

Top 5 Indicators Shaping Upstream Oil & Gas in 2019

By: Carl Wimberley, Opportune LLP

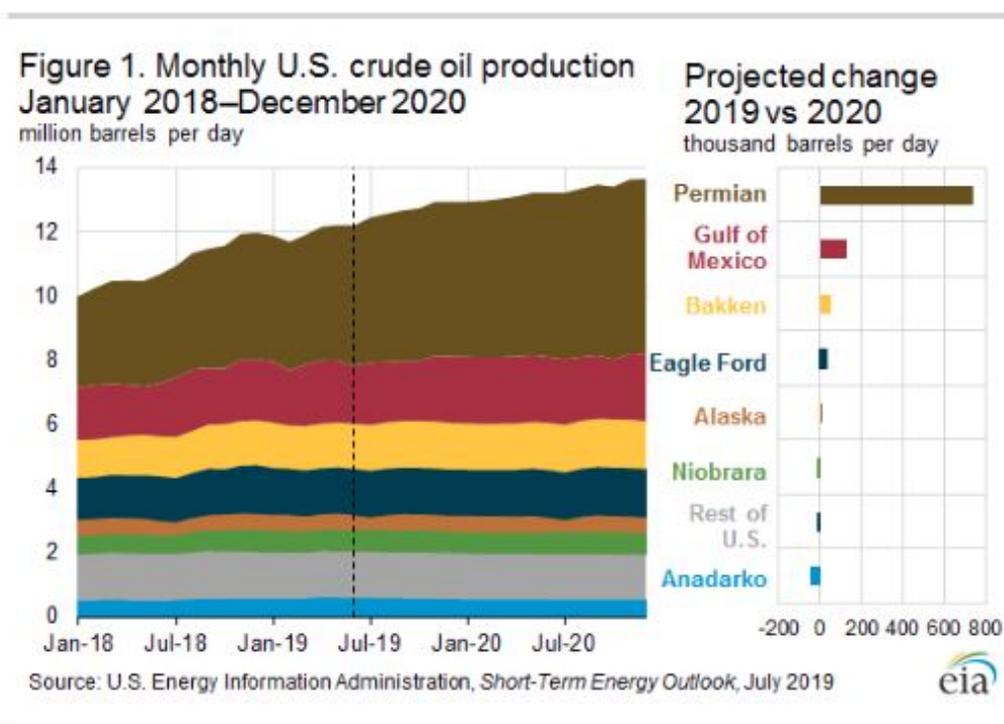
U.S. benchmark West Texas Intermediate (WTI) oil prices rebounded slightly in 2019 and have since hovered in a steady band within the \$50/bbl range, hitting a high of over \$66/bbl at one point in April 2019, after prices fell 40% in the fourth quarter of 2018. Brent oil prices, the international benchmark, followed the same trajectory of domestic oil prices, reaching a high of nearly \$75/bbl in April, and falling to the \$60/bbl level. U.S. natural gas prices, meanwhile, kicked off 2019 at just under \$3/MMBtu, reaching over \$3.50/MMBtu at one point in January 2019, but have declined since with prices holding steady just under \$2.20/MMBtu.

While concerns around oil and gas price volatility and other external challenges certainly remain, below are five key indicators shaping the upstream oil and gas sector as we close out 2019.

1. U.S. Shale Output Will Continue to Climb

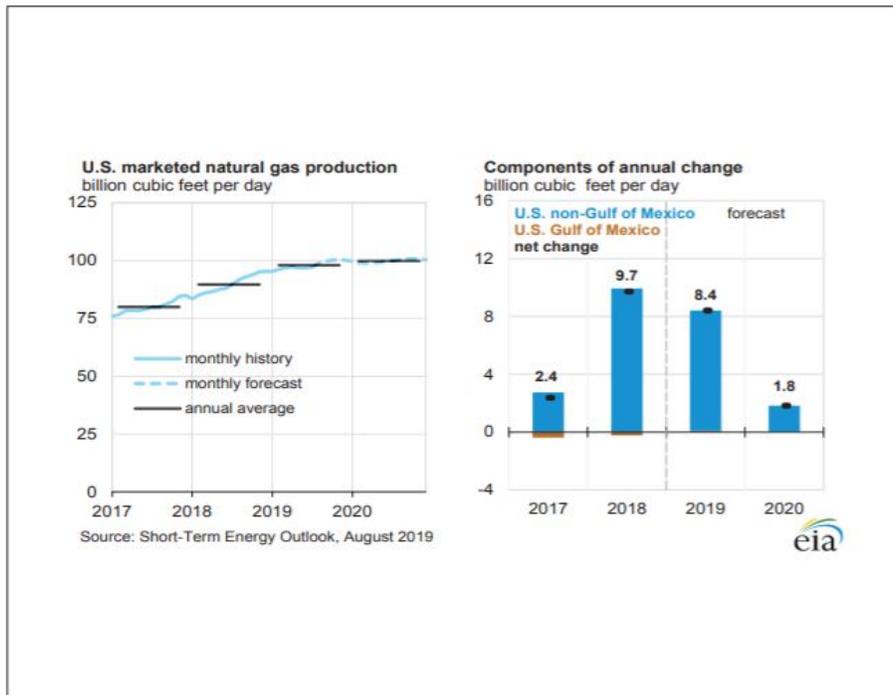
U.S. crude oil production from shale plays is estimated to average 12.3 MMbbl/d in 2019 and increase to an average of 13.3 MMbbl/d in 2020, both of which would be record levels, with most of the growth coming from the Permian region of Texas and New Mexico, according to the U.S. Energy Information Administration's (EIA) latest Short-Term Energy Outlook (STEO). By this time, the nation will also start exporting more crude oil and fuel than it imports, the EIA noted. In 2018, the U.S. became the world's largest crude producer with production of nearly 11 MMbbl, breaking the country's annual record set in 1970.

In April, U.S. crude oil production and lease condensate already hit 12.2 MMbbl/d, according to the EIA, marking the first time that monthly U.S. crude oil production levels surpassed 12 MMbbl/d. This milestone comes less than a year after U.S. crude oil production surpassed 11 MMbbl/d in August 2018.



(Source: U.S. Energy Information Administration)

Meanwhile, U.S. dry natural gas production is forecast to rise to an all-time high of 91.03 Bcf/d in 2019, breaking last year's record of 83.39 Bcf/d, according to the EIA's August STEO. The agency noted that U.S. gas consumption is also expected to rise to 84.65 Bcf/d this year, which would surpass the record-high of 82.07 Bcf/d set a year ago.

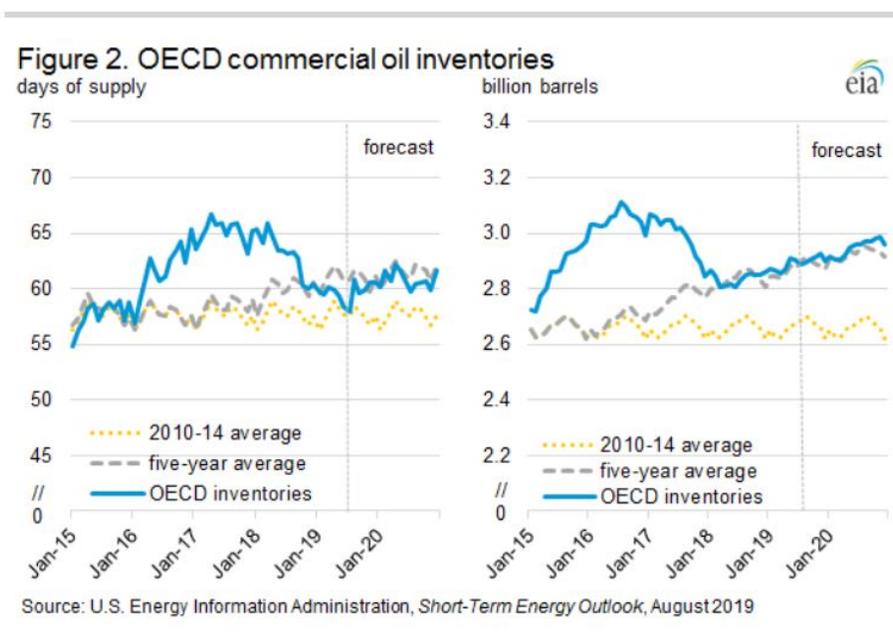


(Source: U.S. Energy Information Administration)

2. Supply-Side Concerns Weigh

In 2019, the U.S. is expected to continue leading growth in oil supply worldwide and will likely continue to do so through 2025. Improving pipeline takeaway capacity, particularly in the Permian Basin, and the combination of confirmed horizontal drilling and hydraulic fracturing techniques, continue to drive higher and more efficient production in the U.S. In addition, rising drilled but uncompleted wells (DUCs) will likely be drawn down as a lower cost production alternative, which should contribute to supply growth going forward.

Globally, the EIA forecasts global oil inventories will increase 100,000 bbl/d in 2019 and 300,000 bbl/d in 2020. In its August STEO, the EIA forecasts 2020 inventory builds of 280,000 bbl/d, but that outcome is highly dependent on crude oil production. The agency expects total global production growth will increase year over year by 1.6 MMbbl/d in 2020. U.S. total liquids production drives the forecast global production growth, and EIA expects that it will average 19.8 MMbbl/d in 2019 and increase by 1.5 MMbbl/d to 21.3 MMbbl/d in 2020.



(Source: U.S. Energy Information Administration)

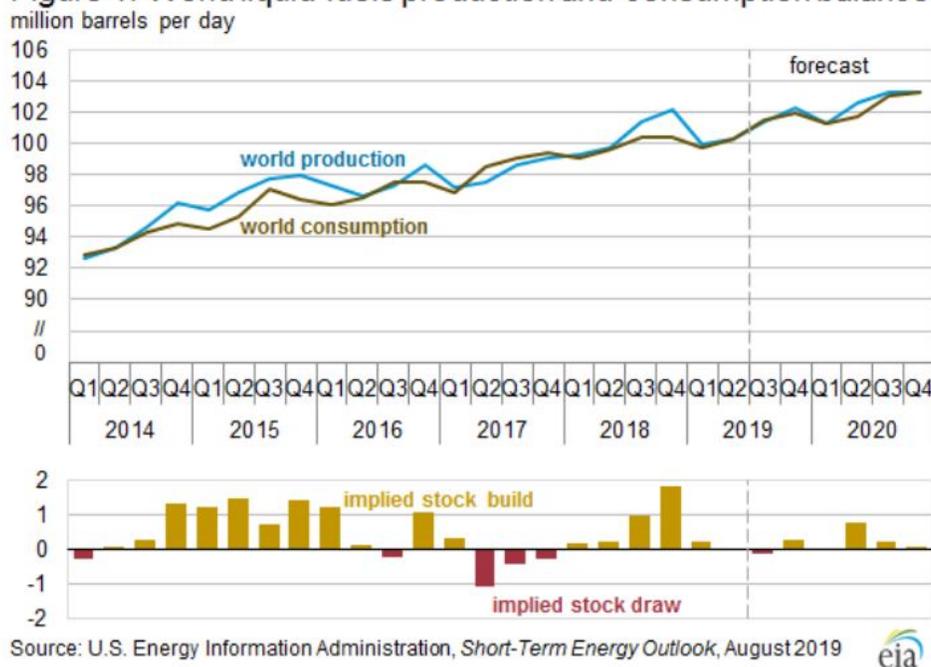
3. Demand Uncertainty Looms

On the demand side, the outlook appears to be much more bearish as trade tensions between the U.S. and China will likely exacerbate demand-side concerns, coupled with stagnant GDP growth worldwide, through at least the end of 2019 and possibly into 2020. In fact, some major oil traders have expressed a bleak outlook for global oil demand.

On August 1, 2019, Brent and West Texas Intermediate (WTI) prices declined by more than 7% on the day following the U.S. announcement of new tariffs on China. The EIA revised its global oil demand forecast down by 100,000 bbl/d to 100.9 million bbl/d in 2019 because of the downside risks to demand.

Globally, the EIA forecasts global liquid fuels consumption, which averaged 99.9 MMbbl/d in 2018, will grow by 1.1 million b/d in 2019 and by 1.4 million b/d in 2020. EIA has revised down its expectation for global liquids demand growth for six consecutive months. This revision reflects slower expected economic growth in many of the world's largest oil-consuming countries, lower than expected oil consumption so far this year, and higher crude oil prices.

Figure 1. World liquid fuels production and consumption balance

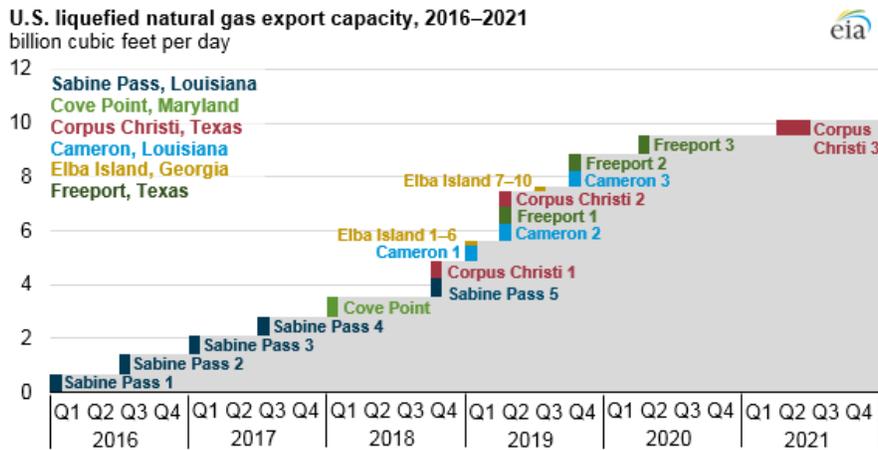


(Source: U.S. Energy Information Administration)

4. LNG Export Surge

U.S. LNG exports have been growing steadily and reached a new peak of 4.7 billion cubic feet per day (Bcf/d) in May 2019, according to the latest data published by the U.S. Department of Energy's Office of Fossil Energy. This year, the U.S. became the world's third-largest LNG exporter, averaging 4.2 Bcf/d in the first five months of the year, exceeding Malaysia's LNG exports of 3.6 Bcf/d during the same period. The U.S. is expected to remain the third-largest LNG exporter in the world, behind Australia and Qatar, in 2019–2020, according to the EIA.

Last year saw some large-scale additions to global LNG production capacity, such as Shell's Prelude and Inpex' Ichthys, both offshore Australia, and Novatek expanded its Yamal LNG facility. U.S. LNG exports have increased as four new liquefaction units (trains) with a combined capacity of 2.4 Bcf/d—Sabine Pass Train 5, Corpus Christi Trains 1 and 2, and Cameron Train 1—came online since November 2018. The U.S. Gulf Coast alone has nearly 8 Bcf/d capacity under construction and another 6.8 Bcf/d has been approved. Over 26 Bcf/d has additionally been proposed.



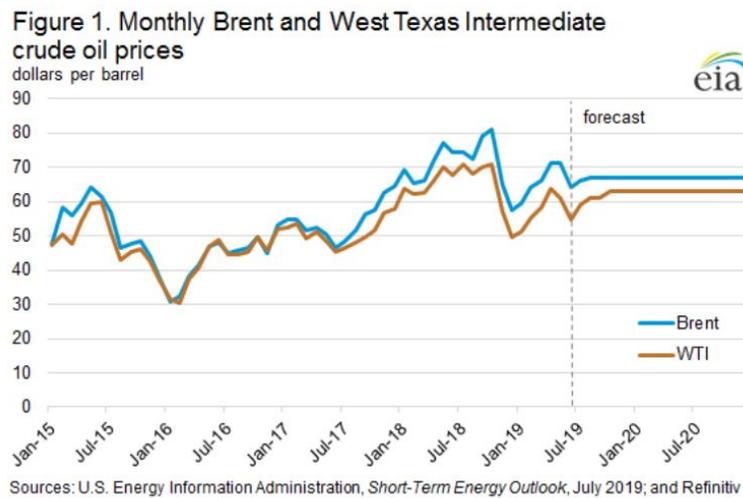
(Source: U.S. Energy Information Administration)

Asian countries have historically accounted for the majority of U.S. LNG exports, but shipments to Europe have increased significantly since October 2018 and have accounted for almost 40% of U.S. LNG exports in the first five months of 2019, according to EIA data. In fact, LNG exports to Europe surpassed exports to Asia for the first time in January 2019.

5. Rising Oil & Gas Production = Depressed Pricing

The good news is that production for both oil and gas is increasing, and producers have continued to adjust to the current pricing environment. However, the increased production will also likely limit price increases. Therefore, forward pricing for oil and natural gas is estimated to be relatively flat this year.

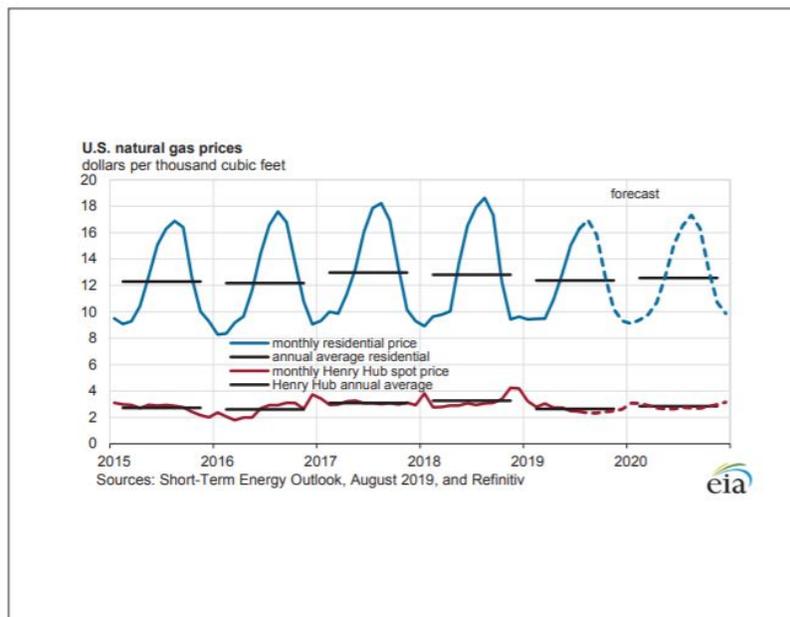
Brent crude oil spot prices averaged \$64/bbl in July, almost unchanged from the average in June, but \$10/bbl lower than the price in July of last year. The EIA forecasts Brent spot prices will increase to \$65/bbl by the fourth quarter of 2019 and remain there throughout 2020. U.S. crude oil prices are expected to average \$5.50/bbl lower than Brent prices from the fourth quarter of 2019 through the end of 2020. In its July STEO, EIA forecast this differential to be \$4/bbl. The wider forecast Brent-WTI differential reflects EIA’s updated assumptions about the marginal cost of transporting crude oil via pipeline from Cushing, Oklahoma, to the U.S. Gulf Coast.



Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, July 2019; and Refinitiv

(Source: U.S. Energy Information Administration)

Meanwhile, EIA lowered its Henry Hub natural gas spot price forecast for the second half of 2019 to an average of \$2.36/MMBtu. The agency expects natural gas prices in 2020 will increase to an average of \$2.75/MMBtu, with signs pointing to rising prices required in the coming quarters to bring supply into balance with rising domestic and export demand in 2020.



(Source: U.S. Energy Information Administration)

About the Author:



Carl Wimberley is a Partner at Opportune and serves as the Upstream Sector Leader and General Counsel. Carl has more than 25 years of business experience, including eight years as a partner with the national law firm Winstead and eight years as a senior executive in the energy industry. Prior to joining Opportune, Carl was the Senior Vice President of Legend Natural Gas serving in a number of roles including General Counsel, VP of Land and Chief Administrative Officer. In these roles, Carl oversaw Legal, Land, Land Administration, IT, Acquisitions/Divestitures, Risk Management, Human Resources and EHS. Carl also served as Senior Vice President and General Counsel of Marlin Midstream (FISH), a publicly traded MLP headquartered in Houston, Texas, with various operations throughout the United States.

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