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My take: John England

As we are midway through the fourth full year of the crude oil downturn, it seems like the right time for some big-picture reflection on where we are as an oil and gas industry. It's been an interesting 2017 as the news cycle has been dominated by politics, natural disasters, and tense geopolitical challenges; also, the oil market is still challenged by high stocks and sluggish prices. From an energy perspective, we were busy watching: a) OPEC extend its cuts and adhere to them, b) US producers increase production and keep costs down, and c) demand increase enough to give us hope but not yet enough to really move the needle.

In the meantime, we experienced Hurricane Harvey in Texas, which reminded us of what's really important in life and of the indomitable spirit of Texans (and many Louisianans who came to our aid). For me, Harvey also reinforced that what we do as an energy industry is important to the world and something we should look upon with pride.

So, as we enter 2018, here are some reflections, observations, and predictions for our industry:



2017 was the year the United States came into its own as an energy exporter

When the crude oil export ban was lifted in January 2016, many broadly viewed it as good for the industry and free trade but were not quite sure about its impact. In 2017, we saw US exports of crude, as well as liquefied natural gas (LNG) and refined products, continue to rise. This rise aligns nicely with the new administration's motto of "energy dominance" for the United States.¹ Although still a net importer of crude, our growing place as an energy exporter and

low-cost supplier could fundamentally change our position in the global energy landscape. Furthermore, it could change our views on geopolitics and national security.

Some may see our newfound energy strength as allowing us to go further down an isolationist path as we seek the dream of energy independence. Another view might be that our strength as an energy supplier simply gives us more leverage in

the global, free trade economy that the United States has historically supported. The first test of this may come in the form of NAFTA renegotiation discussions. Mexico shows promise as a market for US natural gas and refined products but perhaps only if we are able to maintain a stable trading relationship. The outcome of this negotiation may be indicative of our future path.

US shale cost reductions are stickier than expected

As I wrote in my previous industry outlook, the cost reductions achieved by US unconventional producers have been remarkable. The question coming into 2017 was whether these reductions are sustainable. The evidence seems to tell us they are, with break-even costs across the major US shale plays still 30-50 percent below the levels of early 2015.²

In looking at cost reductions, it's also worth considering how US natural gas producers have lowered and sustained costs, especially in the Marcellus and Haynesville gas plays.

If this is indicative of the path for oil, costs may stay down (and need to) for a long time. However, it's also important to remember that a healthy industry also needs a healthy ecosystem of producers, service providers, manufacturers, etc. Although producers are surviving, and in some cases growing again, many in the oilfield services industry continue to suffer, and further consolidation may be in the cards.



OPEC may be running out of cards



As long as I'm talking about cards, OPEC still seems to be playing with the same hand. The production cuts announced last year, in coordination with Russia, which were then extended six additional months, seem to have helped start a re-balancing of the market. However, although prices have recently moved up above the mid-\$50 per barrel range, slow demand growth coupled with supply increases in the United States, Brazil, Iran, Libya, and Nigeria have, as yet, limited the pace of a return to market equilibrium.

At the end of November, it was announced that the current level of cuts would be extended another nine months to the end

of 2018, with Libya and Nigeria adding a promise not to raise their production; but, at some point, the market still needs a real demand boost to get prices moving upward in a meaningful way. Unfortunately, right now it's not clear if that card is still in the deck. Barring that, only a supply shock is likely to move the market significantly, and that's not really how we want to re-balance the market.

OPEC's role will likely continue to be a very important one for many years to come, but the rise of US tight oil has certainly changed the playing field and will likely continue to do so for the foreseeable future.

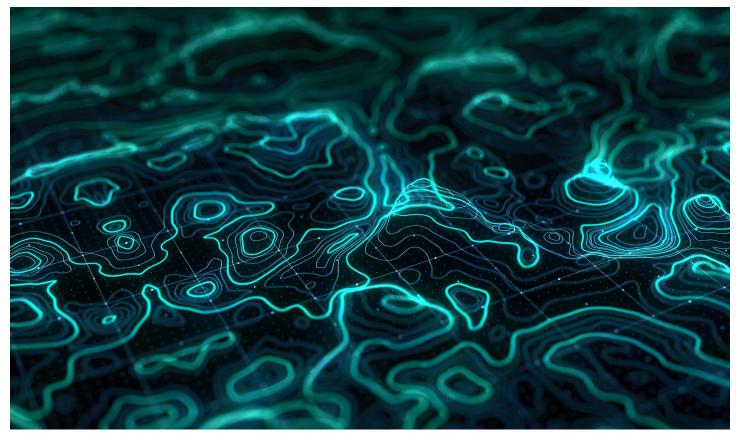
Natural gas—the fuel of the future



The rise of natural gas demand continued during 2017, but it was overshadowed by continued low-cost supply growth from a number of regions, such as the United States, causing global pricing to remain relatively low. The impact of US LNG exports (both current and expected) on the global market has been significant and has helped quickly turn a seller's market into a buyer's market.

While the long-term growth of natural gas and LNG still seems likely, the economics of investment in LNG is more challenging than ever as long-term oil-linked contracts are replaced by shorter ones, based on a variety of natural gas indices, as buyers exert more leverage in the market.

The digital cavalry is coming, right?



Having now painted a less than rosy picture for the industry, I thought I'd migrate to the hopeful side of this piece: The digital revolution is here.

So, what exactly does that mean?

Actually, it could mean the difference between thriving, surviving, or just not making it. As previously mentioned, the efficiency gains on per barrel of oil equivalent since the downturn began in 2014 have been remarkable. However, we may be in the early innings of the game when it comes to the digital revolution and the opportunities it presents.

In a world where the assumption that energy demand would rise forever seems to be wavering, one path to success is to be a low-cost provider, whether of energy commodities or of the equipment and services needed to produce these commodities and get them to market. The proliferation of increasingly lower-cost digital technology is already unleashing innovative ideas across the oil and gas value chain. From how we develop a field, procure goods and services, and move product to all the HR and back-office services to support the core businesses, digital technologies could change everything, resulting in radical efficiency gains and improvements of both top and bottom lines.

This does not mean everyone will win. The digital age is seemingly moving faster than our previous industrial revolution did and could naturally create winners and losers. However, companies that are willing to innovate and invest can unlock tremendous value and may remain financially strong regardless of what happens to global supply and demand trends. So, the digital cavalry is coming, but it likely won't rescue everyone—possibly only those who are brave enough to embrace it.

Let's talk



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John serves as the vice chairman, US Energy & Resources leader and US and Americas Oil & Gas leader for Deloitte LLP. John works closely with our oil and gas clients to bring the deep capabilities of Deloitte to solve problems and enhance value. John brings a unique mix of commercial, risk management, operational and financial knowledge and the experience of 28 years serving in the industry. He holds a BBA in accounting from Stephen F. Austin University and is a CPA in the state of Texas.

Endnotes

- 1. Rick Perry, Scott Pruitt, and Ryan Zinke, "Paving the path to U.S. energy dominance," The White House: Office of the Press Secretary, June 27, 2017, https://www.whitehouse.gov/the-press-office/2017/06/27/perry-zinke-and-pruitt-paving-path-us-energy-dominance, accessed November 14, 2017.
- 2. Artem Abramov, "NA Shale: What has changed since 2016?," presented at 2017 Rystad Oil and Gas Summit, September 19, 2017.

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