**Energy Value Chain Update Call**
**Prepared Remarks**
**April 24, 2019**

**Pam Kearney**: Thank you. Good afternoon and welcome to the Tortoise Energy Value Chain update call. I'm Pam Kearney, Vice President of Investor and Public Relations at Tortoise. I'm joined by energy Portfolio Managers Brian Kessens and Rob Thummel to provide a review of the energy sector.

Some of the statements made during the course of this call are not purely historical and may be forward-looking statements regarding our intentions, projections and strategies for the future. These statements are subject to various risks and uncertainties and actual outcomes and results may differ materially from our forward-looking statements. We do not update our forward-looking statements. This presentation is for information only and shall not constitute an offer to sell or a solicitation of an offer to buy any securities.

We''ll begin with Brian Kessens for an energy sector update.

**Brian Kessens**: Thank you. The winds shifted positively for energy in the first quarter and investors are returning to the sector. The broader energy sector, as represented by the S&P Energy Select Sector® Index, rebounded from a dismal end of 2018, up 16.3% at the end of first quarter. Midstream energy increased even more, with the Tortoise North American Pipeline Index℠ returning 21.7% and the Tortoise MLP Index® returning 17.6% in the first quarter. Year-to-date, both MLPs and the energy sector have outperformed the S&P 500® which delivered returns of approximately 13.7%.

West Texas Intermediate (WTI) crude oil prices 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 lower OPEC/Non-OPEC production and steady demand growth. Note yesterday's WTI price was even higher, ending around $66.

Looking ahead, there's a host of energy infrastructure projects teed up and expected to drive fee-based cash flows for years to come. As an extension, the bottlenecks that exist at the wellhead are moving further downstream, additional opportunity for midstream by constructing export infrastructure. Also noteworthy in the quarter: (1) midstream energy is into the final stretch of simplifications, which along with stronger balance sheets and the ability to self-fund capex puts the sector in a good order and (2) the Permian basin is gaining even more prominence with supermajors setting their sights on the world's largest producing basin and validating the attractiveness of U.S. shale.

**Pam Kearney**: Thanks, can you also update us on crude oil production projections and our supply and demand forecasts.

**Brian Kessens:** U.S. crude oil production is growing again this year, expected to average 12.4 MMbbl/d in 2019 and 13.1 MMbbl/d in 2020. With that growth, net imports of crude oil and petroleum products are expected to continue falling and by late 2020, the U.S. EIA predicts the U.S. will be a net exporter of the combination. On exports, crude exports hit a peak of 3.6 MMb/d in mid-February and continue to be a necessary 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. Specifically, the 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 5 years – largely matching the supply increases.

Near term supply remains dynamic. March compliance with the OPEC production target set in December increased to 156%, up from 94% in February, driven by larger than promised cuts from Saudi Arabia and the UAE. Further declines from exempted OPEC members Iran, Libya and Venezuela due to political challenges reduced output by an aggregate 1.0 MMbbl/d from Oct 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.

**Pam Kearney:** Rob, oil and natural gas prices have been going in opposite directions with oil prices up over 40% year-to-date while natural gas prices have declined by 20% to start 2019. Has our outlook for prices changed?

**Rob Thummel:** Our outlook on prices remains the same. U.S. crude oil prices remain in the $55–$65 range while natural gas prices are around $3/mcf. Oil prices have risen as OPEC, specifically Saudi Arabia, have reduced production significantly. We expect global oil inventories to track historical norms resulting in oil prices remaining within our forecasted range. We believe that OPEC will take a wait and see approach on implementation of the Iran sanctions by the U.S. If Iran exports decline then OPEC will be ready to increase production. The goal is to keep global oil inventories at levels that result in stable oil prices. Natural gas prices need to move higher to reach our forecast. Natural gas inventories are low. With low prices comes coal to gas switching during the summer cooling season as well as producer discipline which should result in natural gas prices rising.

**Pam Kearney**: Thanks Rob. So, first Chevron and now Occidental announced it was acquiring Anadarko. This is a $50 plus billion transaction. Greater than $50 billion transactions are a rare in the energy sector. What does this mean for the upstream and midstream sectors?

**Rob Thummel:** You're right $50 plus billion transactions don't happen that often. But, this transaction signifies how important U.S. shale has become to the largest global oil and gas producers in the world. Chevron's CEO described the Permian as the highest return investment dollar that Chevron can spend. Late adopters of U.S. shale technology like Exxon, Chevron and Occidental are now on the hunt for acreage in the Permian so that they can benefit from being a large scale producer. For the upstream space, early adopters of shale with large, contiguous land positions in the Permian like Pioneer, Concho and Diamondback Energy will be on their radar. Related to midstream, the addition of the large, independent, super-majors like Exxon and Chevron into the Permian and other shale basins solidifies the long term viability of shale. As a result, the need for additional energy infrastructure in the future continues. Specific to this transaction, Anadarko is a 55% owner of Western Midstream Partners, formerly Western Gas. We believe that whatever entity ends up owning Anadarko will retain Anadarko's interest and will use Western Midstream as its midstream provider as it grows Permian and DJ production.

**Pam Kearney:** Turning to midstream many of the catalysts we've discussed in recent months are coming to pass. Brian,what are the takeaways?

**Brian Kessens:** Sure, thanks Pam. 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 in capital expenditure from 2019 to 2021. With lower leverage and improved distribution coverage, there is visibility to funding the equity portion of projects with discretionary cash flow.

Enterprise value to EBITDA and price to distributable cash flow metrics for MLPs remain well outside of historical norms, currently 24% and 49% cheap respectively, on 2020 estimates. As the midstream sector has continued to evolve, we assess midstream C-Corps as well, which while not quite as cheap on a relative basis to historical valuations, are quite compelling, roughly 15% and 20% cheap on EV/EBITDA and Price/Earnings ratios.

Our total outlook for the next 12 months is cash distribution growth in the 4-6% range plus the MLP sector yield of 8.4%. All in, this leads to a total return expectation of 12-14%. Note, this does not take into account the change in the market multiple, where we think there is additional upside to return to average historical multiples. Getting the timing on that change is harder, yet with sector evolution of the past few years, we think we're getting closer.

**Pam Kearney: Are midstream companies effectively still locked out of the capital markets, and how has this changing landscape impacted the private equity activity in the first quarter?**

**Brian Kessens**: Yes, equity capital markets activity remain challenged compared to historical averages. Midstream companies raised approximately $12 billion in total capital in the first quarter, 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.

Private equity deployed approximately $36 billion in midstream energy infrastructure transaction since 2017. Publicly traded midstream companies divested non-core assets to private equity to help finance growth projects and reduce leverage. In our opinion, the most interesting observation is the cash flow multiples paid by private equity. Private equity investors paid on average a 13X EBITDA multiples for midstream assets, consistently higher than what investors in the publicly traded stocks are currently valuing these companies. This disconnect supports our theme that the midstream energy infrastructure sector is significantly undervalued.

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

**Pam Kearney: Okay thank you and now turning to you Rob, can you highlight trends in the downstream segment?**

**Rob Thummel:** Sure, the trend of a cleaner energy future strengthened in the start of 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. Over 45 GW of natural gas capacity are under development, representing approximately 50% of total planned capacity additions. Conversely, the share of electricity generation from coal is forecast to decline from 28% to 24% from 2018-2020 with 4.5 GW of coal capacity slated for retirement in 2019.

Renewables are also expected to continue to gain market share, primarily through the use of solar energy as the EIA expects U.S. solar generation to rise by more than 42% from 2018 through 2020.

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, refinery runs will focus on maximizing upgrading of high-sulphur heavy fuel into low-sulphur distillate fuel. This likely results in strong diesel margins in 2020. And finally, petrochemical companies, another downstream end-user of energy, will likely take advantage of attractively priced natural gas liquids (NGL) supplies, with an eye on robust margins.

**Pam Kearney: Thanks. Rob, what do rising oil prices in 2019 mean for gasoline prices as we approach the summer driving season?**

**Rob Thummel:** The EIA recently provided its prediction for motor gasoline prices for the 2019 summer driving season. The good news for the consumer is that the EIA predicts that summer 2019 gasoline prices will be 3% lower than the summer of 2018. Most of you know that I love to talk about record setting activities in the energy sector. Here is another one for you. The EIA forecasts U.S. motor gasoline consumption to approach record levels this summer. In addition, the EIA forecasts the U.S to be a net exporter of total gasoline for the first time since 1960. In my opinion, this is significant. It sends signal to the rest of the world that U.S. refiners can deliver low cost gasoline. Of course, increased exports improves the trade deficit as well.

**Pam Kearney: Okay. The last question to you Brian.** Any significant regulatory announcements to cover?

**Brian Kessens**: Oh yes. Colorado recently signed into law a requirement that oil and gas producers receive local approval of proposed drilling activity prior to requesting drilling permits from the Colorado Oil and Gas Commission. The governor stated that "this is an important step for the stability of Colorado to end the oil and gas wars in a way that everybody wins." We don't expect this new law to materially change the course of drilling activity in Colorado.

In addition, the FERC announced that it is initiating a Notice of Inquiring regarding its policy to determine the return on equity for public utilities and interstate pipelines. The proposed calculation of base ROE incorporates four equally-weighted methodologies including DCF, CAPM, expected earnings and risk premium models.

Lastly, President Trump reaffirmed his support of the Keystone XL pipeline by issuing a new presidential permit. One question remains as to Nebraska's supreme court decision on an alternative route for construction to begin.

**Pam Kearney: Thank you. We'll wrap-up, with a recap of what we covered in today's call:**

- U.S. leadership in production growth is transforming global markets and is projected to surpass Russia in volume of oil exported and match or even exceed the exports of Saudi Arabia
- OPEC is expected to maintain the current output reduction targets through June, and delay a decision on extending the curtailments until year end
- Chevron's recent announcement to acquire Anadarko and Occidental's counter offer signifies how important U.S. shale has become to the largest global oil and gas producers in the world
- Midstream fundamentals continue to show strength on the back of higher production
- The trend of a cleaner energy future strengthens as coal continues to be displaced by natural gas and renewables with renewables expected to gain market share, primarily through the use of solar energy
- Colorado signed into law Senate Bill 19 -181 requiring oil and gas producers to receive local approval of proposed drilling activity prior to requesting drillings permit from the Colorado Oil and Gas Commission.
- Lastly, the energy sector's ability to adapt to the changing landscape and its resilience has made for an exciting start to 2019. And, in our view, the midstream sector's fundamentals and valuations are quite compelling

With that, we'll open up the call for questions.

Thank you all for joining us today. We invite you to visit our website at www.tortoiseadvisors.com and download our Tortoise QuickTake energy podcast series and Tortoise Talk insight piece where we will share our views on timely energy events weekly. Thank you.

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