

Do You Feel Better After 2 Years In Hell?

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Presented to:
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October 19, 2016



This Is How I Described Our Situation A Year Ago

Here We Are. Now What?

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ICoTA Canada Roundtable 2015
October 21, 2015



Key Takeaways

- This cycle has been and will continue to be different from past cycles
- Global forces will play a greater role in the future of the industry
- Consolidation in the industry will be key to recovery
- Until consolidation, expect increased volatility
- Better days ahead – when is unclear but becoming more visible

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What Happened Over The Past Two Years?

- **Oil Price Volatility:**
 - \$100 - \$27/bbl
 - Now ~\$50/bbl – where we were last June
- **Natural Gas Price Volatility:**
 - \$4+ - \$1.65/mcf
 - Now ~\$3.155/mcf – about where we were in late 2014
- **Industry Capital Expenditures:**
 - Over \$300 billion, or 40% from 2014
 - Debate over 2017 spending trend
- **Energy Job Losses:**
 - US: 23 straight months of decline / 220K or 25% of 2014 employment
 - Canada: 55K or 15% (Sept '14 – Sept '16)
 - Doesn't count associated jobs lost
- **Energy Industry Bankruptcies:**
 - O&G companies: 102 (17) with \$136 (\$1.5) billion of debt
 - OFS companies: 93 (6) with \$14bn (\$95mm)
- **Oil & Gas Responsible For:**
 - Climate change
 - Air pollution
 - Water pollution (leaks, spills, & fracking)
 - Earthquakes
 - Intense & more frequent hurricanes
 - Other weather events
- **Political Target**

Houston Faces Roughest Patch Since Mid-1980s

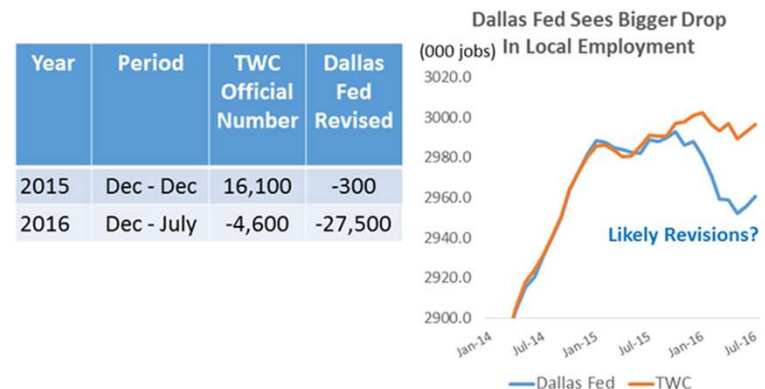
Job Losses Are Beginning To Take A Toll

Figure 2: Job Losses Are Driven By Energy
(Net Change in Jobs, seas. adj. annual rate)

Sector	Since Oil Bust Began Dec 2014 – July 2016		So far in 2016 Dec 2015 - July 2016	
	New Jobs	Percent	New Jobs	Percent
Total Payroll	16,100	0.5%	-4,600	-0.3%
Oil Production & Services	-24,700	-22.3%	-7,100	-7.6%
Construction	6,500	3.1%	-5,700	-2.5%
Manufacturing	-29,200	-11.2%	-5,300	-2.2%
Machinery	-15,400	-25.6%	-3,700	-7.7%
Fab Metal	-13,700	-20.8%	-3,100	-5.7%
Wholesale Trade	-3,300	-1.9%	-2,100	-1.2%
Prof/Bus Services	-12,500	-2.6%	-5,800	-1.2%

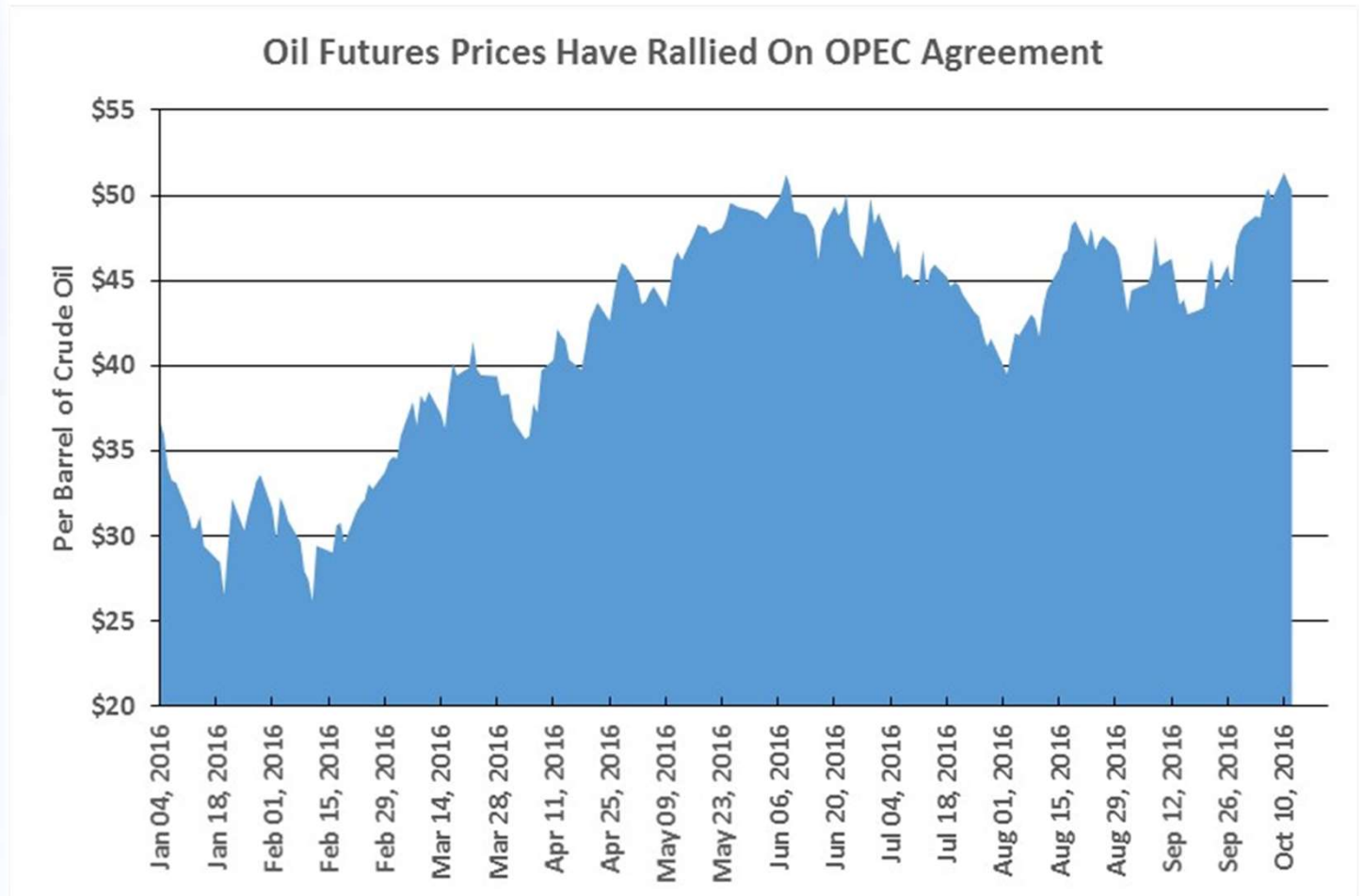
Job gains? Concentrated in Healthcare, Leisure and Hospitality, Retail Trade, and Local Government

Figure 3: All That Done and Said ... The Job Numbers Are Subject to Revision
(Change in Payroll Jobs)



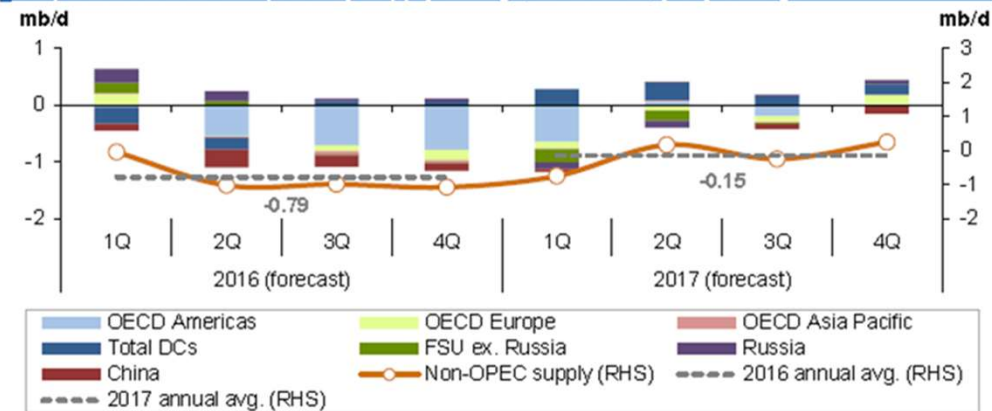
Texas Workforce Commission and Dallas Federal Reserve Bank

Current Oil Market Improving Due To OPEC Agreement



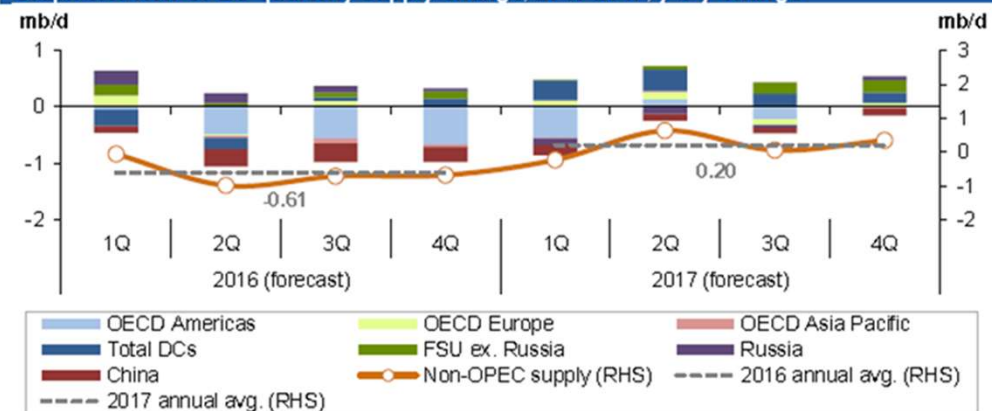
What Changed Saudi Arabia's Thinking?

Graph 5.3: Non-OPEC quarterly supply change, 2016-2017, y-o-y change



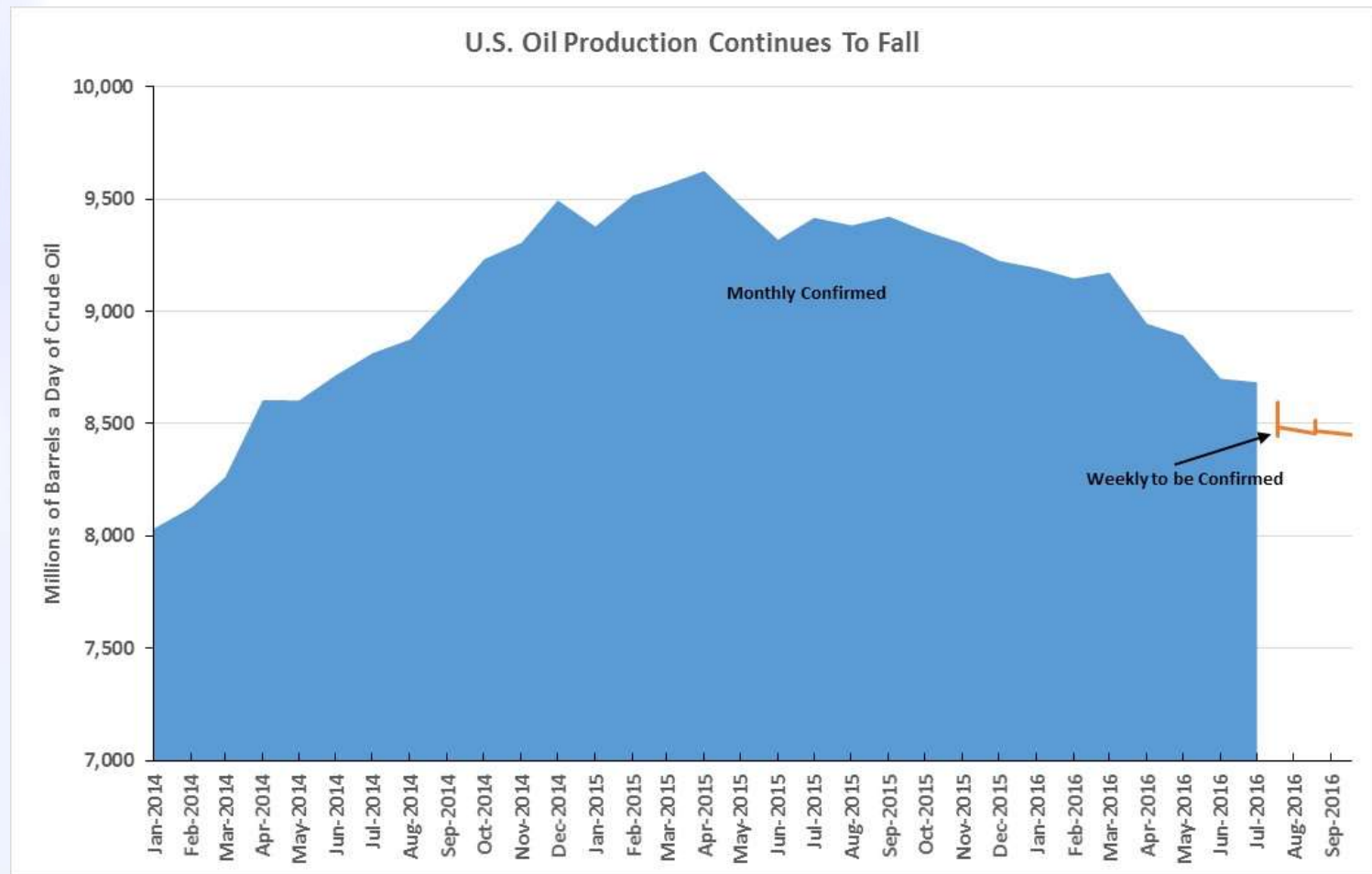
August OPEC
Oil Bulletin

Graph 5.3: Non-OPEC quarterly supply change, 2016-2017, y-o-y change

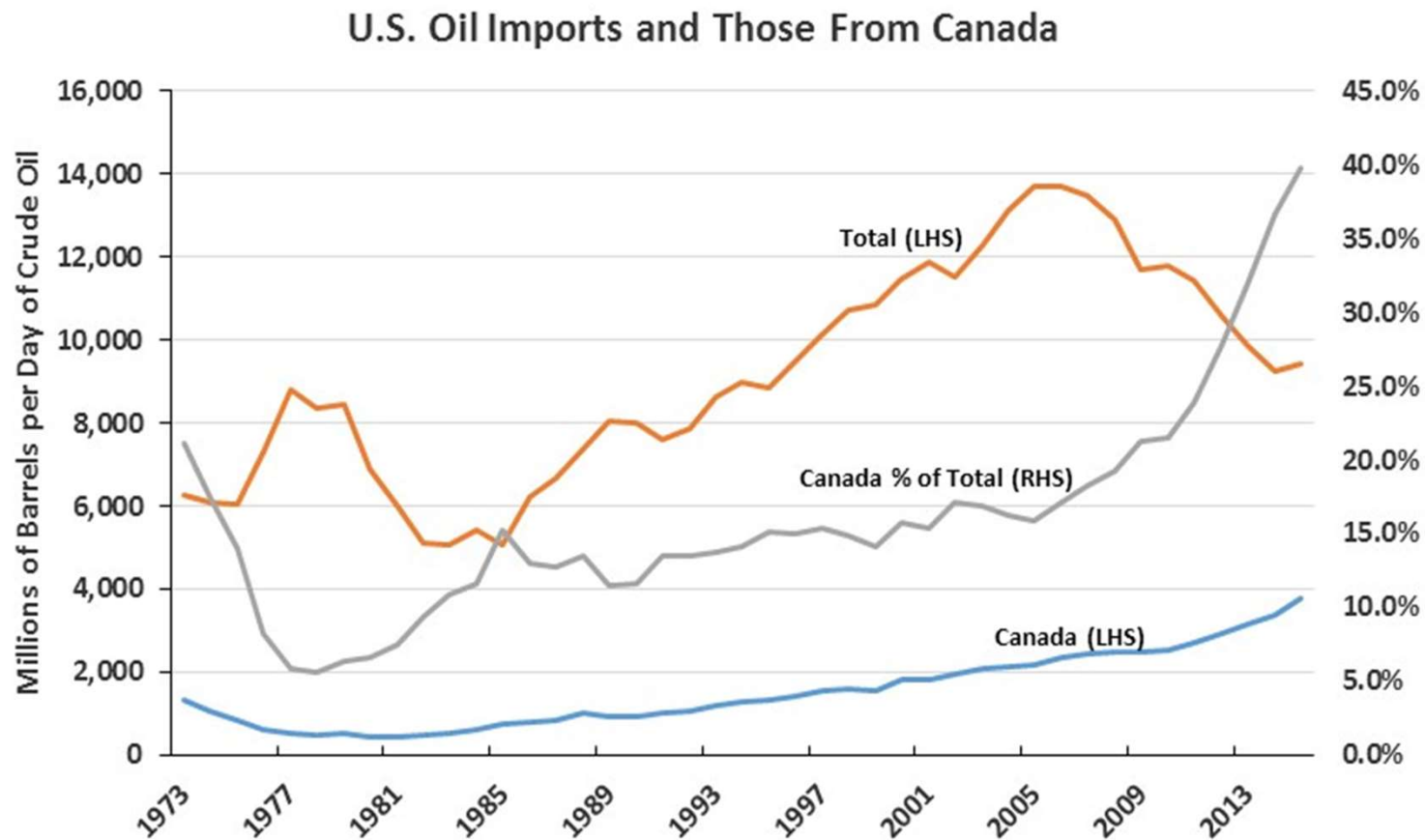


September OPEC
Oil Bulletin

Falling U.S. Oil Output The New N.A. Dynamic



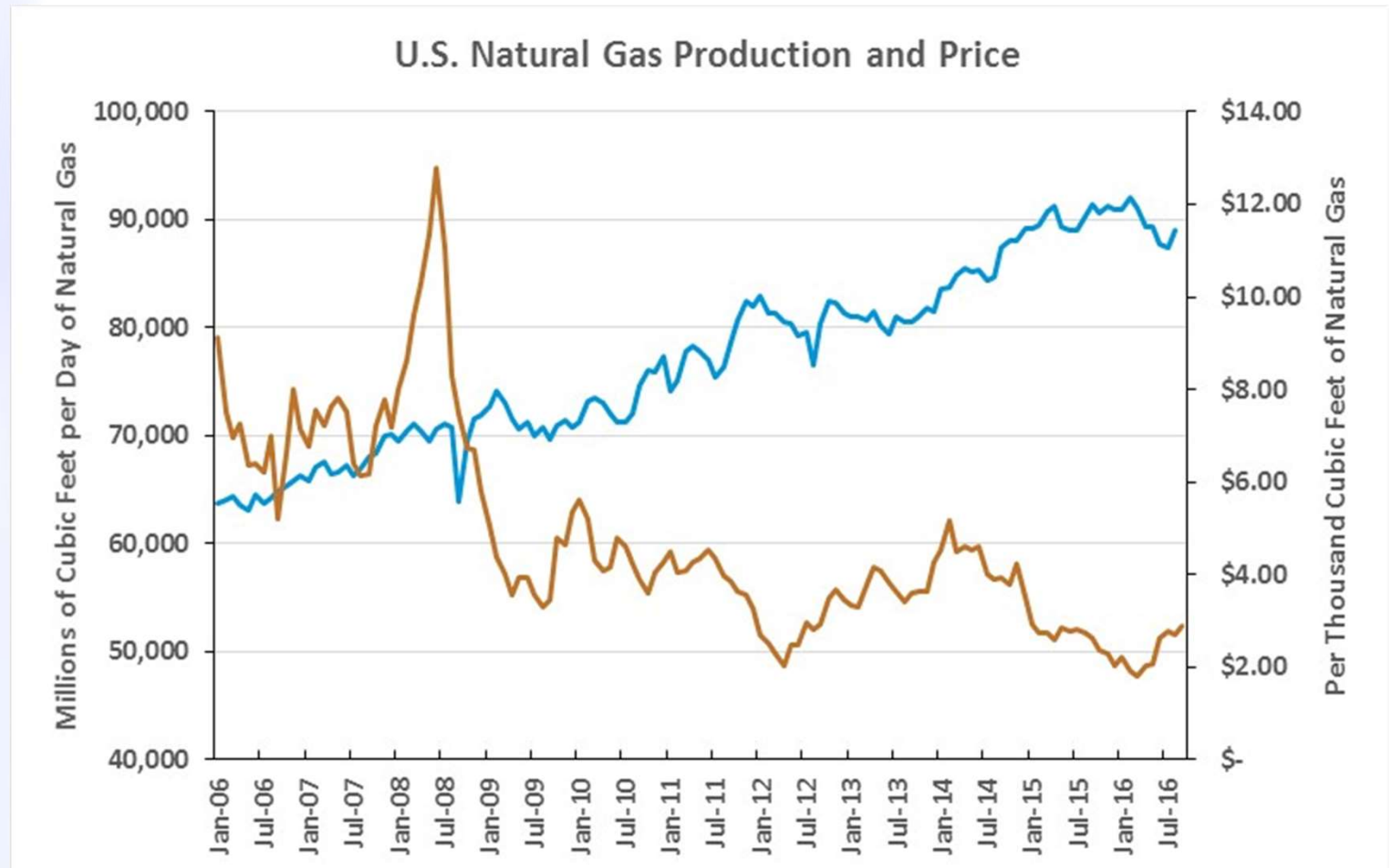
Why U.S. Oil Output Drop Could Help Canada



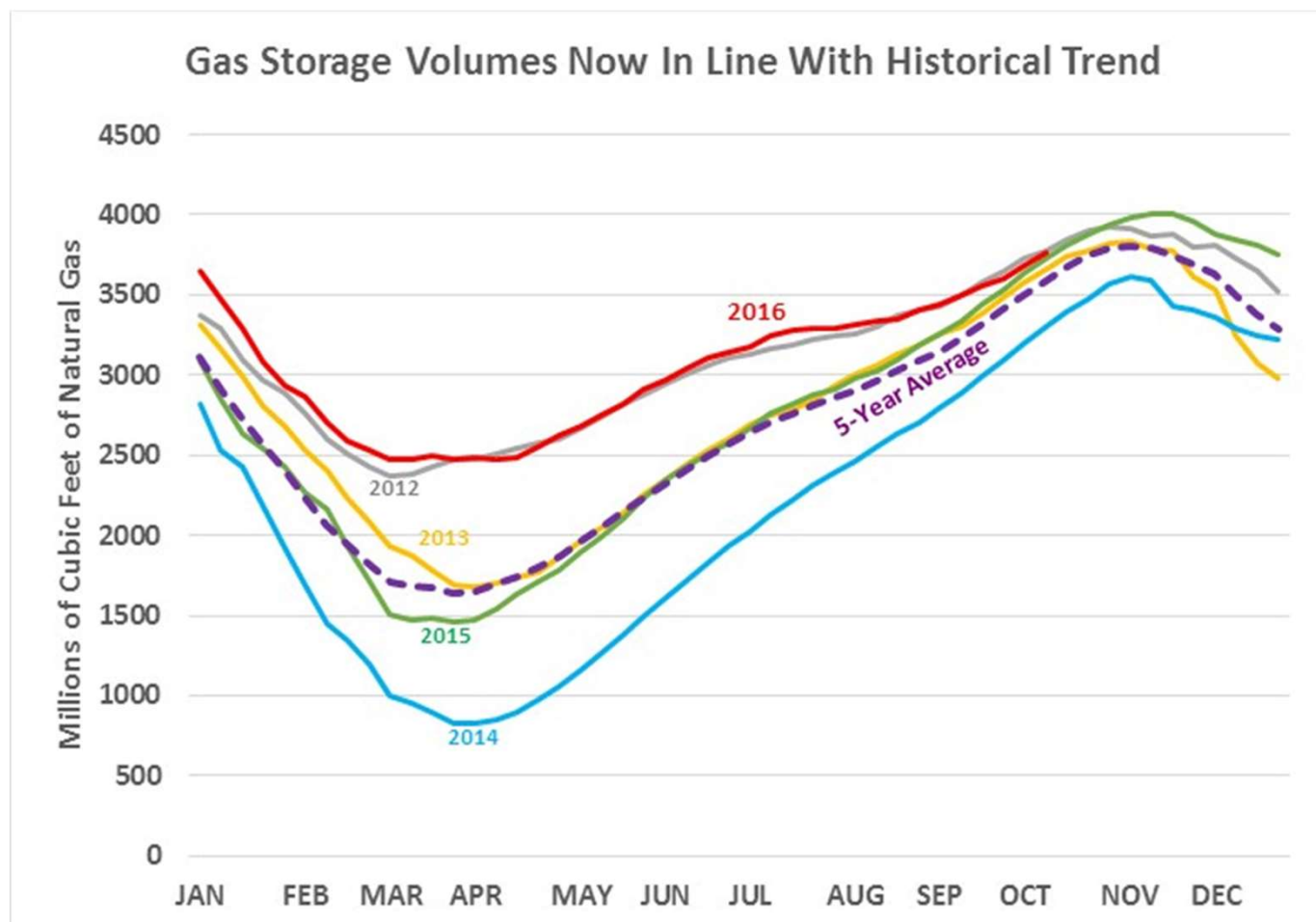
First Keystone XL, Now Dakota Access



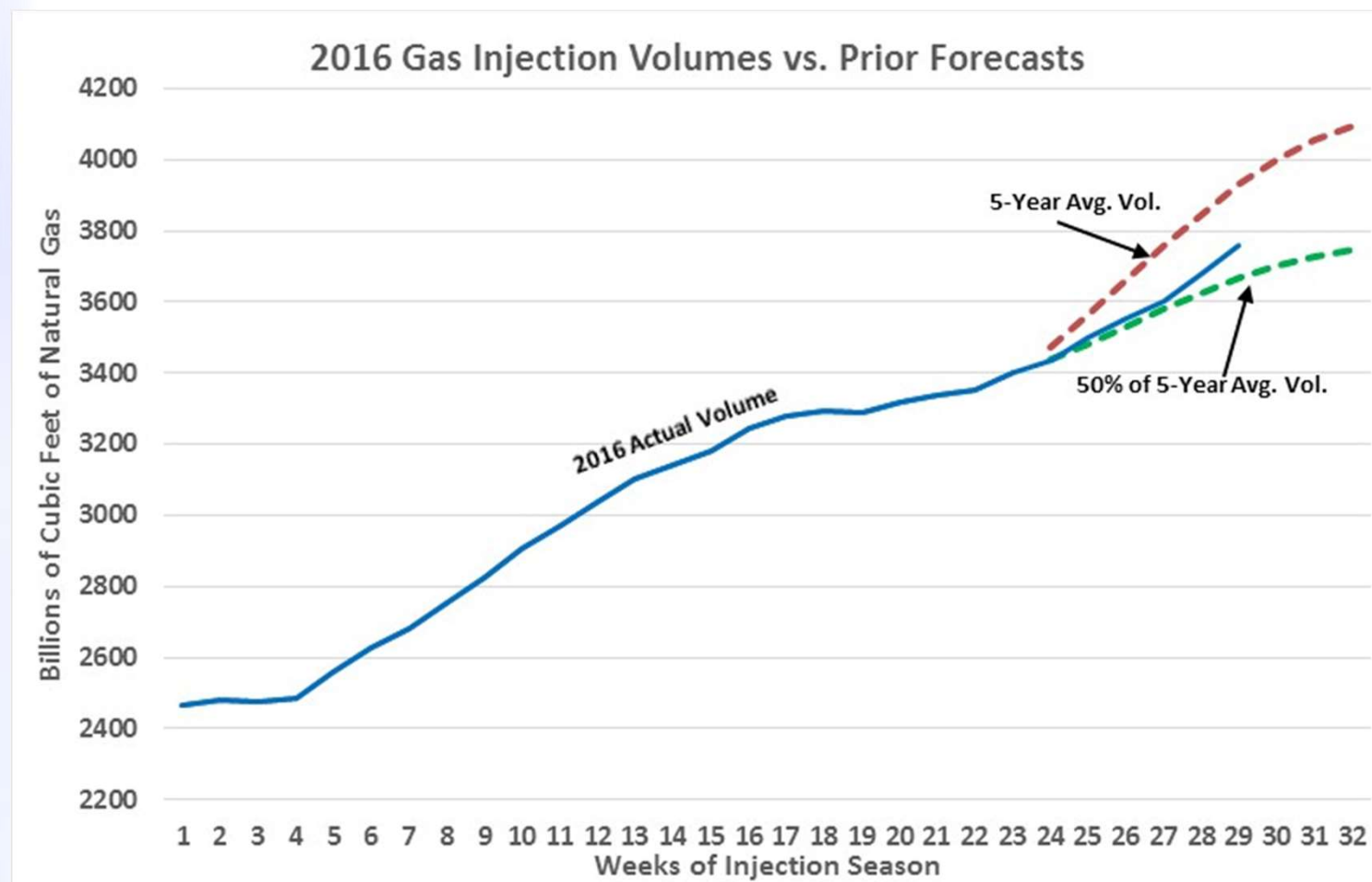
Gas Prices Are Responding To Falling Output And Rising Demand



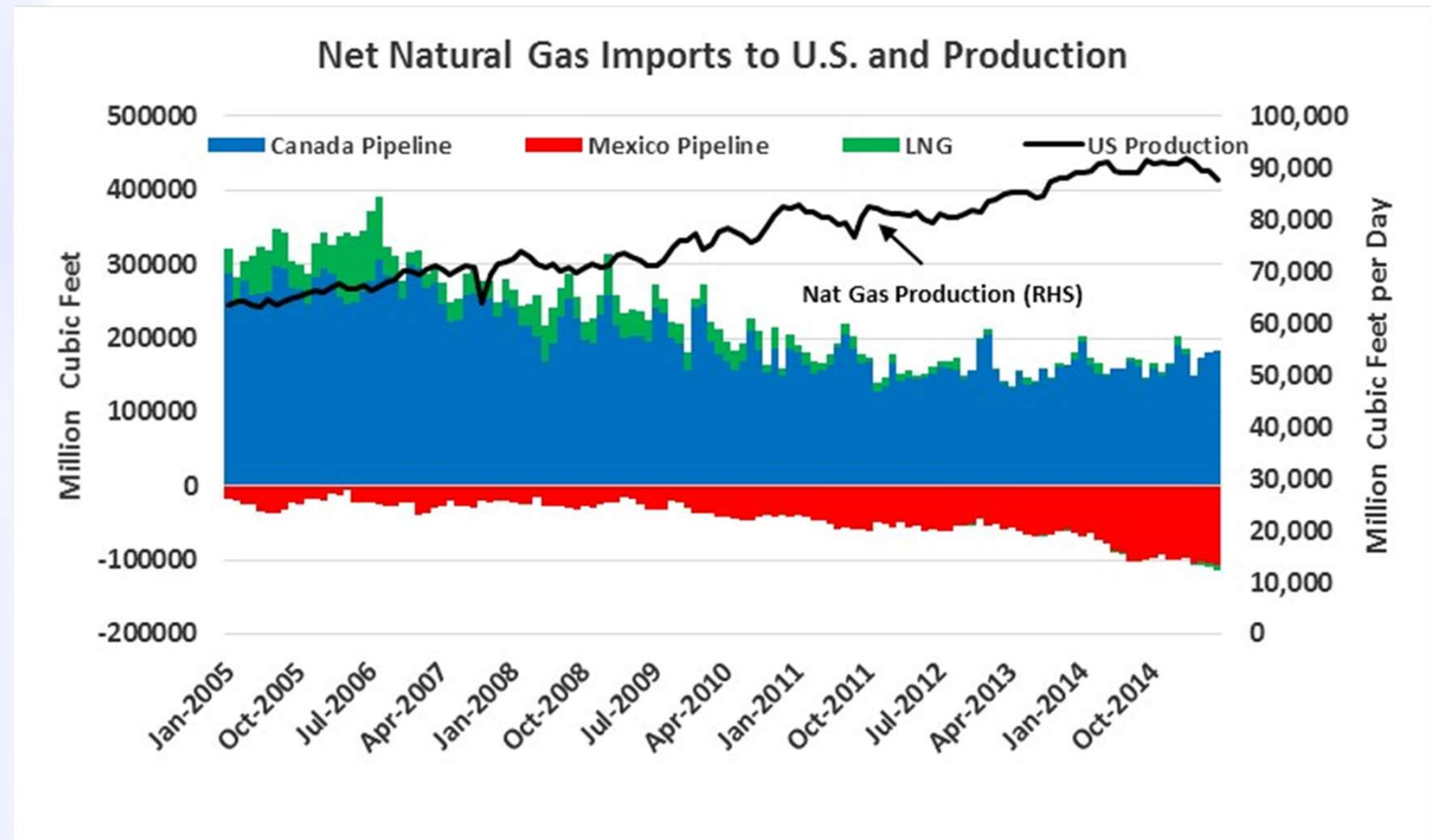
U.S. Gas Storage Market Improving



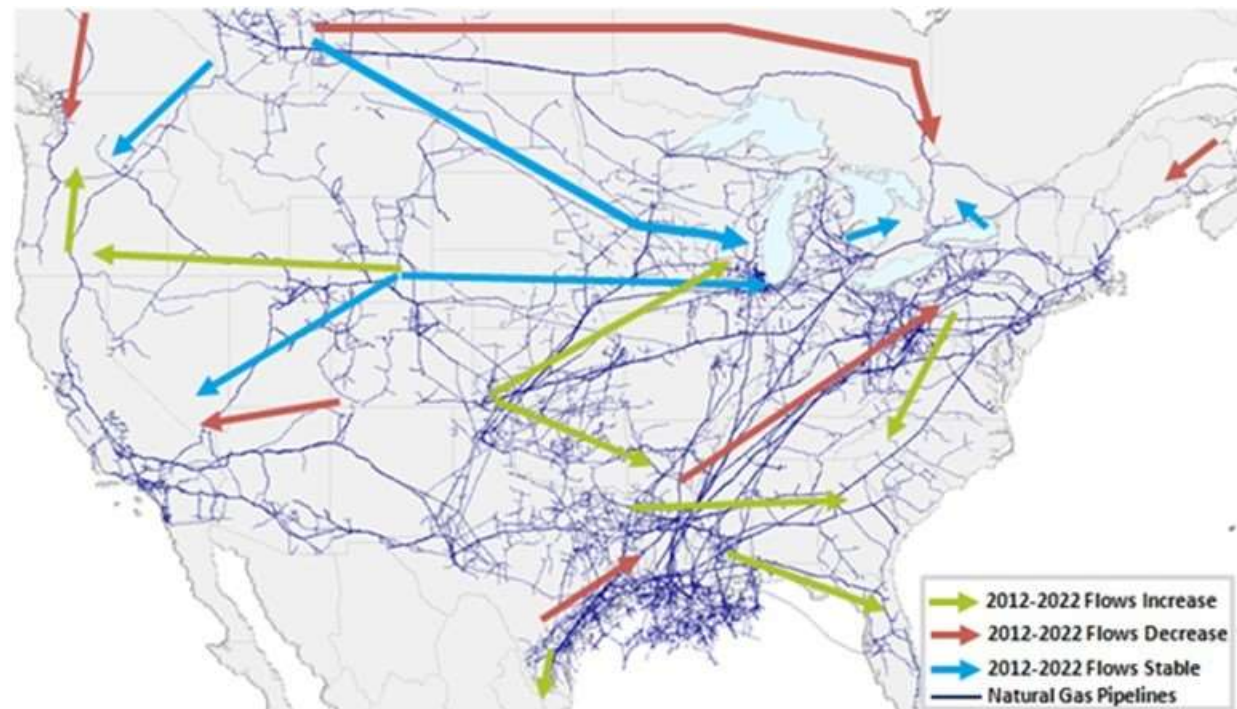
Gas Storage Running On Low Side Of Forecast



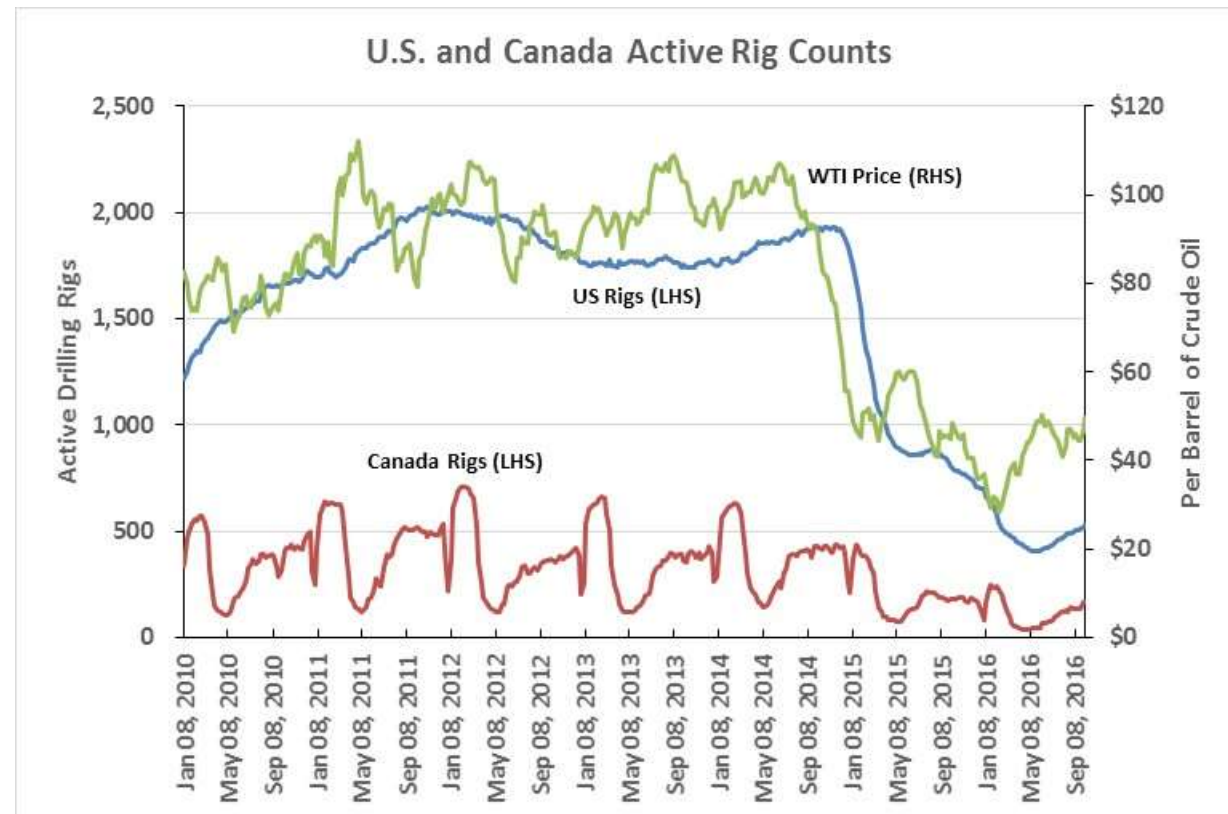
Why U.S. Gas Market Health Is Important To Canada



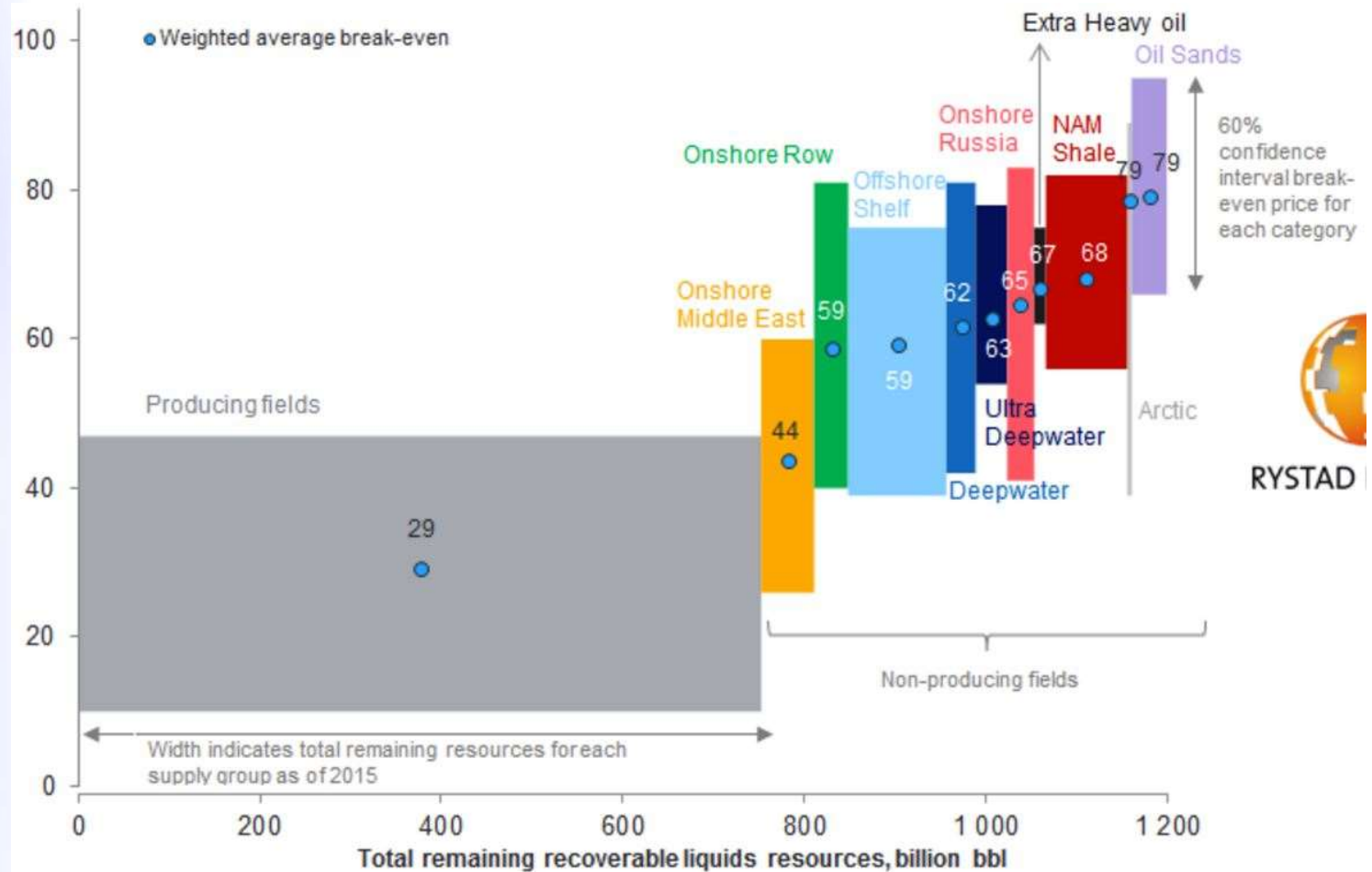
Shale Change N.A. Gas Transportation Market



Rig Counts Are Beginning To Respond To Price Signals

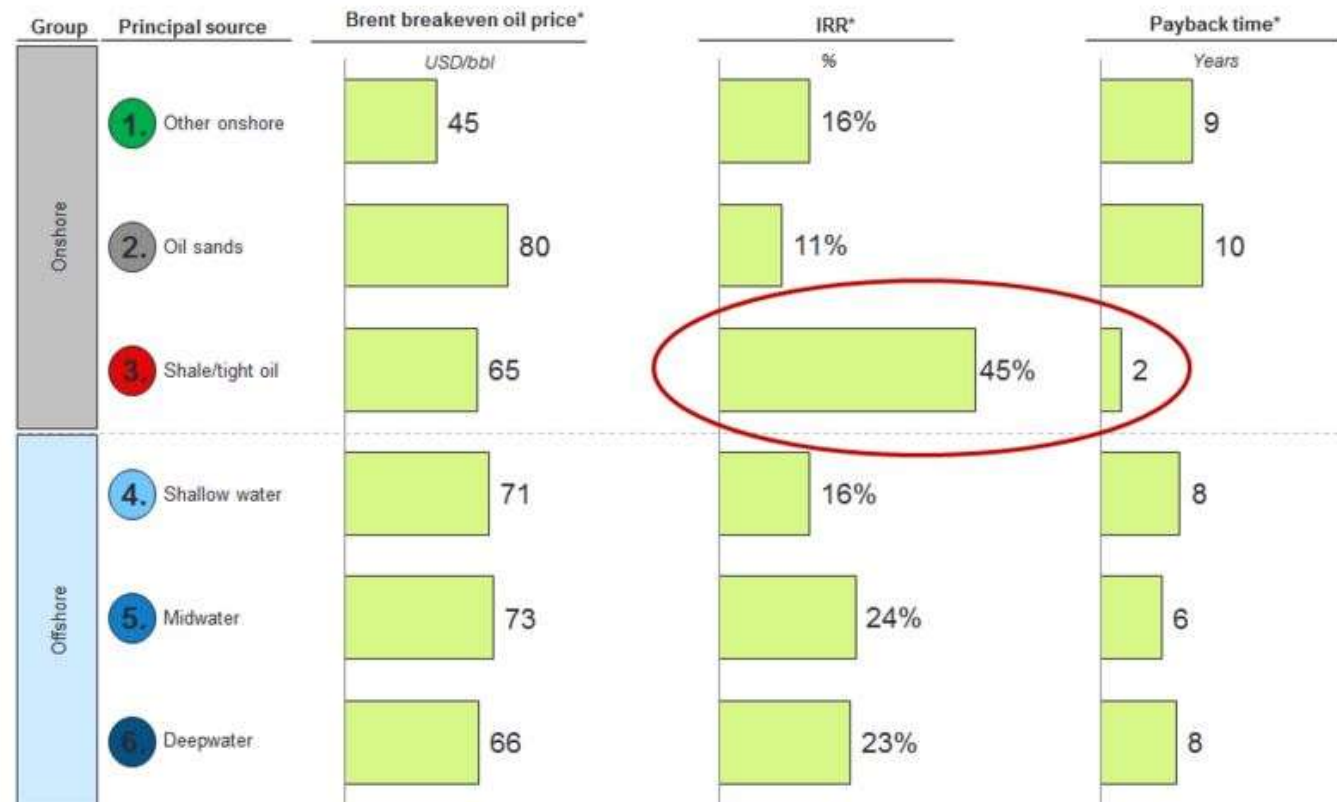


The Long-Term Challenge Facing Industry And Consumers



2014 Economics Distorted By \$100/Bbl Oil Prices

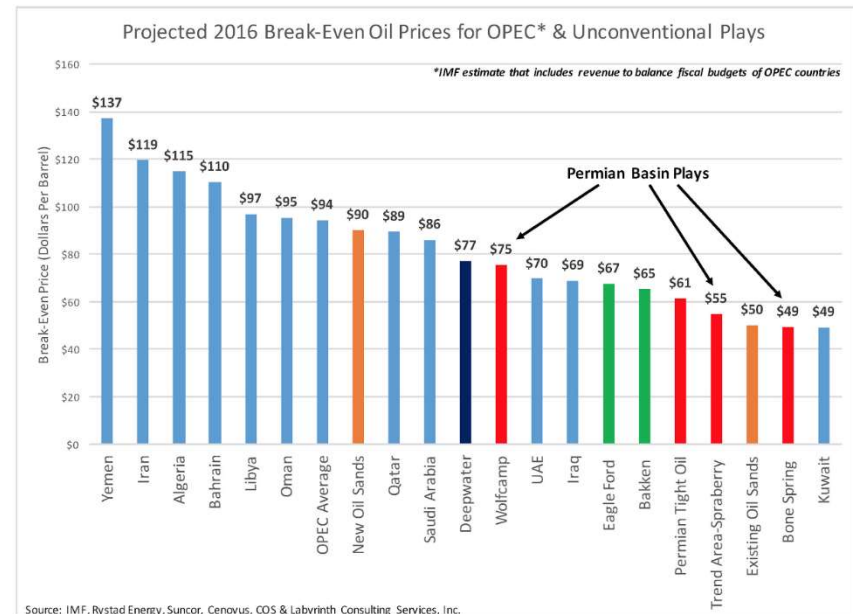
Key economic metrics for principal sources of oil supply



*Estimated are based on the 30 largest projects within each group expected to start up in the period 2014-2020 and it assumes \$90/bbl oil price
Source: Rystad Energy research and analysis

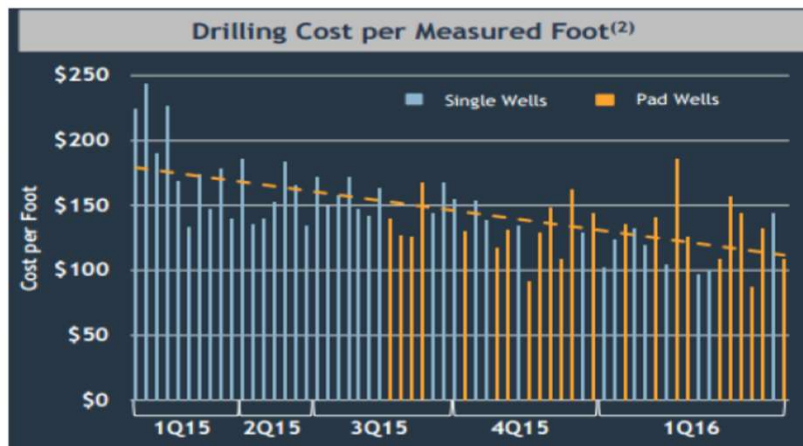
Breakeven Prices Have Declined, But There Are Many Estimates

Breakeven Improvement Impressive; Cash Flow The Issue



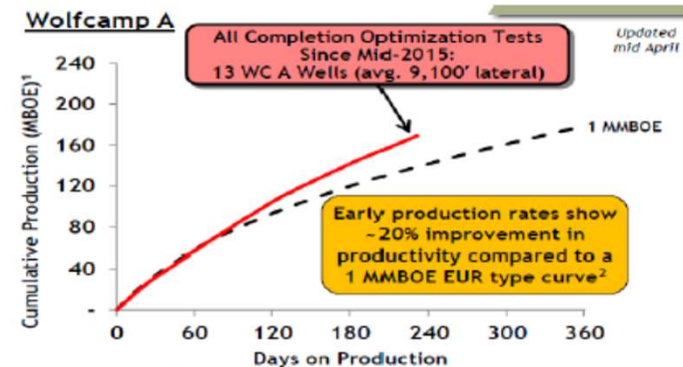
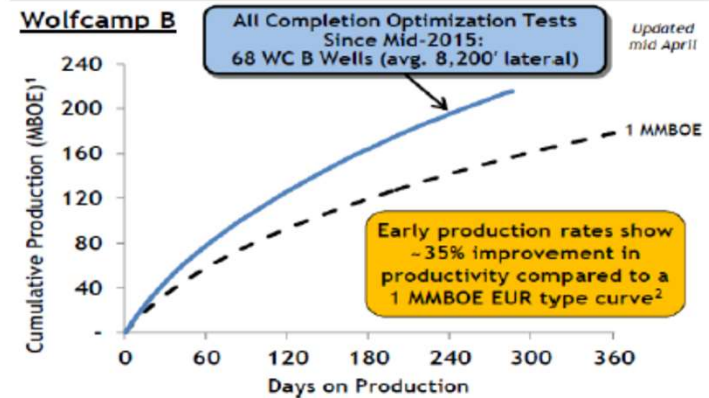
How Breakeven Costs Fell: How Much Will Be Retained?

PE Drilling Cost Improves with Pad Design



Source: Parsley Energy

PXD Noted 35% Type Curve Outperformance in Wolfcamp B & 20% in Wolfcamp A



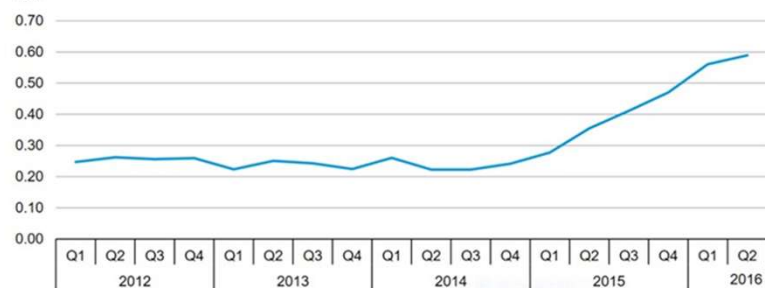
Source: Pioneer Natural Resources

Low Cash Flows Being Consumed By Debt Service

Debt Remains An Issue

Debt servicing payments as a share of operating cash flow increased as cash flow declined and companies refinanced

Annualized debt repayments to cash flow ratio

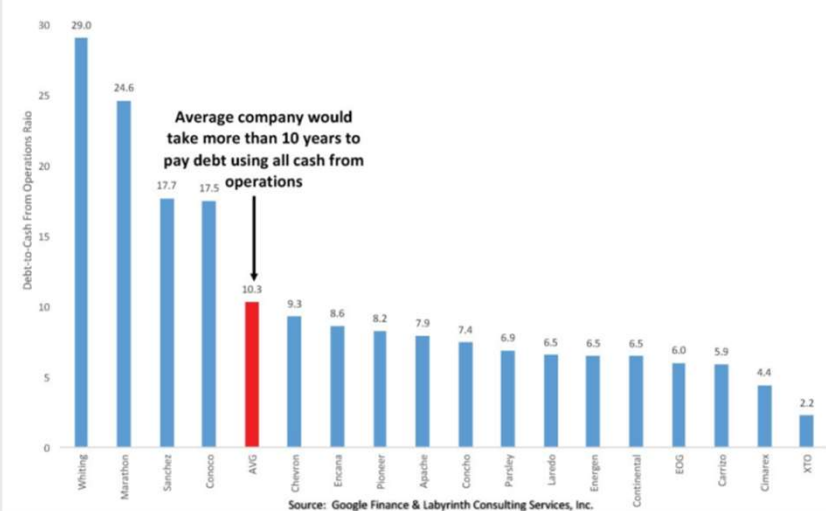


Source: U.S. Energy Information Administration, Evaluate Energy

More Cash Flow Required

July 2016

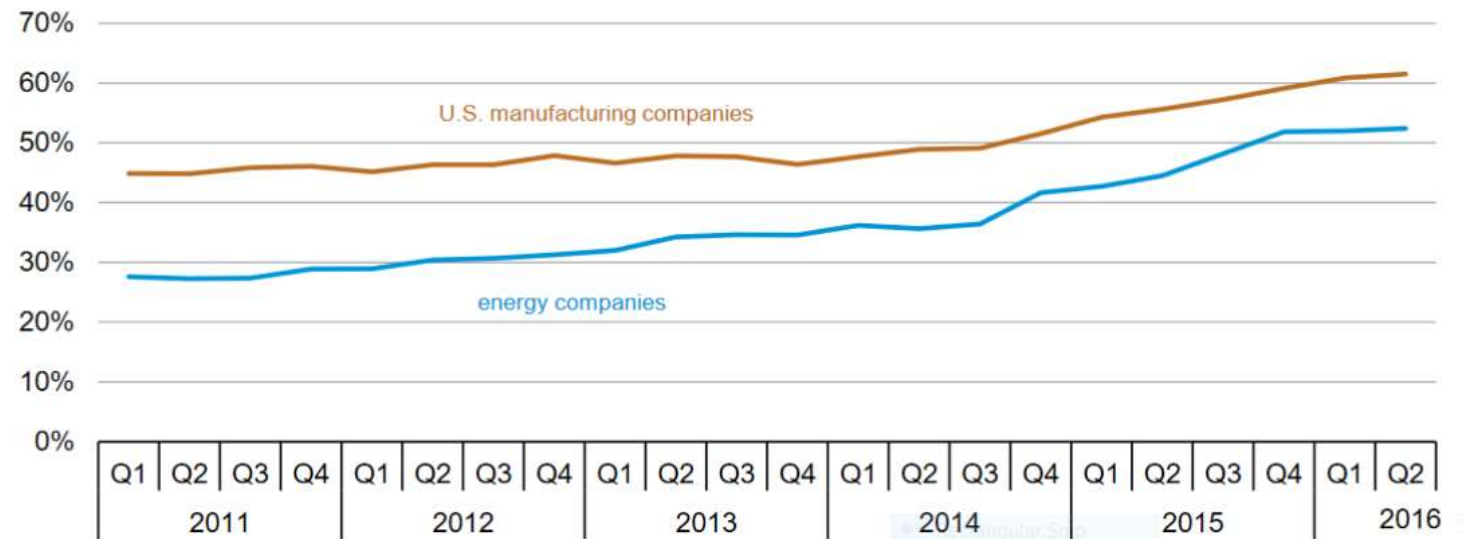
10 years to pay off debt using all cash from operations



What Does High L-T Debt To Equity Ratio Mean?

Global energy companies' long-term debt-to-equity ratio remained at 52% for the third consecutive quarter

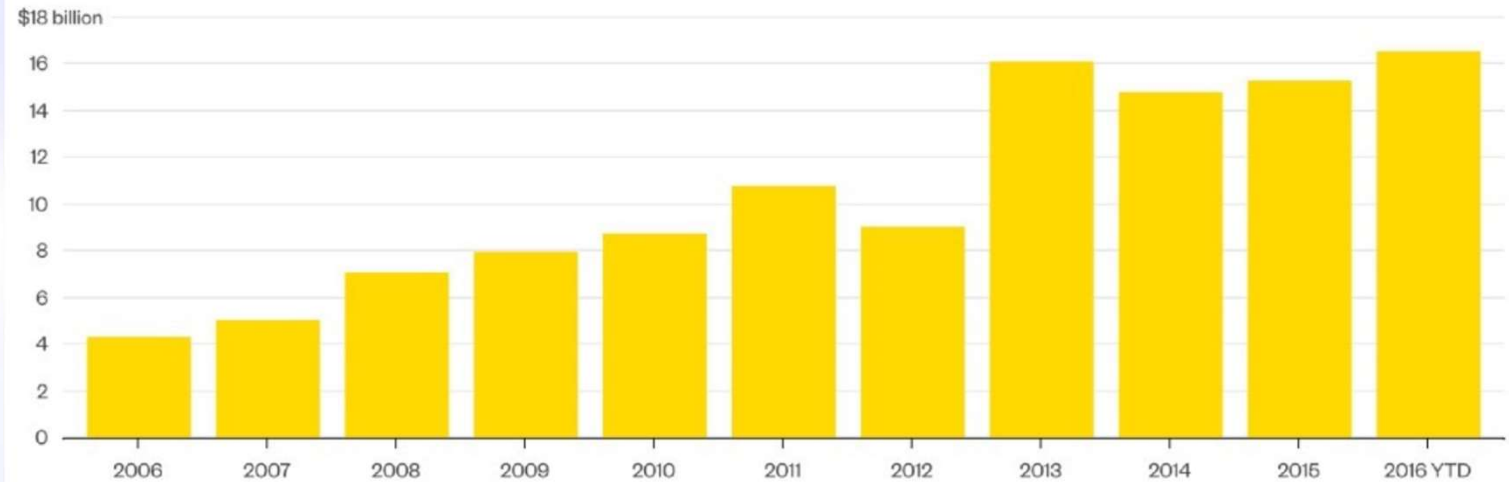
long-term debt-to-equity



Source: U.S. Energy Information Administration, Evaluate Energy, U.S. Census Bureau

Surprisingly, Capital Markets Receptive To E&P Equity Offerings

YTD Equity Raised Exceeds Last Three Years



Source: Bloomberg

Let's See What Is Different Today From A Year Ago

Key Takeaways

- This cycle has been and will continue to be different from past cycles
- Global forces will play a greater role in the future of the industry
- Consolidation in the industry will be key to recovery
- Until consolidation, expect increased volatility
- Better days ahead – when is unclear but becoming more visible

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Thank You