Tortoise

Tortoise Talk
Energy update

First quarter 2019

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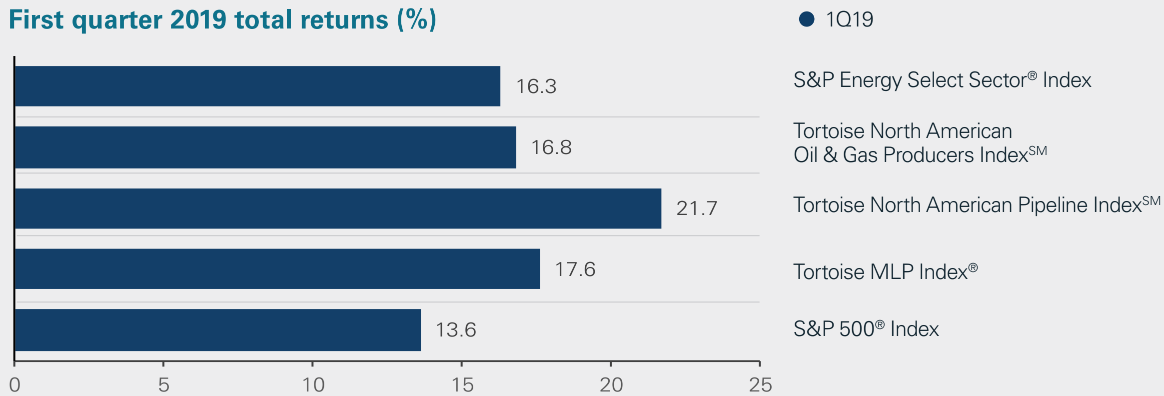
The energy sector bounced back strongly after a dismal end to 2018 returning 16.3% during the first quarter, driven partly by both planned and unplanned curtailments from The Organization of Petroleum Exporting Countries (OPEC) that lifted crude oil prices more than 30%, their strongest quarter since 2009. Macro themes that caused headwinds at the end of 2018, specifically concerns of Fed tightening appear to have abated somewhat and the government seems to be edging closer to a trade war solution. Following a solid earnings season, midstream energy is gaining back favor with strong fundamentals and the winding down of restructurings driving strong performance for the first quarter.

First quarter 2019 total returns (%)



As of 3/31/2019. Source: Bloomberg. It is not possible to invest directly in an index. Please see index definitions on disclaimer page.
Past performance is no guarantee of future results.

Upstream

Upstream oil and gas producers experienced strong performance during the first quarter of 2019, returning 16.8%. Crude oil prices, represented by West Texas Intermediate (WTI), increased steadily throughout the quarter, ending March at the high price of $60.14 after beginning the year at $46.54. Higher prices were driven by materializing production cuts from OPEC members and non-OPEC producers as well as worldwide production outages.

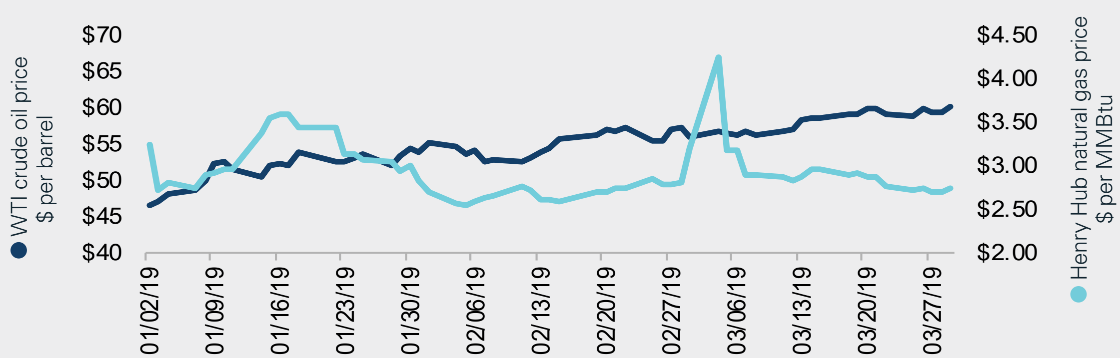
U.S. crude oil production is expected to average 12.4 million barrels per day (MMbbl/d) in 2019 and 13.1 MMbbl/d in 2020, a big step up from the 9.3 MMbbl/d produced in 2017[1]. As a consequence of this growth, net imports of crude oil and petroleum products are expected to continue falling and by late 2020, the U.S. Energy Information Administration predicts the U.S. will be a net exporter of these products. Crude oil exports hit a peak of 3.6 MMb/d in mid-February and continue to be an important clearing mechanism for incremental production growth. In its 5-year outlook, the International Energy Agency (IEA) highlighted that U.S. leadership in production growth is transforming global markets. IEA projects that by 2024, the U.S. will surpass Russia in volume of oil exported and match or even exceed the exports of Saudi Arabia. On the demand side, growth is expected to average 1.3 MMbbl/d in 2019 and to continue to average 1.2 MMbbl/d per year for the next five years – a sufficient amount to match expected supply.[2]

Energy sector = S&P Energy Select Sector® Index
Oil and gas producers = Tortoise North American Oil and Gas Producers Index℠

On near term supply, March compliance with the OPEC production target set in December increased to 156%, up from 94% in the prior month[2], driven by larger than promised cuts from Saudi Arabia and the UAE. Further declines from exempted OPEC members Iran, Libya and Venezuela have reduced output by an aggregate 1.0 MMbbl/d from October 2018 baseline levels. At the March joint ministerial meeting, OPEC noted it will maintain the current output reduction targets through June, at which point it will make a decision on extending the curtailments until year end.

Natural gas prices decreased slightly during the first quarter, opening the period at $2.82 per million British thermal units (MMBtu) before closing the quarter at $2.73. Prices experienced significant volatility during the quarter due to several polar vortex events in the U.S. Prices troughed at $2.54 on Feb. 5, 2019 and peaked at $4.25 on March 4, 2019. The natural gas withdrawal season ended with inventories well below the five year average. Yet with natural gas production expected to grow again and average 90.2 billion cubic feet per day (bcf/d) in 2019 and 93.3 bcf/d in 2020[3], we believe inventories are ample to meet domestic demand and LNG export needs. The U.S. became a net exporter of natural gas in 2017, the trend continued in 2018[4], and with more LNG liquefaction additions this year and next, net exports are set to increase.

Crude oil & natural gas prices



As of 3/31/2019. Source: Bloomberg. Note: MMBtu = million British thermal units

Midstream

Pipelines improved in the first quarter returning 21.7% and MLPs returned 17.6% for the same period. Fundamentals continue to show strength on the back of higher production. Partly due to greater need to export crude oil and natural gas, the organic growth opportunity for midstream companies is healthy at approximately $124 billion for 2019 to 2021.

With lower leverage and improved distribution coverage, there is visibility to funding the equity portion of projects with discretionary cash flow. Additionally, private equity interest in midstream is healthy to help fund larger projects. To illustrate, Targa Resources recently sold a 45% interest in its Bakken energy infrastructure assets to GSO Capital Partners and Blackstone for $1.6 billion. The transaction, valued at a 15x multiple of cash flow, assisted Targa Resources in meeting its 2019 equity needs and exemplifies how private equity investors are valuing the cash flows of energy infrastructure companies at a higher value than public investors.

Pipeline companies = Tortoise North American Pipeline Index℠
MLPs = Tortoise MLP Index®

Spotlight: Supermajors doubling down on U.S. energy value chain

The recent announcement of Chevron Corp.'s $33 billion acquisition of Anadarko Petroleum Corp. and Occidental Petroleum Corp.'s subsequent bid of $38 billion have highlighted a larger scale pivot in supermajors strategy to short cycle shale investments. This shift in strategy is largely driven by a number of factors including competitive returns with international onshore/offshore projects, reduced risk due to higher surety of supply and the short cycle nature of shale production leading to enhanced capital flexibility.

The existence of supermajors in U.S. unconventional plays is nothing new. The majority of supermajors have been present at some level in U.S. shale in the past five years, with the exception of Total, albeit at a relatively small scale. This is about to change. Both Chevron and Exxon have made the Permian basin a lynchpin of their upstream strategy with significant production growth plans out to 2023-24 announced at their respective 2019 analyst days. BP is also looking to ramp up production over the coming years with its 2018 acquisition of BHPs shale assets giving it scale in the Eagle Ford, Haynesville and Permian basins.

It's important to note that the focus is not just on upstream with the supermajors investing heavily across the entire energy value chain to integrate their significant upstream growth plans with their downstream presence. Examples of this include Chevron's recent acquisition of Petrobras' Pasadena, Texas refinery and Exxon's investments in the Permian to Houston crude pipeline, refining capacity expansion at its Beaumont, Texas refinery and construction of a world-scale ethane cracker at its Baytown, Texas complex, to deal with incremental volume growth out of the Permian basin.

With strong balance sheets, stable multi-year investment programs and the ability to invest through production cycles, the expanding presence of supermajors in U.S. shale is positive for stable, visible longer term production growth. A key beneficiary of this pivot in strategy will be U.S. midstream with higher and more predictable production volumes and improved counterparty risk. We anticipate more large acquisitions of independent U.S. E&Ps, particularly in the Permian basin, as the supermajors look to increase scale by blocking up significant chunks of acreage to support their growth plans in the future.

Downstream

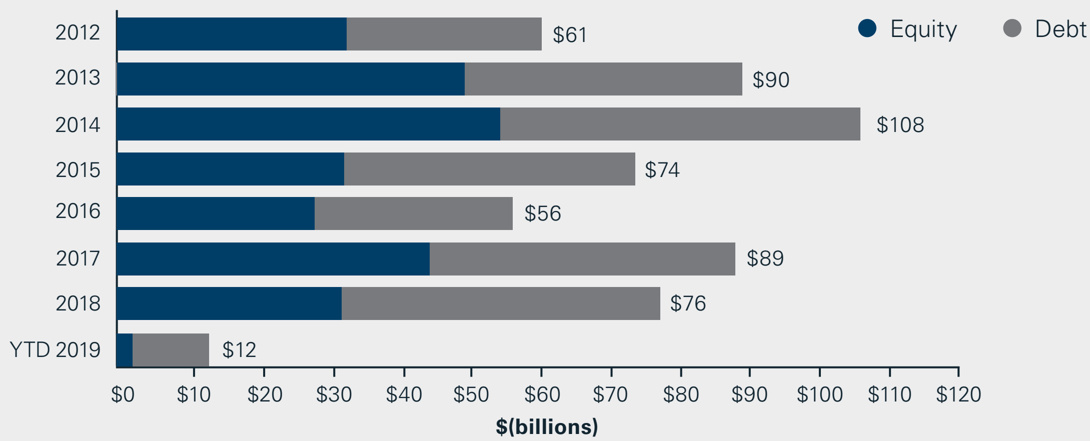
The trend of a cleaner energy future strengthened in early 2019 as coal continues to be displaced by natural gas and renewables. The EIA expects the share of U.S total utility-scale electricity generation from natural gas to rise from 35% to 37% from 2018-2020 with over 45 GW of natural gas capacity under development representing approximately 50% of total planned capacity additions. Conversely, the share of electricity generation from coal is forecast to decrease from 28% to 24% from 2018-2020 with 4.5 GW of coal capacity slated for retirement in 2019.[5] Renewables are also expected to continue to gain market share, primarily through the use of solar energy as Bloomberg New Energy Finance expects average U.S. solar generation to rise by more than 42% from 2018 through 2020.[6] 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 of 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.

Capital markets

Capital markets activity remained challenged compared to historical averages in the first quarter with midstream companies raising approximately $12 billion in total capital, with almost all of the issuance in debt. Alternative options for raising capital remain available, including joint ventures, partnerships, PIPEs and sale of non-core assets.

MLP and pipeline company debt & equity offerings

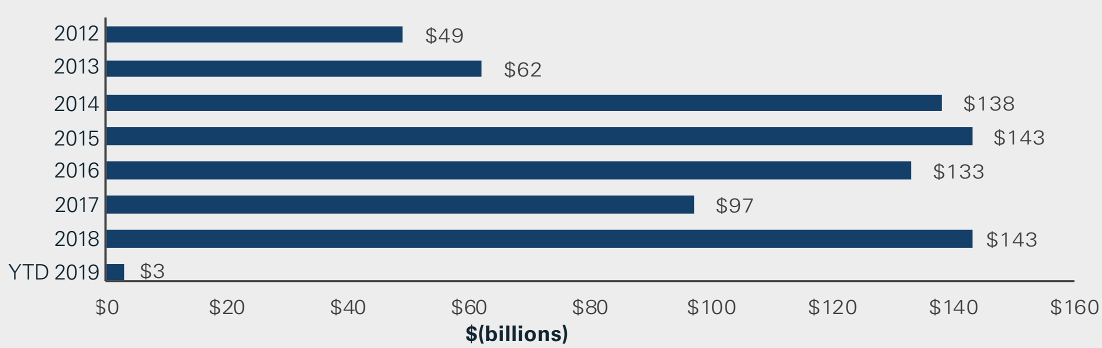


Source: Company filings. As of 3/31/2019. Includes equity issued to sponsors.

Merger and acquisition activity among midstream companies was relatively light during the first quarter with approximately $3 billion in announced transactions. The largest announced transaction for the quarter was EQM Midstream Partners acquiring additional midstream assets in the Appalachian basin for approximately $1 billion.

Private equity companies continue to acquire midstream assets, spending approximately $12 billion in the first quarter. We expect midstream companies to continue divesting non-core assets to private equity investors to help finance growth projects and decrease leverage.

Announced MLP and pipeline company acquisitions



Source: Company filings. As of 3/31/2019. Includes MLP and pipeline corporations, including transactions between MLPs.

Regulatory updates

The Colorado Senate passed SB-19 181, a bill allowing for greater local control of oil and gas activities and widely viewed as a compromise following the defeat of Colorado's Proposition 112 in the fourth quarter 2018. The bill empowers local governments to regulate surface impacts of oil and gas operations in a "reasonable manner." On permitting, the bill only allows the Colorado Oil & Gas Conservation Commission (COGCC) to delay a final determination, rather than refuse to issue a permit. The final version of the bill is viewed as a positive for the industry as it removes a key overhang and includes several concessions that were favorable to the oil and gas industry.[7]

The White House issued two executive orders aiming to boost pipeline construction and lower energy prices. One order directs the Environmental Protection Agency to review and tighten rules to make it more difficult for states to scuttle pipelines by invoking provisions of the Clean Water Act. The other executive order would transfer authority for approving the construction of international pipelines from the Secretary of State to the President, eliminating a lengthy State Department review process.

Concluding thoughts

The winds have shifted positively for energy in the first quarter and investors are returning to the sector. With crude oil prices rising over $60 per barrel, and U.S. oil and gas producers exhibiting steady capital discipline, higher corporate returns are expected this year. Along with that, we anticipate the completion of a host of energy infrastructure projects that will drive fee-based cash flows for years to come. As an extension, the bottlenecks that exist around the wellhead are moving further downstream where midstream energy companies are positioned to stake a claim. Energy production growth in 2019 is expected to move materially higher and midstream companies should benefit from this growth, along with benefitting from being on the final stretch of simplifications, with stronger balance sheets and little need for equity financing. Lastly, the Permian basin is gaining prominence with supermajors Exxon and Chevron setting their sights on the world's largest producing basin and validating the attractiveness of U.S. shale. The energy sector's ability to adapt to the changing landscape and its resilience is evident, exciting and bodes well for the patient investor.

[1] Energy Information Administration April 2019 STEO
[2] International Energy Agency (IEA)
[3] EIA, Wood Mackenzie, BTU Analytics, IHS, EPD (Average)
[4] EIA Annual Energy outlook 2019
[5] EIA
[6] Bloomberg New Energy Finance
[7] Colorado General Assembly SB19-181

Disclaimer

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The Tortoise MLP Index® 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℠ 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℠ 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® Index is a market-value weighted index of equity securities. The S&P Energy Select Sector® 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® is a modified market-cap weighted index composed of constituents of the S&P 500® 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.

It is not possible to invest directly in an index.

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ML19-001365