



**Tortoise Talk**  
Energy update

Fourth quarter 2018

# Tortoise Talk Fourth Quarter 2018

The broader energy sector, retreated substantially during the last quarter of the year, returning -23.7%, bringing the 2018 performance to -18.1%. The broader equity market declined as well due to trade tensions and interest rate fears, returning -13.5% in the fourth quarter and -4.4% for the year, and commodity prices were volatile with crude oil prices seeing both the peak and trough for the year in the last quarter. Continued U.S. production growth, increased production from the Organization of the Petroleum Exporting Countries (OPEC), specifically Saudi Arabia in anticipation of the Iranian sanctions, and uncertainty leading up to the OPEC meeting in Vienna on Dec. 5, all contributed to driving oil prices lower. The midstream segment pulled back too partly due to near-term uncertainty around simplification transactions and further evolution of the midstream segment.



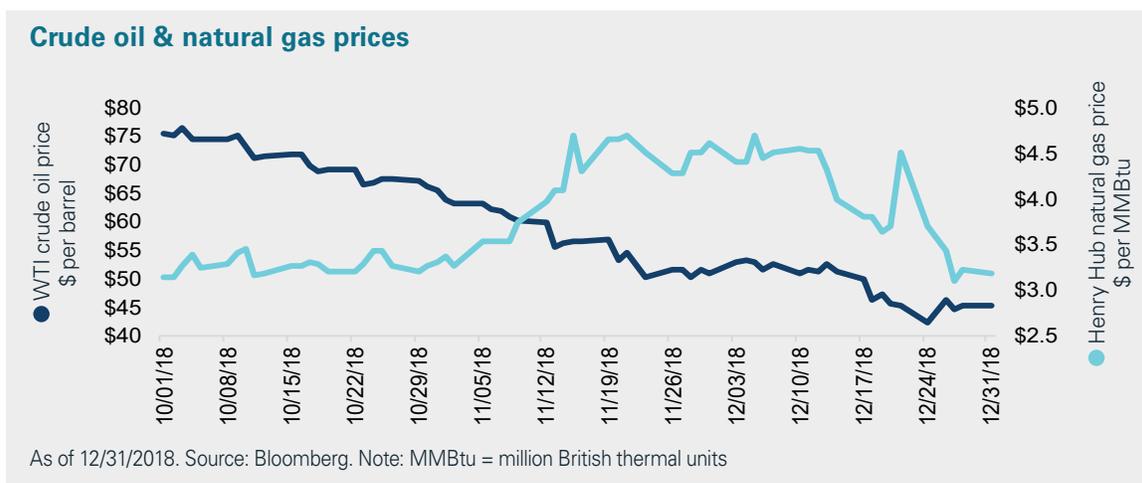
## Upstream

Upstream oil and gas producers experienced a strong pullback during the final quarter returning -34.8%, bringing year-end performance to -28.3%. Crude oil prices, represented by West Texas Intermediate (WTI), ended the year under \$50 per barrel after approaching \$80 per barrel in early Oct. Crude oil prices began the year at \$60.37 and steadily increased over the first three quarters. The fourth quarter brought volatility as oil prices fell from a high of \$76.41 on Oct. 3 to a low of \$42.33 on Dec. 24, 2018 before ending the year at \$45.41.

U.S. crude oil production is expected to average 10.9 million barrels per day (MMbbl/d) in 2018 and to increase to 12.1 MMbbl/d in 2019. This is significant growth from 2017.<sup>1</sup> Production growth in the U.S. will be offset globally by declining OPEC production as per the agreed upon cut of 800,000 barrels per day (b/d) at the December OPEC meeting and the 400,000 b/d cut from non-OPEC countries including Russia. Regarding demand, the EIA expects global liquid fuels consumption to grow by 1.5 MMbbl/d in 2019, largely driven by increases in China, U.S. and India. U.S. net imports of crude oil and petroleum product are projected at 2.4 million b/d in 2018, down from 3.8 million b/d in 2017.<sup>1</sup> Net crude oil imports are expected to continue to decline to 1.1 million b/d in 2019 and further still to less than 0.1 million b/d in 2020. By the end of 2020, the EIA predicts the U.S. will be a net exporter of crude oil and petroleum products.<sup>1</sup>

Broad energy = S&P Energy Select Sector<sup>®</sup> Index  
 Equity market = S&P 500<sup>®</sup> Index  
 Fixed income = Bloomberg Barclays U.S. Aggregate Bond Index  
 Oil and gas producers = Tortoise North American Oil and Gas Producers Index<sup>SM</sup>

Natural gas prices were volatile during the fourth quarter as inventories were low at the end of injection season followed by cold weather in parts of the country. Weather played a factor in natural gas prices throughout the year as prices opened the year at the high of \$6.24 per million British thermal units (MMBtu) with the “bomb cyclone” in the Northeast, then quickly fell to a low of \$2.49 in February and before ending the year at a closing price of \$3.19. Natural gas production is expected to average 80.7 billion cubic feet per day (bcf/d) in 2018 and 87.3 bcf/d in 2019<sup>2</sup>. The U.S. continues to export significant amounts of natural gas by pipeline to Mexico and liquefied natural gas (LNG) to the rest of the world, which is benefiting natural gas producers. In 2018, the U.S. exported more natural gas than it imported, with net exports averaging 2.1 bcf/d.<sup>1</sup> Gross U.S. exports of natural gas are expected to continue to grow by more than 30% in 2019 and another 15% in 2020.<sup>1</sup>



## Midstream

Performance in the midstream sector declined along with broad energy, returning -13.6% for the fourth quarter and -10.5% for the year with the MLPs returning -16.7% for the fourth quarter and -13.4% for the year. Despite market turmoil, midstream companies showed their resilience with nearly 95% of midstream MLPs increasing or maintaining their third quarter distribution over the prior quarter.

The MLP sector continues to evolve. We expect even higher distribution coverage and lower leverage going forward. Many companies have shifted to self-funding the equity portion of their capex programs, reducing reliance on capital markets access. As a result, we expect dramatically less equity supply issuance in 2019 and beyond as companies focus on return of capital to shareholders in the form of strong yield, debt pay-down, distribution growth and stock buybacks. Some companies are also selling non-core assets to arbitrage the valuation gap between private and public midstream assets.

We've deemed 2018 as the year of the transaction, with more than half of MLP companies participating in simplification transactions. In many cases, these transactions resulted in an elimination of incentive distribution rights (IDRs). These transactions benefited the sector, resulting in improved corporate governance and lower costs of capital. We expect this trend to continue and by the end of 2019 we anticipate more than 85% of MLPs will have eliminated IDRs.

With significant midstream investment needed to transport the record U.S. energy supply to areas of demand, including export facilities, several pipeline companies are planning to consolidate efforts to efficiently put capital to work. One example is a potential consolidation of two competing Permian Basin long-haul crude oil lines. If combined, the project would be owned by six different midstream companies and would ease concerns of over-investment in basin takeaway capacity. Our outlook for capital investments remains at approximately \$139 billion for 2018 to 2020 in MLPs, pipelines and related organic projects.

## Downstream

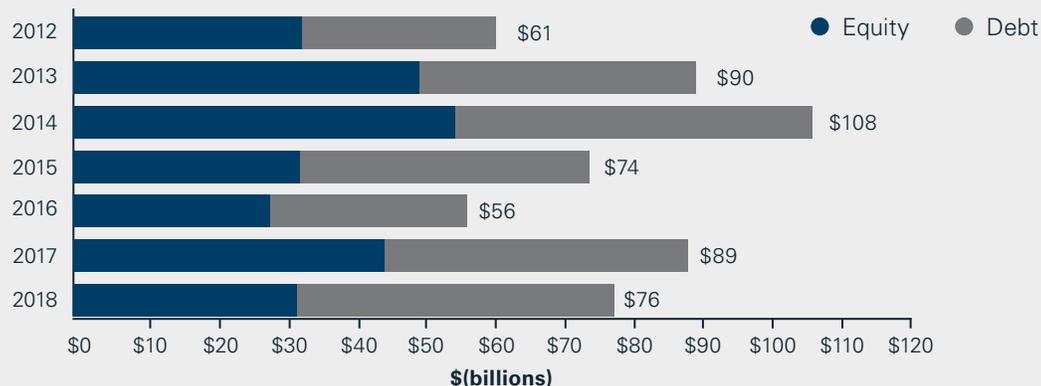
Cleaner energy solutions continue to change the energy landscape and electricity generation in the U.S. continues to evolve. The most notable transition is the continued displacement of coal by natural gas. The EIA expects the share of U.S. total utility-scale electricity generation from natural gas to rise from 35% to 37% from 2018-2020 and conversely, the share of electricity generation from coal to decrease from 28% to 24% from 2018-2020.<sup>1</sup> Renewables are also forecast to continue to gain market share, primarily through the use of solar energy as the EIA expects average U.S. solar generation to rise by more than 40% from 2017 to 2019. We anticipate that utilities will continue to find opportunities to include renewable infrastructure into their rate base, the value of the property on which the utility is permitted to earn a rate of return. Petrochemical companies, another downstream end-user of energy, will likely take advantage of higher natural gas liquids (NGL) supplies, increasing their margins.

Refiners are expected to benefit from the upcoming International Maritime Organization (IMO) 2020 regulation. Starting in January 2020, the maximum sulphur content of marine fuel oil, used in ocean vessels, will decrease from 3.5% to 0.5%. It is expected that in the fourth quarter of 2019, U.S. refinery runs will increase and refiners will maximize upgrading of high-sulphur heavy fuel into low-sulphur distillate fuel. This likely results in above average refinery utilization rates in 2020.<sup>1</sup>

## Capital markets

Capital markets activity picked up slightly during the fourth quarter with MLPs and other pipeline companies raising approximately \$7 billion in total capital, with nearly all of the issuance in debt. This brings total capital raised for the year to approximately \$76 billion. Alternative options for raising capital remain available, including: joint venture, partnerships, PIPEs and sale of non-core assets.

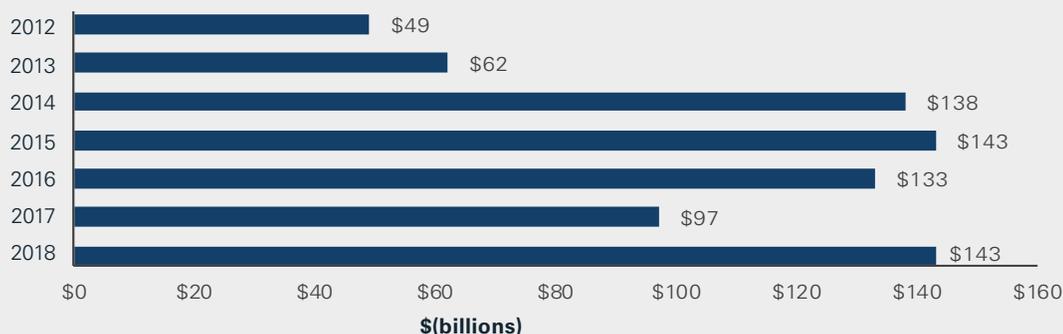
### MLP and pipeline company debt & equity offerings



Source: Company filings. As of 12/31/2018. Includes equity issued to sponsors.

Merger and acquisition activity among MLPs and other pipeline companies also picked up during the last quarter with more than \$30 billion in announced transactions, bringing the 2018 announced transactions to approximately \$143 billion. There were two large transactions announced in the fourth quarter with Western Gas' simplification transaction and strategic deal between Western Gas Partners, LP, Western Gas Equity Partners, LP and Anadarko Petroleum Corporation, valued at approximately \$11.5 billion being the largest. EnLink Midstream, LLC also announced a simplification transaction to acquire EnLink Midstream Partners, LP in a deal valued at approximately \$10 billion.

### Announced MLP and pipeline company acquisitions



Source: Company filings. As of 12/31/2018. Includes MLP and pipeline corporations, including those transactions between MLPs.

### Regulatory landscape

There were two noteworthy issues on the mid-term ballots in November. First, Colorado's Proposition 112, proposing a 2,500 foot drilling setback from occupied structures, was defeated. We believe that the Colorado energy industry and state legislature will likely work together towards a permanent resolution, removing the need for a future challenge. Second, in Nevada, voters approved Question 6, a ballot measure to increase the state's renewable portfolio standard (RPS) to 50% by 2030. The measure will require re-approval in 2020 in order to go into effect. The state hopes to spur investment and advance its leadership in renewable energy.

### Concluding thoughts

As we set course in 2019, we see a positive backdrop for energy stocks with crude oil supply and demand in balance and natural gas inventories low. With oil prices above the \$40 per barrel break-even price in the U.S., we expect U.S. production growth for crude oil, natural gas and NGLs to meaningfully increase again and likely surpass the record 2018 production. Beyond strong fundamentals and compelling valuations, key catalysts unfolding in the midstream sector include: structure clarity as simplification transactions wind down, increased return of capital to shareholders and improved fund flows into the sector. Because of this favorable backdrop, we are excited about the sector's prospects in 2019.

## Disclaimer

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The Tortoise MLP Index<sup>®</sup> is a float-adjusted, capitalization-weighted index of energy MLPs. The Tortoise Midstream MLP Sub Index is comprised of all constituents included in the following sub sector indices: Crude Oil Pipelines, Gathering & Processing, Natural Gas Pipelines, and Refined Products Pipelines. The Tortoise North American Pipeline Index<sup>SM</sup> is a float-adjusted, capitalization-weighted index of pipeline companies (MLPs, corporations, LLCs) domiciled in the U.S. or Canada. The Tortoise North American Oil and Gas Producers Index<sup>SM</sup> is a float-adjusted, capitalization weighted index of North American companies engaged primarily in the production of crude oil, condensate, natural gas or NGLs. The S&P 500<sup>®</sup> Index is a market-value weighted index of equity securities. The S&P Energy Select Sector<sup>®</sup> Index is a modified market capitalization-based index of S&P 500 companies in the energy sector involved in the development or production of energy products. The FTSE NAREIT All Equity REITs Index is an unmanaged, capitalization-weighted index of all U.S. equity real estate investment trusts. The S&P Utilities Select Sector Index<sup>®</sup> is a modified market-cap weighted index composed of constituents of the S&P 500<sup>®</sup> Index in the utilities sector. The Barclays US Aggregate Bond Index is an unmanaged index comprised of government securities, mortgage-backed securities, asset-backed securities and corporate securities to simulate the universe of bonds in the market. The maturities of the bonds in the index are over one year.

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**It is not possible to invest directly in an index.**

<sup>1</sup> Energy Information Agency, January 2019 STEO

<sup>2</sup> PIRA

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