

---

# Winter Fuels Review 2014-15



---

*For*

*National Energy Assistance Directors' Association*

*March 23, 2015 | Washington, D.C.*

*By*

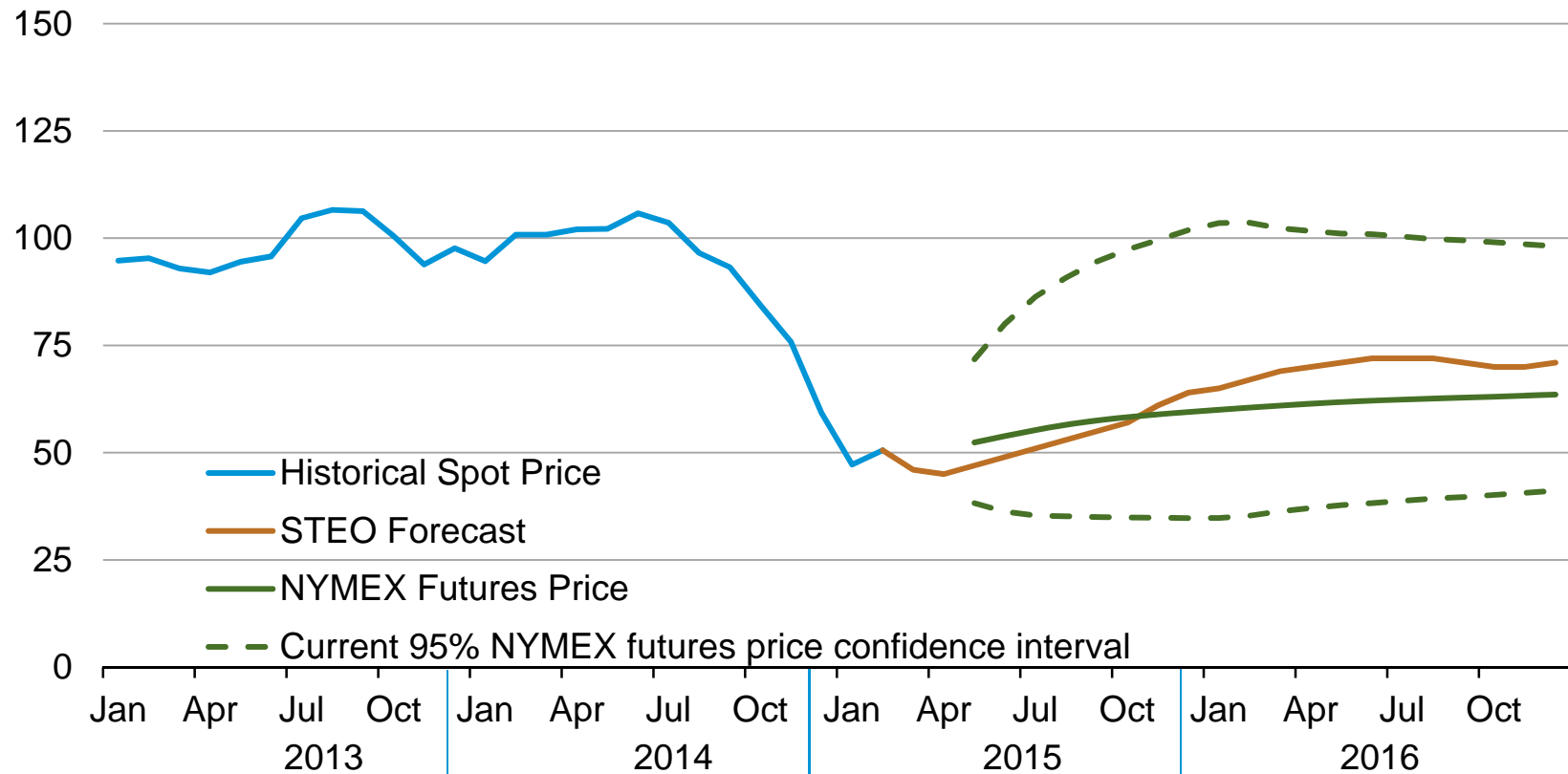
*Tim Hess*



# After falling sharply in late-2014, oil prices rise from mid-2015 through mid-2016 in EIA's forecast – however, the market-implied confidence band is very wide

WTI price

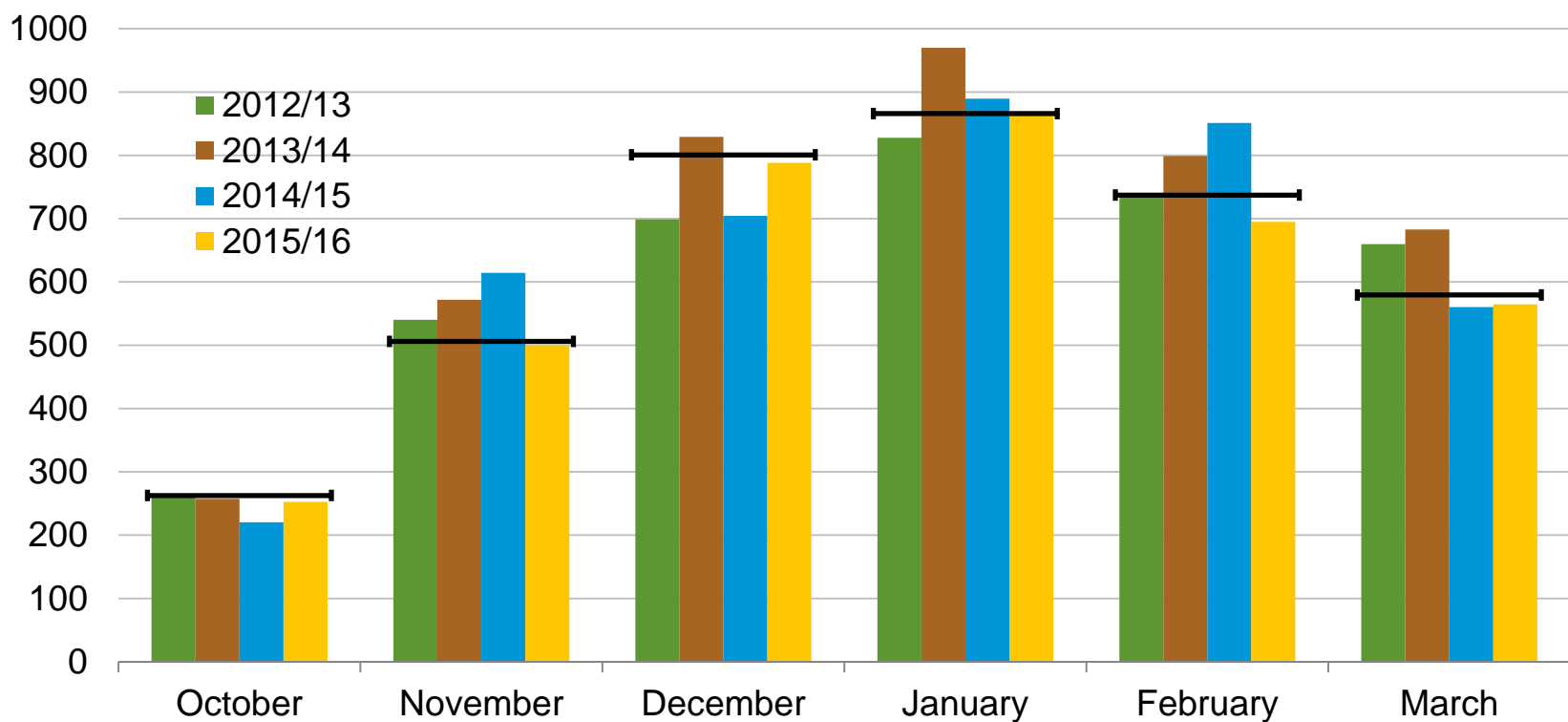
dollars per barrel



Source: EIA, Short-Term Energy Outlook, March 2015

# February and November were much colder than average; however, for the U.S. total HDD, a cold winter in the eastern part of the country was offset by warmer than average temperatures in the West

U.S. winter heating degree days  
population-weighted



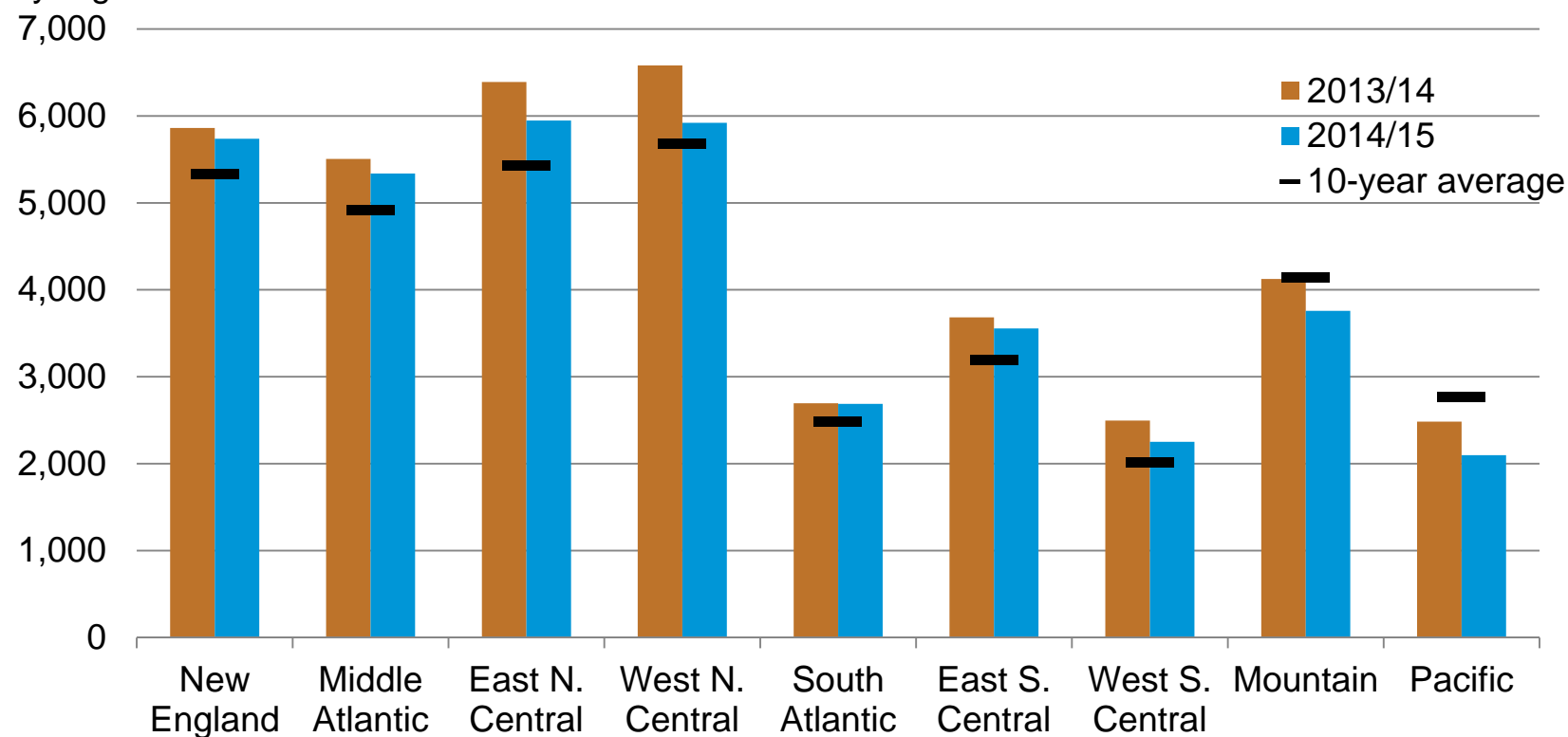
Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Horizontal lines indicate each month's prior 10-year average (Oct 2004 - Mar 2014). Projections reflect NOAA's 14-16 month outlook.

Source: EIA, *Short-Term Energy Outlook*, March 2015

## East of the Rockies, this winter was colder than average, but it was milder than last winter

Winter heating degree days

by region

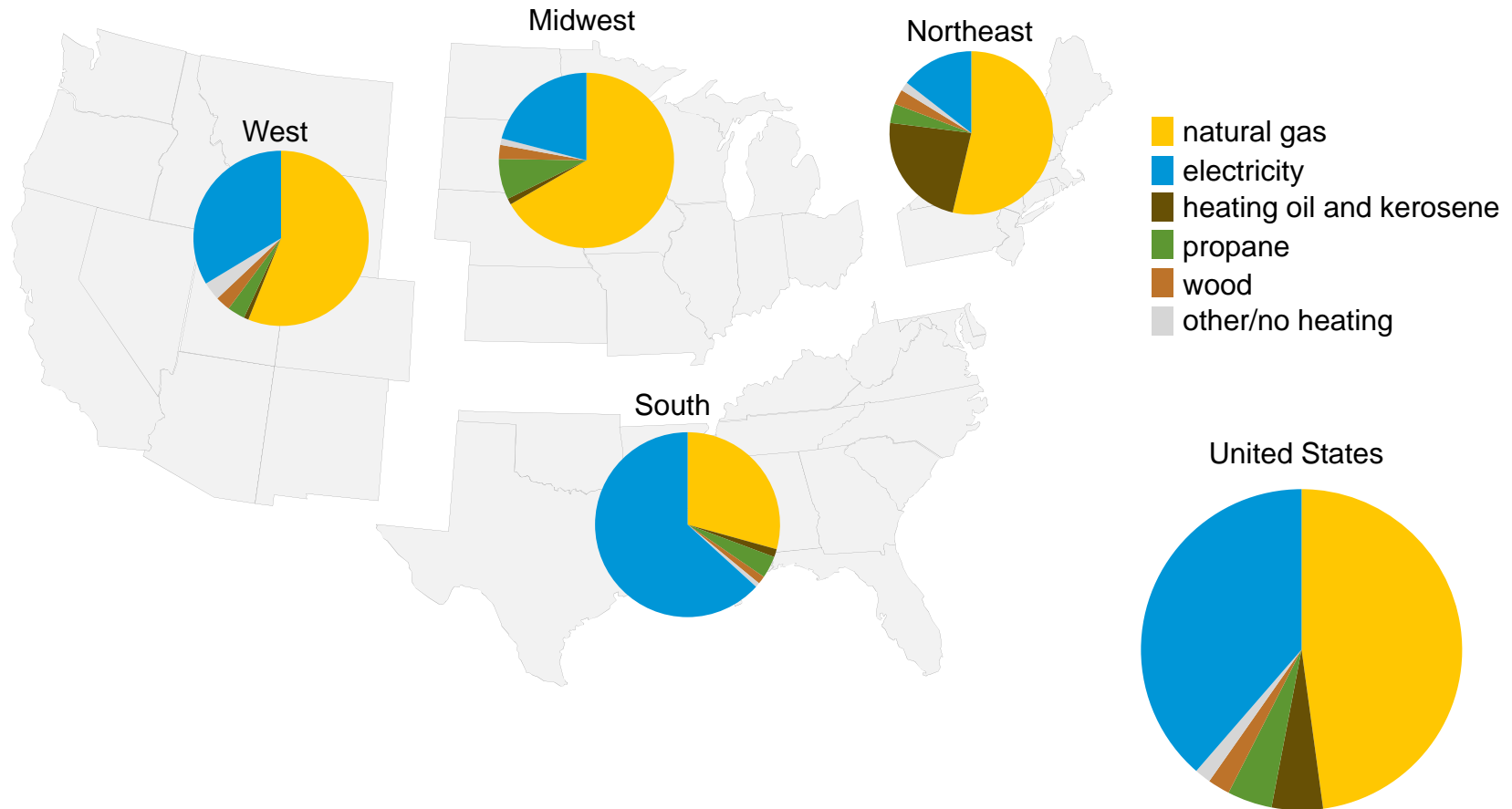


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Horizontal lines indicate each region's prior 10-year average (Oct 2004 - Mar 2014). For winter 2014/15, data are actual through February, March is a projection.

Source: EIA, *Short-Term Energy Outlook*, March 2015

# Heating fuel market shares vary regionally

Share of homes by primary space heating fuel and Census Region



Source: EIA calculations based on the U.S. Census Bureau, 2013 American Community Survey.

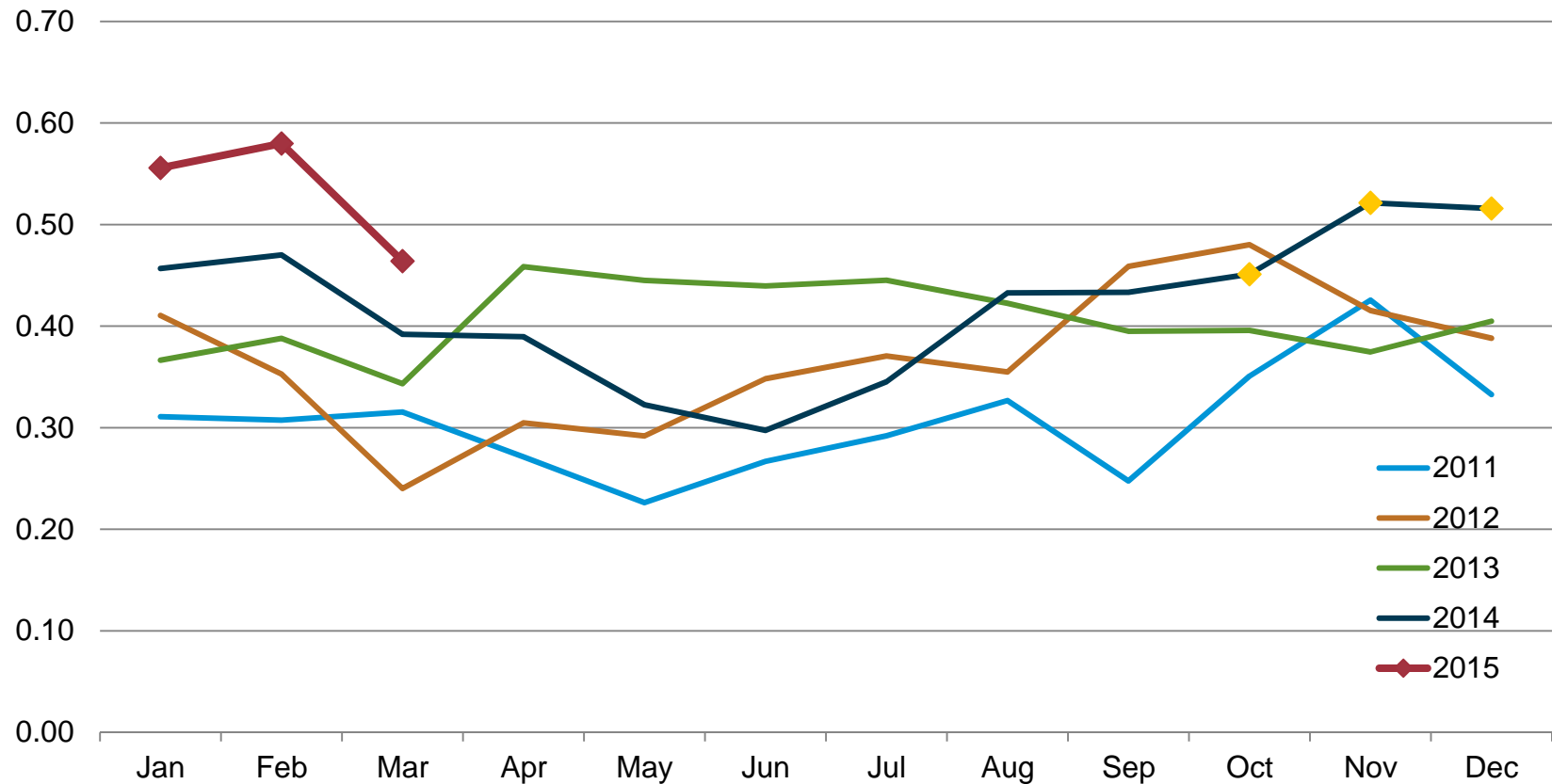
---

# Heating Oil



# Heating oil wholesale prices were high relative to crude oil prices

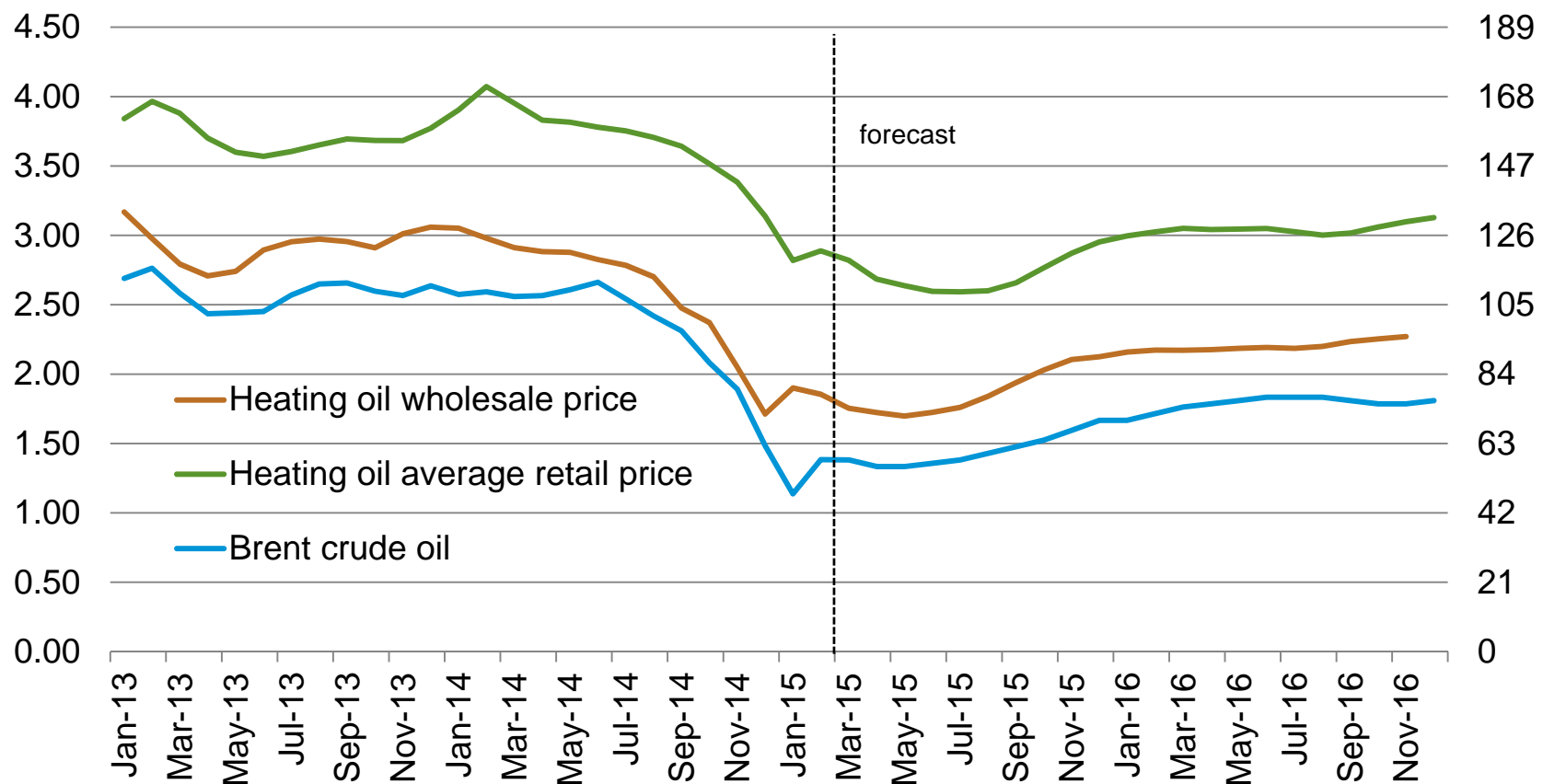
Monthly average NY Harbor heating oil crack spread (Brent)  
dollars per gallon



Source: EIA, Thomson Reuters, and CME Group

# However, because of lower crude oil prices, the absolute price of heating oil is lower than in recent years

Monthly average heating oil and crude oil prices  
dollars per gallon

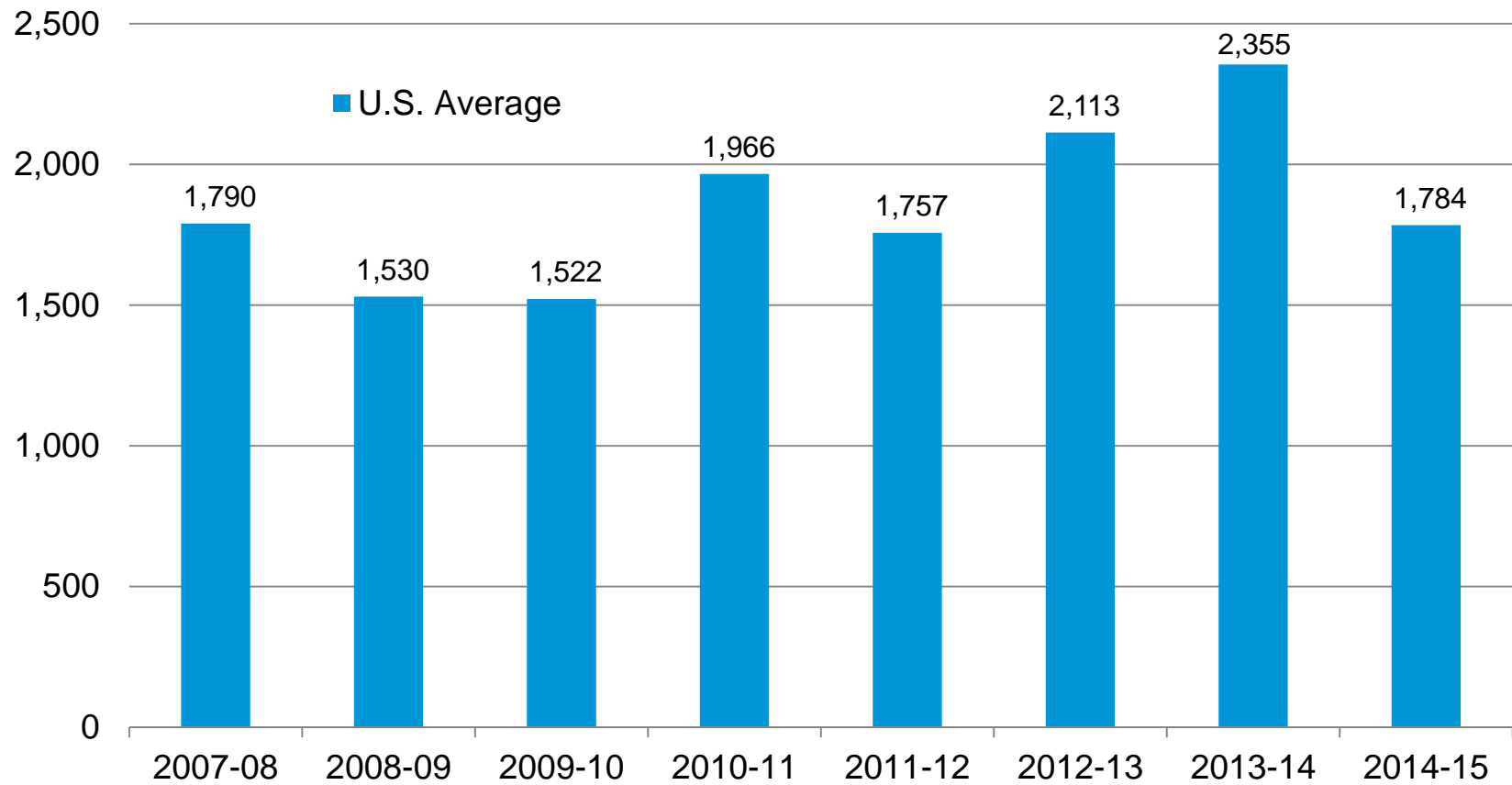


Source: EIA, Short-Term Energy Outlook, March 2015



# Average household heating expenditures for consumers heating with oil fell significantly this winter

Average heating expenditures for household that heat primarily with oil dollars

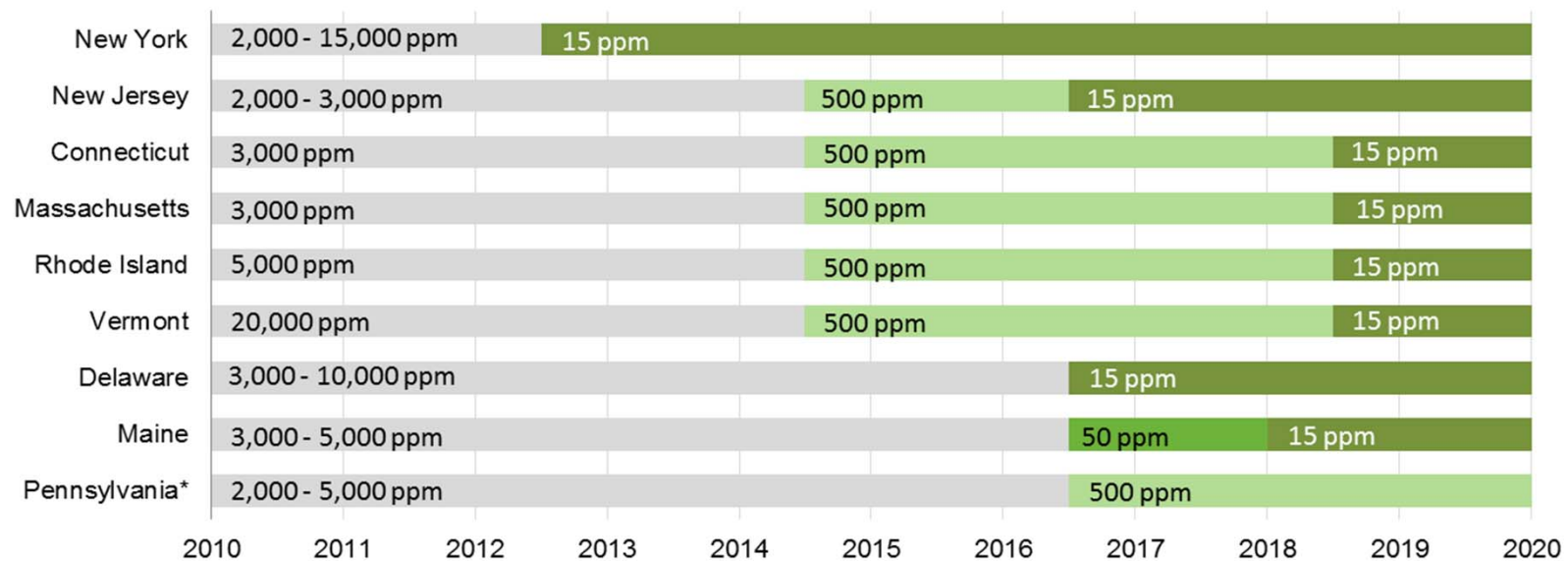


Source: EIA, Short-Term Energy Outlook, March 2015

# There were no reported problems with the change in heating oil sulfur specifications in five states last year

## Schedule for maximum sulfur content of heating oil in the Northeast by year

parts per million (ppm)



Note: Specifications change on July 1 of the years shown, with the exception of Maine's 15 ppm requirement, which changes on January 1, 2018.

\* Philadelphia, Pennsylvania changes from 2,000 ppm to 15 ppm on July 1, 2015.

Source: U.S. Energy Information Administration.

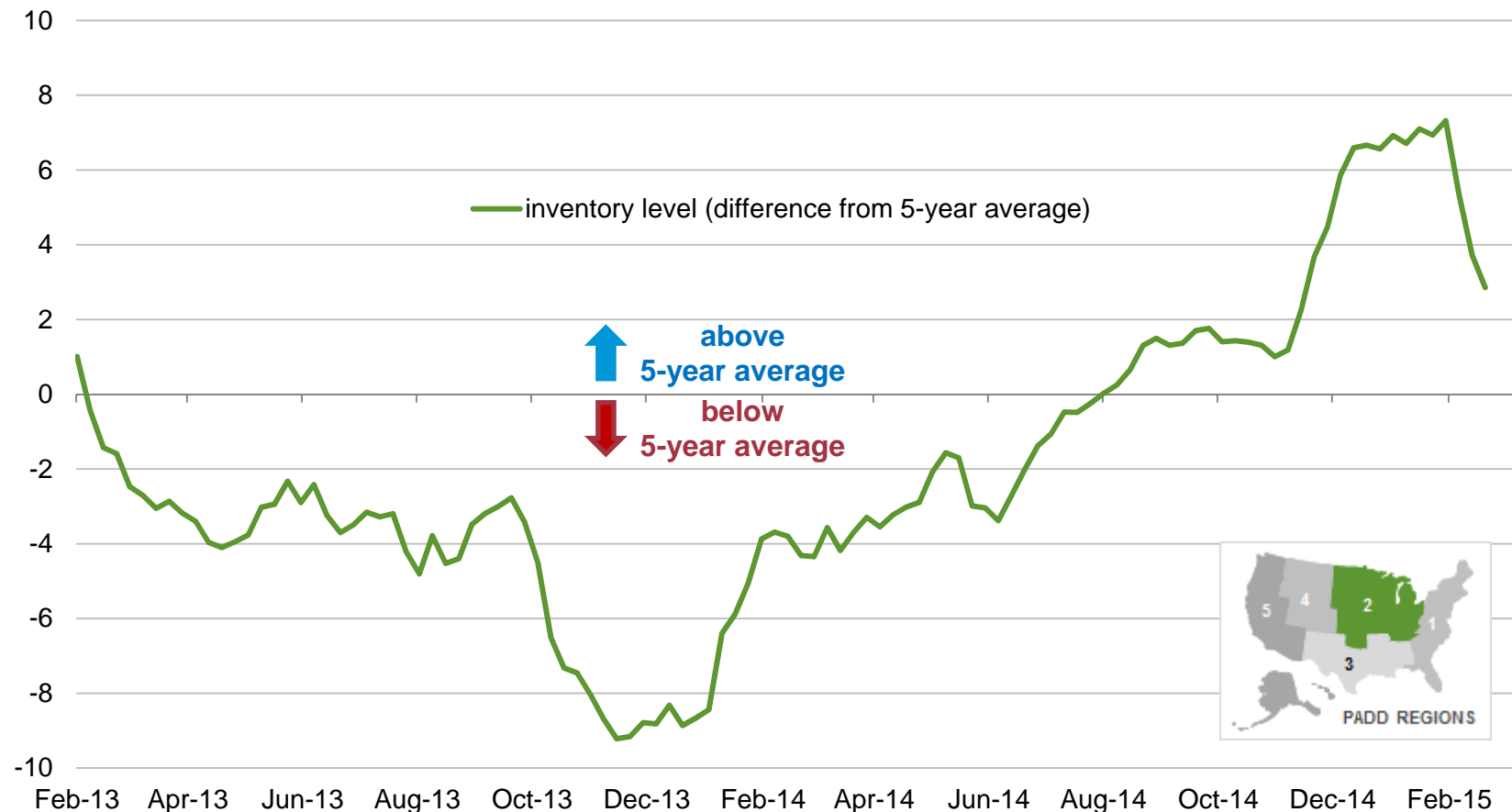
---

# Propane



# PADD 2 (Midwest) propane inventories remain above the 5-year average

PADD 2 propane inventories, difference from 5-year average  
million barrels

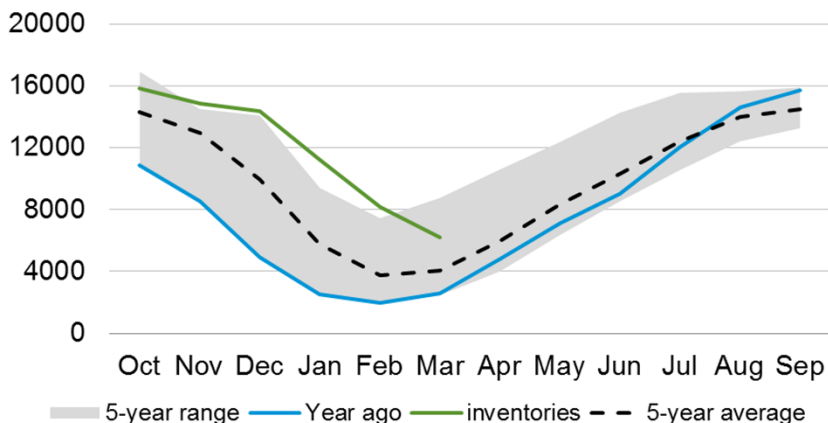


Source: EIA, Weekly Petroleum Status Report, data through March 13, 2015

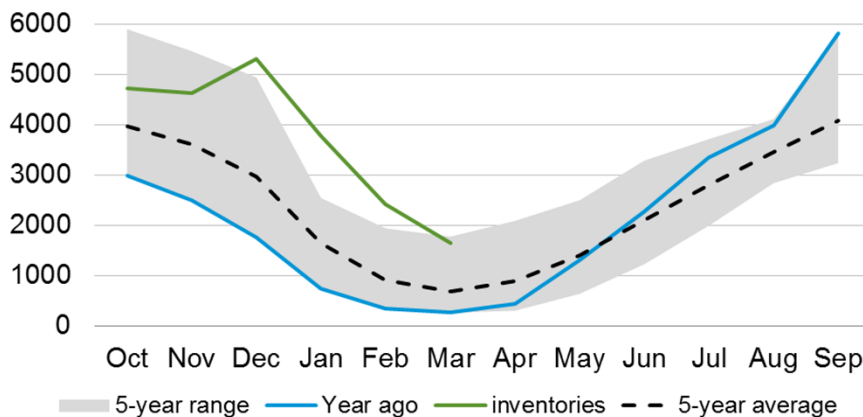
\*propane/propylene for fuel use only

# Selected state propane inventories

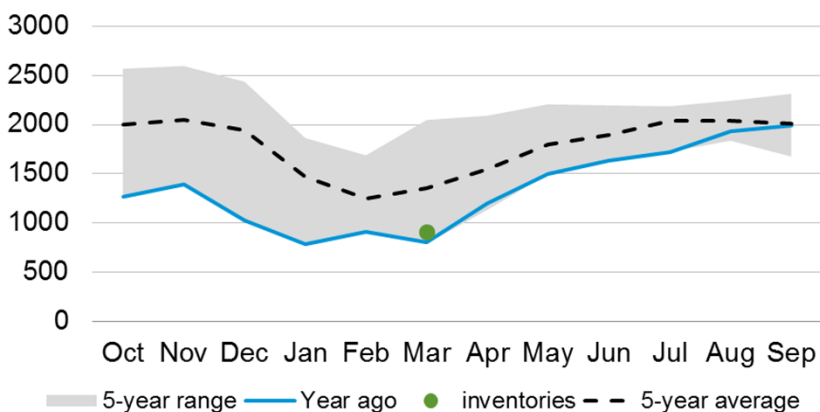
Kansas propane stocks  
thousand bbls



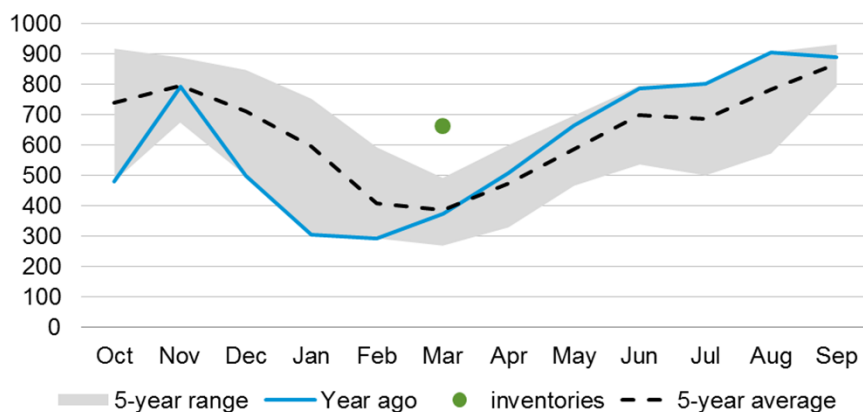
Michigan propane stocks  
thousand bbls



Illinois, Indiana, Ohio propane stocks  
thousand bbls



Iowa, Minnesota, Wisconsin propane stocks  
thousand bbls

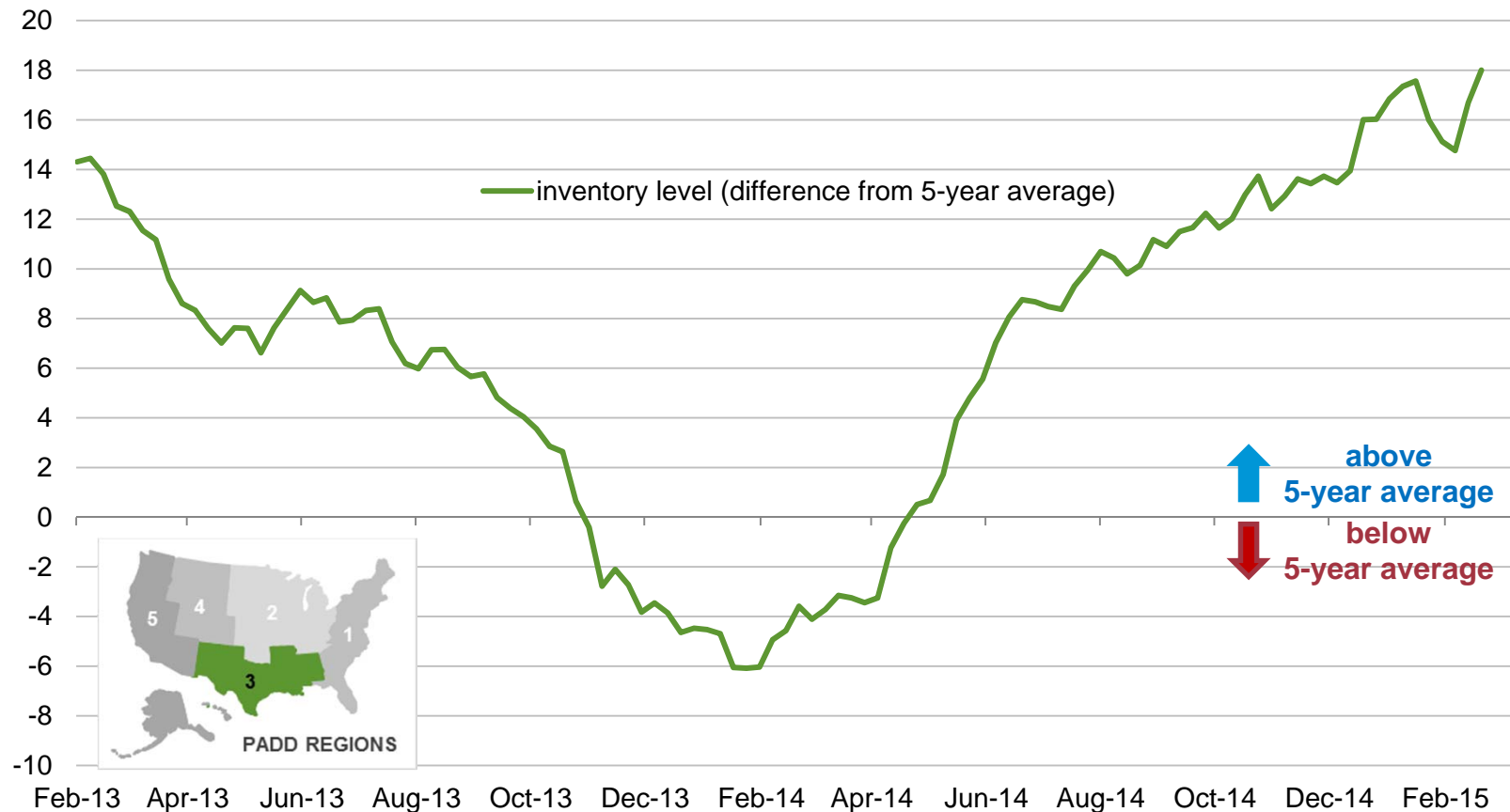


Source: EIA, Weekly Petroleum Status Report, data through March 13, 2015

\*propane/propylene for fuel use only

# PADD 3 (Gulf Coast) propane inventories well above 5-year average

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

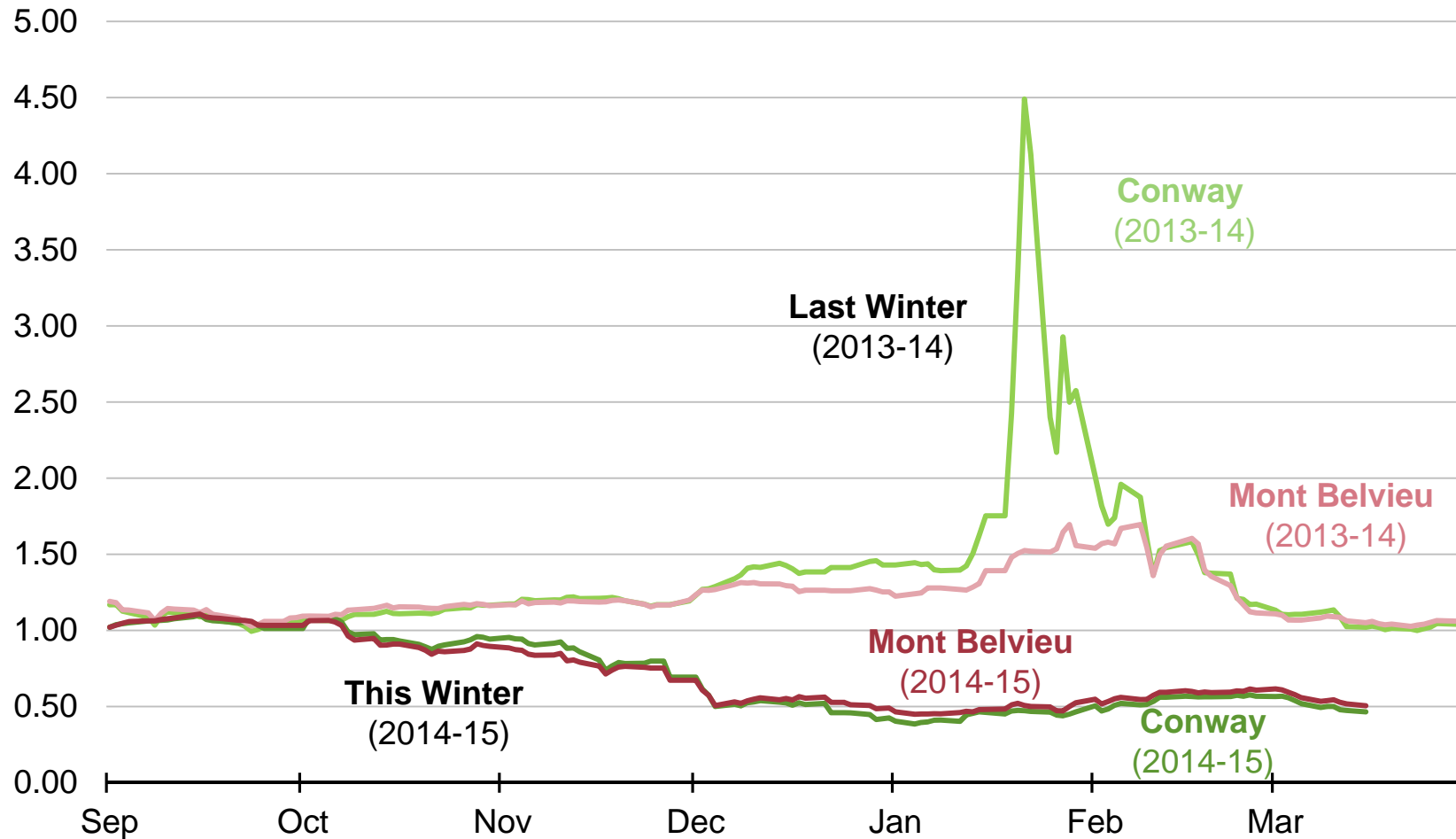


Source: EIA, Weekly Petroleum Status Report, data through March 13, 2015

\*propane/propylene for fuel use only

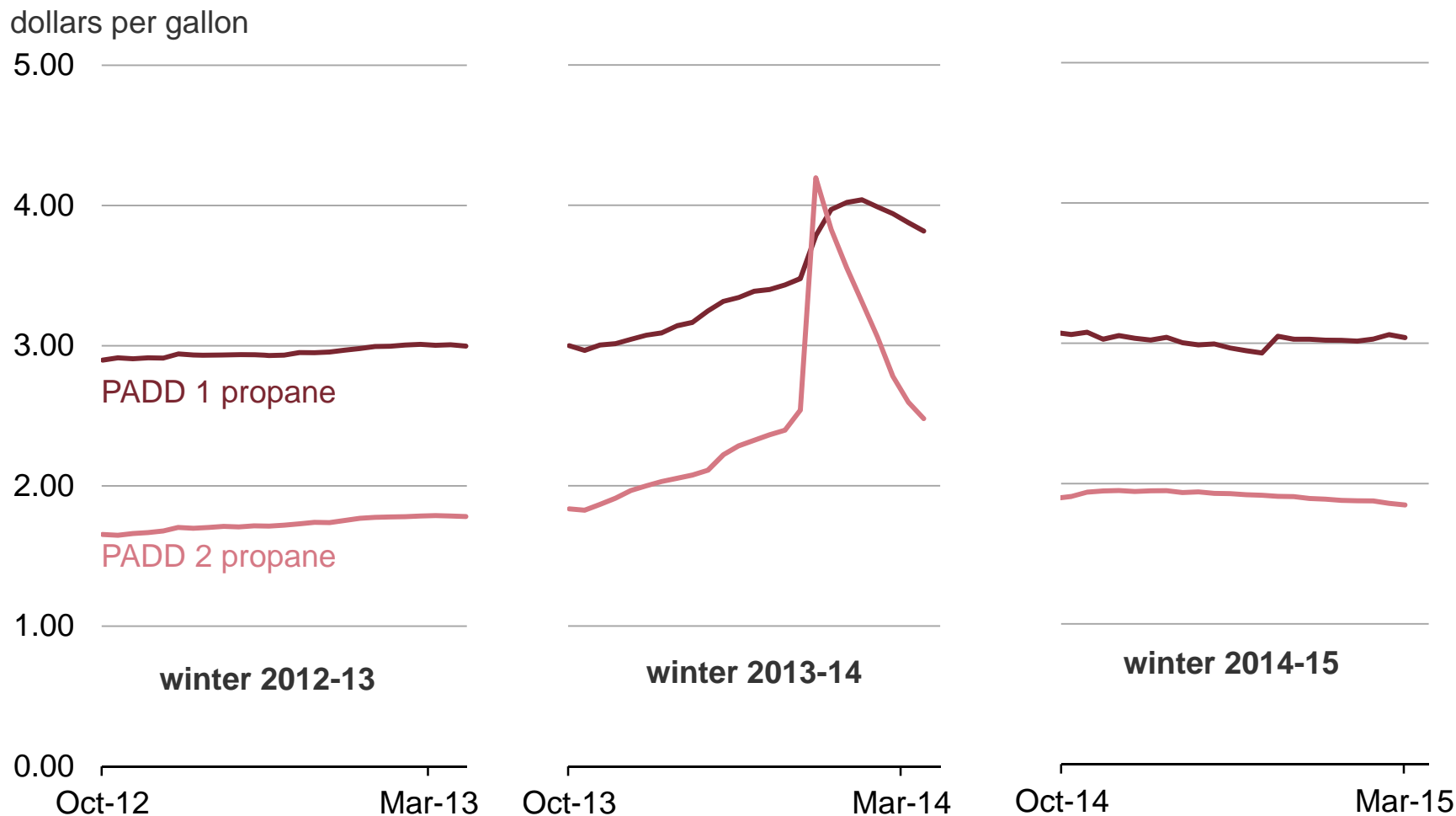
# Propane spot prices are below last winter

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



Source: EIA, Thomson Reuters, data through March 17, 2015

## Retail propane prices on the East Coast and in the Midwest have been stable so far this heating season

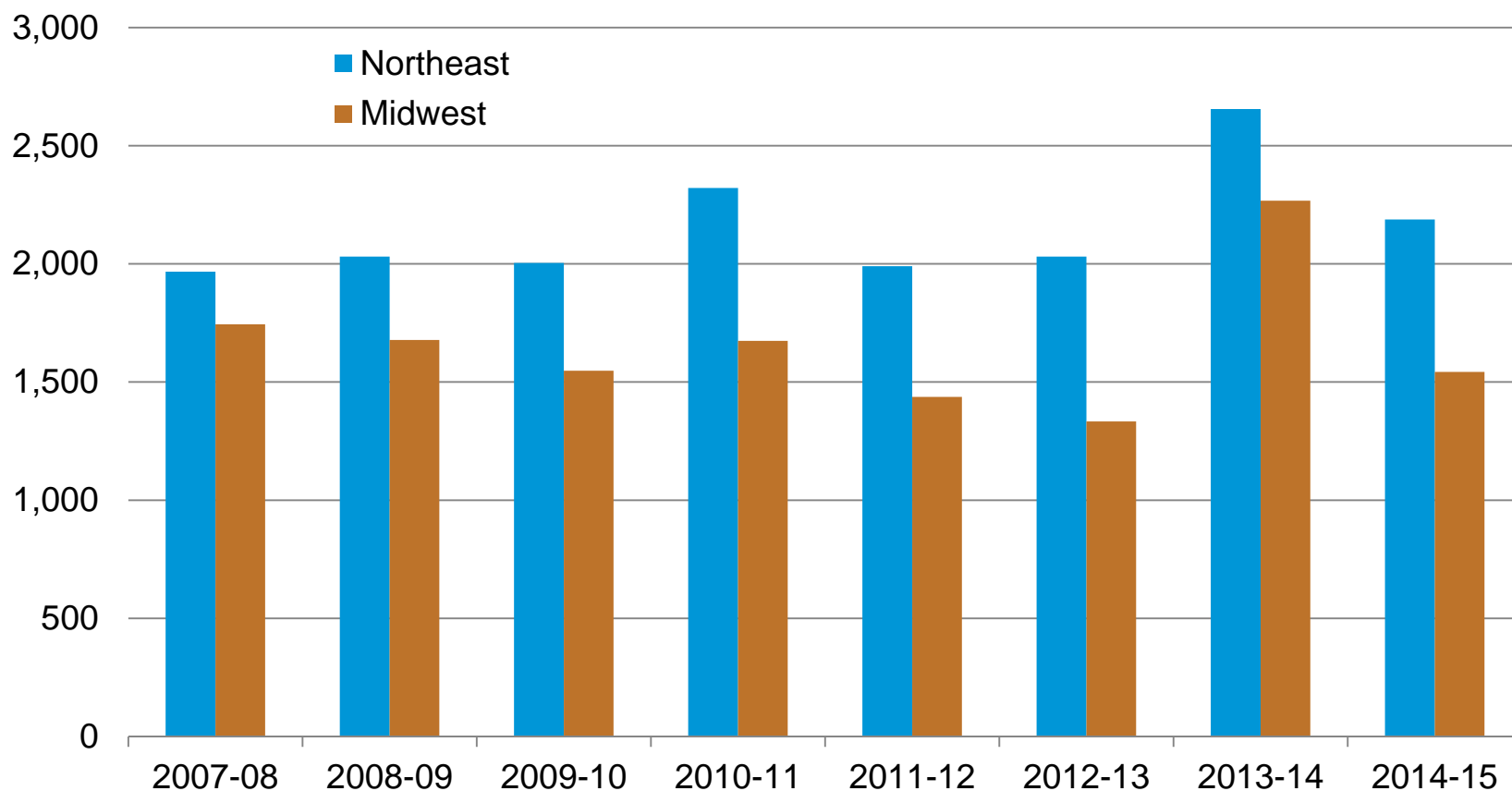


Source: State Heating Oil and Propane Program, data through March 16, 2015



## Average household heating expenditures for consumers heating with propane fell in both the Northeast and Midwest

Average heating expenditures for household that heat primarily with propane dollars



Source: EIA, Short-Term Energy Outlook, March 2015

---

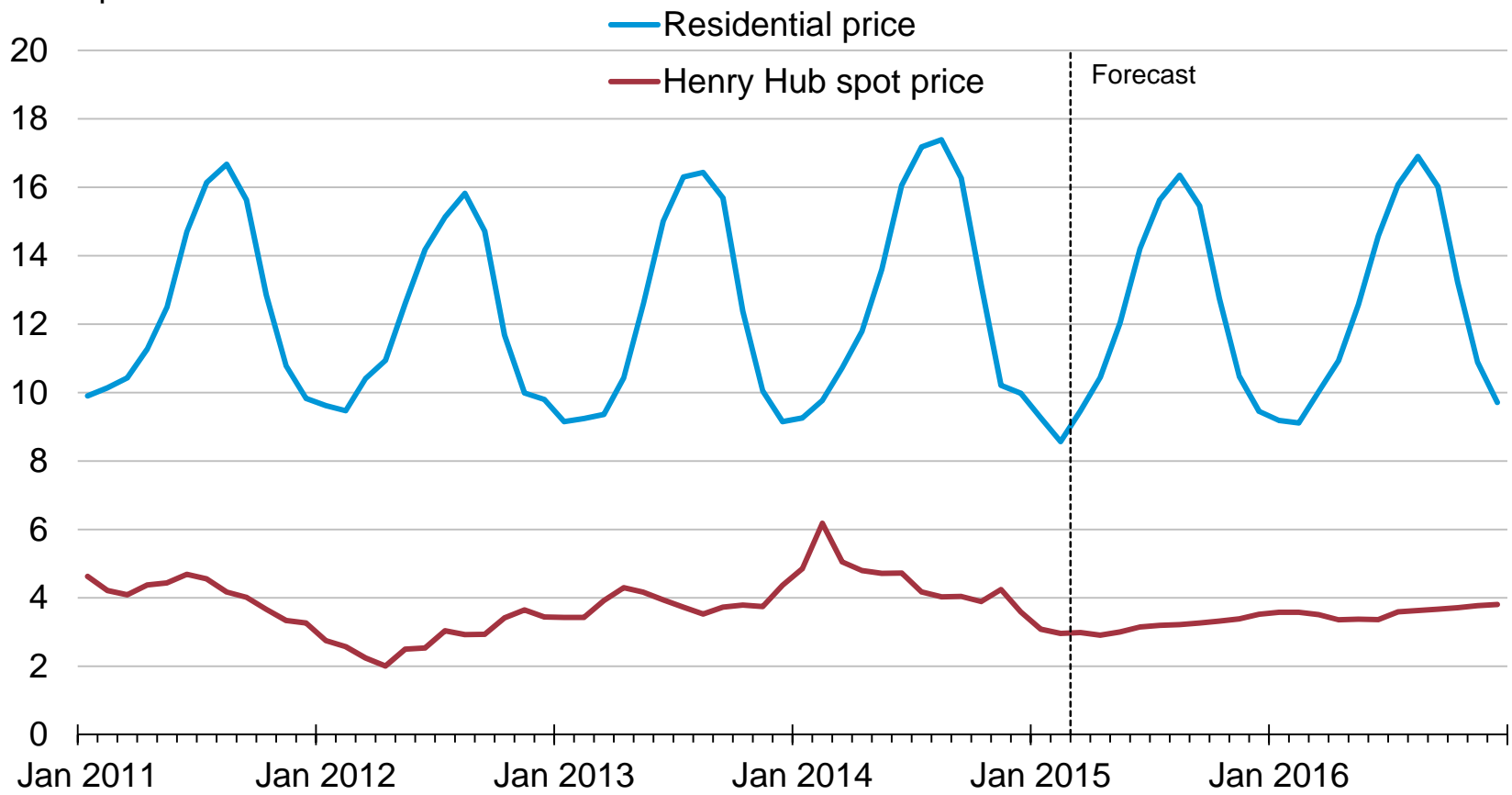
# Natural Gas



# Falling Henry Hub spot prices contributed to lower residential natural gas prices this winter

WTI price

dollars per thousand cubic feet

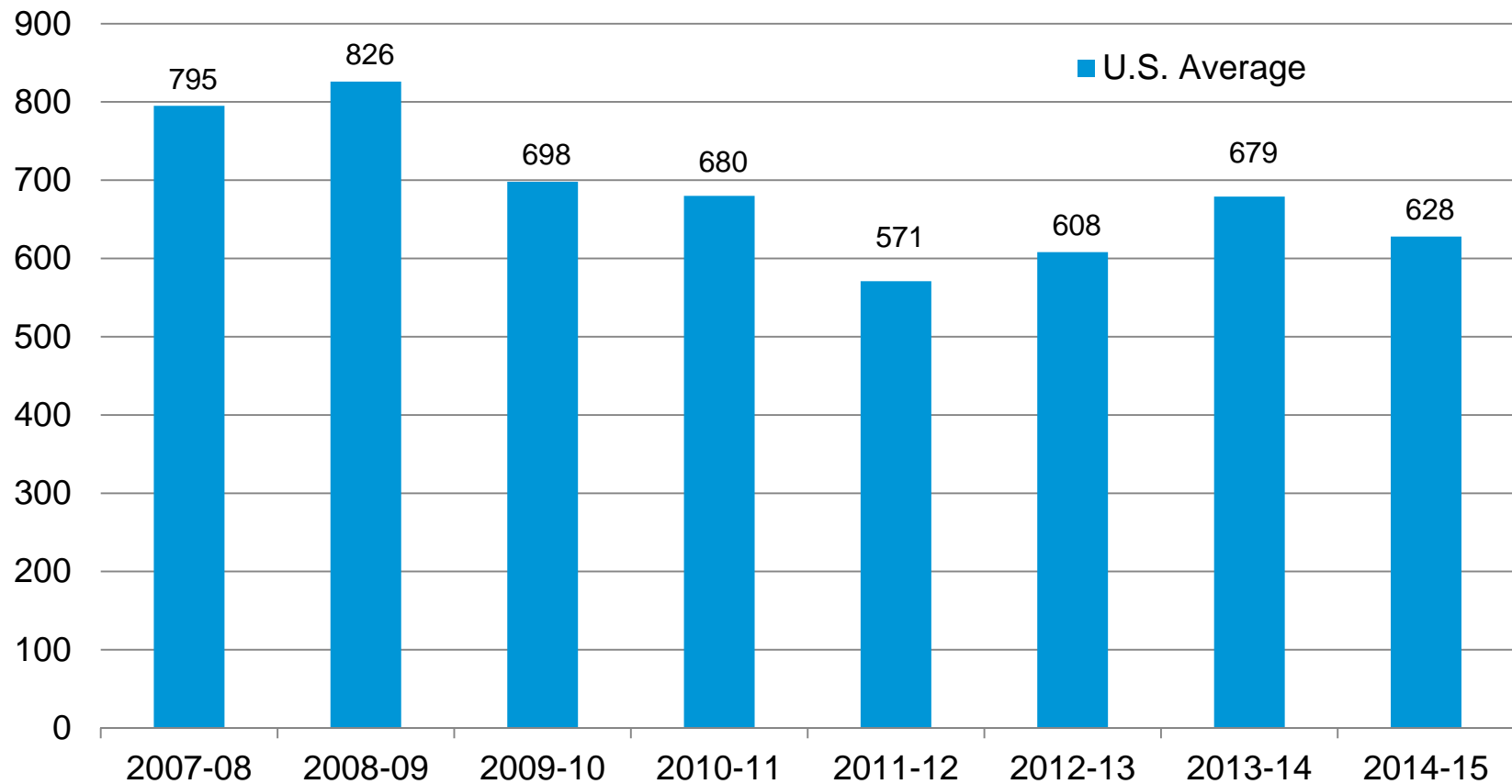


Source: EIA, Short-Term Energy Outlook, March 2015



## Lower natural gas prices and slightly higher temperatures this year contributed to a drop in average natural gas heating expenditures

Average heating expenditures for household that heat primarily with natural gas dollars



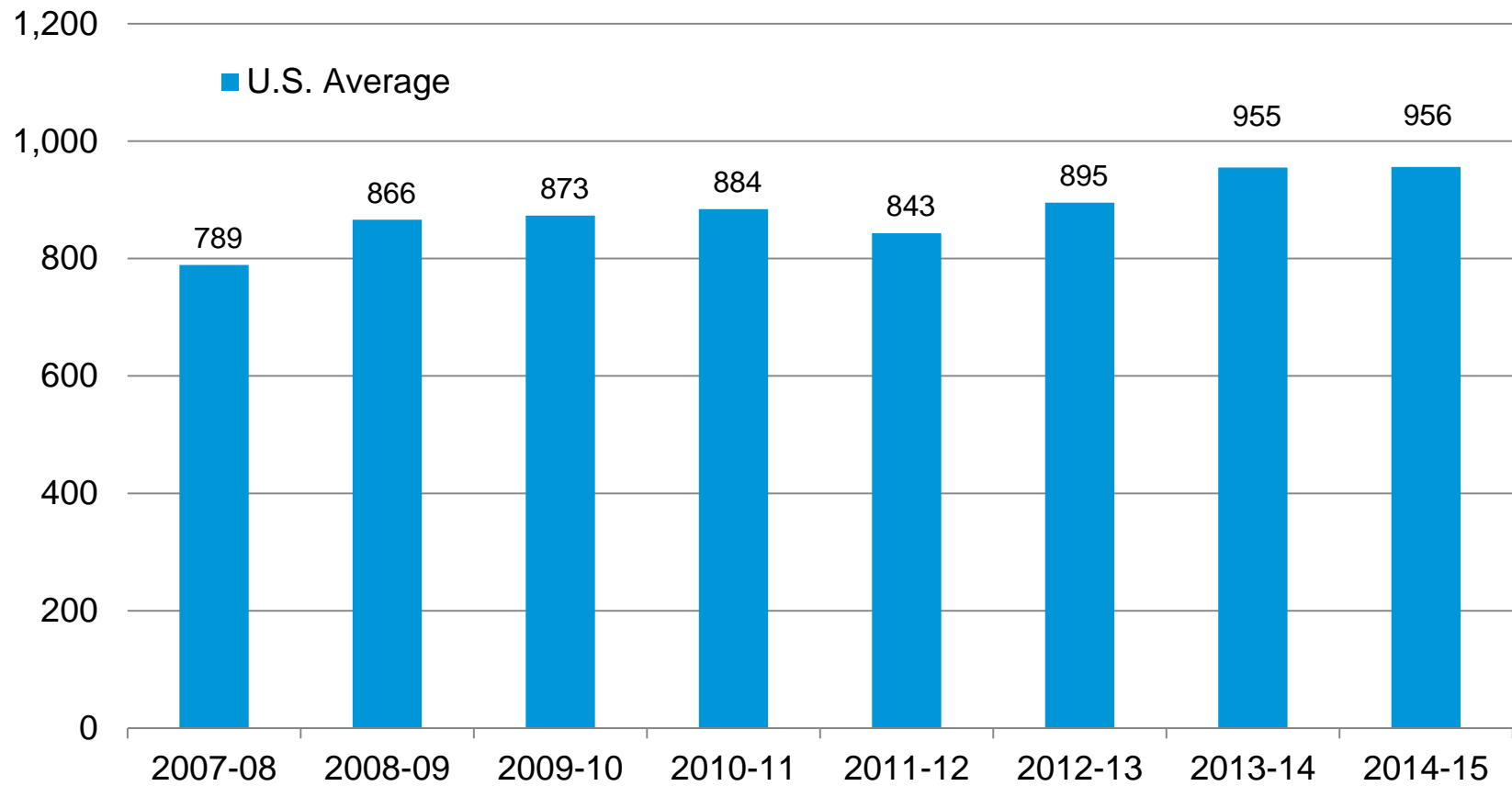
Source: EIA, Short-Term Energy Outlook, March 2015

---

# Electricity

# Electricity expenditures for heating were unchanged from last winter as higher prices offset lower consumption

Average heating expenditures for household that heat primarily with electricity dollars



Source: EIA, Short-Term Energy Outlook, March 2015

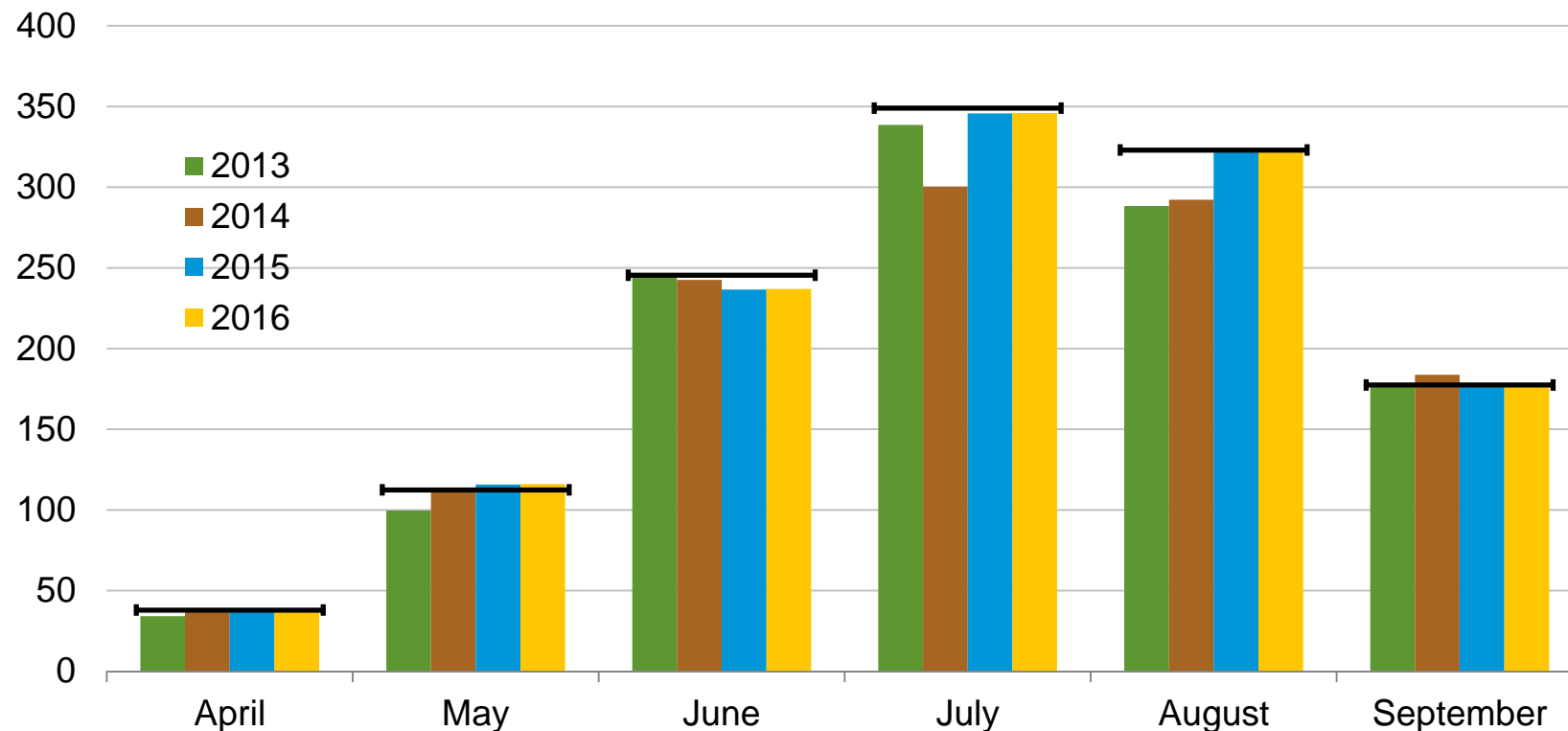
---

# Summer 2015



# U.S. cooling degree days are projected close to average levels in 2015

U.S. summer cooling degree days  
population-weighted



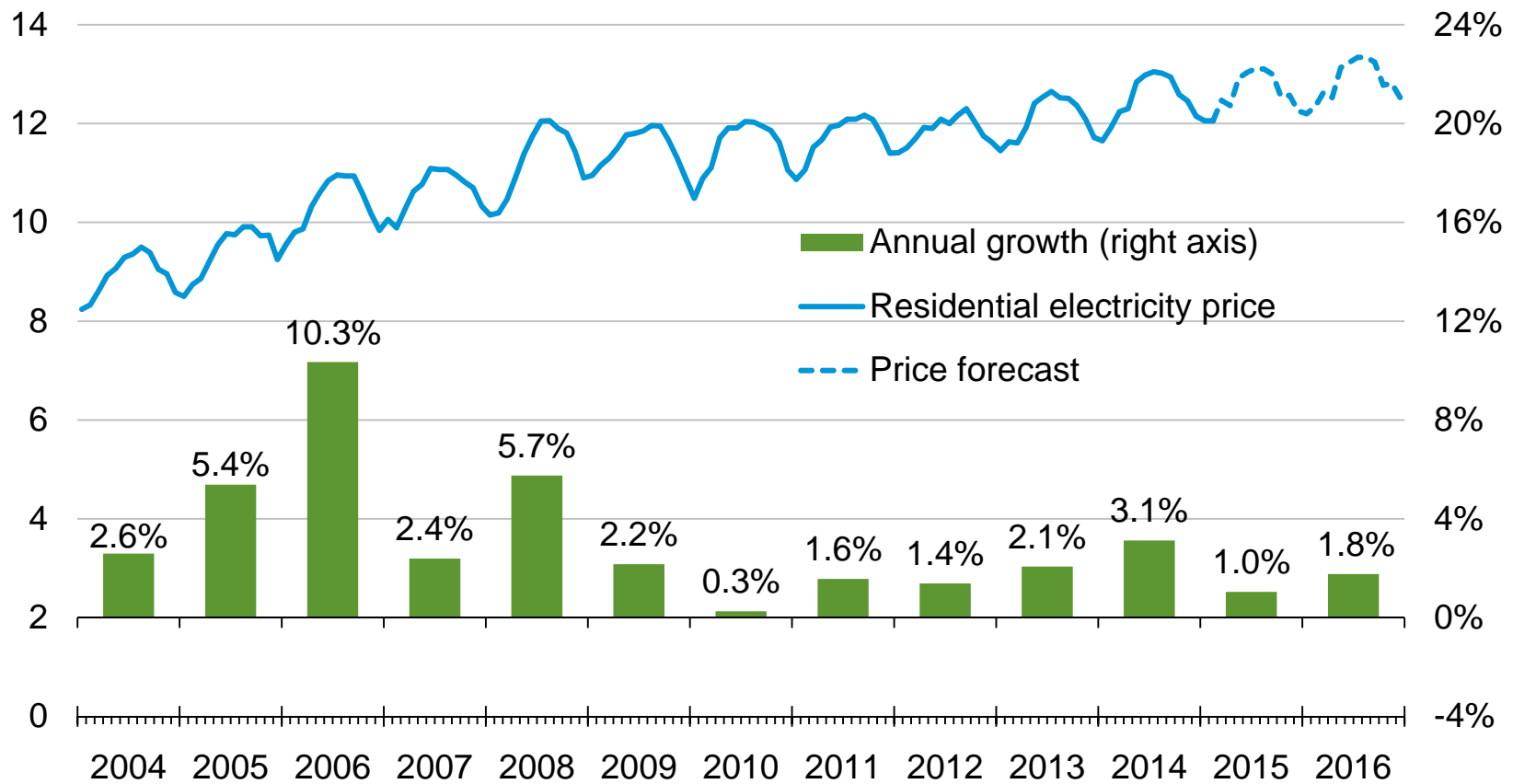
Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Horizontal lines indicate each month's prior 10-year average (Oct 2004 - Mar 2014). Projections reflect NOAA's 14-16 month outlook.

Source: EIA, *Short-Term Energy Outlook*, March 2015



# Residential electricity prices are projected to rise modestly in 2015, averaging 12.6 cents/kWh for the year and 12.9 cents/kWh during the summer months

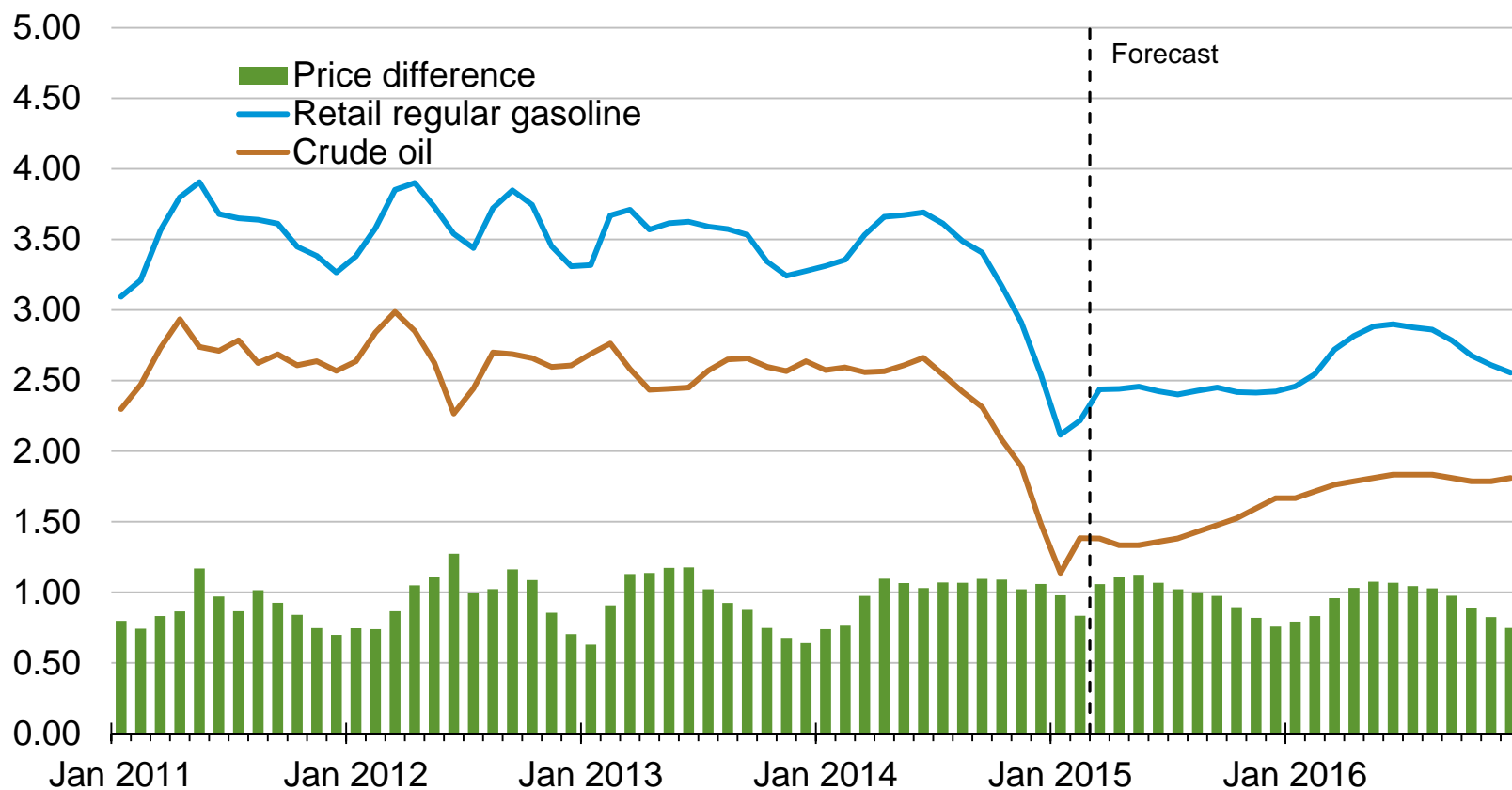
U.S. residential electricity price  
cents per kilowatthour



Source: EIA, Short-Term Energy Outlook, March 2015

# Retail gasoline prices are projected to average \$2.43/gal during summer of 2015 and \$2.73/gal in for full-year 2016

U.S. gasoline and Brent crude oil prices  
dollars per gallon



Source: EIA, Short-Term Energy Outlook, March 2015

---

## For more information

***Subject matter experts for this presentation:***

*Tim Hess, Office of Integrated and International Energy Analysis*  
*[Timothy.Hess@eia.gov](mailto:Timothy.Hess@eia.gov), 202-586-4212*