# EIA Short-Term Energy and Winter Fuels Outlook

*for*

*National Capital Area Chapter of the U.S. Association for Energy Economics*

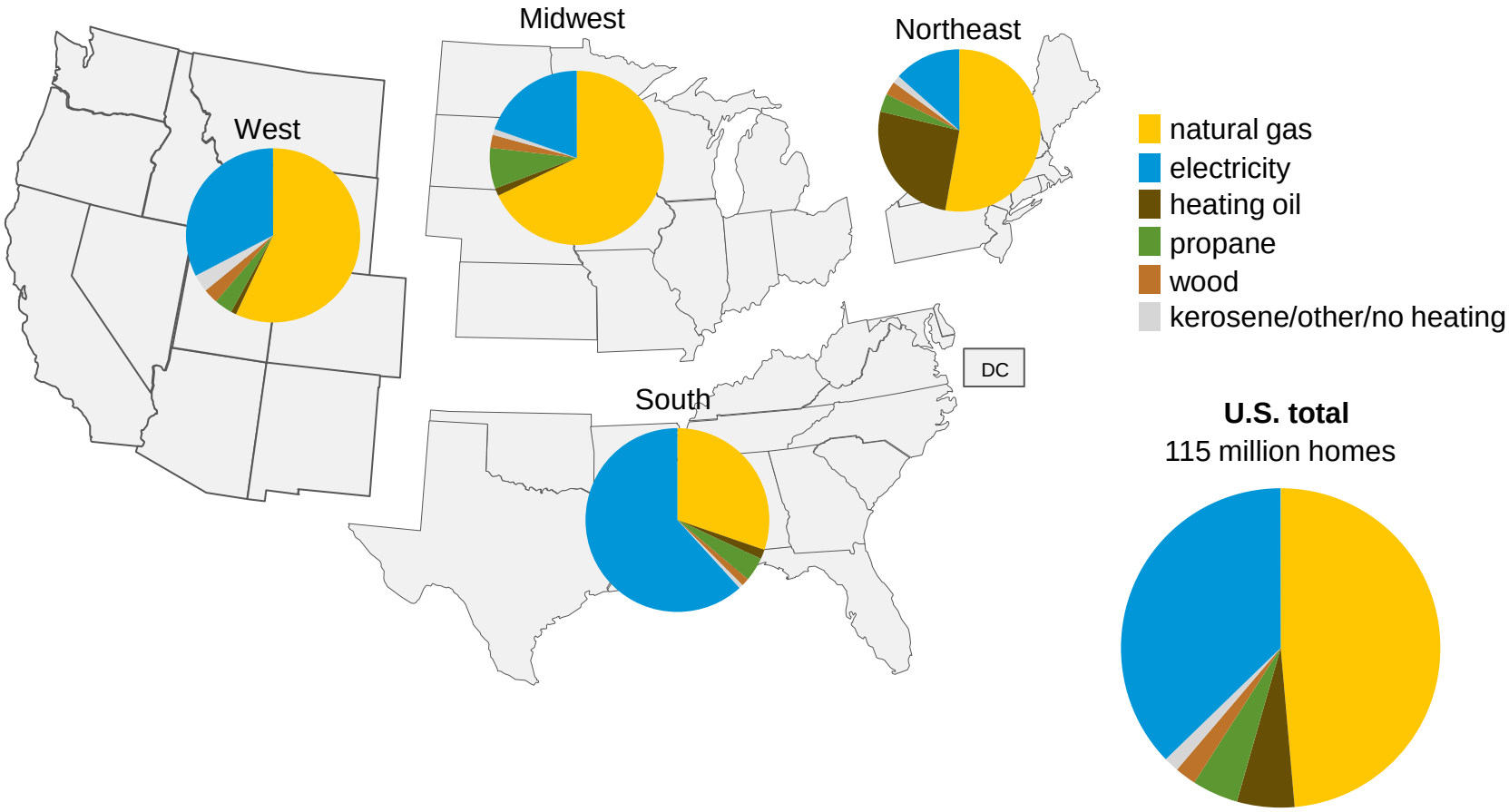
*October 19, 2012 | Washington, DC*

*by*

*Adam Sieminski, Administrator*

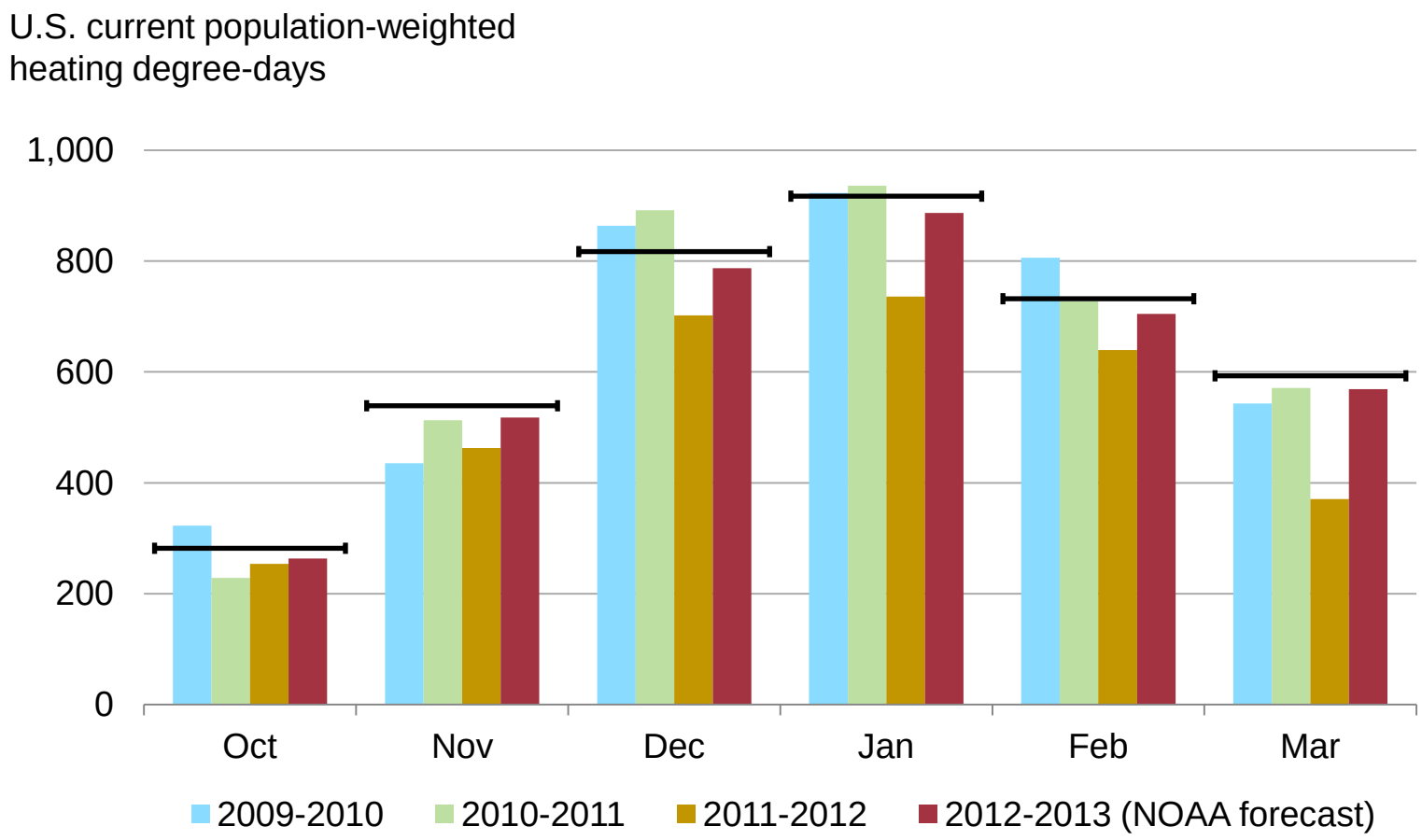
# Heating fuel market shares vary regionally

Number of homes by primary space heating fuel and Census Region, winter 2012-13




*Source: EIA Short-Term Energy Outlook, October 2012*

# The U.S. winter 2012-13 heating season forecast is about 2% warmer than the 30-year average, but 18% colder than last winter




*Note: Horizontal bars indicate monthly average degree days over the period 1971-2000.*
*Source: EIA calculations based on NOAA state history and forecasts (August 15, 2012) weighted by same-year populations.*

# Expenditures are expected to increase this winter (October 1– March 31) for all fossil fuels

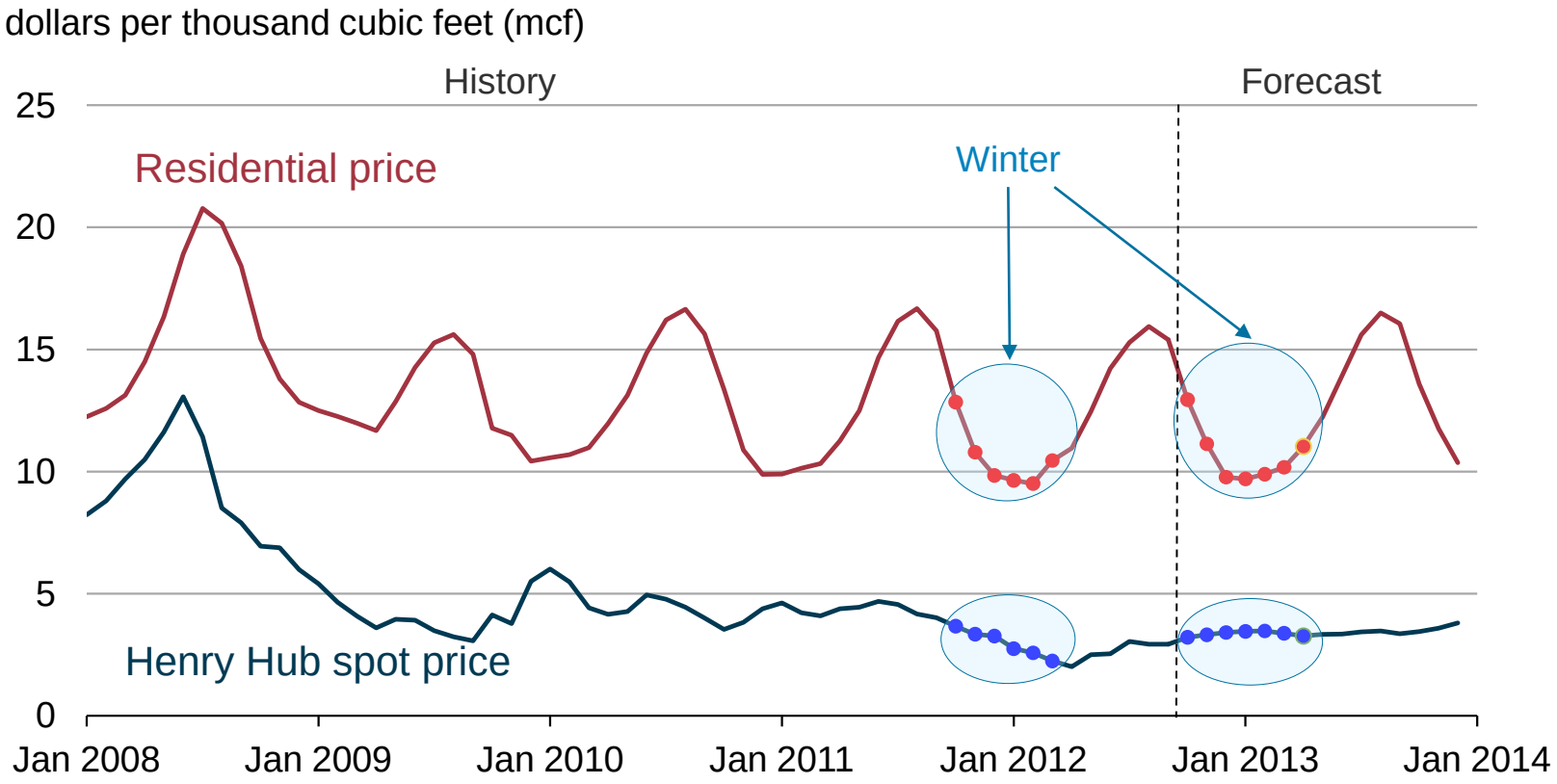
Percent change in fuel bills from last winter (forecast)

| Fuel bill | Base case forecast | If 10% warmer than forecast | If 10% colder than forecast |
|---|---|---|---|
| Heating oil | **19** | 7 | 32 |
| Natural gas | **15** | 3 | 28 |
| Propane * | **13** | - | - |
| Electricity | **5** | 2 | 11 |

* Propane expenditures are a volume-weighted average of the Northeast and Midwest regions. All others are U.S. volume-weighted averages. Propane prices in warm and cold cases are not available.

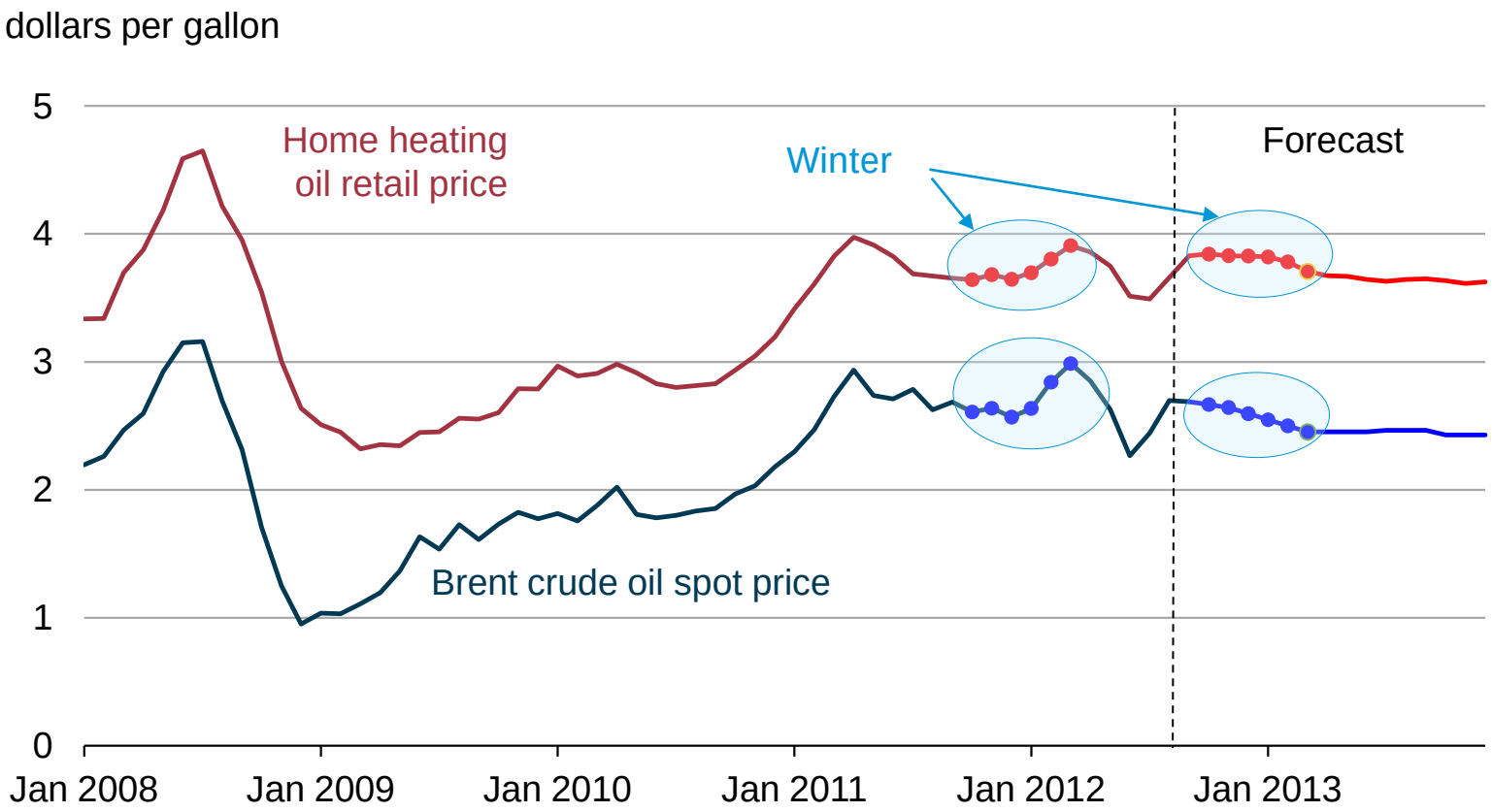
*Source: EIA Short-Term Energy Outlook, October 2012*

# EIA expects residential natural gas prices to closely follow last winter's prices




*Source: EIA Short-Term Energy Outlook, October 2012*

# EIA expects residential heating oil prices to average 2% higher this winter than last

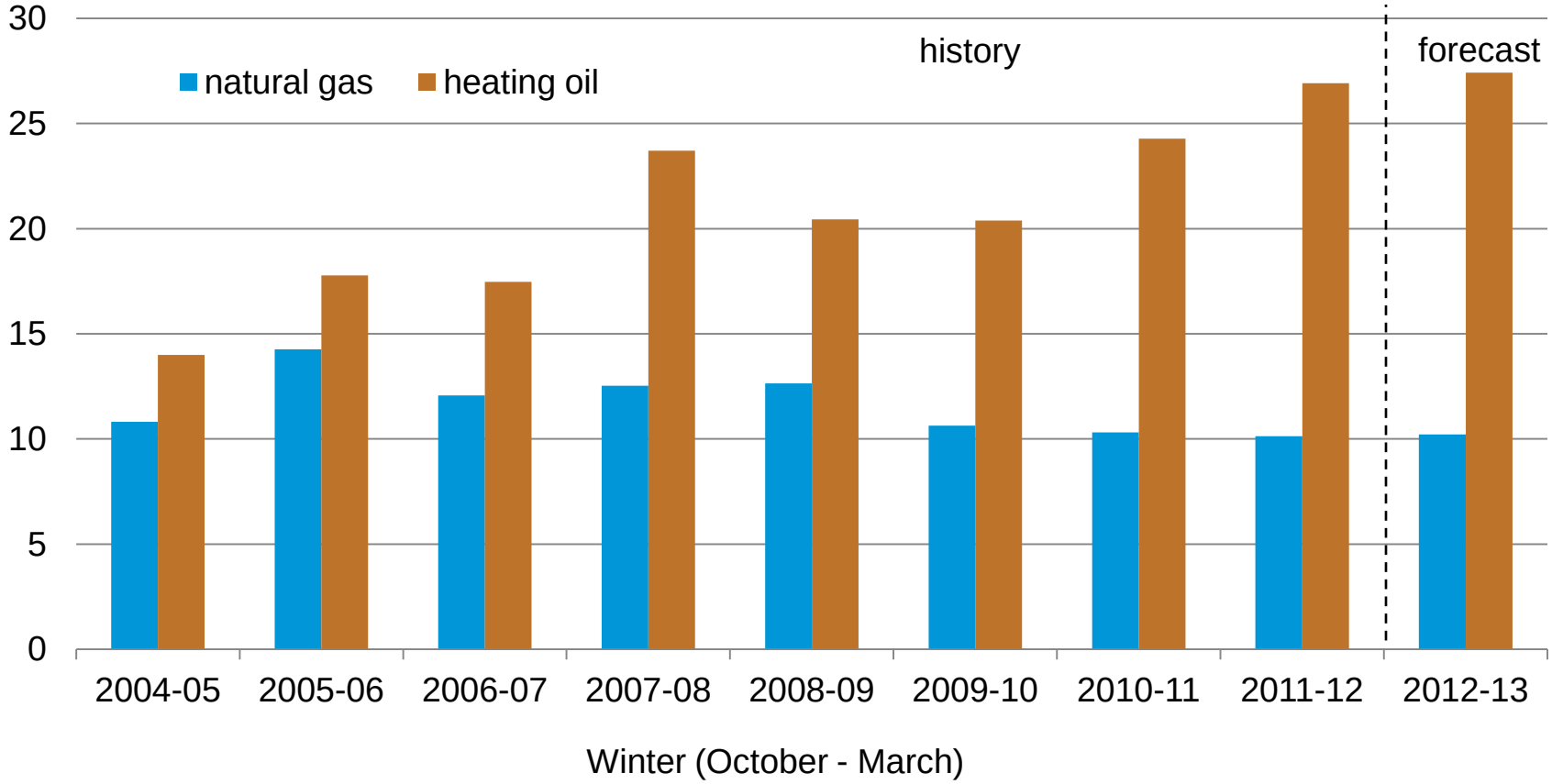



*Home heating oil retail price includes taxes.*

*Source: EIA Short-Term Energy Outlook, October 2012*

# Heating oil remains much more expensive than natural gas

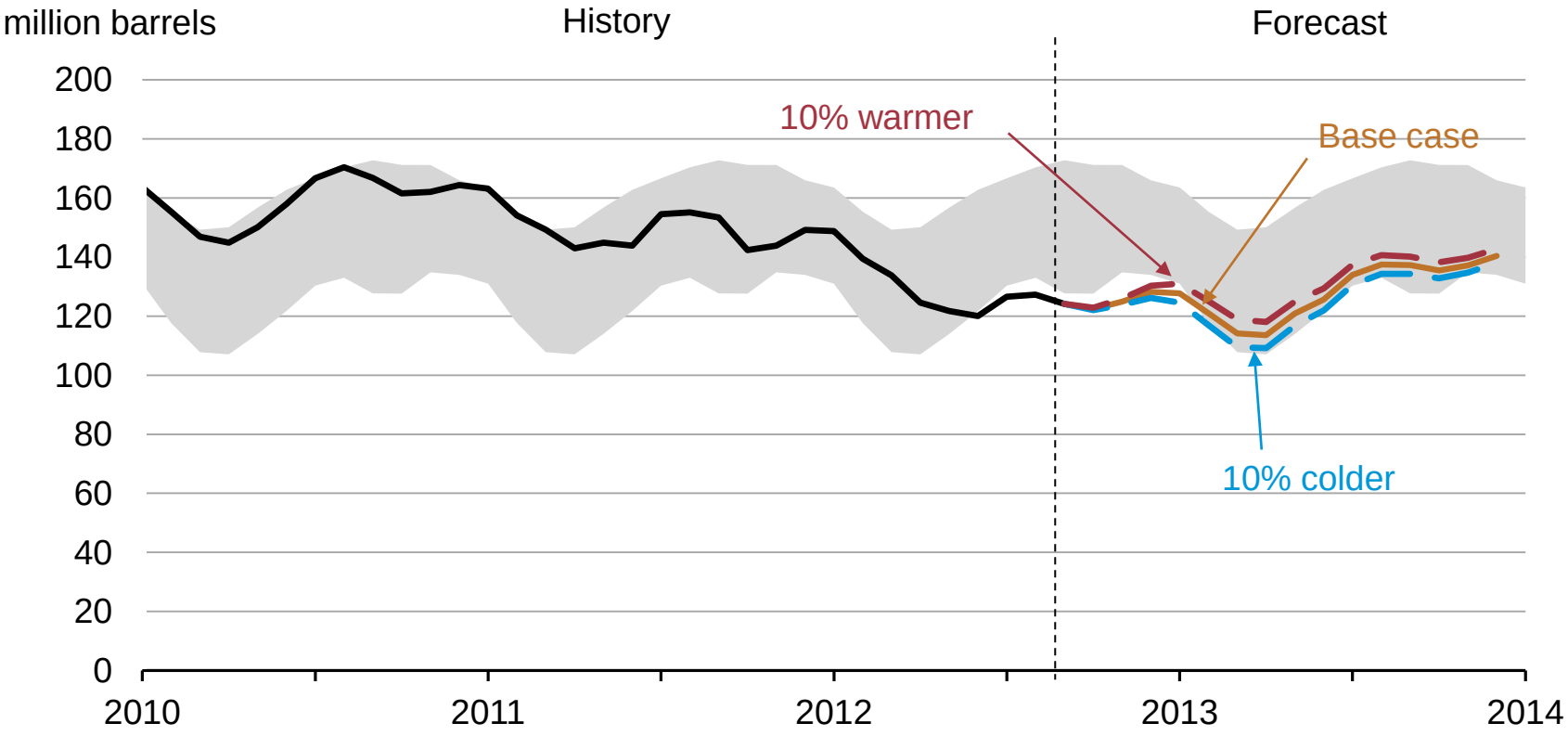
U.S. average residential winter heating fuel prices
dollars per million Btu




*Source: EIA Short-Term Energy Outlook, October 2012*

# Recent changes in the heating oil market

# U.S. distillate stocks are at the low end of the normal range



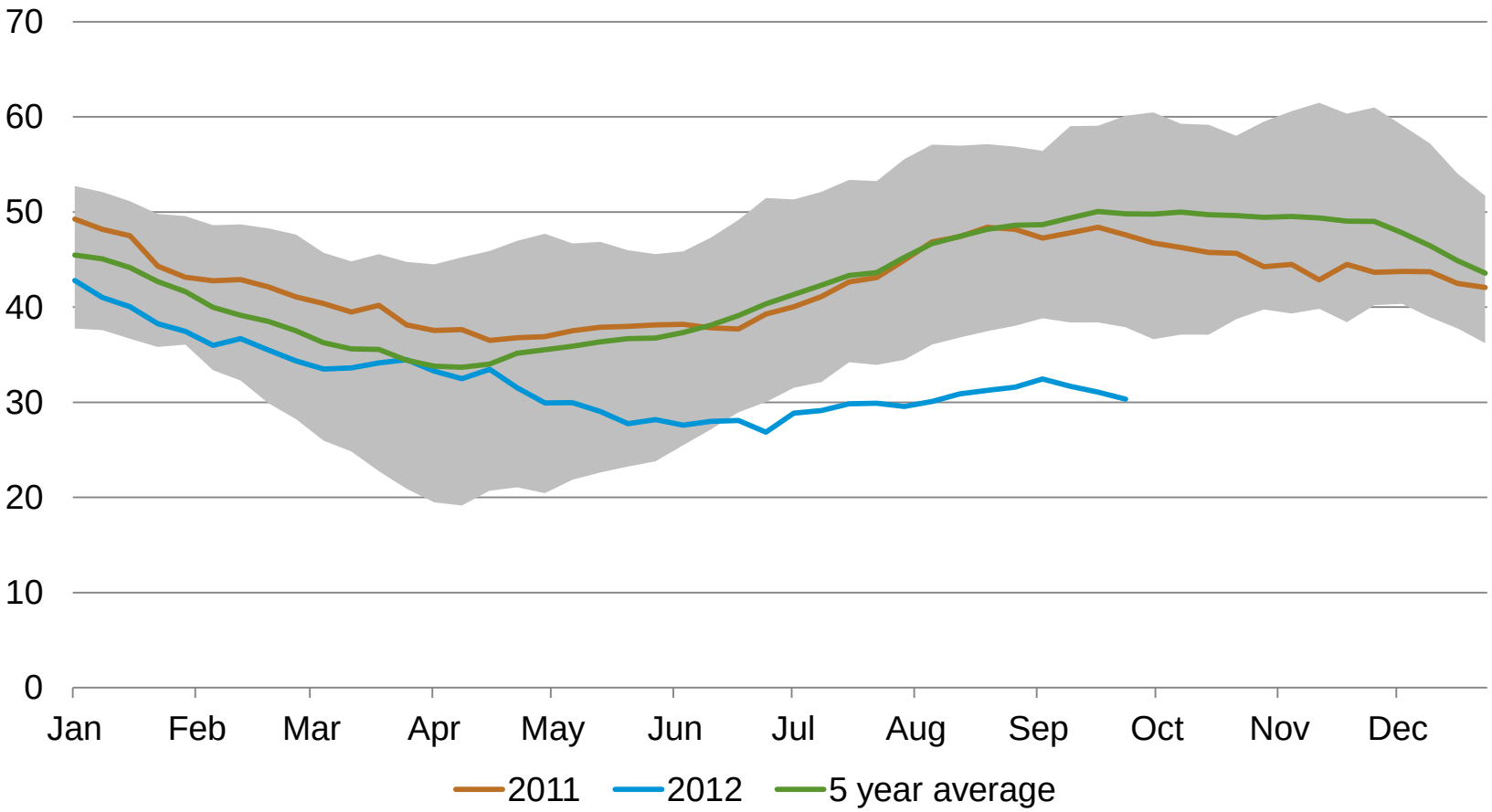

Note: Normal range (colored band) represents the range between the minimum to maximum from Jan. 2007 to Dec. 2011.

*Source: EIA Short-Term Energy Outlook, October 2012*

# Distillate inventories in the Northeast have been below their normal range since mid-summer

U.S. Northeast Total Distillate Inventories

million barrels

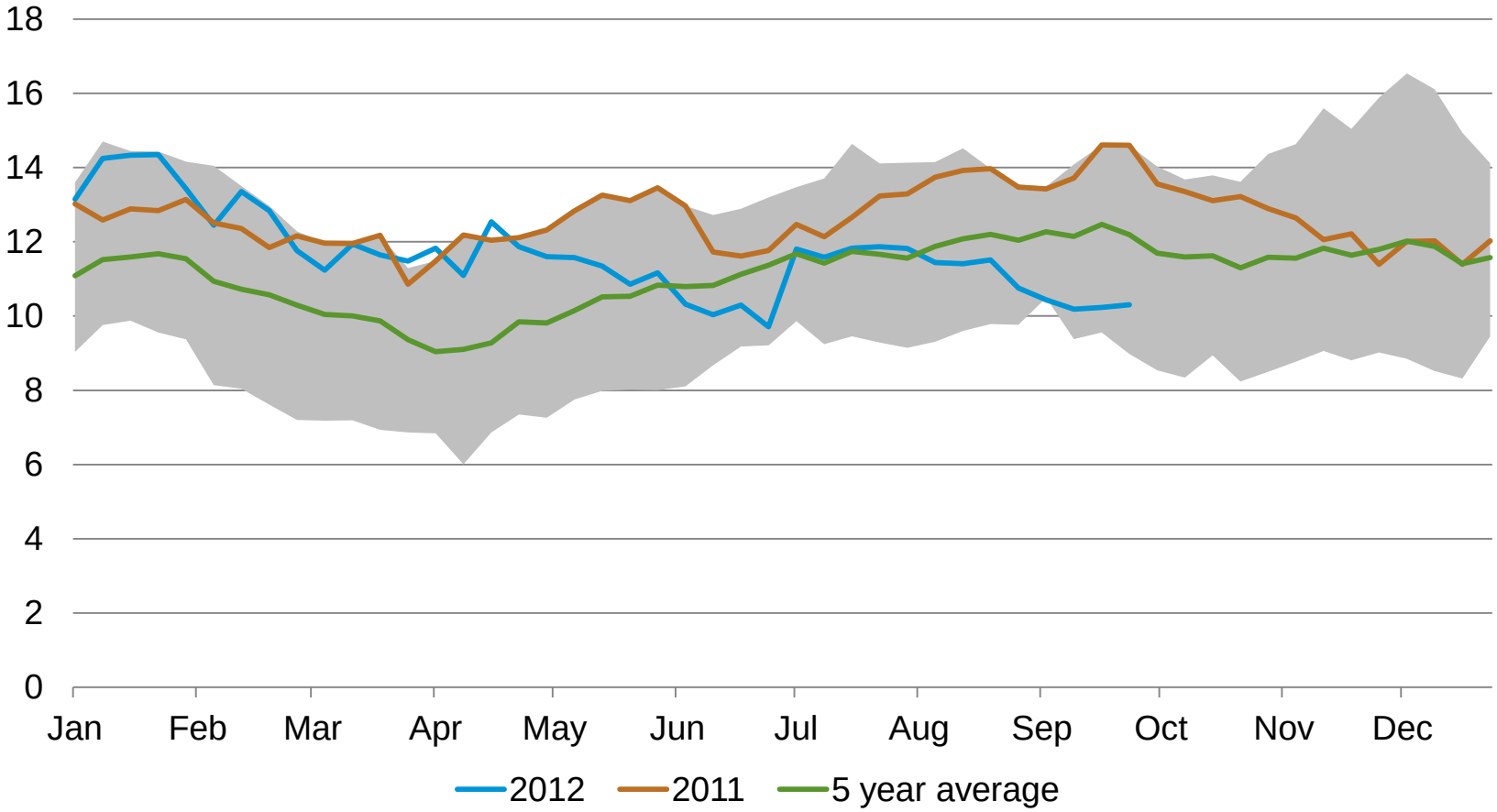



*Source: EIA Weekly Petroleum Status Report*

# Ultra-low sulfur diesel (ULSD) stocks are also low

U.S. Northeast ULSD inventories

million barrels

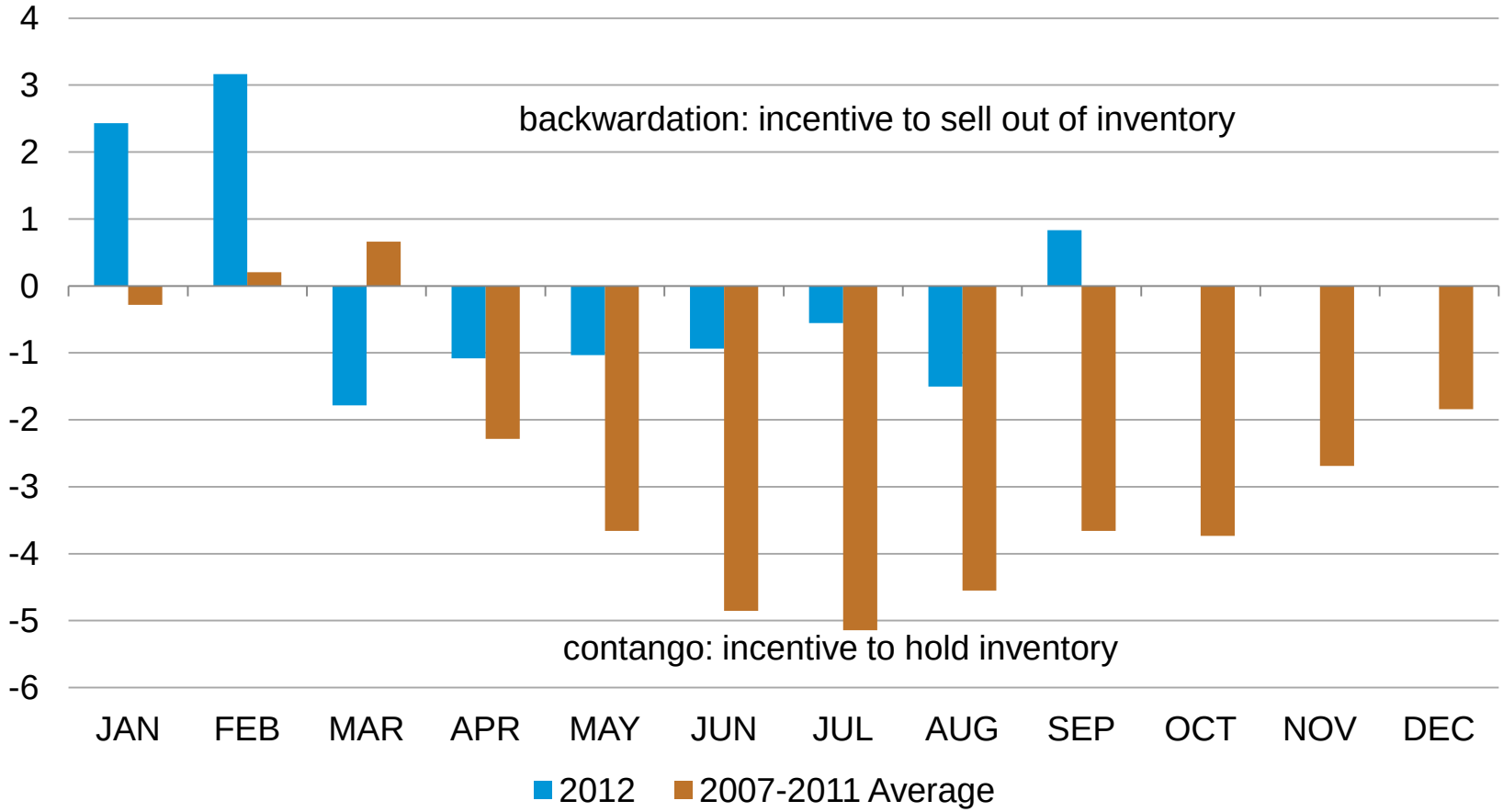



*Source: EIA Weekly Petroleum Status Report*

# Futures market indicates a reduced incentive to hold inventories

Time spreads for NYMEX heating oil futures contracts

cents per gallon

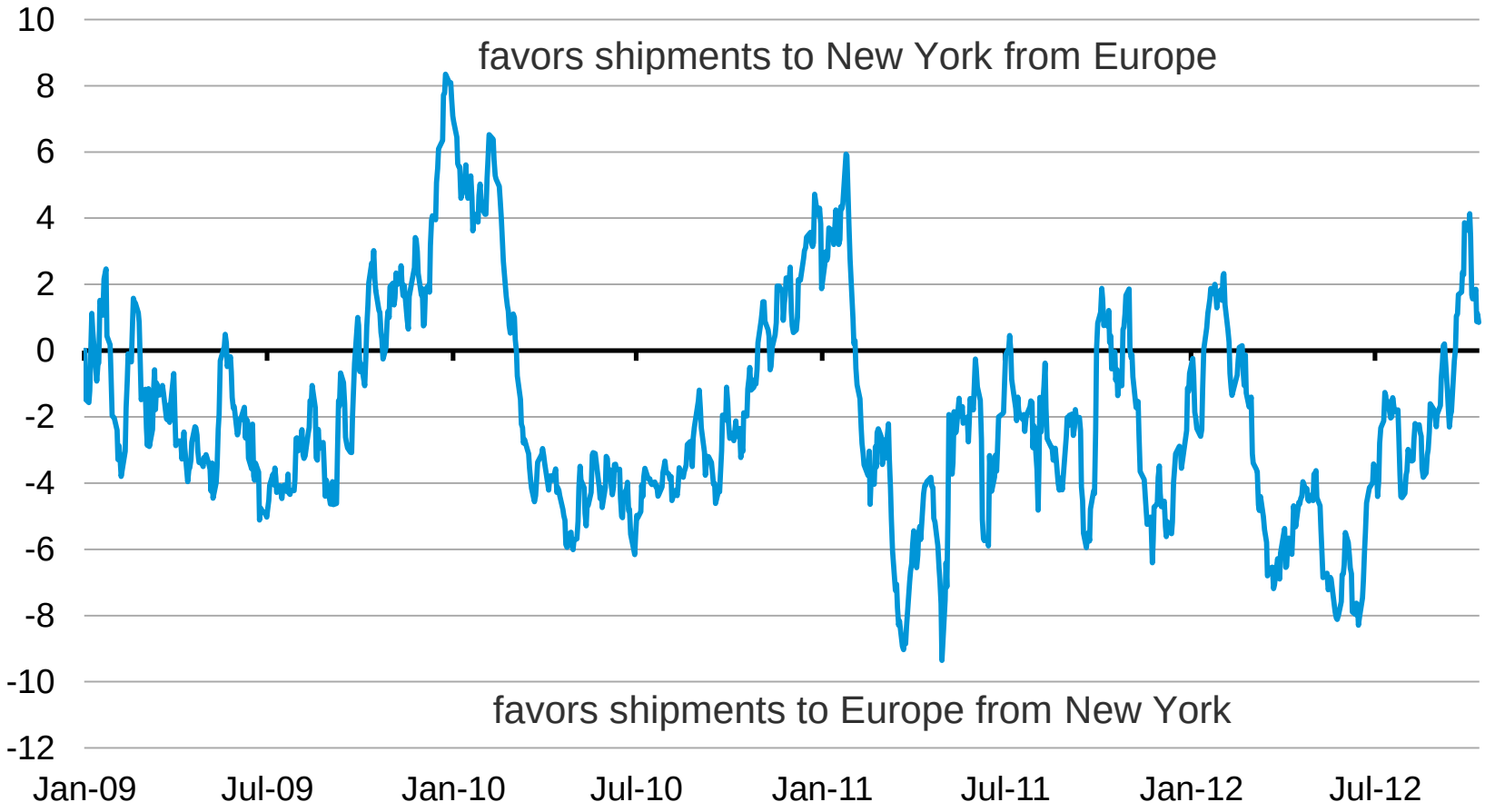



Note: Data are the average monthly first - third contract

*Source: Bloomberg LP*

# Arbitrage between New York Harbor and Europe has closed

Transatlantic Distillate Arbitrage: New York Harbor - Northwest Europe
cents per gallon (five year average)




*Source: Bloomberg LP*

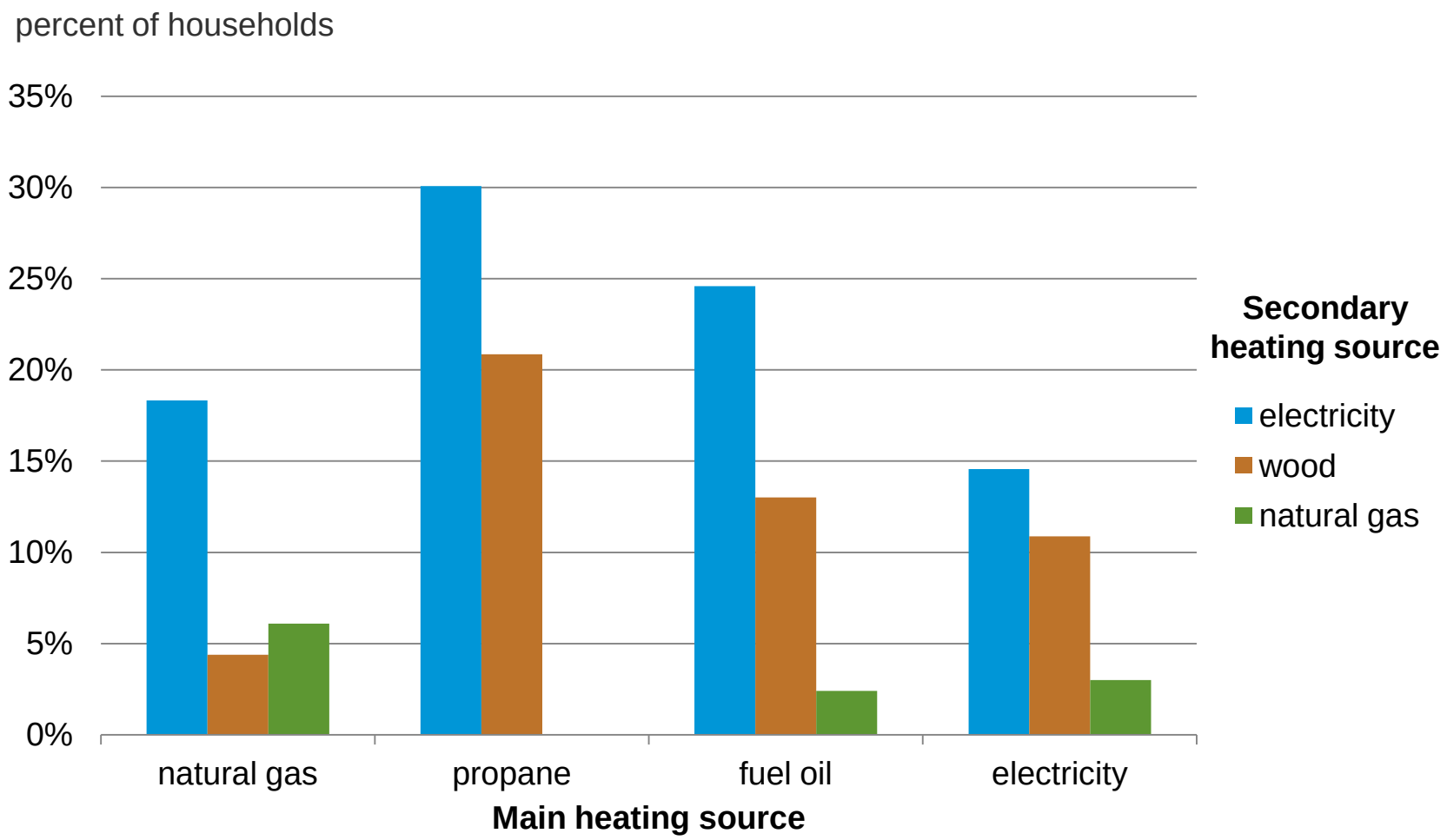
# Other factors that could lessen tightness in Northeastern distillate markets headed into the winter

- Delta Air Line's 185k bbl/d Trainer Refinery near Philadelphia has restarted after being idle for the last year and represented 16% of East Coast refining capacity
- Colonial Pipeline's completion of a 55,000 bbl/d capacity expansion of a distillate pipeline from Houston, Texas and the 60,000 bbl/d expansion from a pipeline from Greensboro, North Carolina
- Additional production could come online from other Northeast refineries to take advantage of the strength in the distillate market

# Changes in Northeast heating fuel consumption

- Northeastern heating oil market volumes are declining, though fuel oil remains the primary fuel in some areas
- Connecticut announced a plan to expand natural gas distribution networks
- Consumers are also supplementing liquid heating fuels with wood and electricity –wood pellet use has been growing in New England
- Production from shale gas in Pennsylvania has increased access to natural gas in Northeastern markets

# Secondary heating is most prevalent for homes using heating oil or Propane/LPG as their main heating source




*Source: EIA Residential Energy Consumption Data, 2009*

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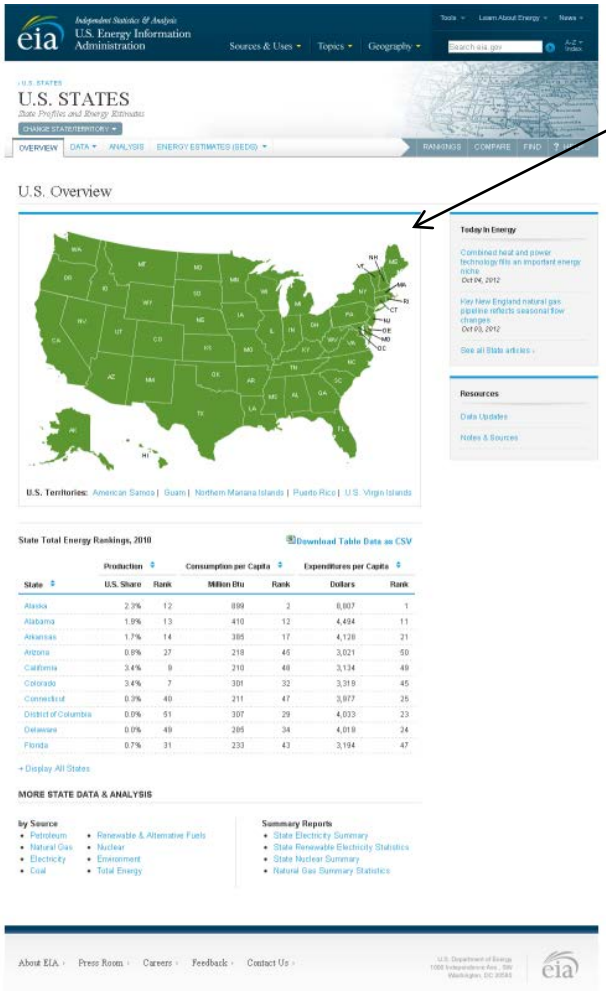
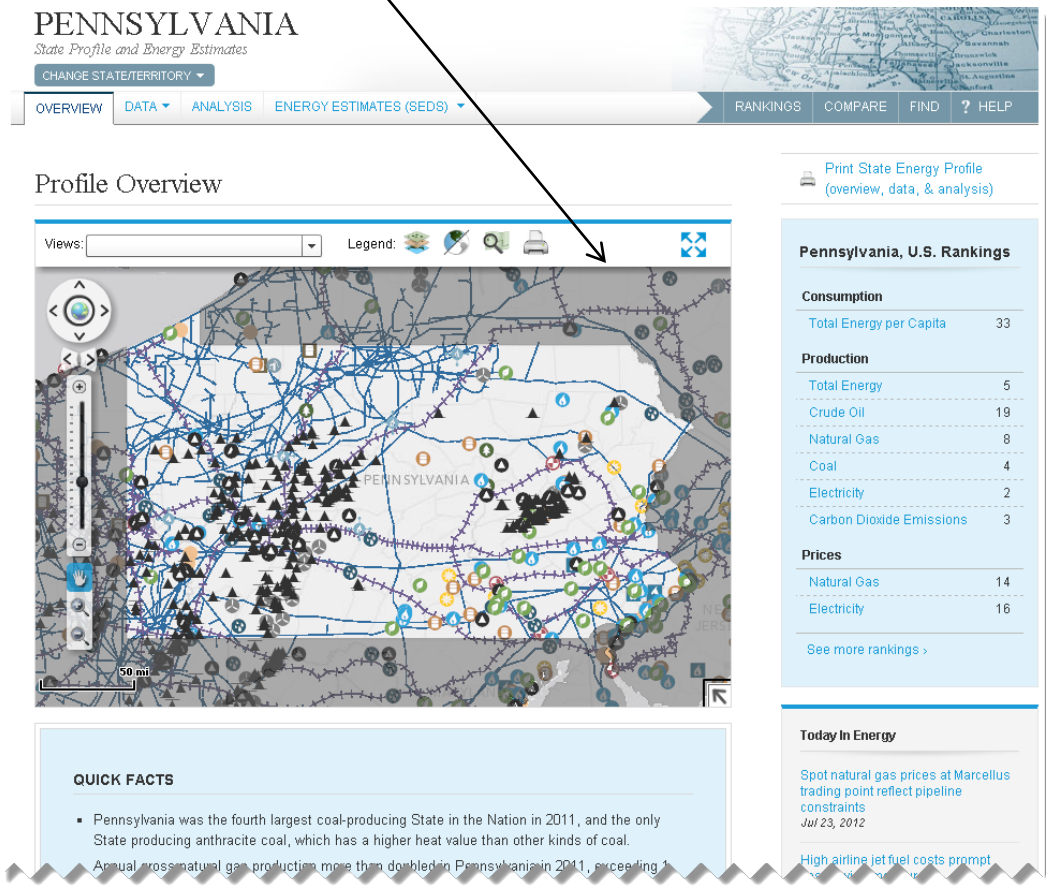
# EIA updates state level datasets with mapping features and energy infrastructure datasets

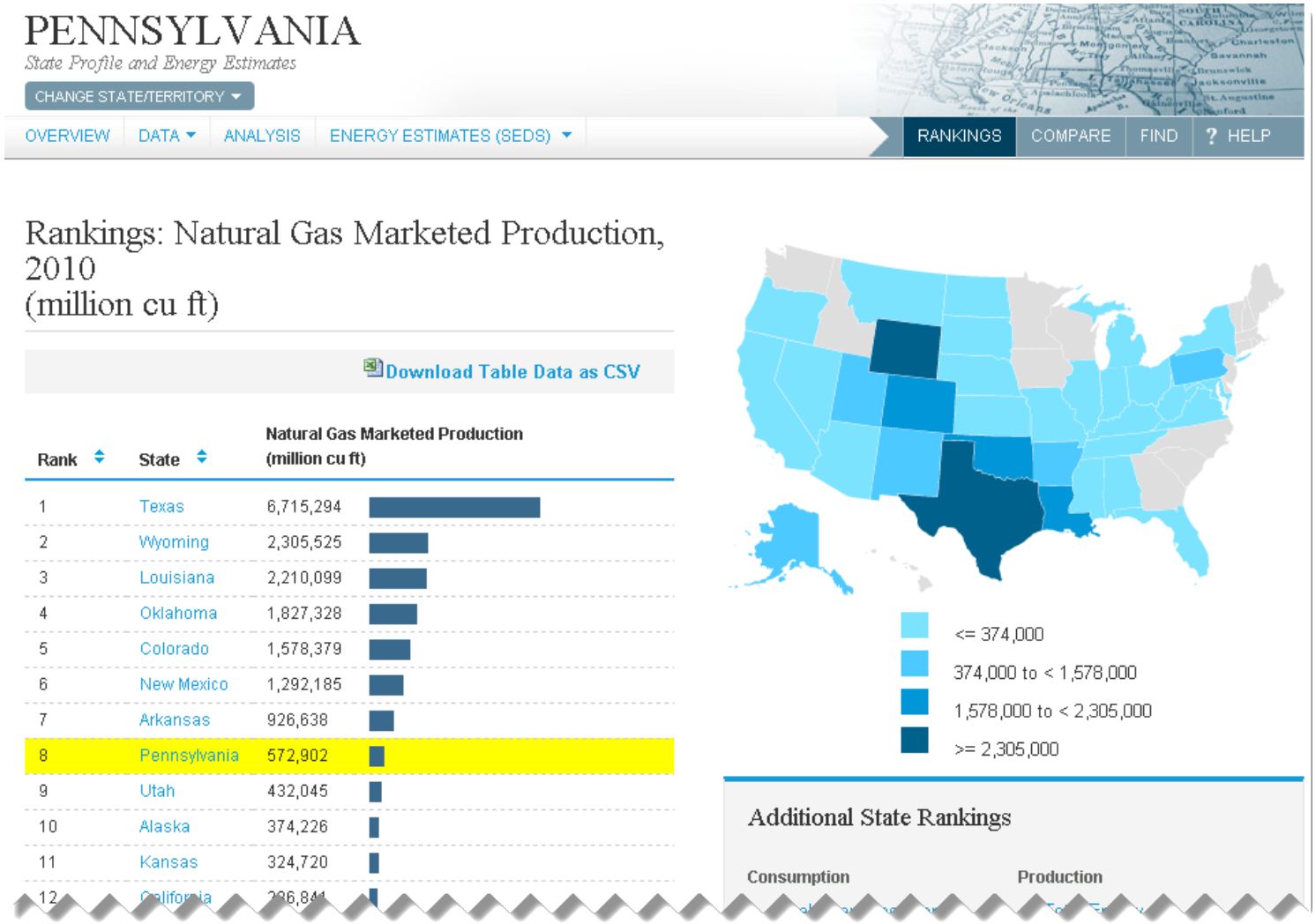
Interactive map links to state level energy data



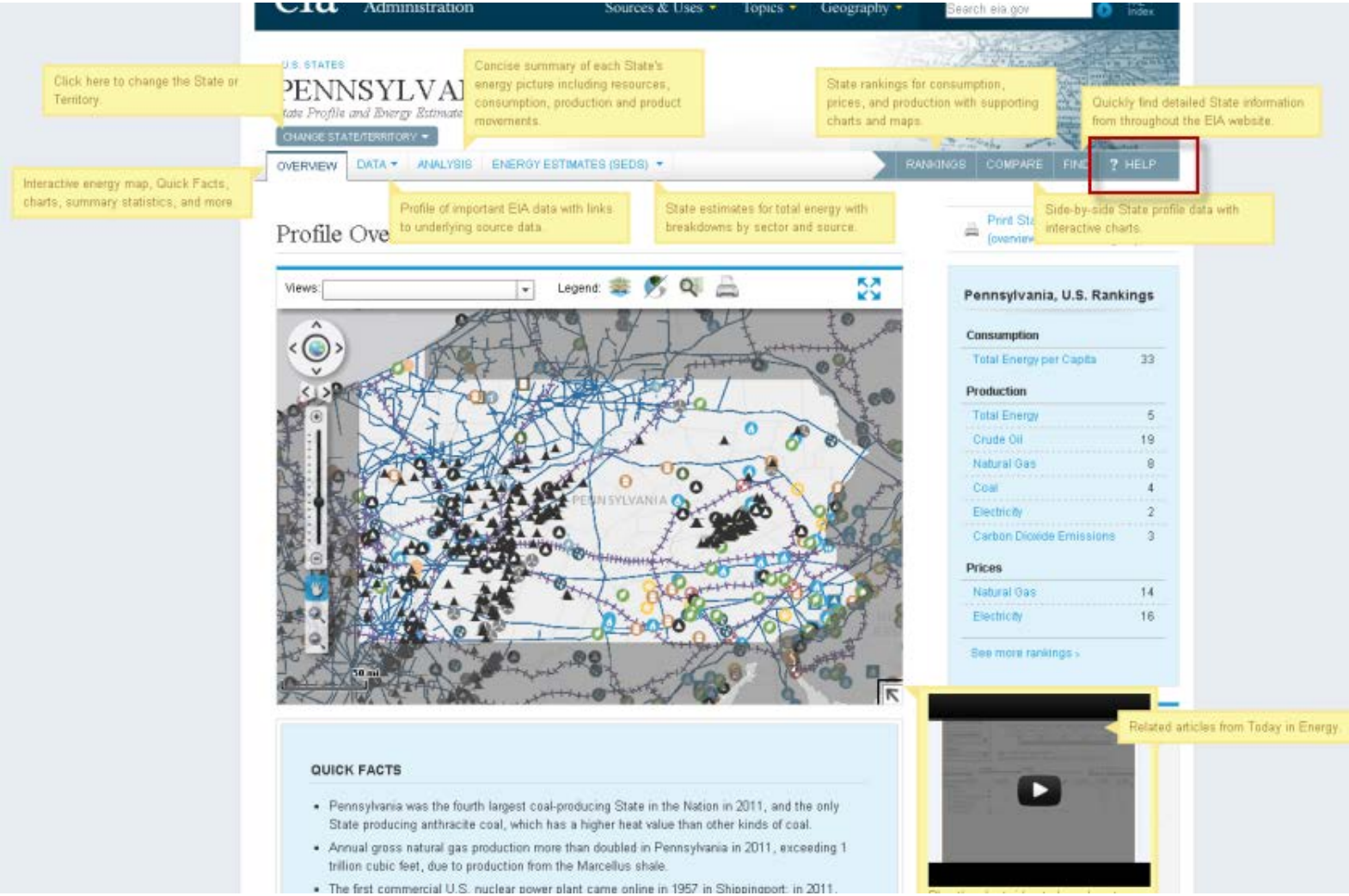

*Source: EIA*

# States pages include EIA datasets and fuel and energy infrastructure analyses




*Source: EIA*

# “Help” features include navigation tips, available tools, and an introductory video




*Source: EIA*

# For more information

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

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

Annual Energy Outlook | www.eia.gov/aeo

International Energy Outlook | www.eia.gov/ieo

Monthly Energy Review | www.eia.gov/mer