

Brent Crude Price Assumption For 2019 And 2020 Raised To \$60 Per Barrel

March 18, 2019

S&P Global Ratings has raised its average annual price assumptions for Brent crude oil for 2019 and 2020 by \$5 per barrel (bbl) to \$60/bbl. Our West Texas Intermediate (WTI) price decks and long-term Brent oil price deck for 2021 and thereafter, are unchanged. Our Henry Hub natural gas price assumptions also are unchanged at \$3 per million Btu through 2021. These revisions are effective immediately.

PRIMARY CREDIT ANALYST

Thomas A Watters
New York
(1) 212-438-7818
thomas.watters
@spglobal.com

SECONDARY CONTACTS

Simon Redmond
London
(44) 20-7176-3683
simon.redmond
@spglobal.com

Ben B Tsocanos
New York
(1) 212-438-5014
ben.tsocanos
@spglobal.com

Paul J Odonnell, CFA
New York
1-212-438-1068
paul.odonnell
@spglobal.com

Key Takeaways

- We have raised our 2019 and 2020 average price assumptions for Brent crude oil to \$60/bbl from \$55/bbl.
- Our Henry Hub natural gas assumptions remain at \$3 per million Btu.
- Natural gas supplies remain healthy, with no sigh of letting up.

We use this price deck (see table 1) to assess sovereign and corporate credit quality, in particular for exploration and production (E&P) companies, in accordance with our published criteria (see How S&P Global Ratings Formulates, Uses, And Reviews Commodity Price Assumptions, published Sept. 28, 2018).

S&P Global Ratings' Oil And Natural Gas Price Assumptions

| | --New prices-- | | | | --Old prices-- | | |
|-----------------|----------------|--------|-------------|-------------|----------------|--------|-------------|
| | Brent | WTI | Henry Hub | AECO | Brent | WTI | Henry Hub |
| | \$/bbl | \$/bbl | \$/mil. Btu | \$/mil. Btu | \$/bbl | \$/bbl | \$/mil. Btu |
| 2019 | 60 | 50 | 3 | 1.25 | 55 | 50 | 3 |
| 2020 | 60 | 50 | 3 | 1.25 | 55 | 50 | 3 |
| 2021 and beyond | 55 | 55 | 3 | 1.50 | 55 | 55 | 3 |

Source: S&P Global Ratings. WTI--West Texas Intermediate. bbl--Barrel. NOTE: Prices are rounded to the nearest \$5/bbl and \$0.25/million Btu.

We had lowered our price deck on Jan. 3, 2019 as oil prices retreated due to concerns over the ongoing trade war between the U.S. and China as well as news of China's economic slowdown.

Brent Crude Price Assumption For 2019 And 2020 Raised To \$60 Per Barrel

Moreover OPEC, particularly Saudi Arabia, along with Russia, were producing at record levels to offset what was expected to be a meaningful reduction in global supply due to the Iranian economic sanctions. However, the sanctions themselves fell short of expectations on Nov. 2, 2018, when the U.S. government announced that eight countries would be exempt from Iranian oil import sanctions for six months. This had the effect of drastically increasing the amount of oil expected to be on the market. All the while, U.S. production, driven by unrelenting growth from shale, continued to increase.

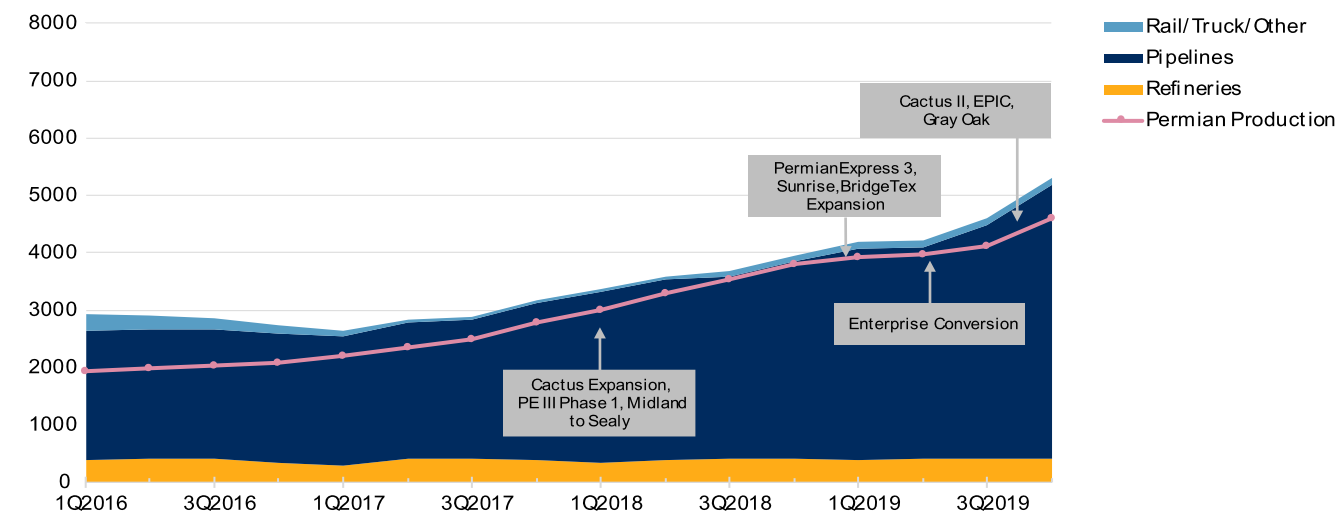
Russia And OPEC

It now appears, however, that once again, measures taken by OPEC and Russia to cut production by a combined 1.2 million barrels per day from October levels, for six months—beginning January 2019—has led to a rally for oil prices, particularly Brent. The price of Brent, which had closed at \$50.57/bbl on Dec. 28, 2018, rose to \$65.06 per barrel by March 15, 2019. Based on announcements from OPEC, it appears that production cuts by Russia and OPEC will continue to support oil markets for the foreseeable future.

Moreover, more positive news about the delay in tariffs between the U.S. and China, as well as the potential for a trade agreement, alleviated some concerns about the impact on oil demand. In addition, looser monetary policy guidance from several central banks has reduced concerns about global economic activity. Other factors which we deem to be wildcards, but we deem supportive for oil prices, are the continuing and rapid declines in production from Venezuela, fluctuating exports from Libya and rhetoric from the U.S. State Department that currently seems to indicate that waiver sanctions will be lifted for the eight countries originally exempt from Iranian sanctions, which could reduce oil supply.

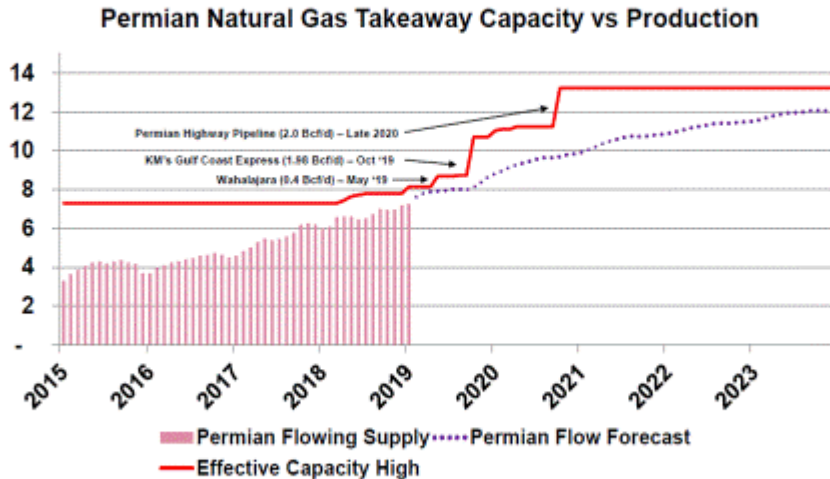
While the price of WTI has also responded positively, it has not rebounded quite as strongly as Brent. This is largely due to expectations about the continuing growth of oil production from the Permian Basin. Permian production is constrained by a lack of pipeline capacity. Production from the region had bumped right up against the 3.4 million bbl/d of regional takeout capacity. However, S&P Global Platts expects that an additional 2.6 million bbl/d of pipeline capacity will come on line in 2019 and early 2020, which will alleviate the takeout issues. The U.S. Energy Information Administration expects Permian production to grow close to 800,000 bbl/d in 2019. We also recognize that oil demand growth for the next few years is likely to remain positive, albeit moderating over time.

Chart 1
By Late-2019, The Permian Will Have More Than Sufficient Takeaway Capacity



Source: Source: S&P Global Platts Analytics
Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

Two pipelines and expansions in Mexico sufficient to support gas production growth



S&P Global
Ratings

Source: S&P Global Platts Analytics
Private & Confidential

9

Lower Production Costs

Our long-term price deck assumptions of \$55/bbl for both Brent and WTI mostly reflect our view of the pronounced industry cost deflation that has taken place. Over the past few years, marginal production costs have declined significantly due to engineering optimization, improved drilling efficiencies, and cost reductions, especially in higher-cost U.S. shale formations. Drillers, forced to improvise because of low prices, continue to employ new drilling, fracking, and well-completion techniques that have resulted in more permanent cost reductions. While we've seen some nominal upward pricing pressure recently from oilfield service companies, particularly for onshore U.S. completions, many operators are targeting at least flat or lower unit costs through ongoing improvements in efficiency, digitization, or closer cooperation with service companies and drillers.

We continue to see a fundamental shift occurring in the U.S. natural gas production profile as production has veered from the Southwest and Rockies to the prolific and economic Marcellus and Utica shale plays in the Northeast. We expect the significant ongoing build-out of takeaway capacity will lead to further narrowing of the differentials and production increases. The boom in U.S. oil shale drilling in recent years has also produced natural gas as a by-product of liquids extraction, with a significant ramp-up in natural gas production from the Permian basin and other oil regions. However, natural gas production has exceeded existing processing and takeaway capacity, resulting in wide natural gas basis differentials in the Permian. Several new pipelines are under construction, which should alleviate this bottleneck over the next two years. Once the takeaway capacity constraints are relieved, we believe these low-cost plays will be able to quickly meet any uptick in demand (e.g., from increased power generation, industrial production, or liquefied natural gas exports), which will effectively cap natural gas prices.

Related Research

Brent Crude Price Assumption For 2019 And 2020 Raised To \$60 Per Barrel

- S&P Global Ratings Expands Its Published Price Assumptions To Include Canadian AECO Benchmark Gas Price, Feb. 7, 2019
- S&P Global Ratings Lowers Brent And WTI Oil Price Assumptions For 2019 Through 2020; Natural Gas Price Assumptions Are Unchanged, Jan. 3, 2019
- FAQ: How S&P Global Ratings Formulates, Uses, And Reviews Commodity Price Assumptions, Sept. 28, 2018
- Methodology For Crude Oil And Natural Gas Price Assumptions For Corporates And Sovereigns, Nov. 19, 2013

This report does not constitute a rating action.

Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.