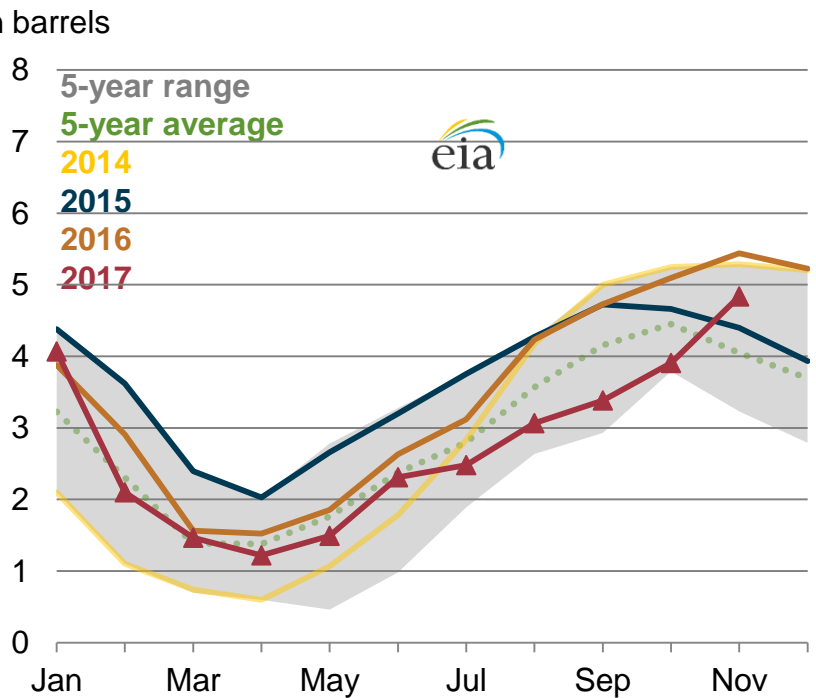
Source: State Heating Oil and Propane Program, data through November 20, 2017

Propane inventories in Canada continued to build; Western Canada above the 5-yr range, and Eastern Canada near the top of the 5-yr range

propane Inventories in Western Canada



propane Inventories in Eastern Canada

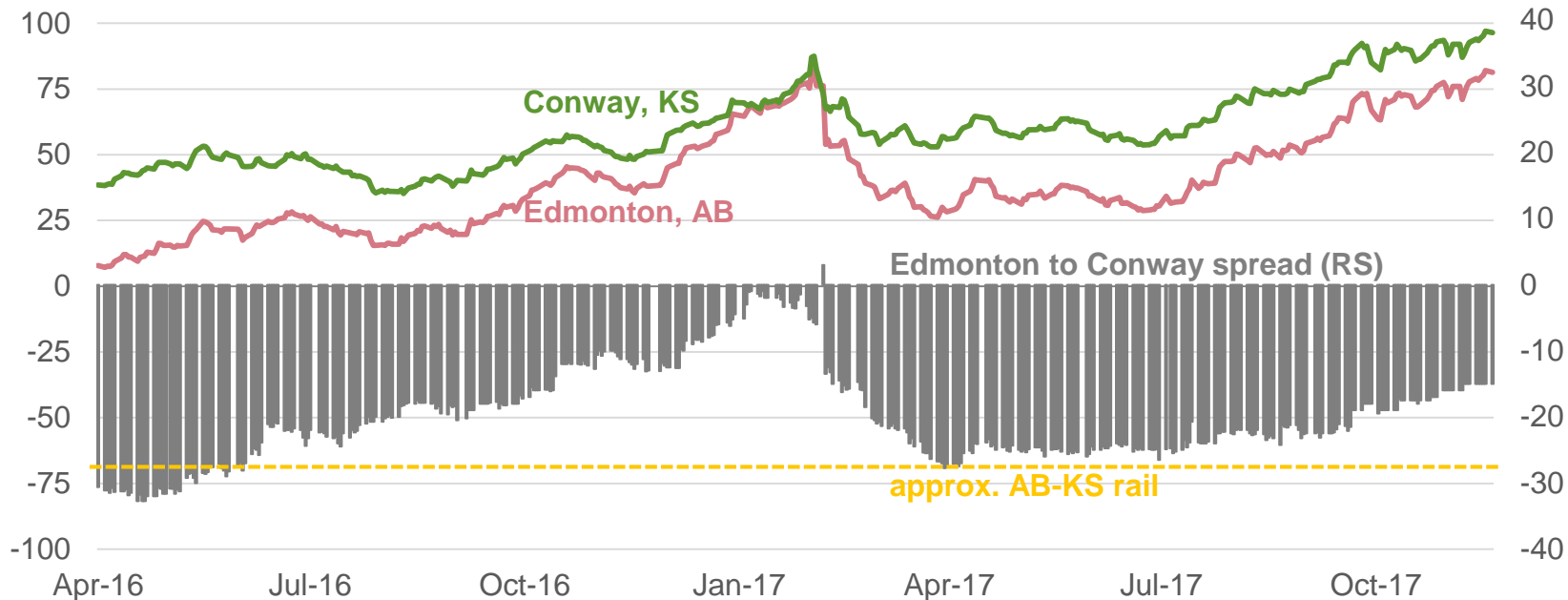


Source: Canada's [National Energy Board](#), Nov 15, 2017

Edmonton discount to Conway declining as Midwest demand draws barrels south

propane spot prices
¢/gallon

propane price spread
¢/gallon



Source: Bloomberg

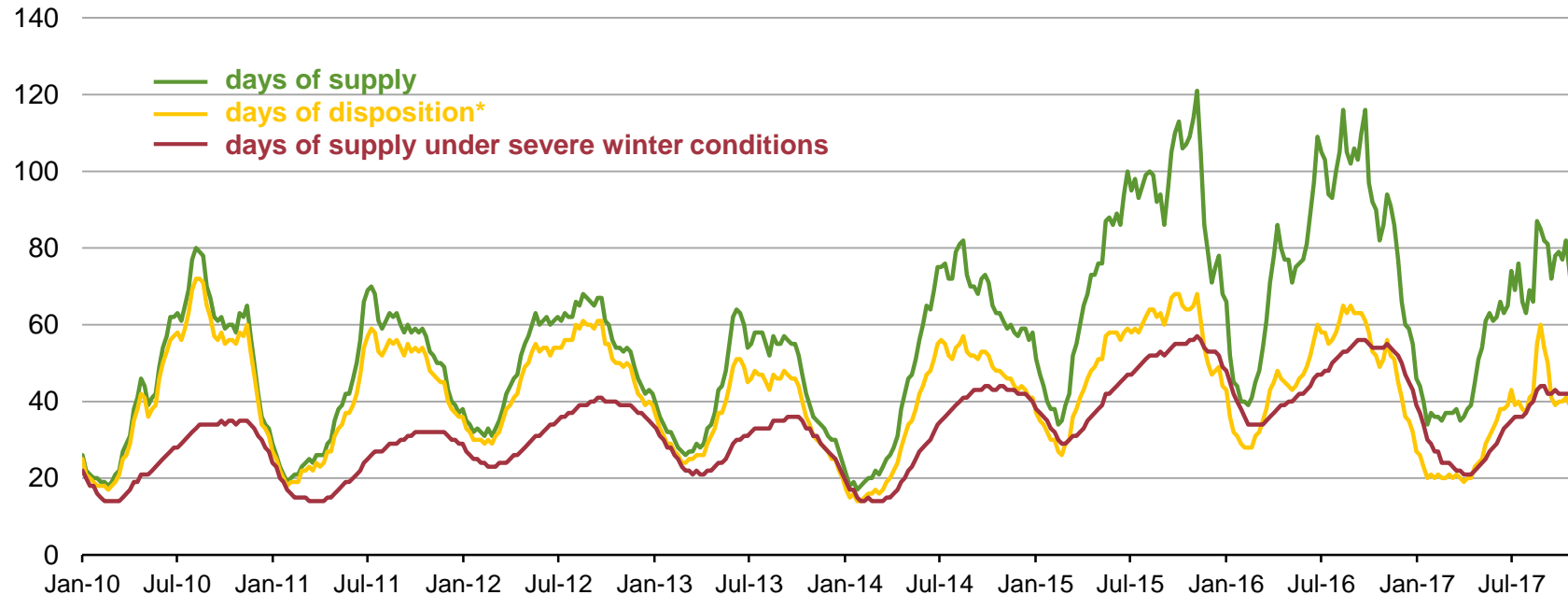
EIA Expands Propane Supply Adequacy Measures during Winter Heating Season

EIA's estimate of *days of supply*, inventories divided by product supplied, is designed to provide a general measure of the adequacy of current U.S. inventories with respect to domestic consumption. EIA's *product supplied* is derived by adding production and imports and subtracting inventory changes and exports. Product supplied, a proxy for domestic consumption, has been used consistently by EIA for all petroleum products since 1981.

This year, EIA is adding two additional measures of relative supply adequacy during the winter heating season. In addition to EIA's standard measure of days of supply, which is widely used by the energy community, EIA will also publish: 1) an estimate of current inventories divided by product disposition, which is defined as product supplied plus exports, and 2) an estimate based on the average peak demand weeks for the previous five winters. These additional measures will be labeled *days of disposition* and *days of supply under severe weather conditions* (see Slide 15). This range will be included in EIA's [Propane Situation Update](#) briefing deck published every week on the [Winter Fuels](#) page.

Days of supply can be one of many measures to assess inventory adequacy

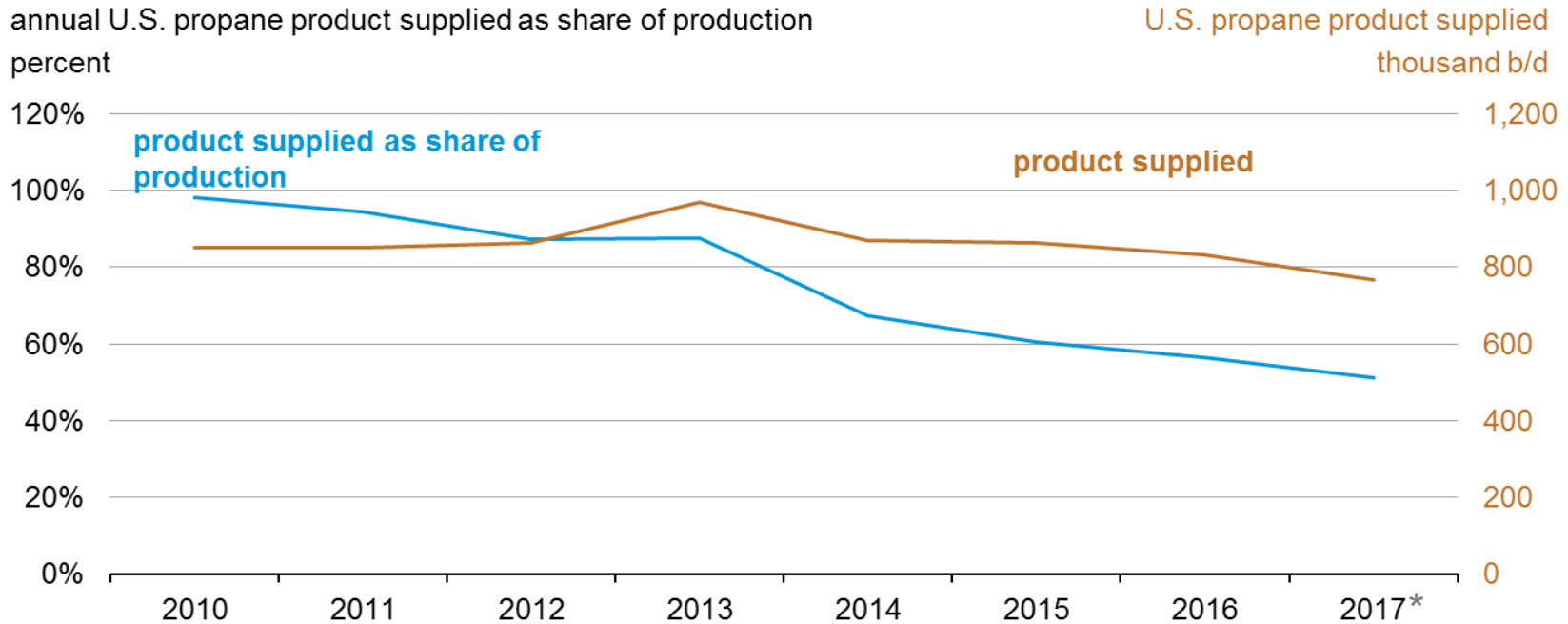
U.S. weekly stocks of propane
days of supply & disposition



Note: *disposition = domestic product supplied + exports

Source: U.S. Energy Information Administration

From 2010 to 2016, U.S. propane production rose 70%, whereas domestic consumption declined 2%



Note: *2017 data through August; 2017 September and October monthly totals estimated from weekly reported data.

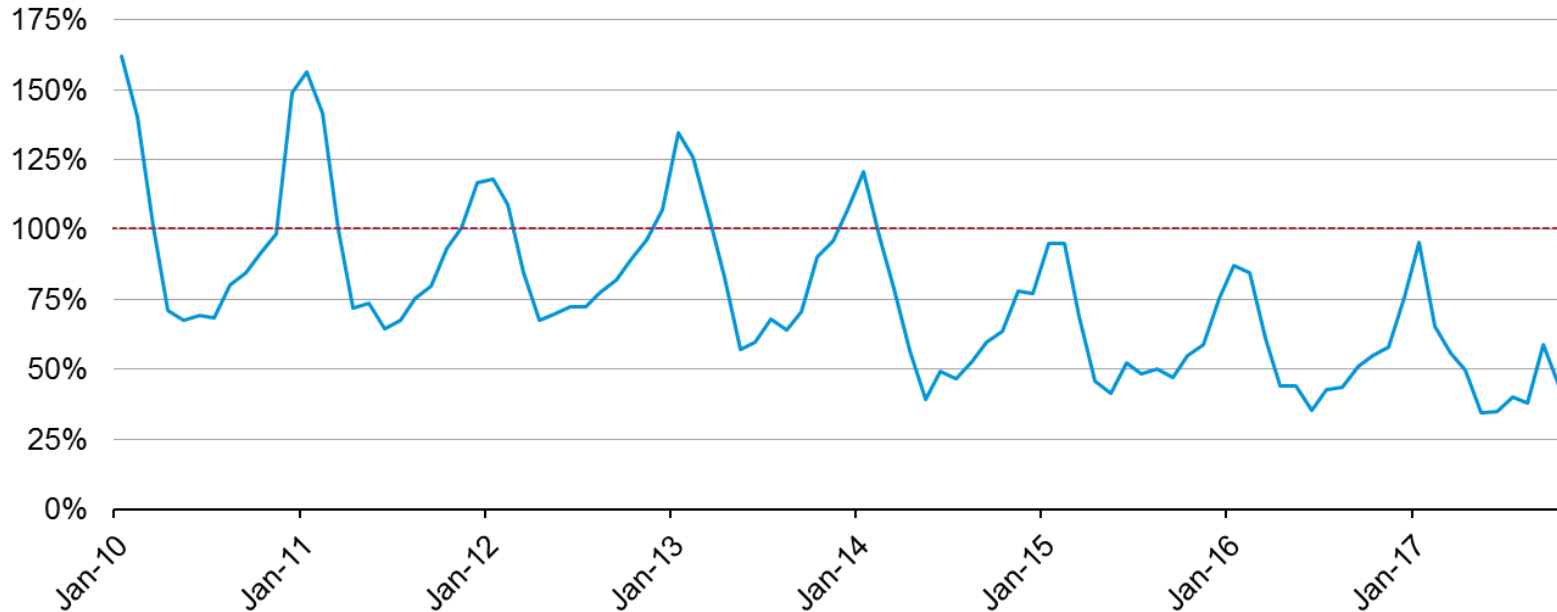
product supplied = domestic consumption

Source: U.S. Energy Information Administration

Growth in domestic supply and flat domestic demand have resulted in U.S. consumption falling below production even during coldest months

propane consumption as a share of U.S. production

percent



Note: *consumption = product supplied

Source: U.S. Energy Information Administration

For more information

U.S. Energy Information Administration home page | www.eia.gov

State Energy Portal | www.eia.gov/state

Winter Heating Fuels Site | www.eia.gov/special/heatingfuels/

Movements of Propane by Rail |

http://www.eia.gov/dnav/pet/pet_move_railNA_a_EPLLPA_RAIL_mdbl_m.htm

Today in Energy | www.eia.gov/todayinenergy

Short-Term Energy Outlook | www.eia.gov/steo

Energy Explained – Hydrocarbon Gas Liquids |

http://www.eia.gov/energyexplained/index.cfm?page=hgls_home

Annual Energy Outlook | www.eia.gov/aeo

International Energy Outlook | www.eia.gov/ieo

Monthly Energy Review | www.eia.gov/mer