

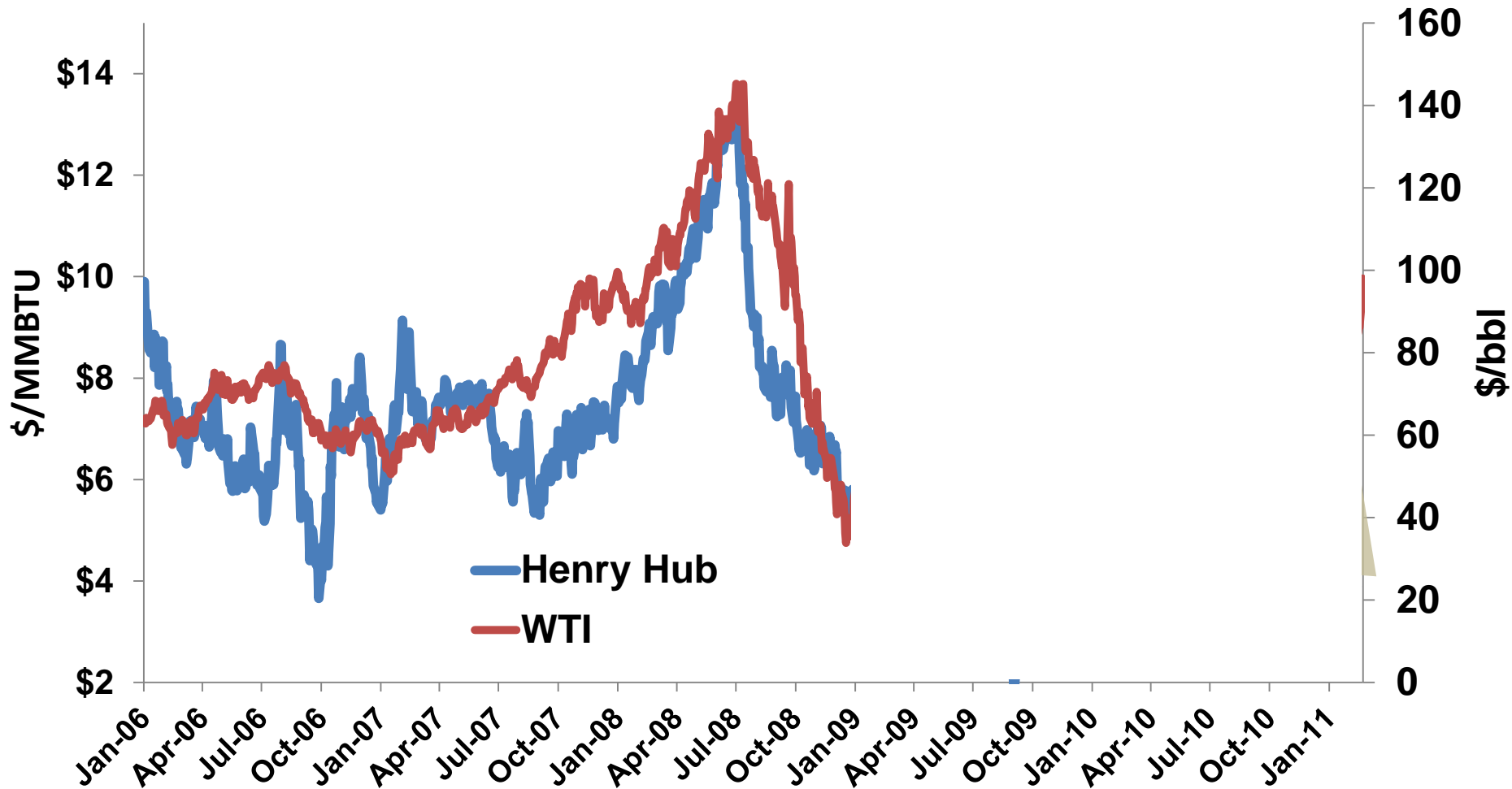


A Tale of Two Fuels
- Crude Oil and Natural Gas Supply



Private Capital Conference
February 24, 2011
Houston, TX

Henry Hub Natural Gas vs. WTI Crude

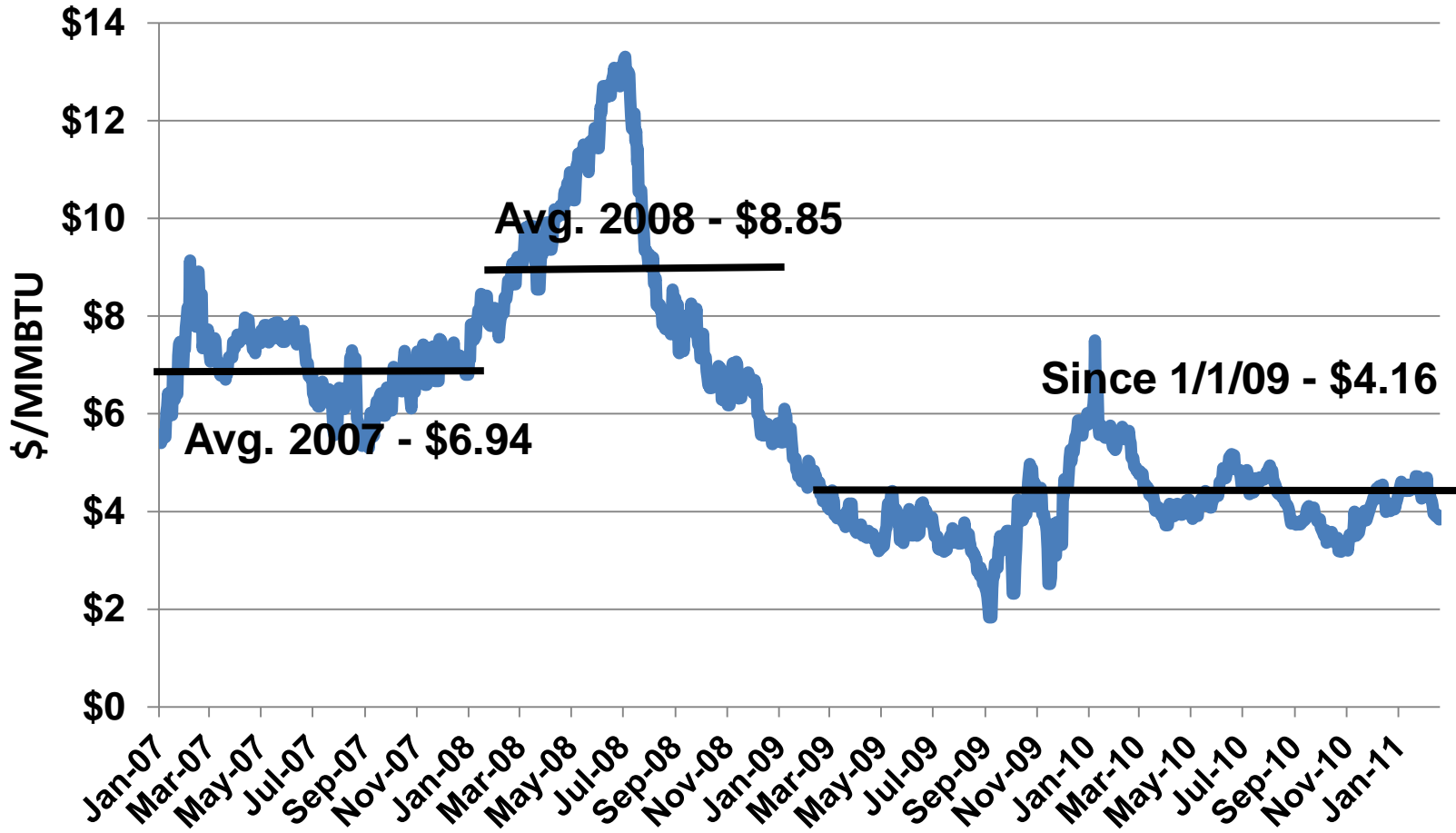


Natural Gas vs. Crude Oil

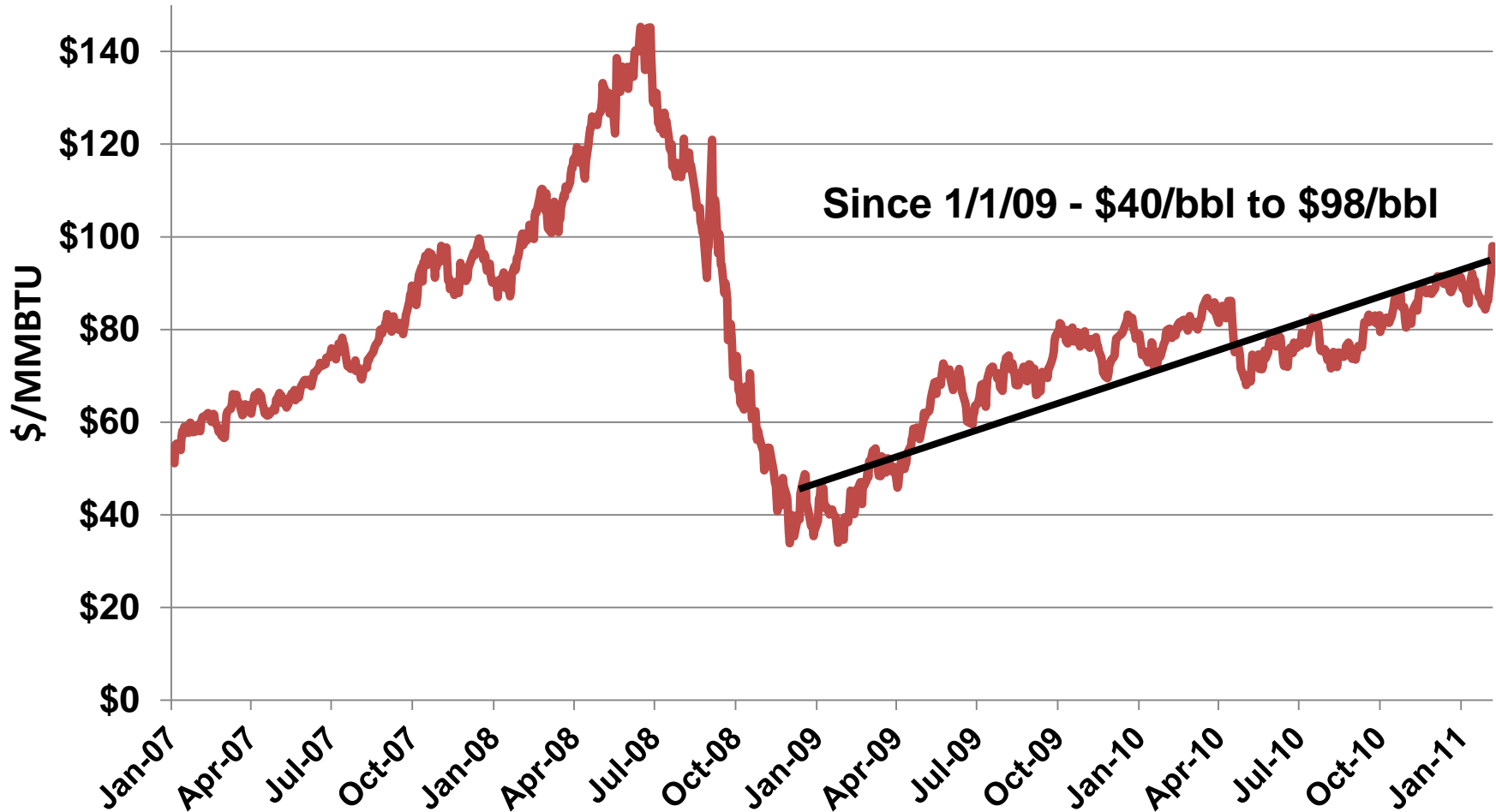
- ❖ Even with natural gas prices below \$4.00, production continues at all time highs; prices remain under downward pressure
- ❖ International demand for liquids fuels is increasing, pushing up global crude oil prices
- ❖ Price divergence between gas and oil is shifting the economics of production, demand, processing and transportation in North America
- ❖ This is a structural shift that will drive market changes for years if not decades to come



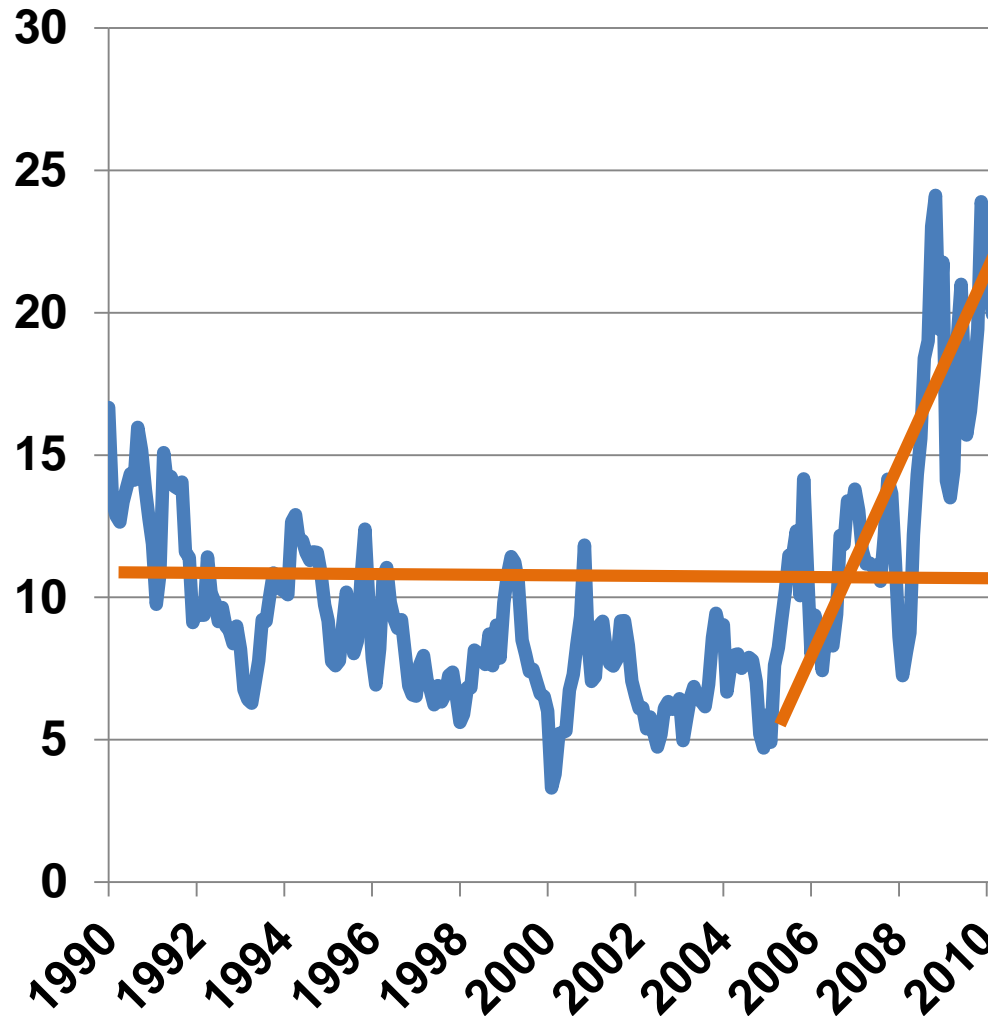
Spot Henry Hub Below \$4.00



WTI Crude - \$40/bbl to \$98/bbl



Crude-to-Gas Price Ratio



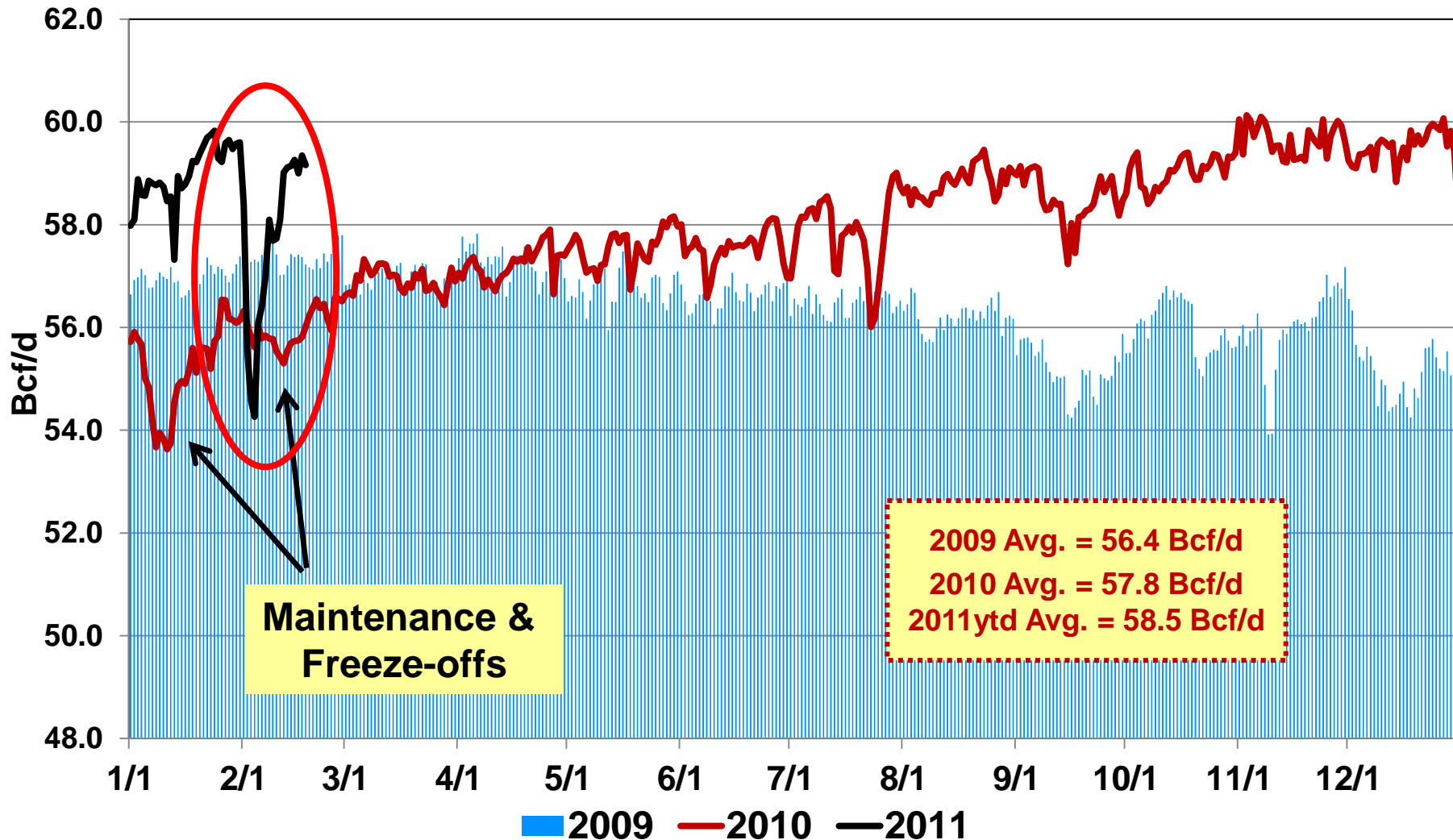
- ❏ Crude prices are high relative to natural gas prices
- ❏ High Crude/Gas ratio

Natural Gas and Crude Oil



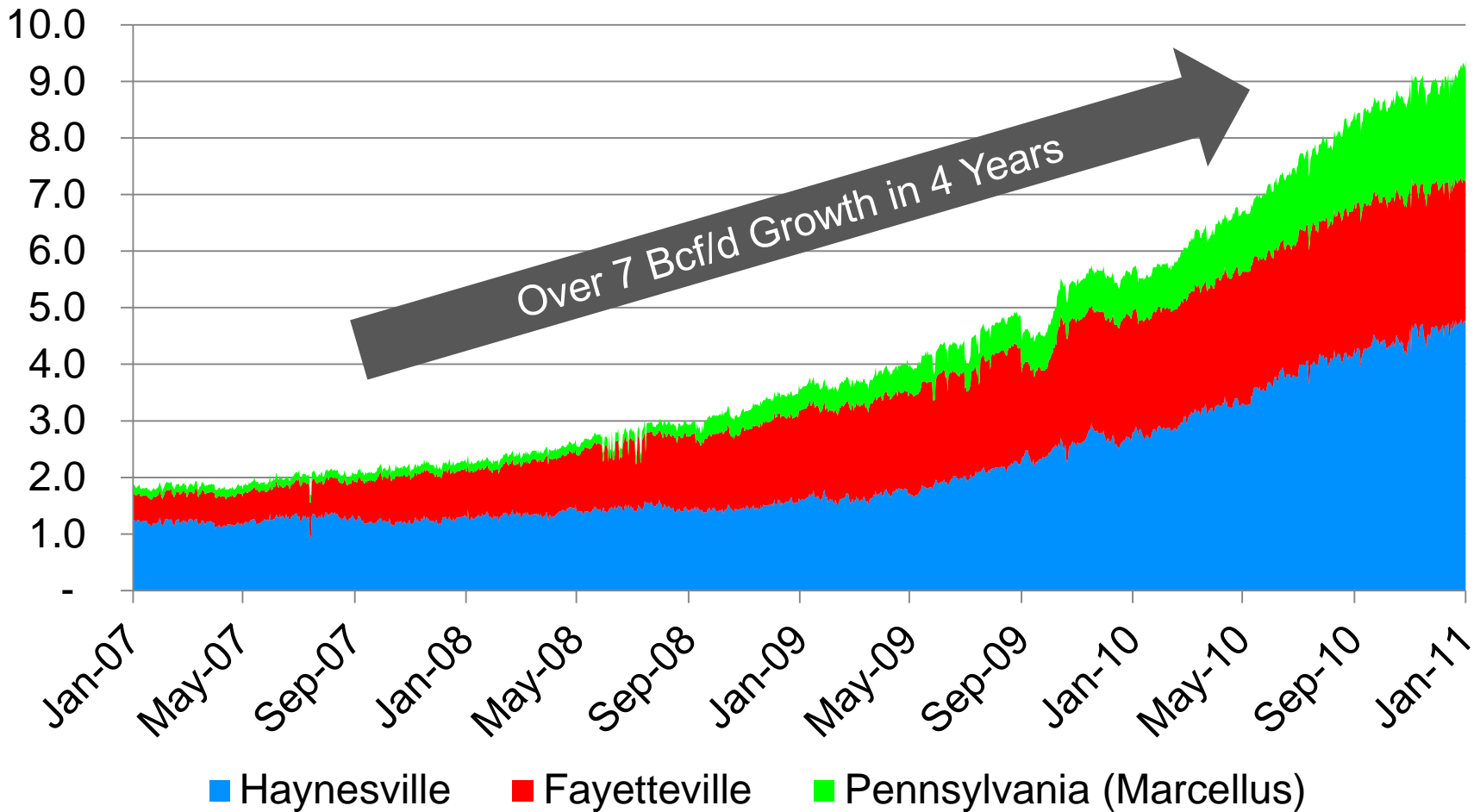
- ❖ Producers – shift to oil and liquids rich gas plays
- ❖ Buyers – shift to low price gas and plentiful light NGLs
- ❖ Midstream – significant opportunities in processing, gathering and transportation

U.S. Production Still on the Rise



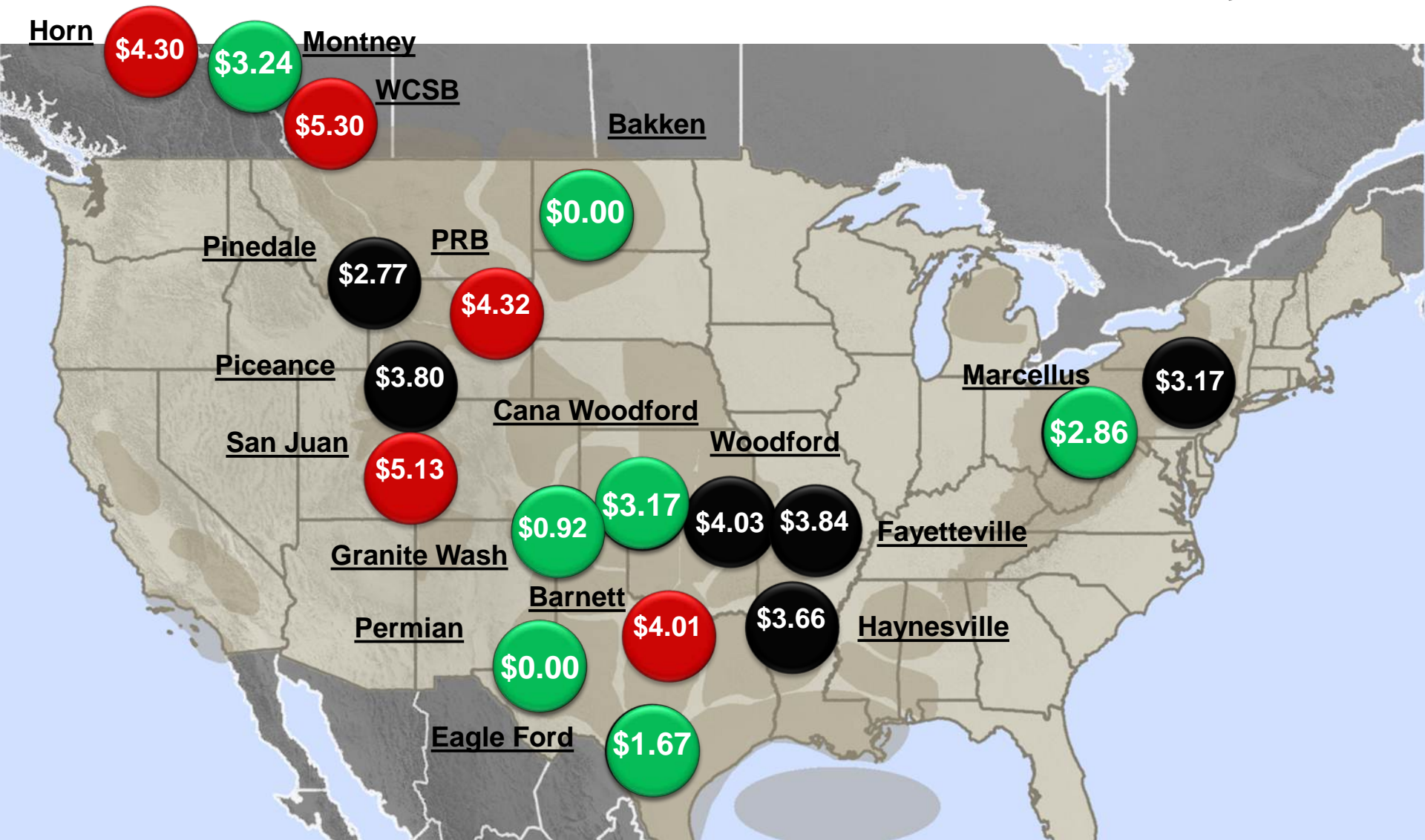
Shale Production Growth

Select Shale Basin Production Growth (Bcf/d)



Source: BENTEK Production Market Model & Production Monitor

Sub \$4.00 Breakevens Drive Resource Plays

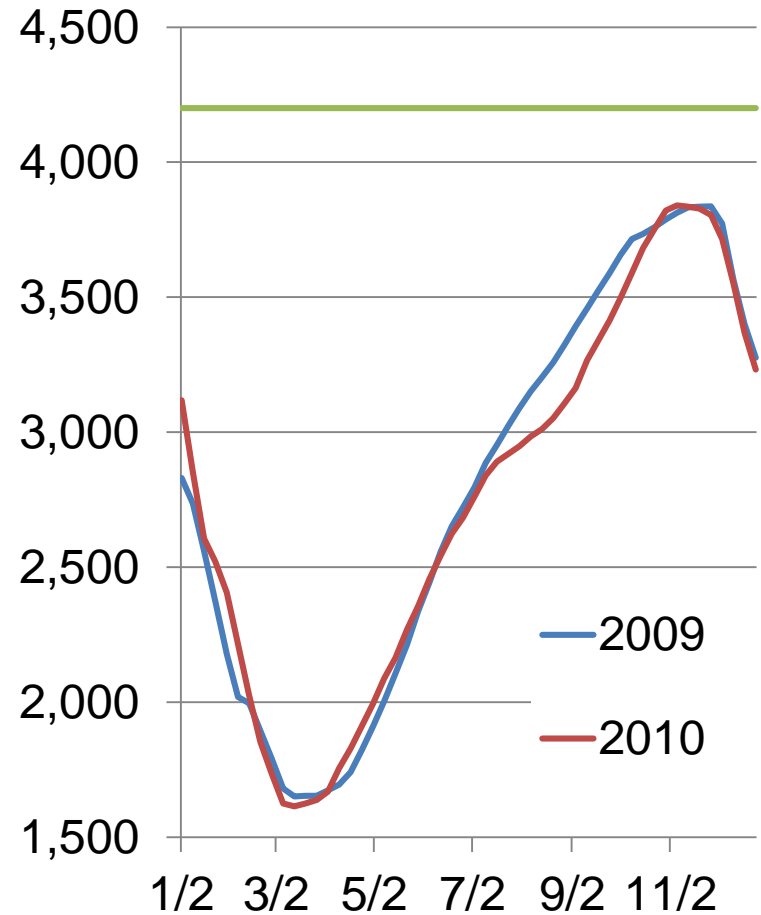


Note: Breakevens computed at 12:1 Crude Ratio and 1:1 NGL Ratio
 Green Circles Breakeven's Computed at \$80 Crude and 1:3 NGL Ratio
 Based on 3Q2010 Financials and State Production Data

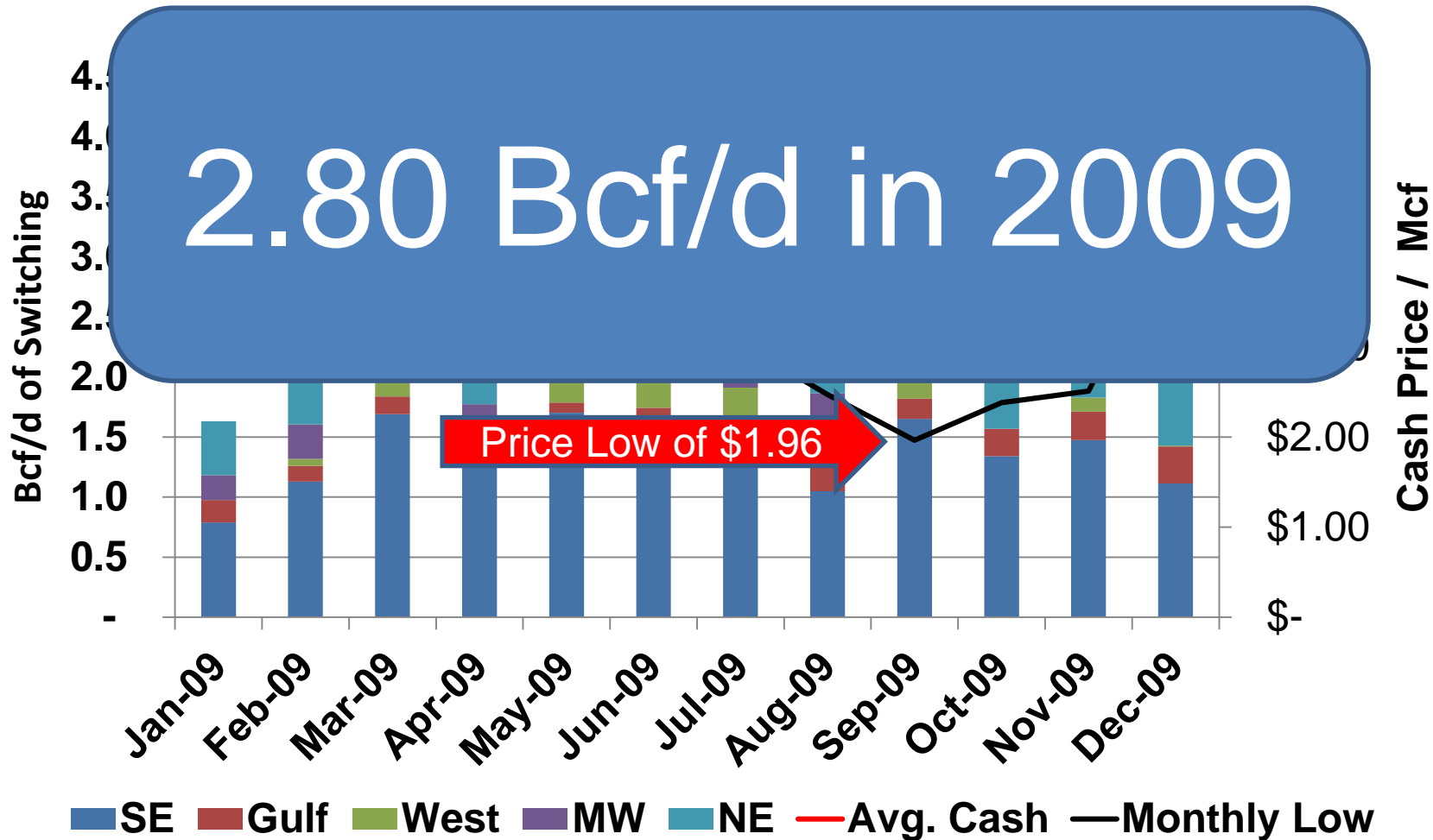
Source: BENTEK

Where Did the Gas Go?

- ❏ Coal-to-gas switching
- ❏ Weather
- ❏ Reduced Imports

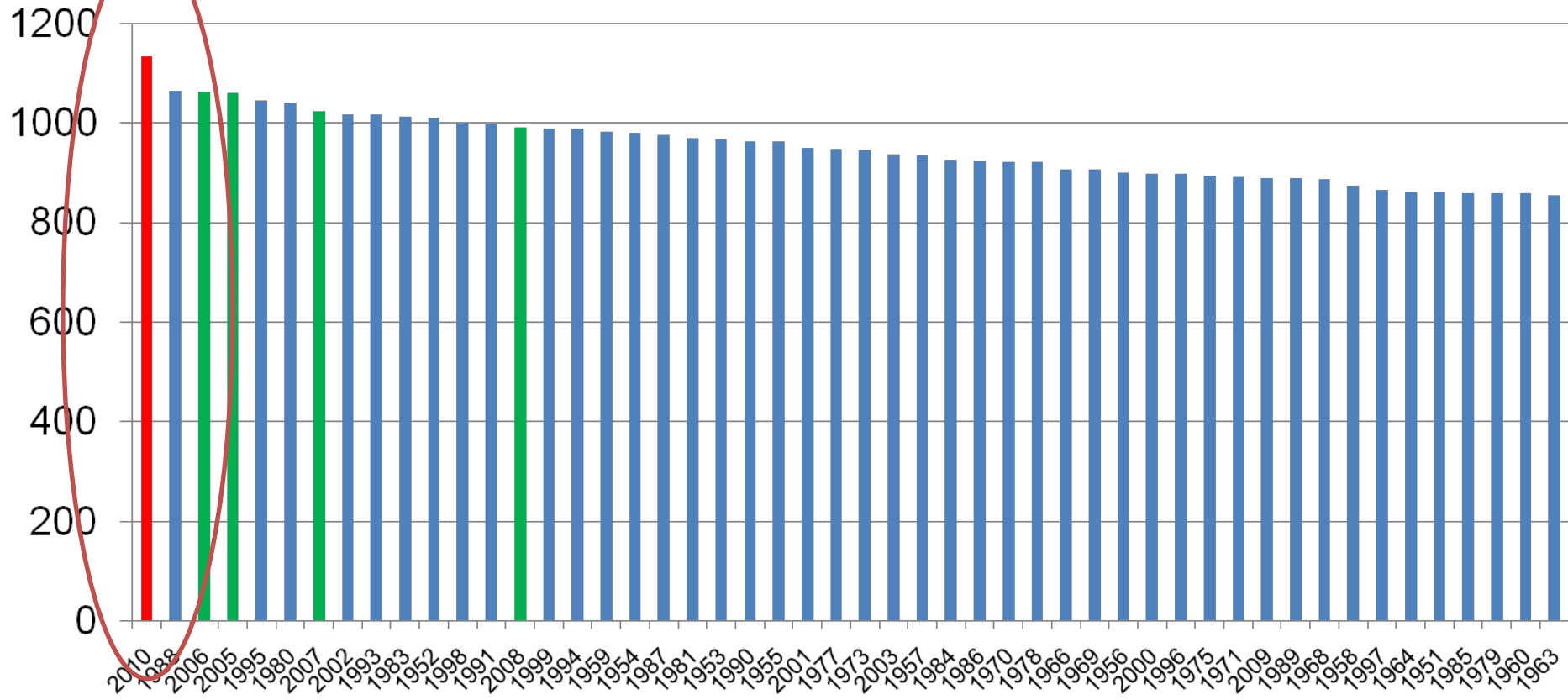


2009 Coal Switching Saves the Day

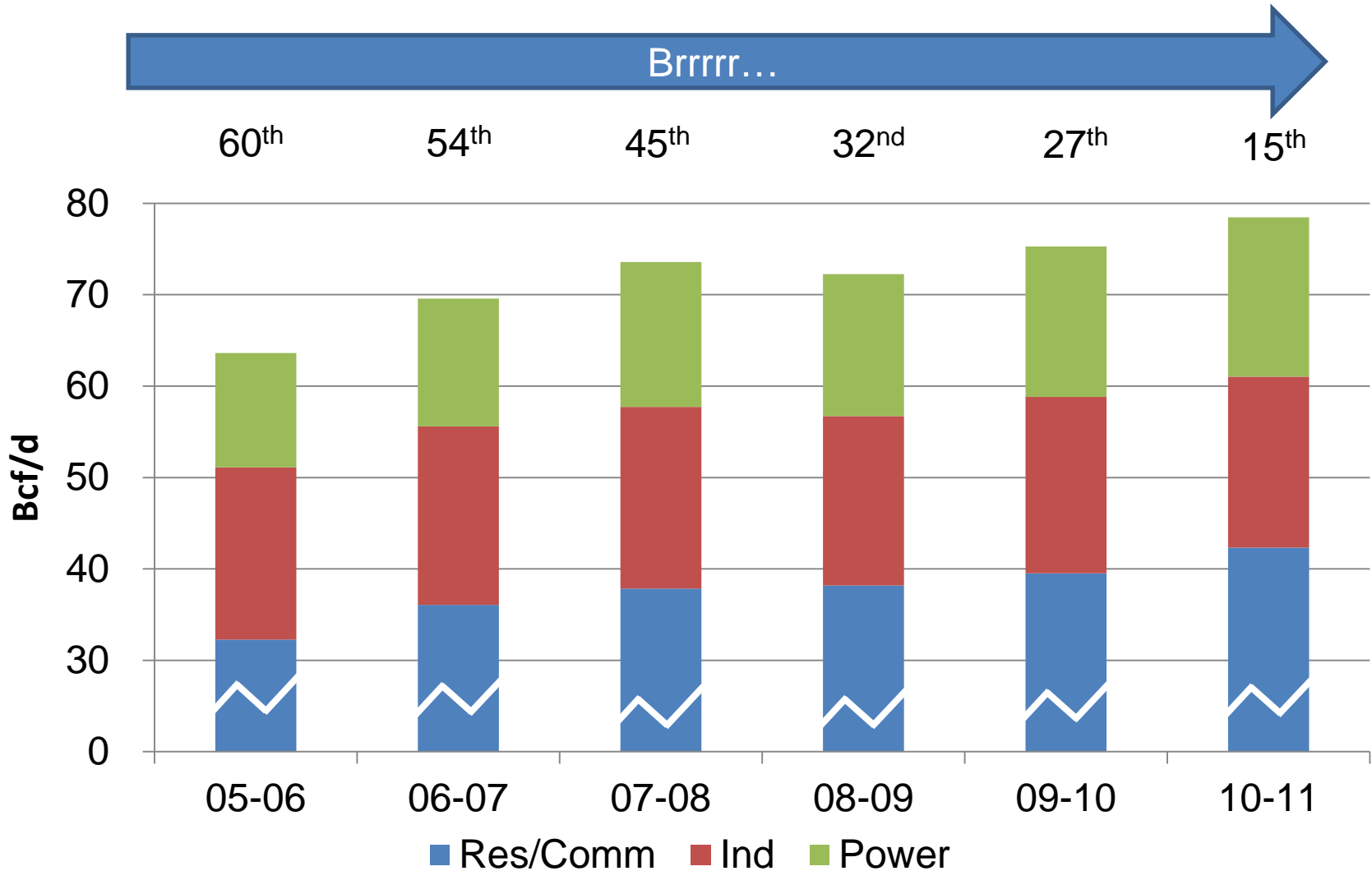


2010 Hottest Summer in Last 60 Years

Total Cooling Degree Days

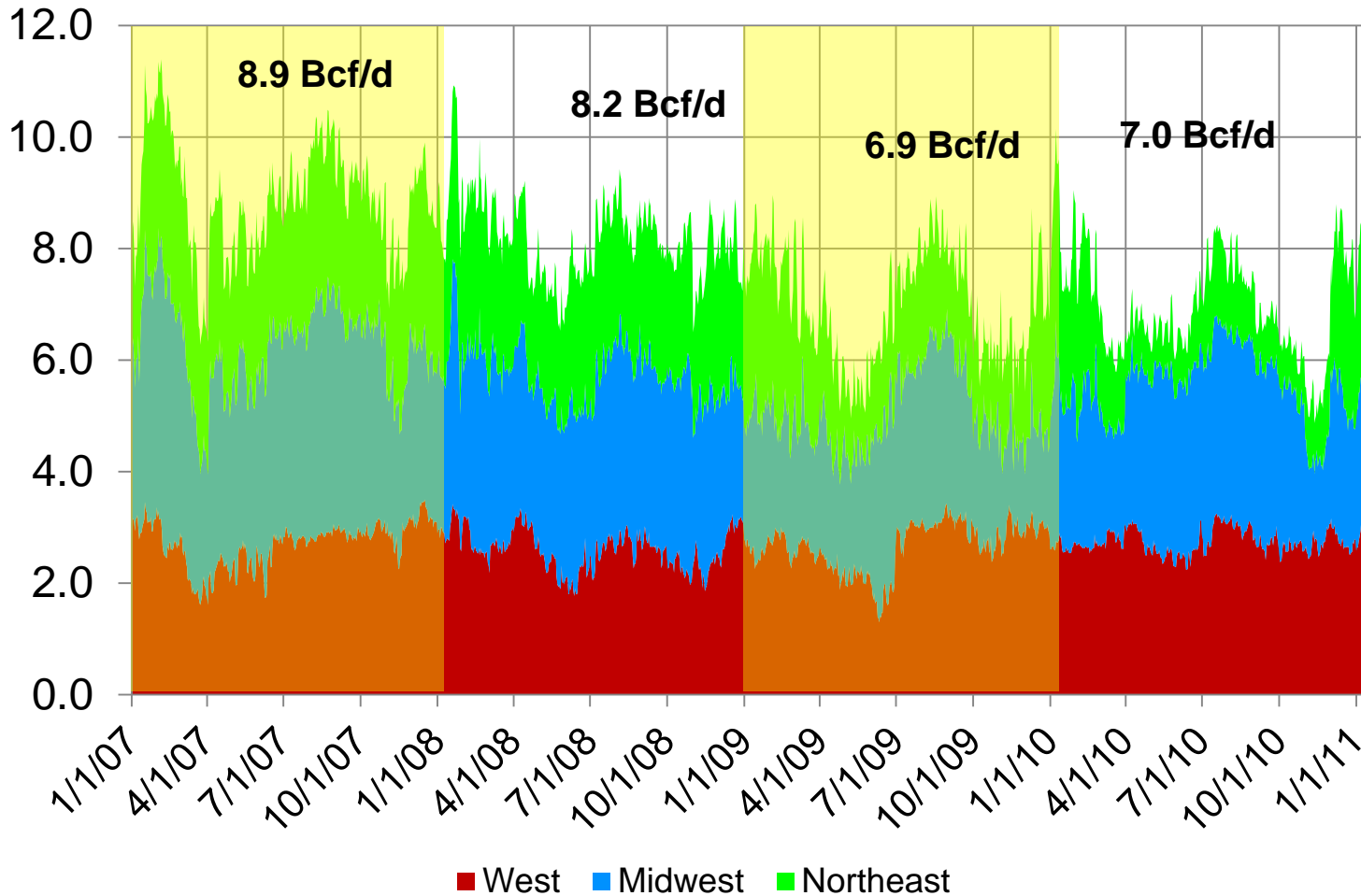


Winter Demand by Year (Nov. 1 - Feb. 15)



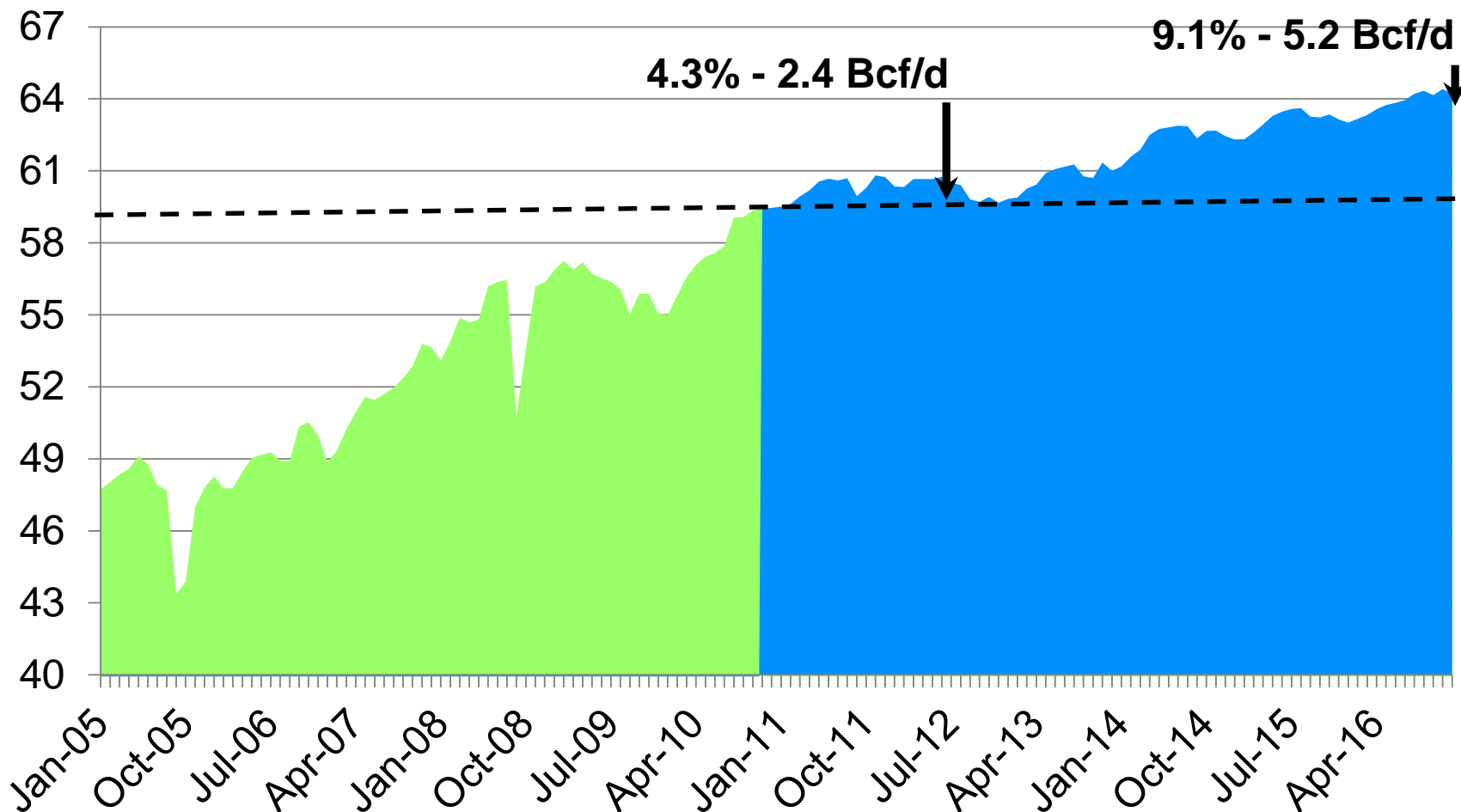
Canadian Net Imports By Region

Canadian Net Exports by Region (Bcf/d)

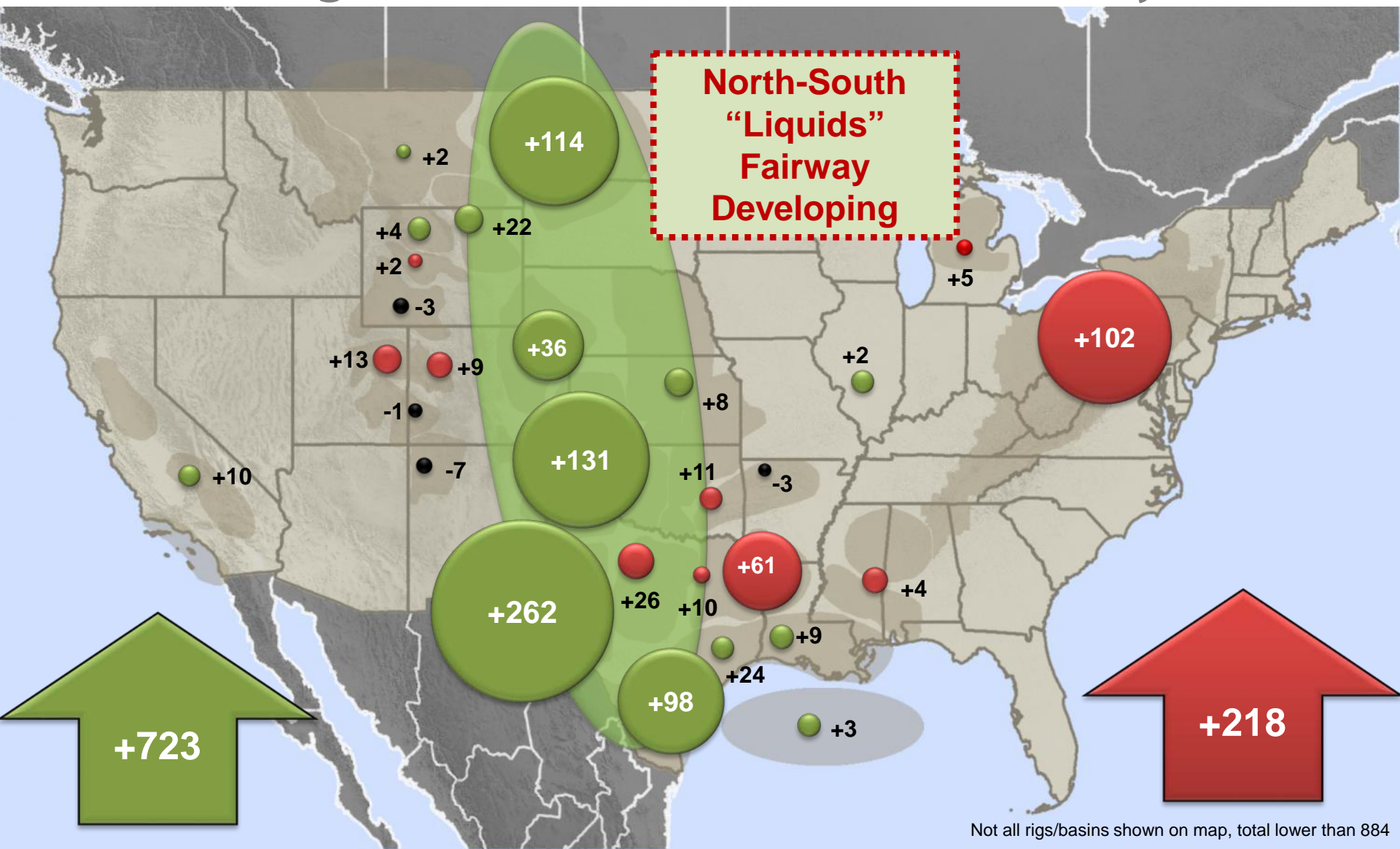


US Supply Long: Lower 48 Production Forecast

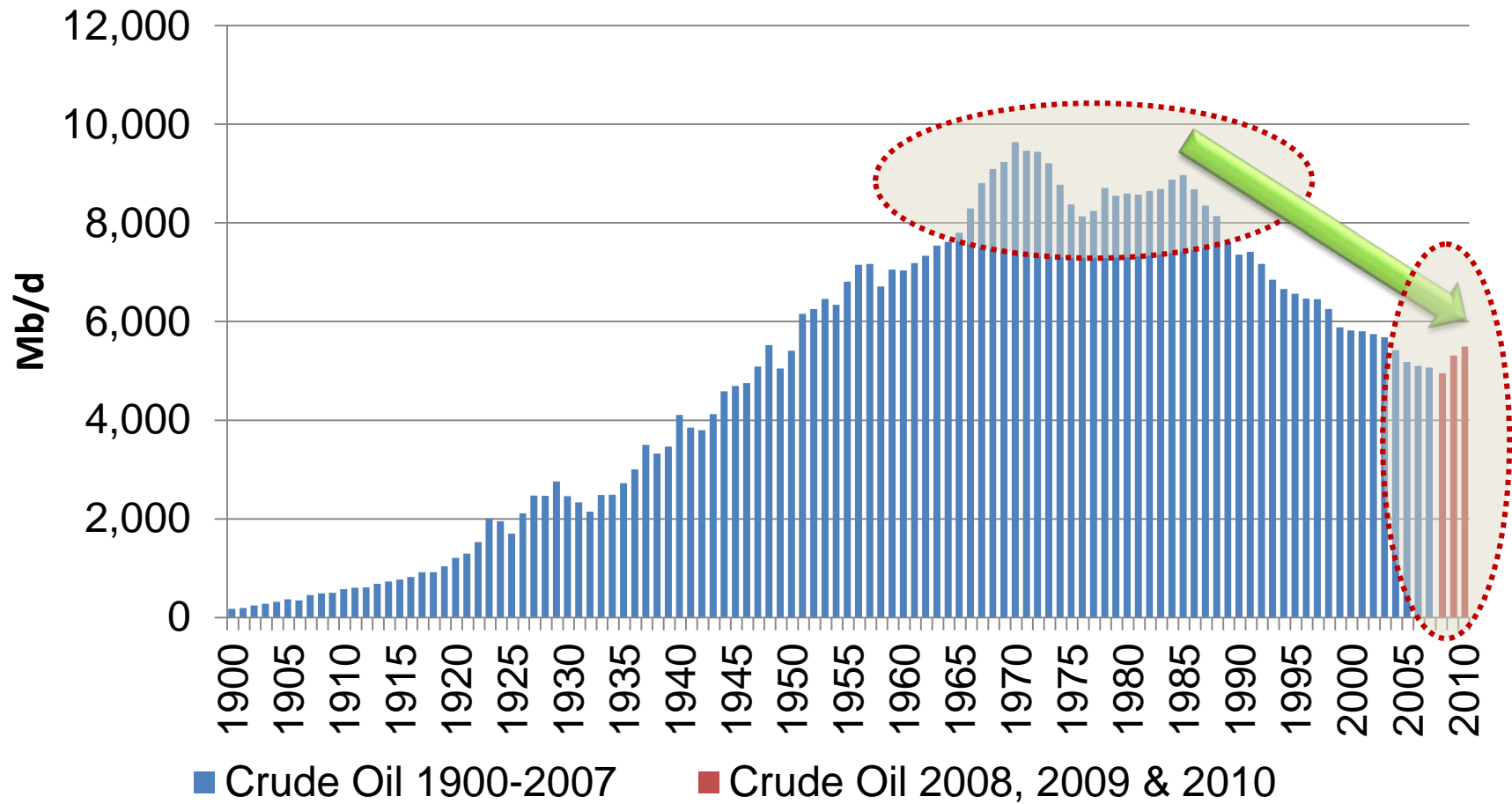
Lower 48 Dry Gas Production Forecast (Bcf)



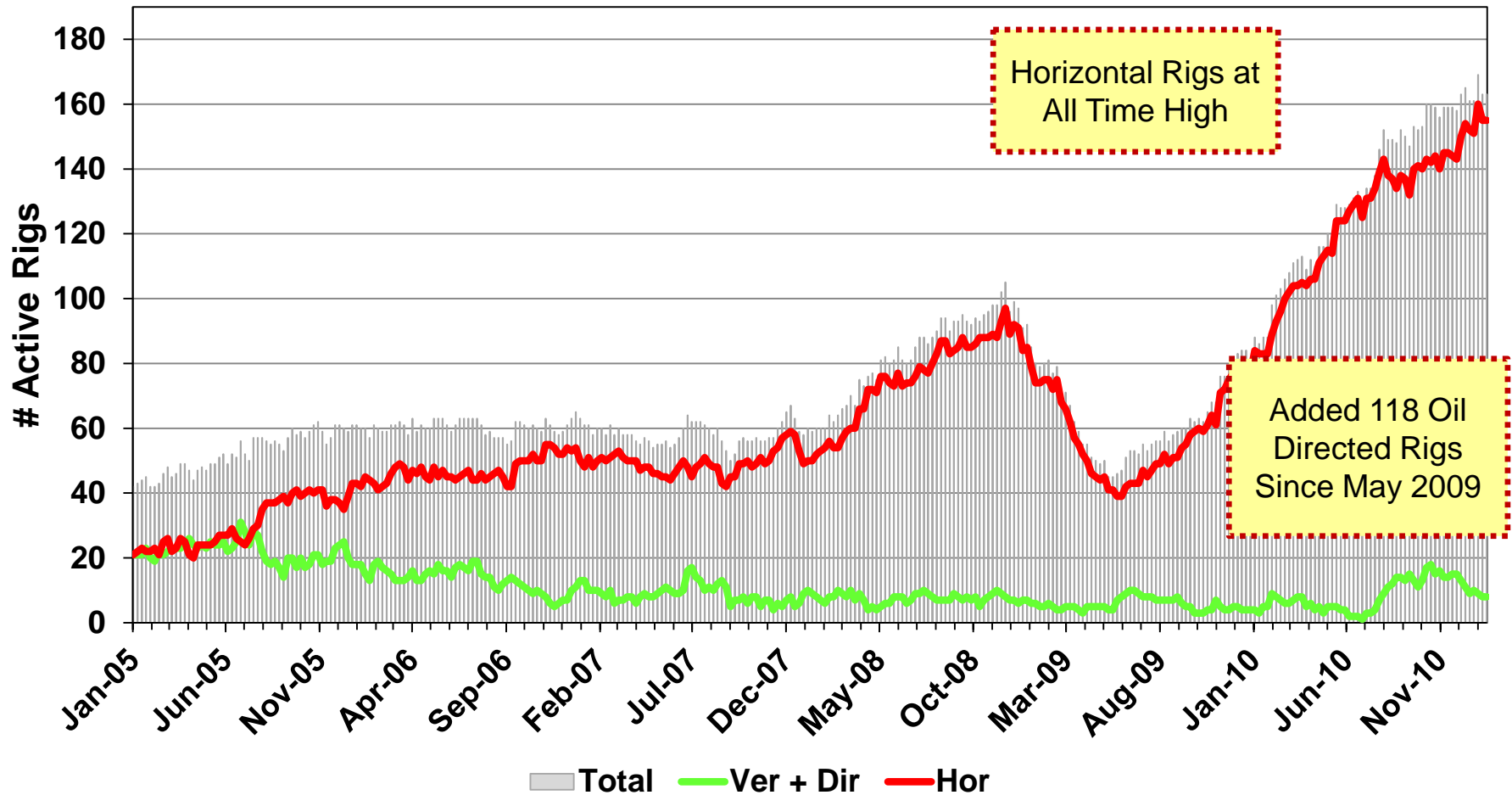
Active Rig Additions Since Recent Low - May 2009



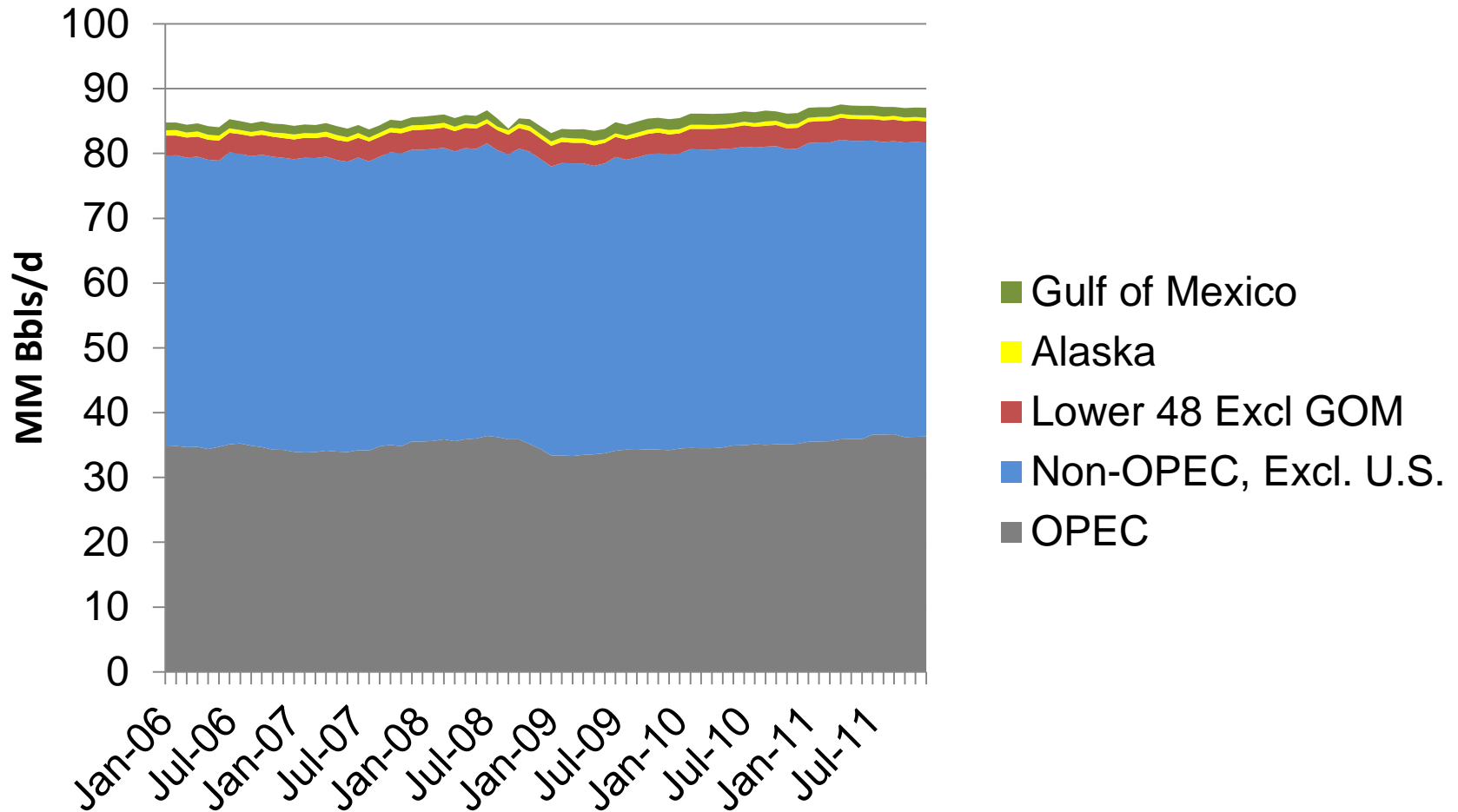
Historical U.S. Crude Production



Capital Moving to Oil – Bakken Shale Oil Play, MT and ND

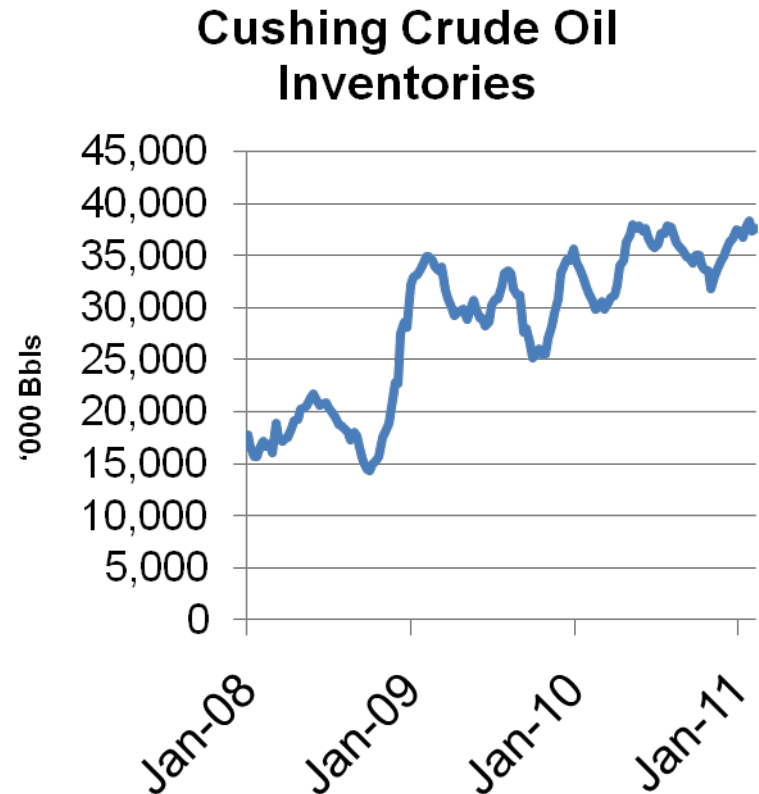
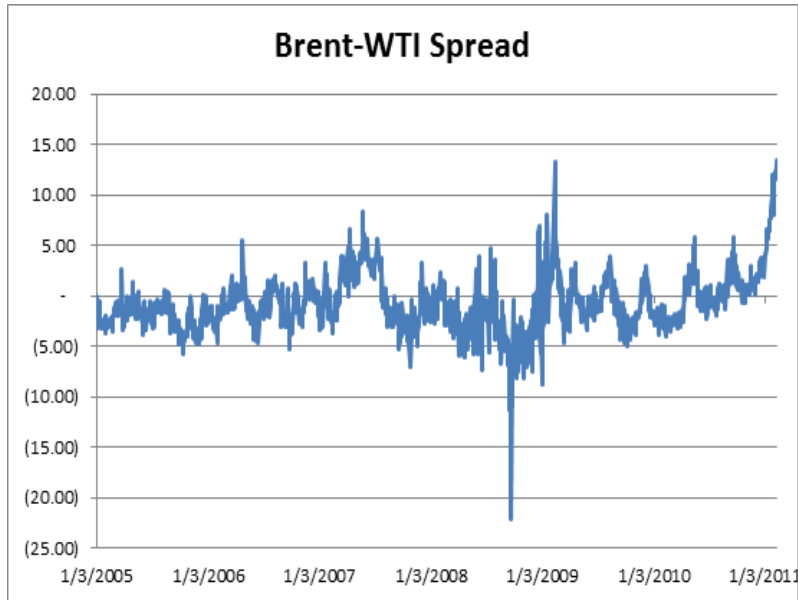


Global Oil Supply



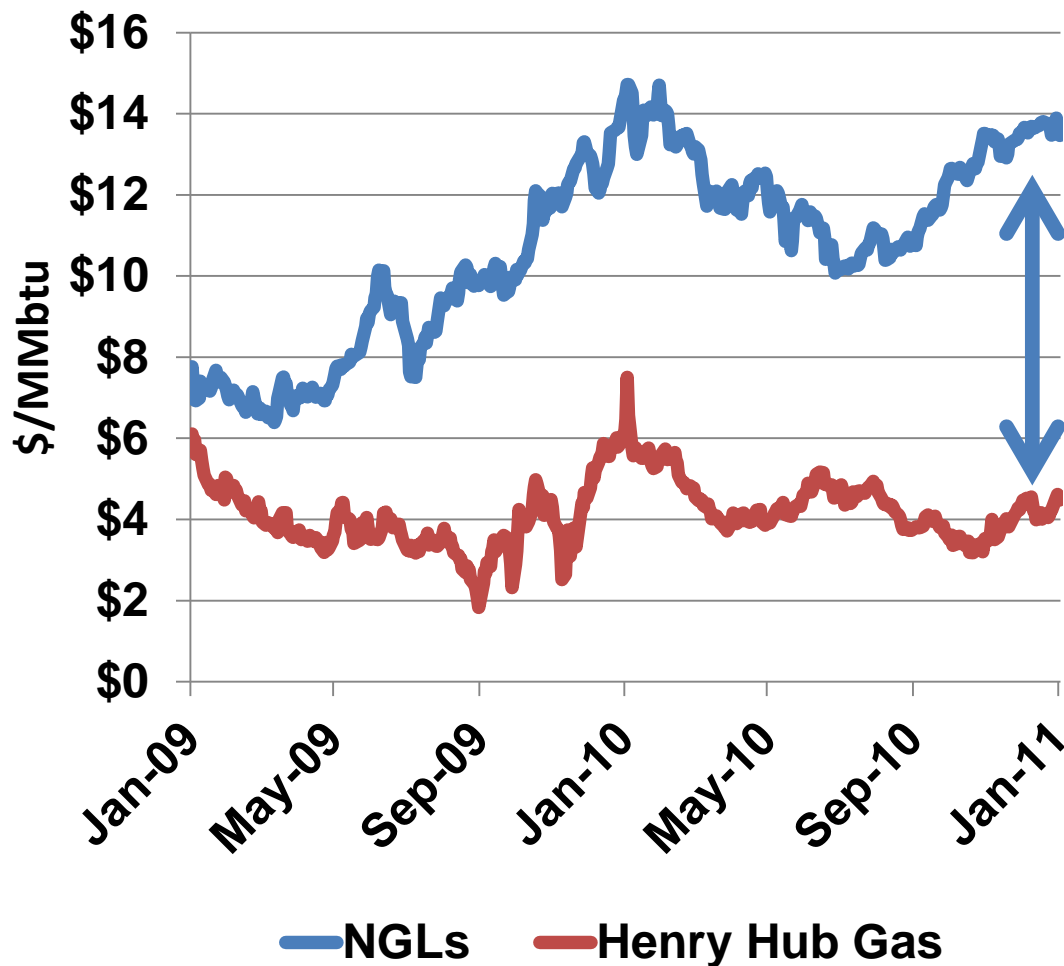
Source: EIA

Cushing WTI Oversupply?



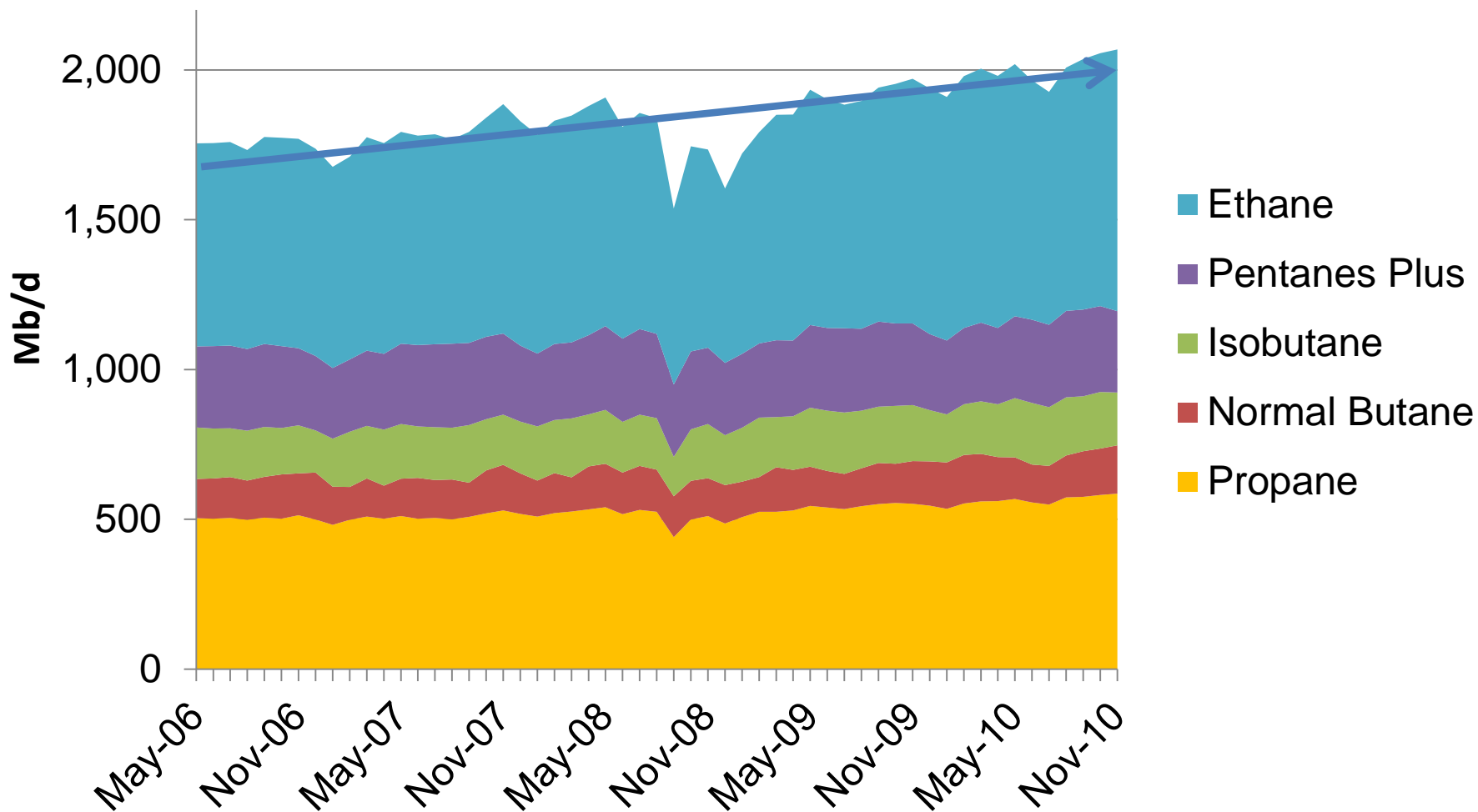
Source: EIA

High NGL Prices

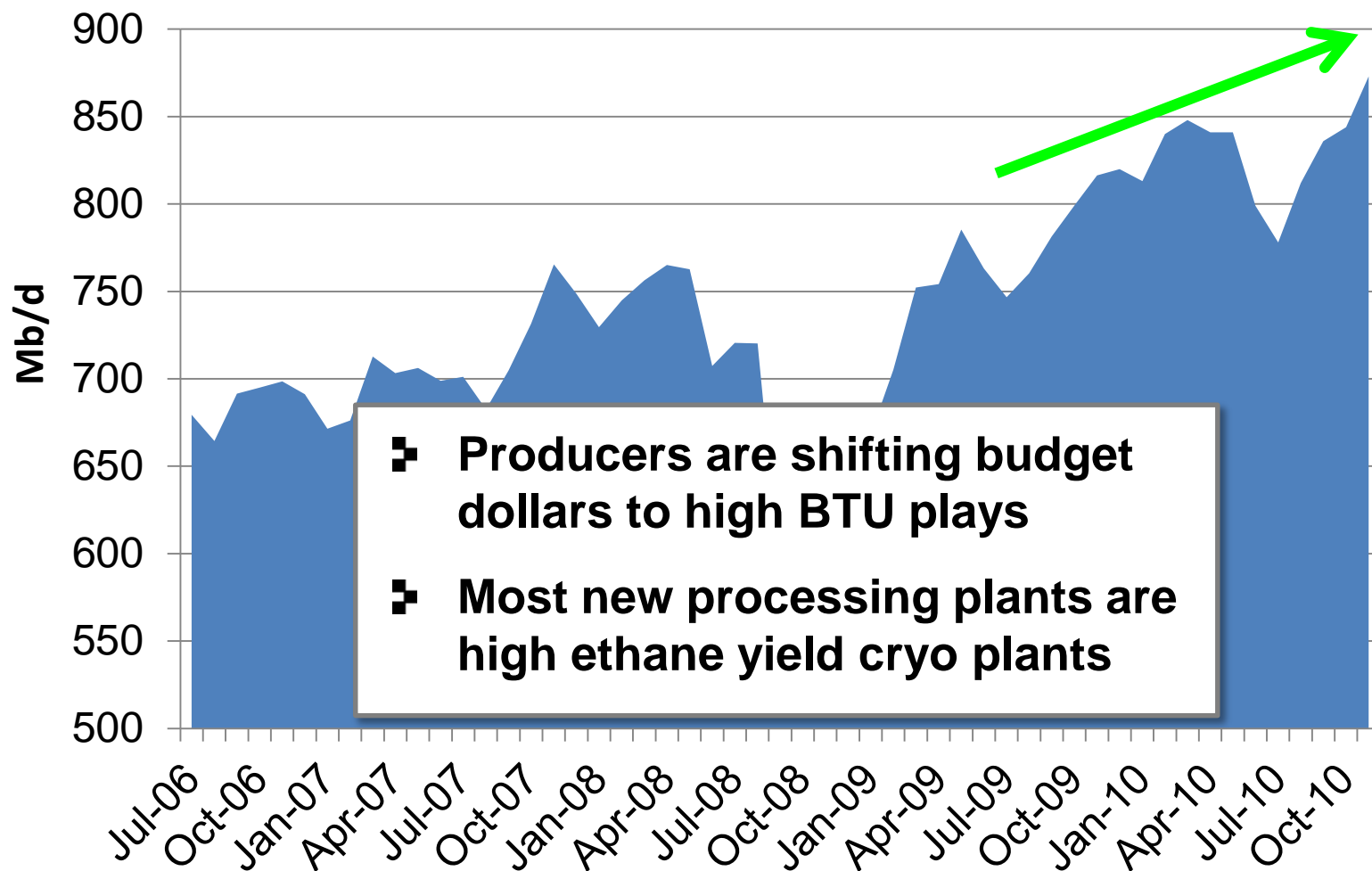


- Natural Gas Liquids prices have historically followed crude prices
- Relative to natural gas prices, liquids prices have been at high levels

U.S. NGL Production – Gas Plants

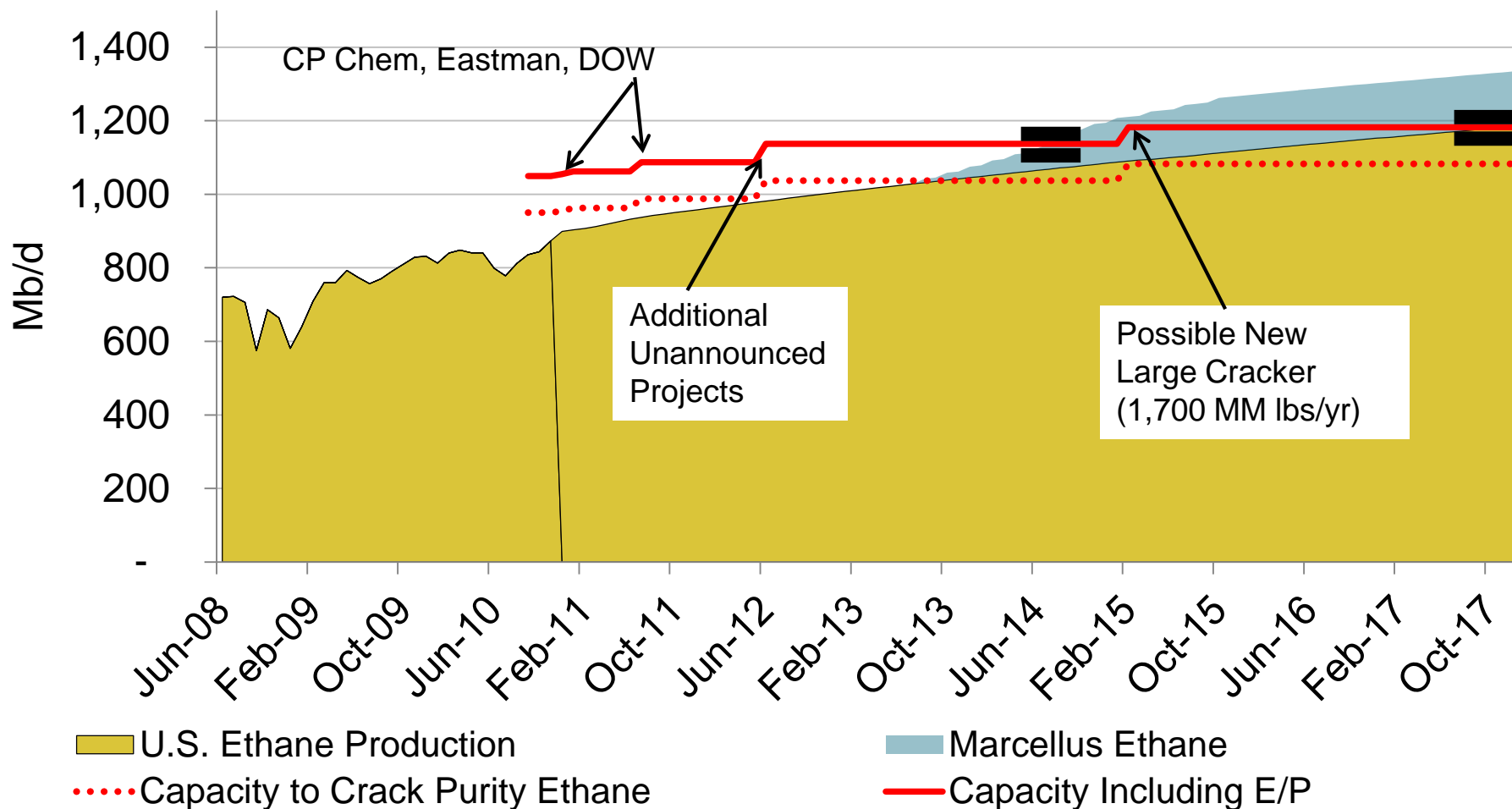


U.S. Ethane Production From Gas Plants – 873 Mb/d in Nov.



Ethane Supply Overhang?

Will Ethane Supply Outpace Demand?



Conclusions

- ❖ **Even with natural gas prices below \$4.00, production continues at all time highs; prices remain under downward pressure**
- ❖ **International demand for liquids fuels is increasing, pushing up global crude oil prices**
- ❖ **Price divergence between gas and oil is shifting the economics of production, demand, processing and transportation in North America**
- ❖ **Winners: Producers with oil & rich gas, Gas Processors, Petchems, Industrial & Other Gas Consumers, Gas Fired Power Generation, Environment**

BENTEK Energy, LLC

BENTEK is an energy market analytics company, focused on the natural gas market and related energy sectors.



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