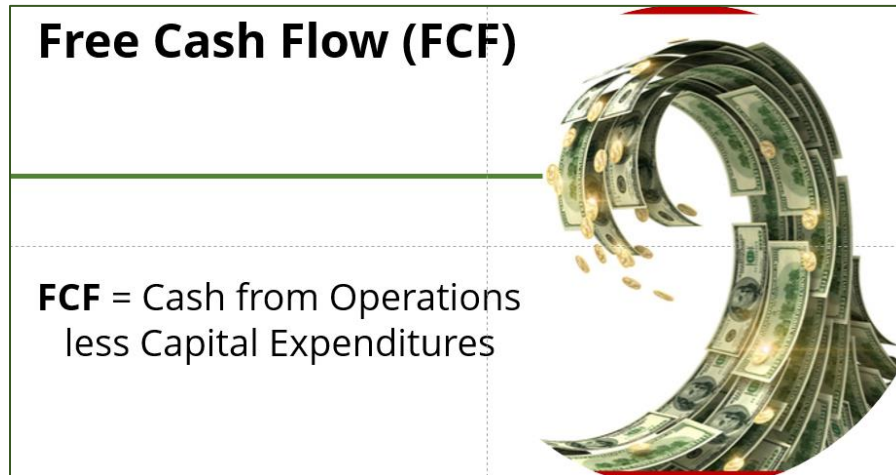


## Key Themes for Energy in 2020

Following are excerpts of some of the key energy “themes” for the US in 2020, taken from a recent CreditSuisse energy research report [1]:

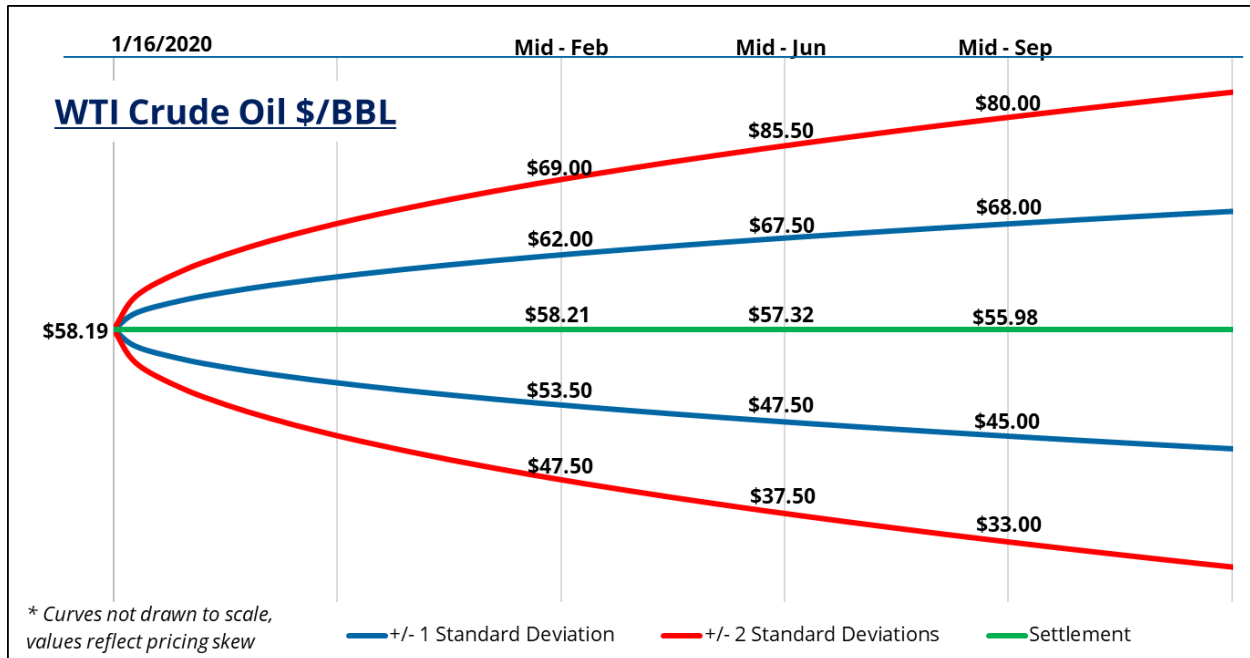
- **E&P companies** are evolving from growth-oriented to more capital disciplined and free cash flow generating entities; [2]



- **Utilities** will continue to transform into a lower-carbon and higher tech industry as renewable power without fuel costs and grid modernization drive earnings growth with less customer burden;
- **Alternative Energy and Renewables** to see new business models emerging around batteries as costs decline and customer adoption rates tick up;
- **Oil prices** for WTI/Brent are forecast with average prices per barrel of \$55 and \$63, respectively;
- **Natural Gas prices** are forecast to average \$2.50/MMBtu;
- **Royalty Minerals** expect further consolidations in 2020. Large-scale transactions could pick up from private equity-backed mineral entities, looking to exit either by coming to the public market, or being consolidated by one of the existing publics.
- **Oilfield Services** are expected to face continued headwinds from E&P capital discipline and efficiency gains.

### WTI Crude Oil Outlook

The price distribution below shows the crude oil spot price on January 16, 2020, as well as the predicted crude oil prices based on option and futures markets. The blue lines are within one standard deviation ( $\sigma$ ) of the mean, and the red lines are within two standard deviations.



Based on January 16, 2020 prices, the markets indicate that in mid-February 2020 there is a 68% chance that oil prices will be between \$53.50 and \$62.00 per barrel. Likewise, there is about a 95% chance that prices will be between \$47.50 and \$69.00. By mid-September 2020, the one standard deviation (1 $\sigma$ ) price range is \$45.00 to \$68.00 per barrel, and the two-standard deviation (2 $\sigma$ ) range is \$33.00 to \$80.00 per barrel. In other words, there is a 95% probability that the expected price of oil will be between approximately \$33 and \$80 per barrel, and a 97.5% probability it will not be above \$80 per barrel.

## Natural Gas Outlook

We can do the same thing for natural gas, which is currently trading at \$2.14 per MMBTU on the Henry Hub. Although more affected by seasonal factors than crude oil, in mid-February 2020, the one standard deviation (1 $\sigma$ ) price range is \$1.85 to \$2.40 per barrel (68% probability) and the two standard deviation (2 $\sigma$ ) range is \$1.60 to \$2.85 per MMBTU (95% probability).

## Key Takeaways

Remember, these option analyses deal in expected probabilities, not certain outcomes—but that doesn't make it any less useful. If someone asks you longingly if oil will be at \$100 again soon, you now can respond with "there is about a 97.5% probability that oil prices aren't expected to get above \$80 by mid-September 2020, so I wouldn't count on it."

## Sources:

[1] Energy in 2020: Evolving," December 19, 2019, CreditSuisse Equity Research report. Equity Research Global

[2] Image downloaded and modified from CreativeCommons.org, credit to Fabius Maximus website.



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