Presentation

Winter 2014-15 US Propane Supply Outlook

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Factors Underlying the 2013-14 Propane Shortage

US propane price supply shortage was the result of a convergence of unfavorable market fundamentals

The price spike in February of this year was the result of a convergence of several factors:

- High propane demand for crop drying
- An unusually prolonged period of cold weather, leading to high heating demand
- Rising exports of US propane to international markets

The confluence of these factors led to a rapid fall in primary propane inventories and supply tightness that resulted in a surge in prices in the Mid-Continent region.

- PADD II primary inventories dropped sharply starting in October 2013 and remained low through February 2014.
- The price spike was short-lived, as markets adjusted and prices returned to normal levels relatively quickly.
- Production growth outpaced demand and exports, enabling stocks to recover for the start of the 2014 - 2015 winter.

US propane supply outlook depends primarily on market fundamentals

Principal factors affecting propane supply and pricing include:

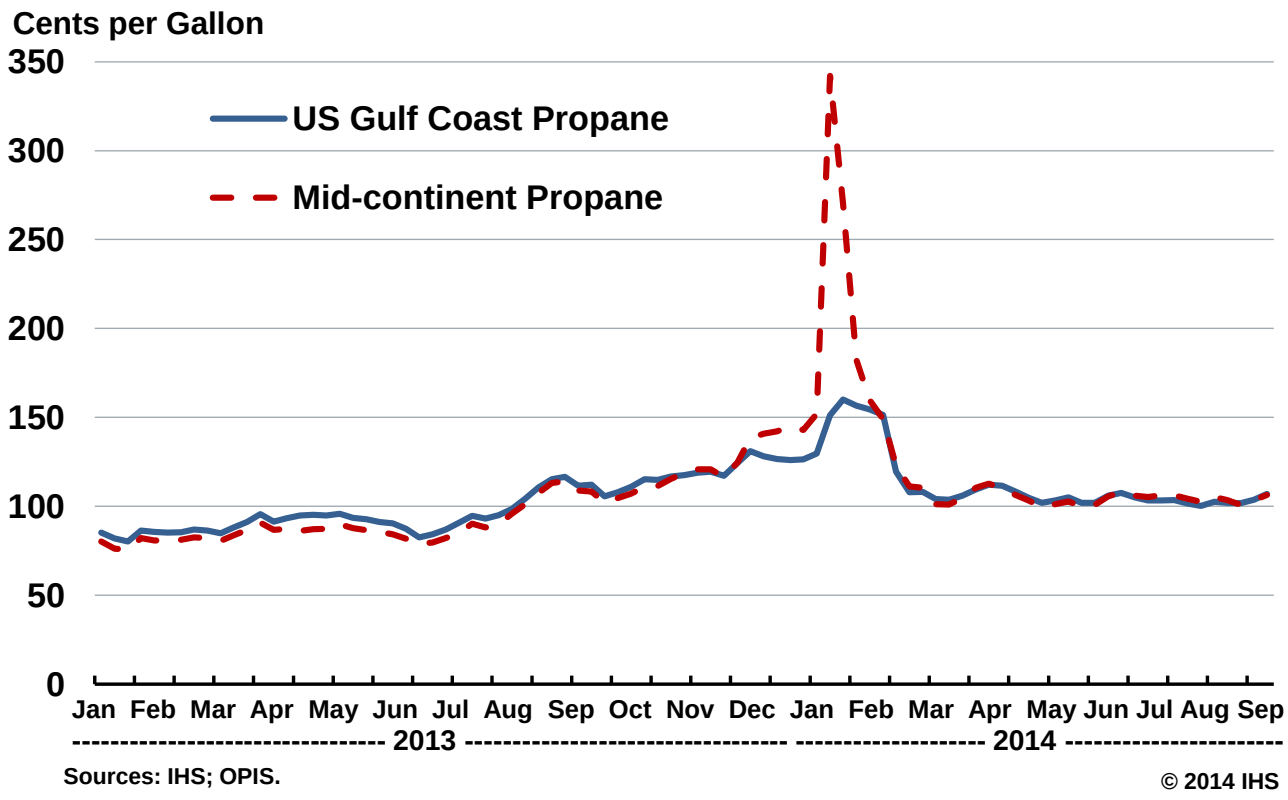
- Inventory levels at start of the heating season
- Winter weather
- Propane production – especially production from prolific wet shale gas plays
- Demand – incl. weather-related and structural demand (e.g. chemicals)
- Exports – Availability of export capacity (as influenced by US propane price competitiveness in foreign markets)

These are the principal factors expected to influence the outlook for propane supply and prices in the winter of 2014-15, as well as in the years ahead.

The 2013-14 propane shortage resulted in a brief, but significant, price surge in the US mid-continent

US Propane Weekly Average Prices, 2013 and 2014 year-to-date

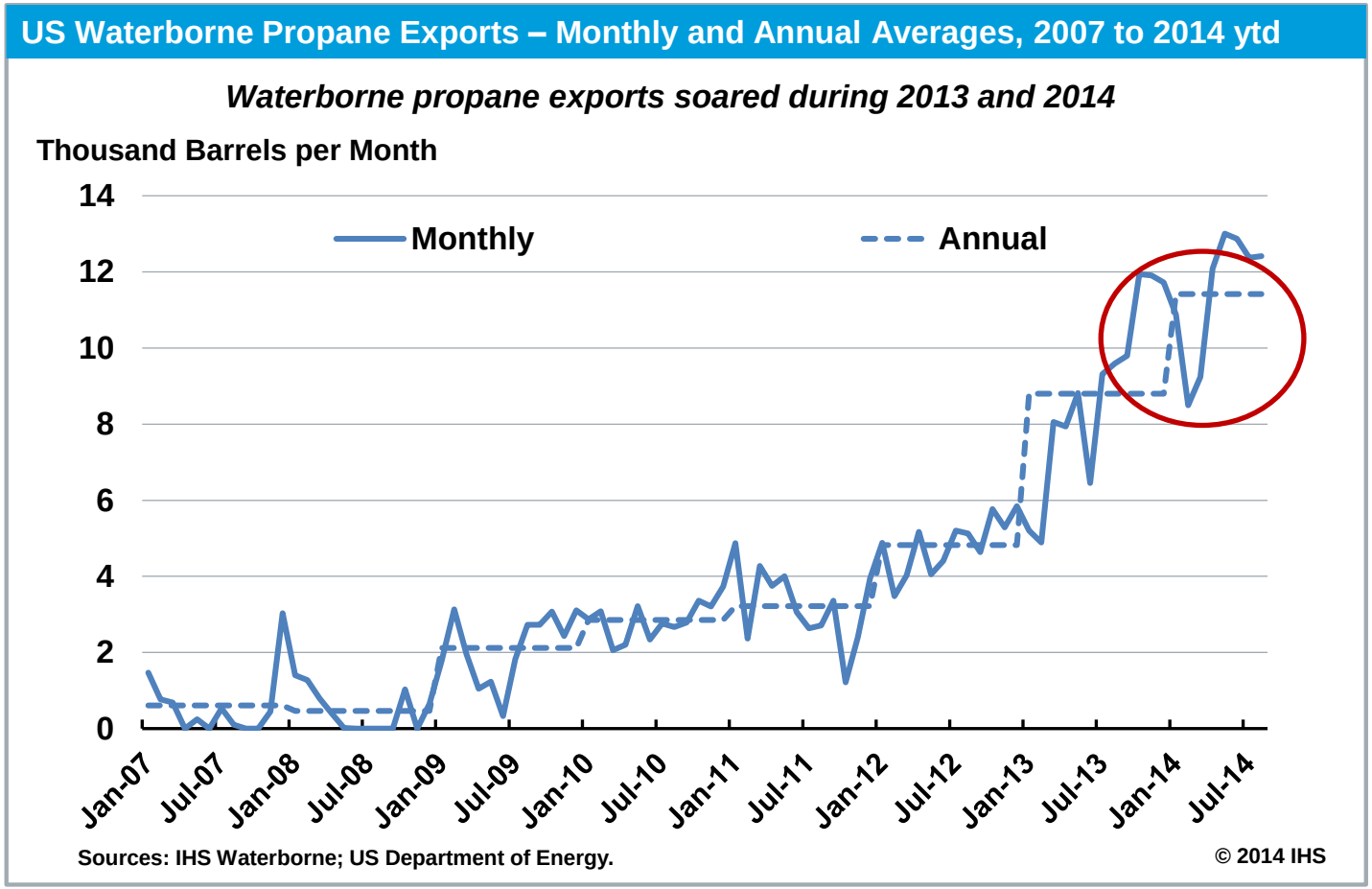
Weekly prices in the Mid-continent spiked and then dropped quickly



- The US propane supply shortages in 2013-14 were largely limited to the Mid-Continent, where price spikes were the most extreme.

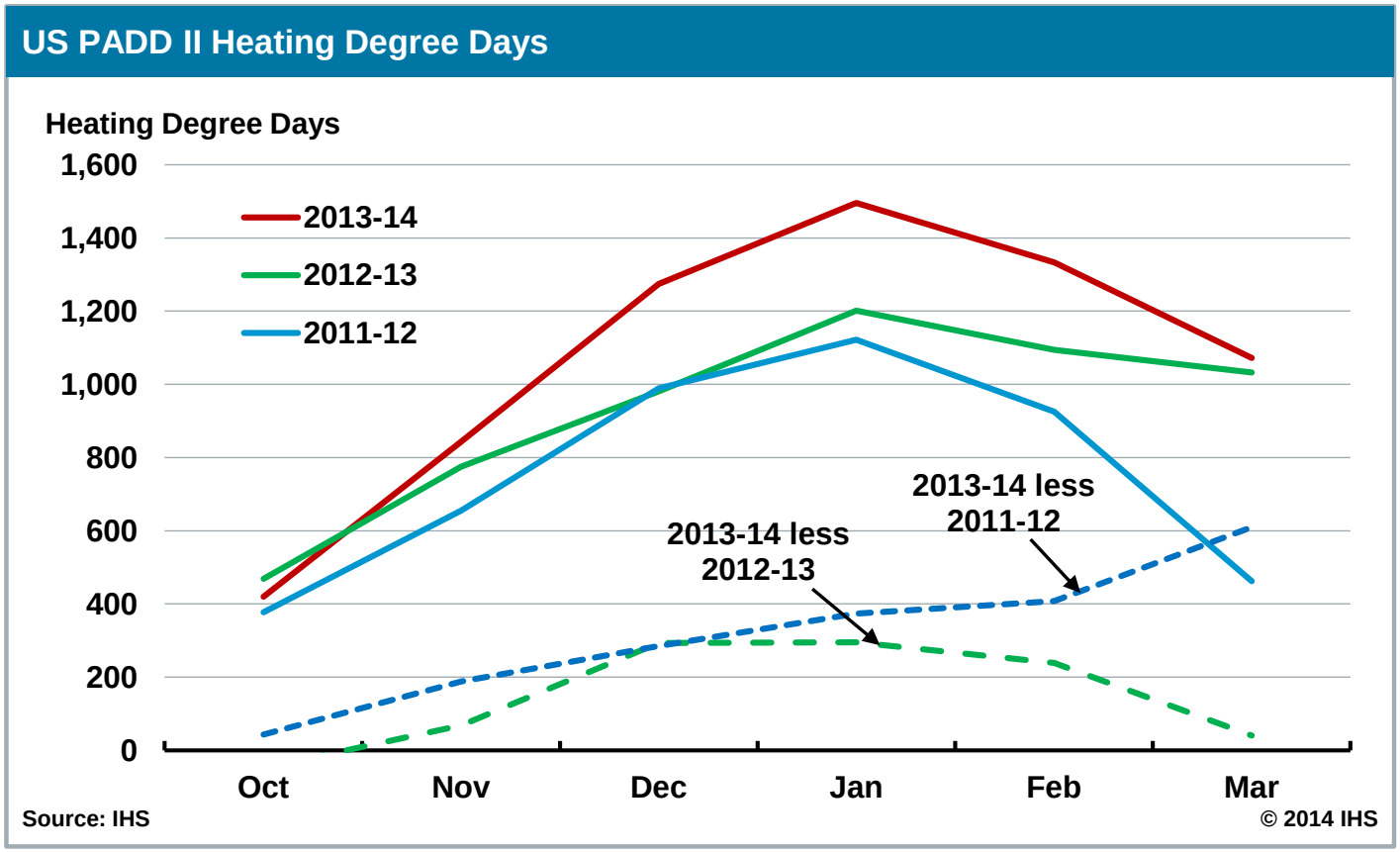
Note: Prices shown reflect weekly averages of wholesale prices; daily retail prices are higher.

Waterborne exports of propane have been rising rapidly, but dropped in February and March as prices spiked



- When US propane price differentials relative to other regions collapsed, waterborne exports dropped.
- Exports subsequently rose sharply when the price incentives improved.

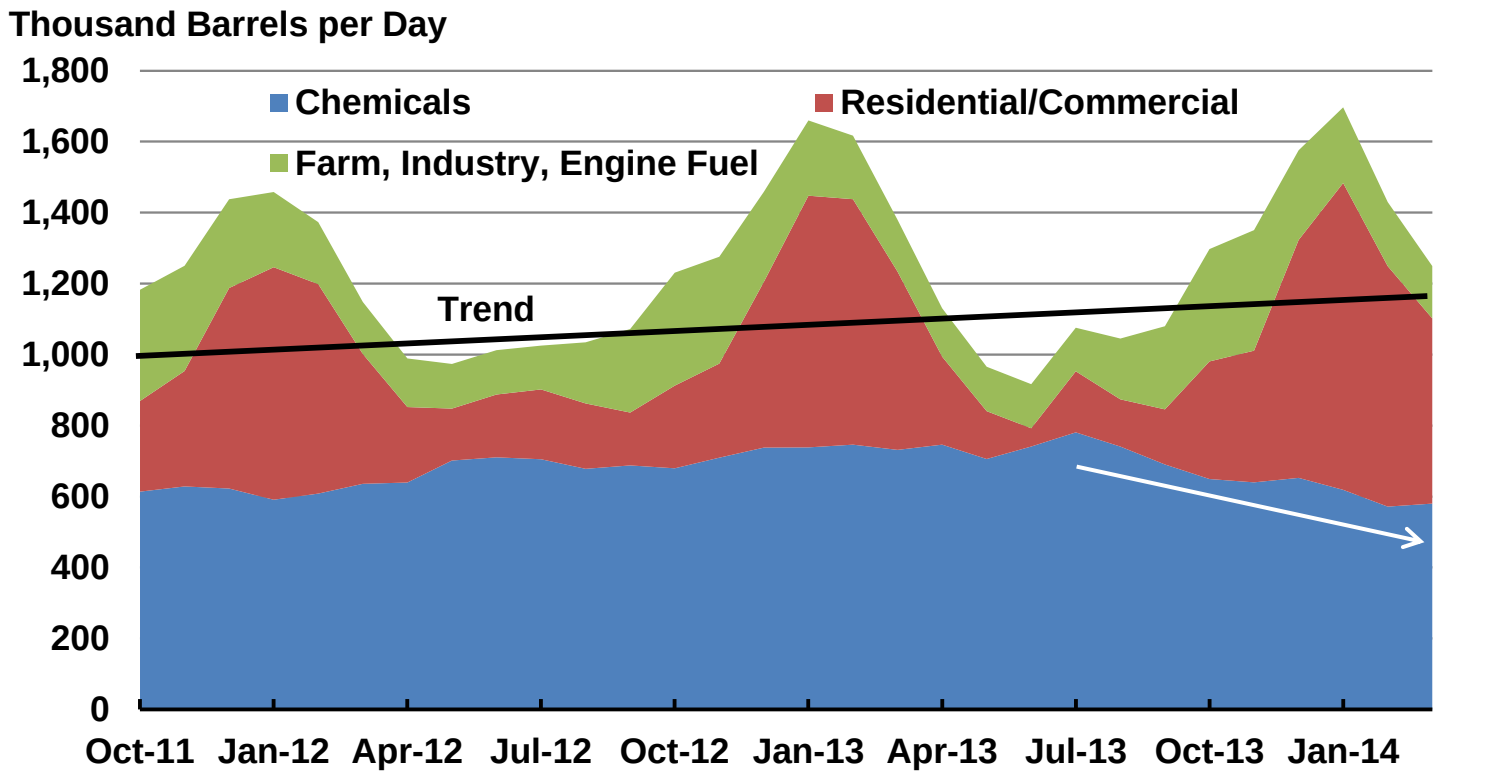
The North Central US experienced a significantly colder winter in 2013-14



- PADD II (North Central) region had 25% higher heating degree-days in the 2013-14 heating season (Oct- Mar) compared to the same period in 2012-13, and 35% higher than in the winter of 2011-12.
- Winter of 2013-14 reflects a period colder and longer period than normal.
- Additional demand for crop drying (primarily for corn prior to storage) exacerbated the demand impact experienced in PADD II region.

US propane demand in 2013-14 trended higher, with gains in res/com offsetting a decline in chemicals

US Propane Demand by End-Use Sector

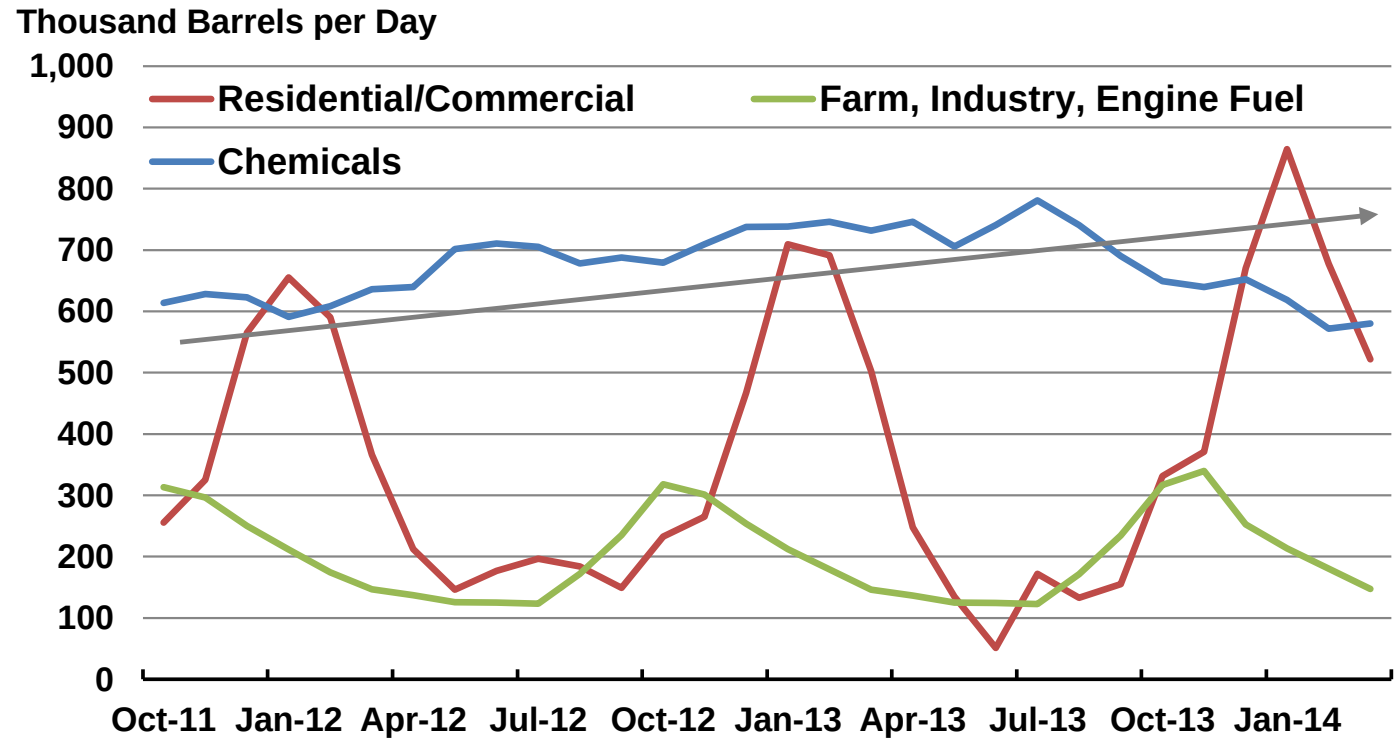


Source: IHS

- Propane demand in both the residential/commercial and agriculture sectors exhibit weather-related seasonality.
- Upward trend apparent in weather-related demand.

The residential/commercial sector exhibits the greatest weather-related seasonality of any sector

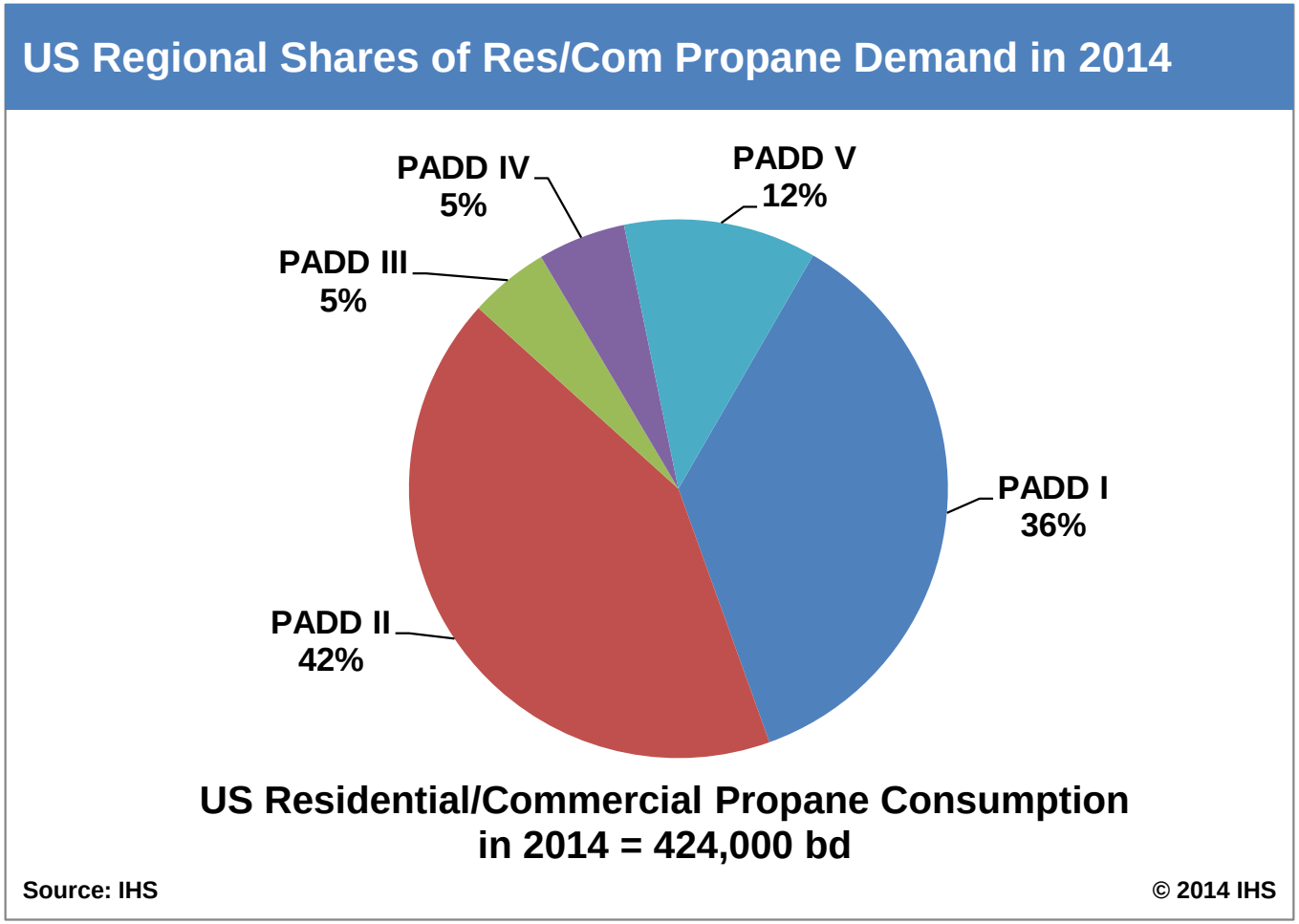
US Propane Demand by End Use Sector



Source: IHS

- Weather-related and seasonal gains in residential/commercial and agriculture demand were key contributing factors in the propane supply shortage in 2013-14.
- The rise in propane prices prompted a decrease in chemical feedstock demand, partially offsetting the increase in res/com and agriculture demand.

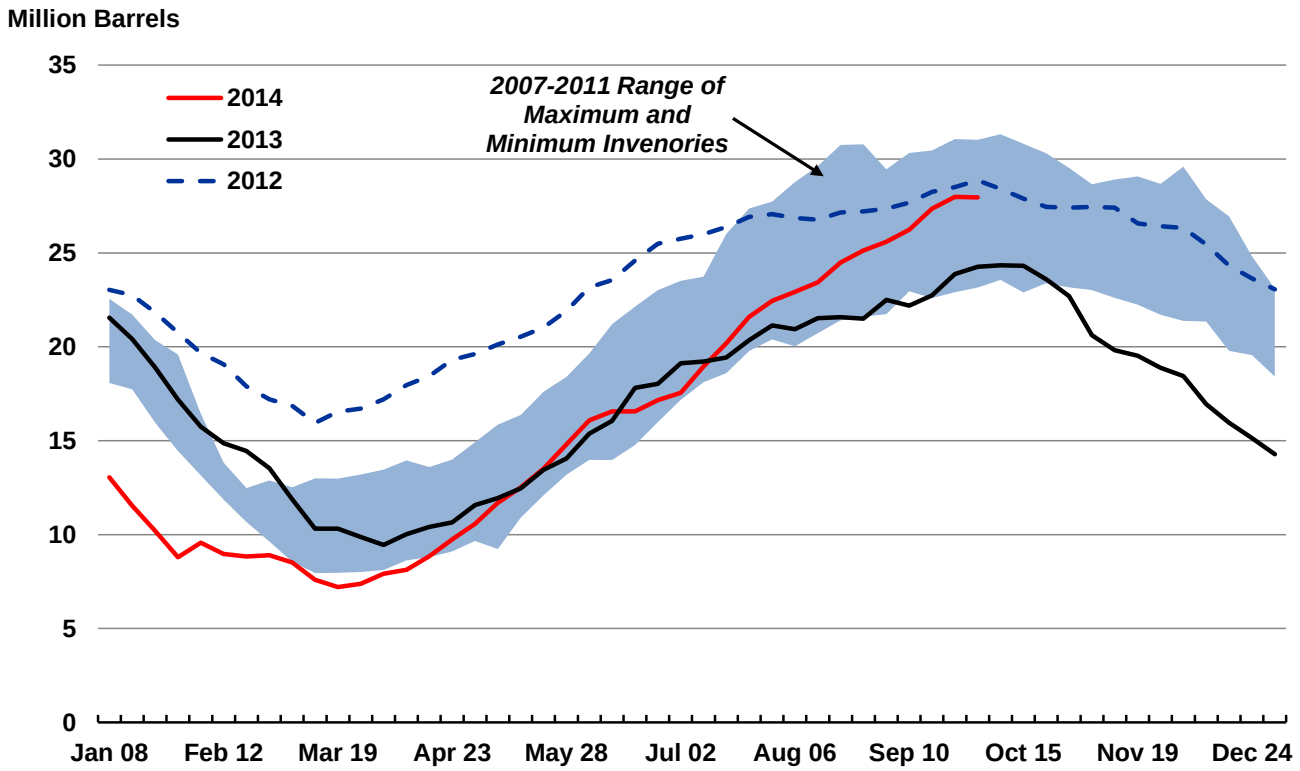
US residential/commercial propane demand is largest in the mid-continent region (PADD II)



- Because of its large share of US residential/commercial propane consumption, PADD II demand is among the most susceptible to weather-related demand variations.

Mid-Continent inventories dropped sharply starting in October 2013, but have recovered strongly in 2014

PADD II Primary Inventories

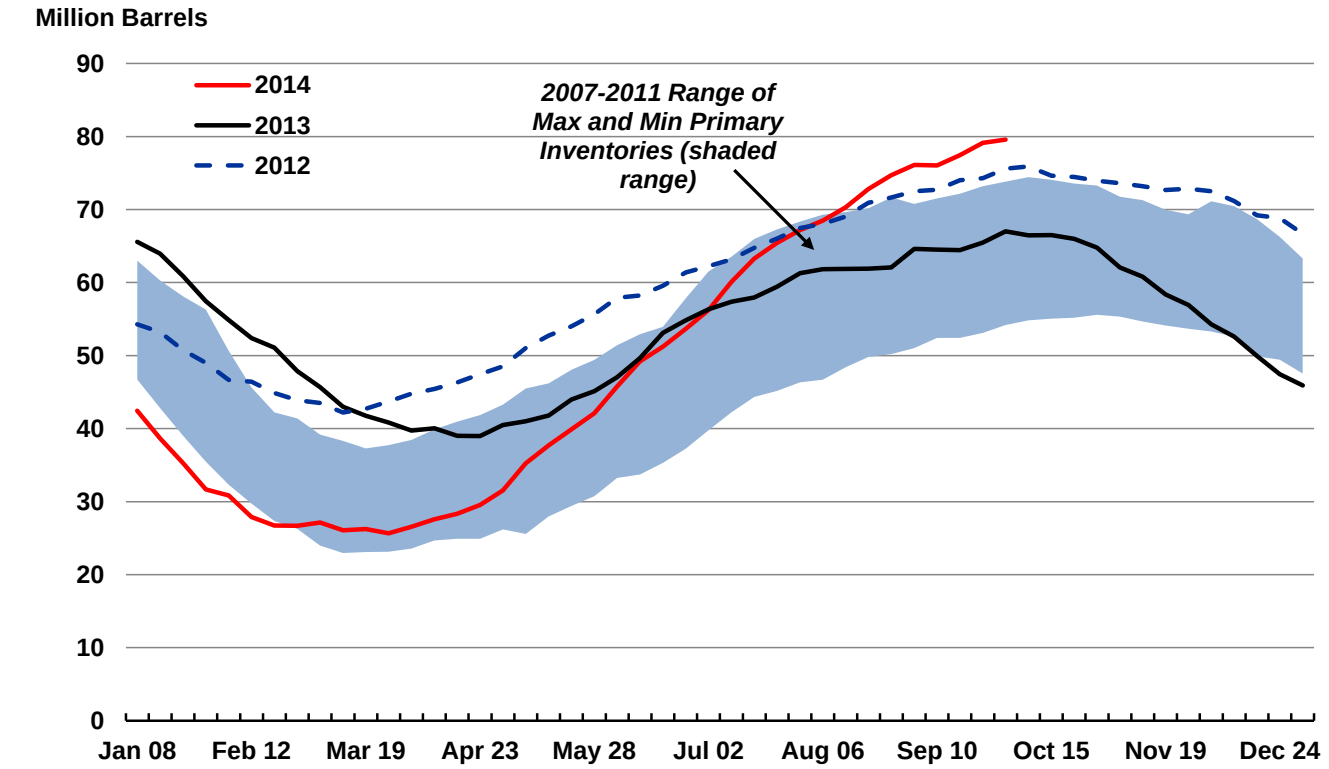


Source: IHS

- PADD II primary stocks dropped well below the normal range during the winter of 2013-14 …
  … but recovered strongly during the 2nd and 3rd quarters

Total US primary inventories also recovered rapidly, significantly exceeding the 2007-2013 maximum levels

Total US Propane Primary Inventories



Source: IHS

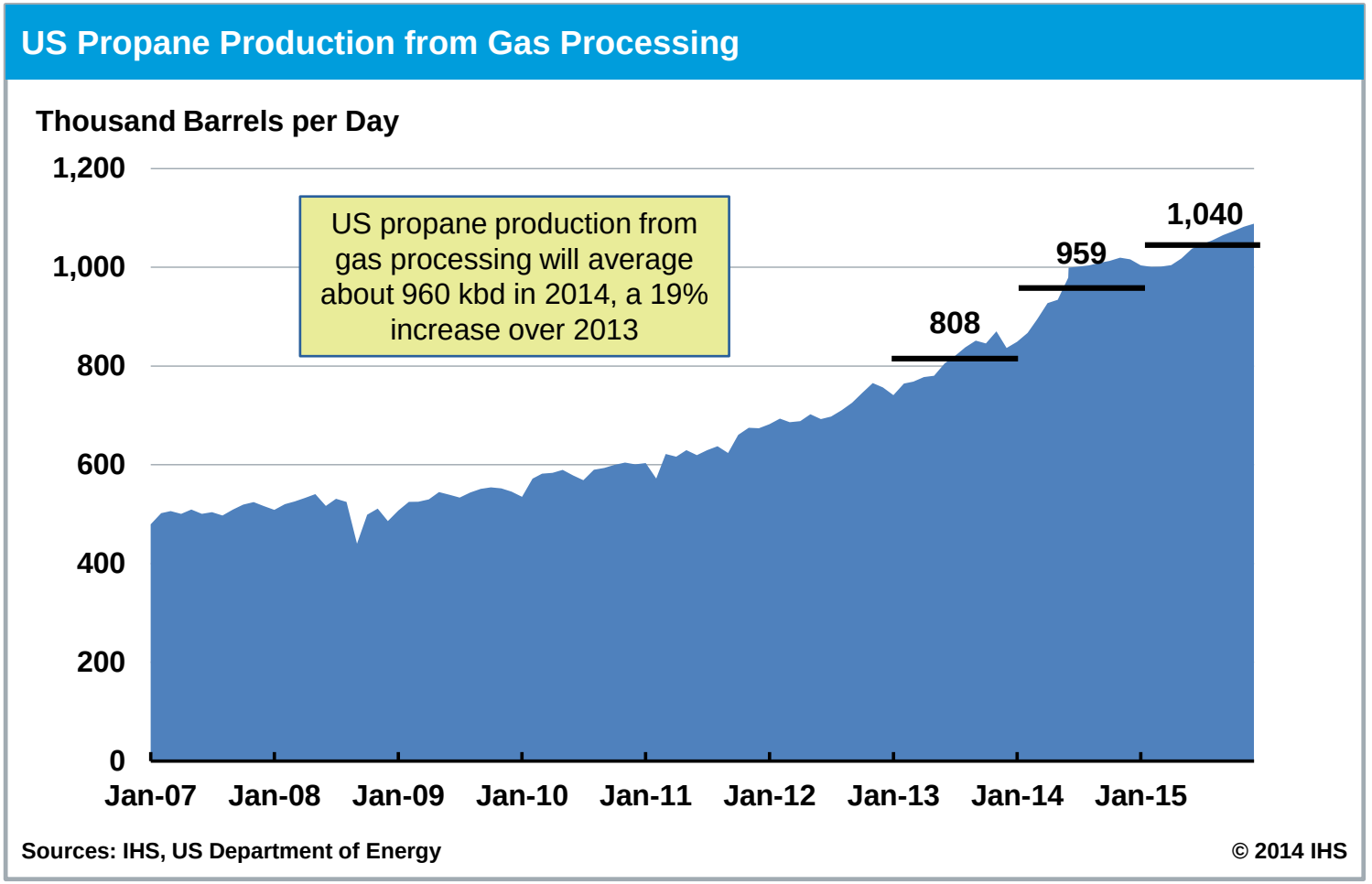
- By mid-year, total US propane inventories had climbed rapidly, and are well above the normal range at the start of the 2014-15 heating season.

US Propane Supply Outlook for 2014-15

US propane market in 2014-15: Outlook for the coming winter depends on market fundamentals

- The US and PADD II markets responded quite well during the 2013-14 shortage, and the price spike was relatively temporary.
- US propane production continues to rise faster than growth in demand and exports, enabling inventories to recover rapidly.
- US propane inventories have gone from near-record lows in early 2014 to near-record highs at the start of October.
- PADD II primary inventories have recovered to their highest October levels since the economic collapse of 2009.
- Propane production from gas processing will sustain a rapid pace of growth through 2015.
- US propane demand growth is projected to be modest, increasing by just 1% in 2015.
- Propane exports will continue to grow as expanded and new export capacity comes on line.

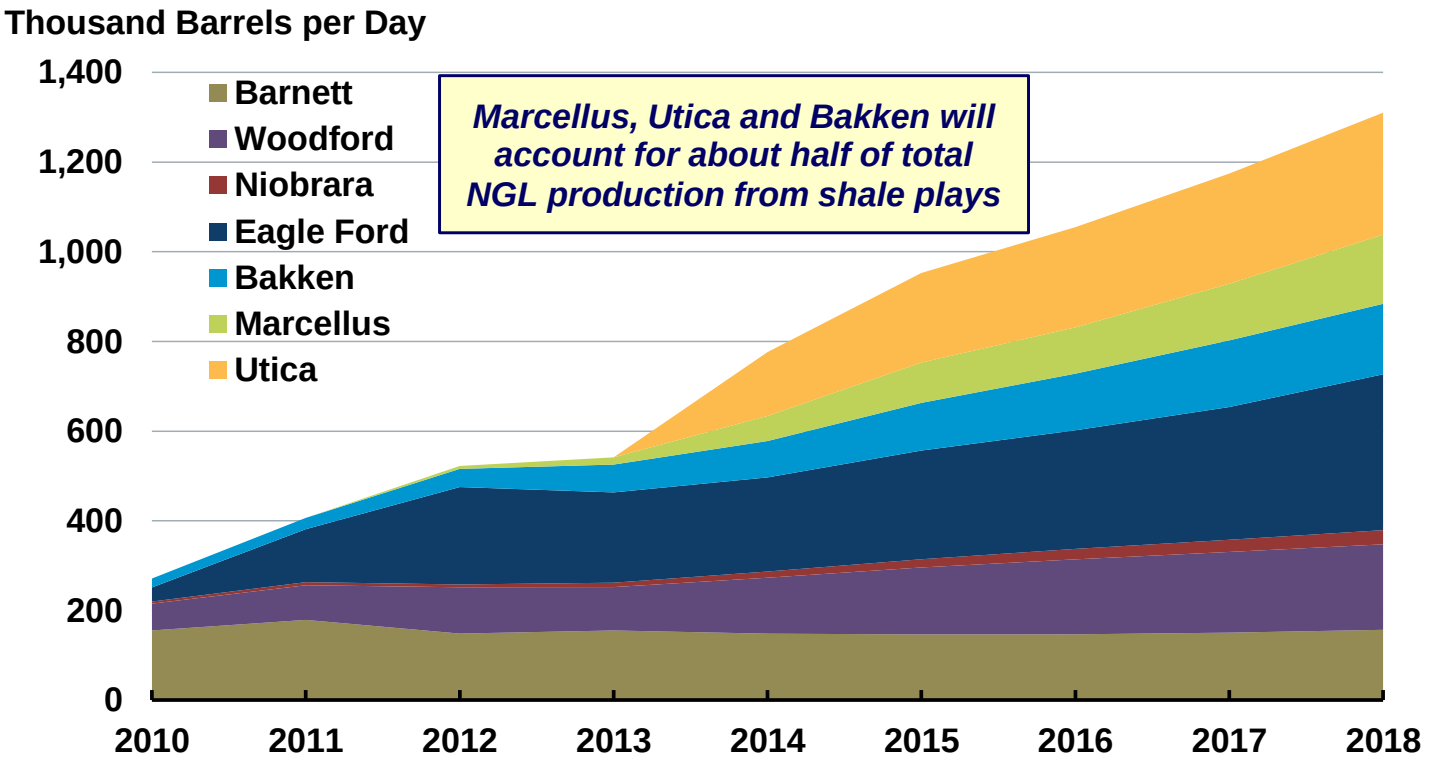
US propane production from gas processing will be driven by strong growth in shale gas production



- Rapidly rising shale gas production will drive corresponding growth in US propane production; US propane from gas processing will rise nearly 20% in 2014, followed by 8% growth in 2015.

US propane production from gas processing will be driven by strong growth in shale gas production

Total NGL Production by Major Shale Play

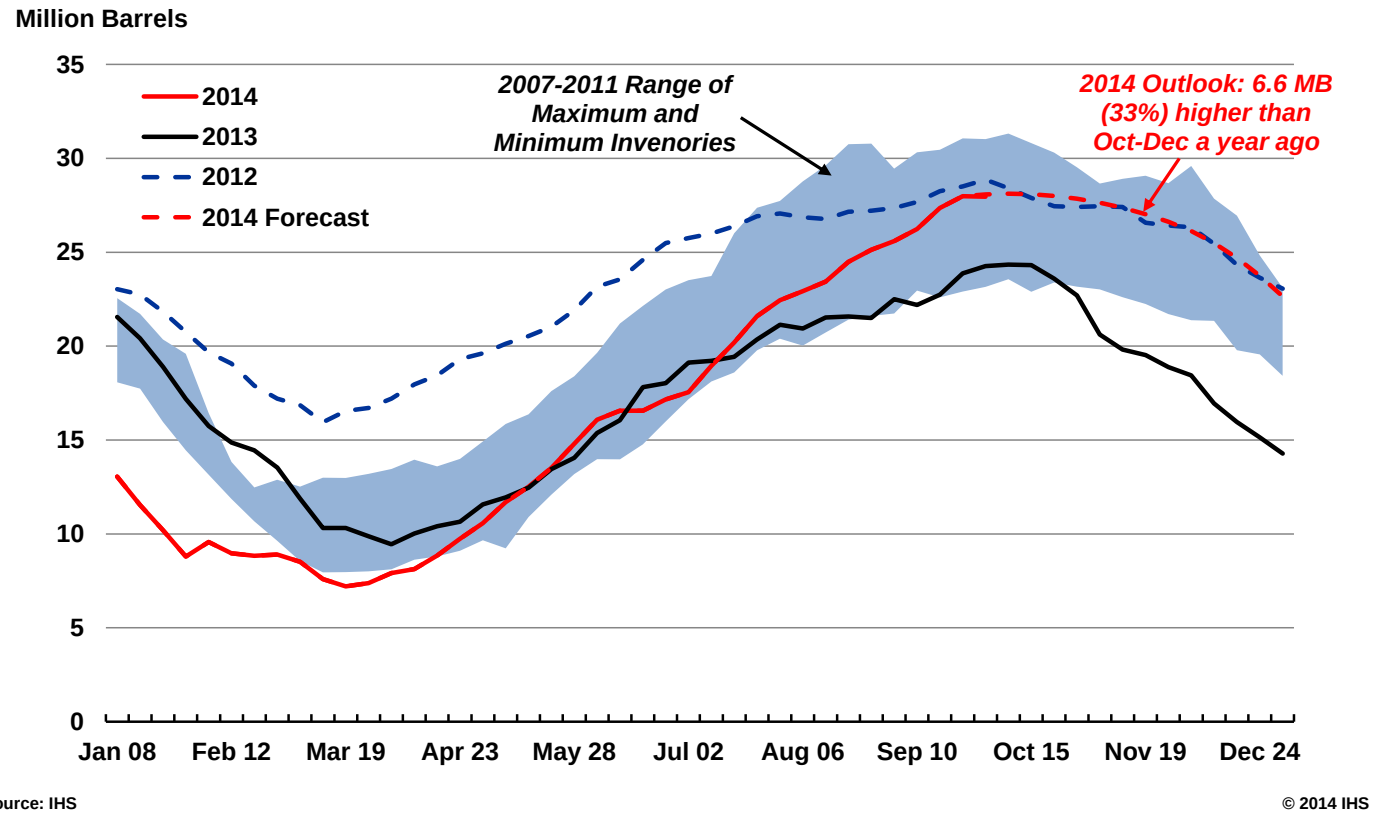


Source: IHS

- Most of the increase in NGL production will come from shale gas development in the Marcellus, Utica and Bakken plays – all located in proximity to the mid-continent.

Mid-continent (PADD II) inventories will remain 33% higher in through the end of 2014 than a year ago

PADD II Propane Primary Inventories

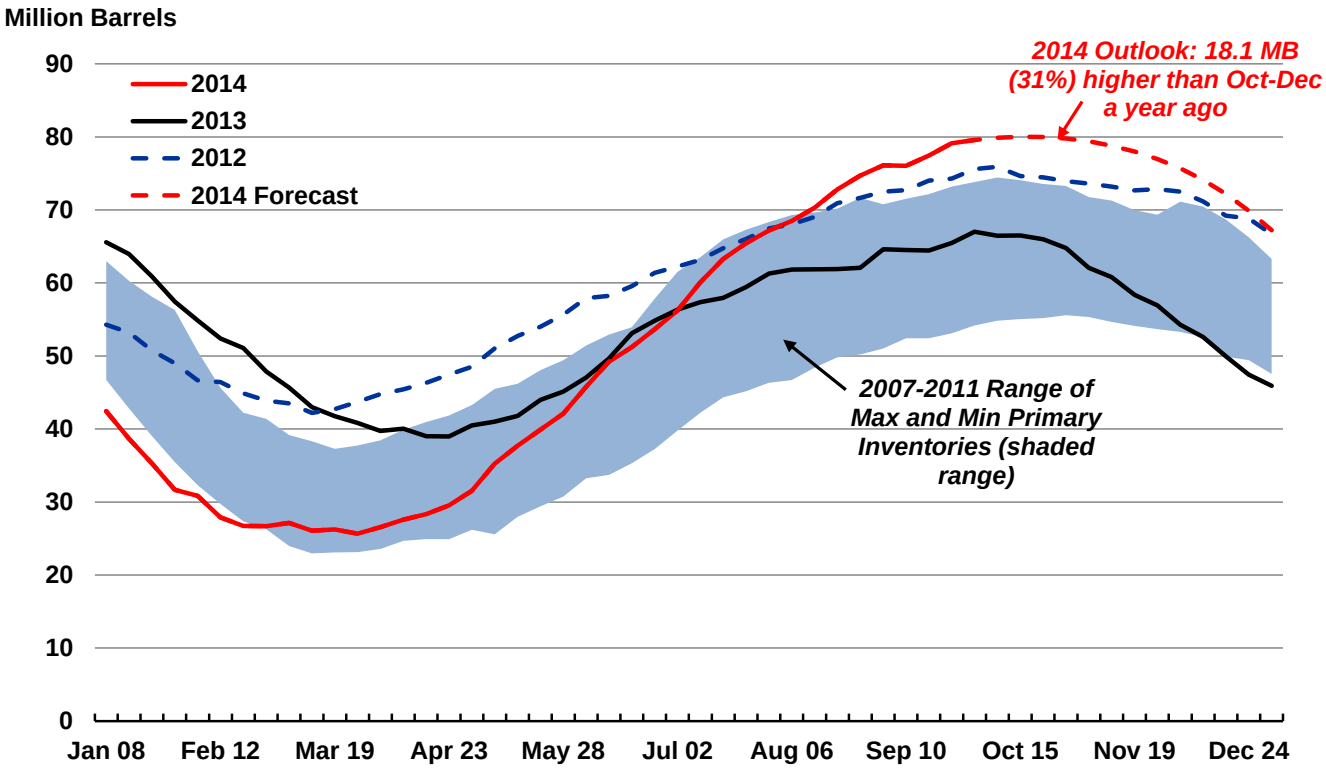


Source: IHS

- PADD II inventories are projected to average 31% (6.6 MB) higher than 2013-14

Total US primary inventories through the end of this year will remain significantly higher than a year ago

Total US Propane Primary Inventories



Source: IHS

US propane market in 2014-15: Conclusions

Looking ahead at US and PADD II propane availability during the winter of 2014-15, we expect that, despite an increase in domestic demand and waterborne exports:

- Inventories will remain comfortable, and ample to meet projected demand in the US and PADD II without a recurrence of last year's shortages.
- There is plenty of propane available to meet market demand.
- The high propane prices experienced last winter lasted only a short time, roughly one month.
- Logistics capacity expansions and other measures are being taken by various states in response to last year's shortage.

US propane market in 2014-15 and beyond: Factors to monitor that could impact the supply outlook

- Propane demand for chemical feedstock use will increase with the addition of new propane dehydrogenation (PDH) capacity – but these additions will not affect the outlook for 2014-15.
- Propane exports will grow as new export terminal capacity is added in the Gulf Coast region (increased during 2nd half 2014 and additional expansions are scheduled for 2015).
- Logistics capacity changes are needed to accommodate changes in US propane production, demand and exports in 2015 and beyond.
- Overall, supply and infrastructure additions are expected to keep pace with production growth.

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