

**Energy Value Chain Update Call  
Prepared Remarks  
July 26, 2017**

**Matt Sallee:** Good afternoon and welcome to Tortoise's Energy Value Chain update call. I'm Matt Sallee, Senior Managing Director at Tortoise. I'm joined today by fellow portfolio managers Brian Kessens and Rob Thummel. We're going to review the state of the energy sector and provide our energy sector outlook for the remainder of 2017. Following that, we'll open up the call for questions from our listeners. As a reminder, some of the statements made during the course of this presentation 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 provided for information only and shall not constitute an offer to sell or a solicitation of an offer to buy any securities.

**Matt Sallee:** *Brian, let's start with you. Can you talk about this seemingly unshakeable sentiment facing the energy sector. Can you shed a little light on what's going on?*

**Brian Kessens:** Sure Matt. Sentiment remains negative for energy and MLP correlations with crude oil continues to be elevated, which combined with weaker access to equity capital markets, drove negative returns. While MLP correlations with crude oil can stay elevated for a bit, we believe it will eventually revert back to more normalized levels. Keep in mind the cash flow from midstream companies derives from volumes, which have been increasing. In fact, since 2014, midstream EBITDA increased at a CAGR of 20%. We believe the cash flow will win out and ultimately the stock price will be reflective of the cash flow of the companies. And specific for MLPs, for patient investors, we think MLPs' attractive current yield helps make it palatable to wait.

**Matt Sallee:** *Can you also provide a recap of the energy value chain performance for the 2<sup>nd</sup> quarter?*

**Brian Kessens:** We had a solid start to 2017, but could not sustain the momentum in the second quarter. Broadly speaking, energy was down, and midstream followed, all tracking crude oil prices lower. Investors turned to weekly crude oil inventory reports to gauge supply and demand, and then grew impatient with a lack of significant draws. And while the May OPEC meeting resulted in expected production cuts, the market reaction was to the downside. This negative sentiment trumped fundamentals during the quarter.

Moving then specifically to performance, the price of crude impacted the entire value chain. The energy sector, represented by the S&P Energy Select Sector<sup>®</sup> Index, fell by -6.6% for the fiscal quarter.

The Tortoise North American Oil and Gas Producers Index<sup>SM</sup>, (TNEP) returned -14.1% with oil prices slipping from a high of \$50.60 to end the quarter at \$46.04 per barrel.

Pipeline companies pulled back too, with the Tortoise North American Pipeline Index<sup>SM</sup> returning -2.4%. MLPs faced additional pressure, causing them to retreat further with a return of -6.5% for the quarter, as represented by the Tortoise MLP Index<sup>®</sup>. While the midstream segment was negative for the quarter, not all pipeline companies retreated to the same extent. Refined products pipelines were the least affected by lower crude oil prices as lower prices tend to drive demand for refined products, such as gasoline. Gathering and processing pipeline companies were impacted the most, particularly those with non-fee-based contracts, due to the negative impact of lower commodity prices on those contracts.

Net/net... the energy sector was down, yet disconnected from fundamentals in our view.

**Matt Sallee:** *How about the macro factors? Rob, give us an update on OPEC's stance on production cuts and outcomes from Monday's OPEC compliance meeting.*

**Rob Thummel:** OPEC has deliberately reduced exports and there is an opportunity for further action given Saudi Arabia's pledge to do "whatever it takes" to defend oil prices. While production has been cut

and compliance has been strong, exports have remained much higher than anticipated, with some reports of only 400,000 bpd cuts versus the 1.2 million bpd stated production cuts. In effect, OPEC has yet to take crude off the market in the volumes that they stated they would. It appears to now be a priority and we expect that both U.S. and global oil inventories will decline throughout the second half of 2017, resulting in a more balanced market and we firmly believe OPEC's extension of the cuts will be a solid tailwind for inventory balances in the 2nd half of the year.

Turning to last Monday's OPEC compliance committee meeting, there weren't any surprise announcements related to the current OPEC agreement. Why? In our view we're in the midst of a seasonal period when global oil demand is the strongest. The Committee will want to see if oil prices continue to react positively to declining U.S. and global oil inventory levels and continued strong demand for oil-related products. The Committee discussed recent increases in Libya and Nigerian production but took no action. The next question on oil traders' minds is what will OPEC do in March 2018 when the current agreement expires? Will OPEC immediately increase production or will it sustain production at current levels? The OPEC compliance committee did recommend keeping the extension of the current agreement beyond the first quarter of 2018 as an option should further action be required for the stabilization of the market. At Tortoise, we think that OPEC will need to maintain production at current levels post March 2018 for awhile. The sooner that OPEC articulates this the better it will be for oil prices. In the future, we believe that both OPEC and the U.S. will need to increase production to fill an emerging global supply gap that is occurring because of insufficient capital investment by many global oil producers.

**Matt Sallee:** *So, Rob I know you get asked about oil prices a lot. What are your thoughts on natural gas environment?*

**Rob Thummel:** Natural gas continues to be a meaningful part of the energy story. U.S. natural gas prices opened the quarter at \$3.10 per million British thermal units (MMBtu) and ended the quarter slightly lower at \$2.94. We expect natural gas prices to remain range-bound in the \$2.75-\$3.25 range in 2017, assuming normal summer weather. Key variables to watch for will be the timing of pipeline in-service dates and the start-up of LNG export facilities. Longer-term, the EIA predicts higher natural gas prices in 2018 due to increased domestic natural gas consumption, along with new export capabilities.

Storage levels ended the second quarter approximately 6% above the five year average as higher than expected demand and lower than expected production helped reduce elevated inventories which had built during the warmer than normal winter. Natural gas supply is expected to resume growth in late 2017, driven by Appalachia as pipeline capacity comes online. We expect associated natural gas and NGL, primarily from the Permian, to play an increasing role in supply growth moving forward.

Natural gas demand is expected to be muted in 2017 as lower summer power burn offsets LNG and Mexican export growth. Longer-term, we believe the natural gas demand outlook remains robust driven by increased exports and rising industrial demand. LNG and Mexican exports are expected to increase 6 bcf/d and 1.8 bcf/d by 2020, respectively from 2016 levels.

As mentioned before, the U.S. is, and will play, a pivotal role in the LNG trade. Last year, the U.S. exported liquefied natural gas for the first time. Two LNG facilities came on-line last year, and three more are expected this year. Low cost U.S. natural gas is also expected to increase demand resulting in more exports to Mexico, coal to natural gas switching is expected to continue in the power generation sector and more natural gas is used in the industrial sector as it grows as well. By the end of the decade, we believe demand for natural gas is likely to be upwards of 12 Bcf/d or approximately 20% higher from current levels. This will require not only more production, but more pipeline takeaway capacity from areas like the Marcellus in the Northeast, and the Permian basin in West Texas. Finally, we think exports remain an integral part of the story as they alleviate inventory overhangs, yet do add price volatility.

**Matt Sallee:** *Thanks, so, with that commodity backdrop how do fundamentals look for the midstream segment, Brian?*

**Brian Kessens:** The fundamental outlook remains constructive for midstream as E&P companies increase activity. We believe higher volumes will drive improved midstream cash flows.

While sentiment clearly drove second quarter's performance, midstream companies typically perform well with growing volumes from U.S. producers. Midstream management teams are more optimistic than investors, pointing to the outlook for significant volume growth driving up utilization of existing assets and creating demand for new infrastructure. That new infrastructure amounts to approximately \$125 billion of capex over the next three years. Companies took proactive steps during the downturn to right-size balance sheets and lower cost of capital, positioning them to take advantage of the improving environment. Solid distribution growth, constructive earnings announcements and a shift in focus to fundamentals are catalysts to drive positive returns. Additionally, in our view, more open equity capital markets or clearer alternative sources of funding would be beneficial to companies with funding needs.

**Matt Sallee:** *Sticking with the midstream segment, how do the capital markets look Brian?*

**Brian Kessens:** Capital markets, equity capital markets in particular, were challenged, experiencing a pause in the thawing we saw in the first quarter. In fact, the overnight equity issuance in 2017 has been at just half the pace of the 5 year average.

There were three midstream initial public offerings during the quarter. MLPs and other pipeline companies raised \$14 billion in total, which is less than half the capital raised during the first quarter. The majority of those were debt offerings.

Alternative financing remain available to companies and we expect these to supplement more traditional overnight offerings of equity until the market heals. PIPEs, or private investments in public equities, continue to provide flexibility and alleviate concerns regarding the ability of companies to raise capital to fund new growth and acquisitions.

Merger and acquisition activity among MLPs and other pipeline companies significantly slowed from the previous quarter, yet we are already at \$58 billion for 2017, compared to our estimate of \$60 billion for the entire year. Pembina Pipeline Corp. had the largest announced transaction of the quarter with its acquisition of Veresen Inc., in a deal valued at about \$5 billion.

**Matt Sallee:** *So, with that on capital markets, how did midstream valuations look?*

**Brian Kessens:** Valuations remain attractive and are providing a solid yield, and a buffer amidst the market volatility.

The yield for the TMLP was 7.3% at quarter-end. This compares to the 3, 5 and 10 year medians of 7.1%, 6.2% and 6.7% respectively for the period ending May 31, 2017. For pipeline corporations, the TNAP yield was 4.6% at quarter-end.

Cash flow multiples remain below the average for EV/EBITDA and Price to DCF as of 06/30/2017. When we look at 2018 projected multiples for MLPs, they are at least one standard deviation below average.

**Matt Sallee:** *So, valuations are a little below average, with that backdrop how are MLP distributions holding up?*

**Brian Kessens:** Relative to 2016, today midstream companies have healthier balance sheets, improved distribution coverage and a tailwind of volume growth across all of crude oil, natural gas and natural gas liquids.

We continue to expect midstream dividend and distribution growth of 5%-7%, ex cuts, and expect low double digit total returns based on the current yield and growth. There is additional upside should midstream companies return to their historical valuation levels.

**Matt Sallee:** *So Rob, back to you. Can you give us an update on the upstream and downstream sectors?*

**Rob Thummel:** We are entering a new era in the energy sector. The global energy landscape is changing and the U.S. is becoming a low cost supplier of oil and natural gas to the rest of the world. U.S. production is going up and U.S. oil producers continue to find ways to earn adequate economic returns at

lower oil prices. As a result, some U.S. oil companies can produce oil at a lower cost than some OPEC members. Therefore, it is expected that U.S. oil production will continue to increase. We believe by 2022 the market will need to find approximately 17.5 million barrels per day of oil. Who will fill that gap? We think the U.S. is uniquely positioned to be a key provider of that new supply. U.S. and OPEC must not only co-exist, but work together to fill this pending supply gap in our view.

Moving to downstream, it was the best performing segment of the energy value chain during the second quarter. Refining, in particular, was a bright spot amidst the negative sentiment even though we're finding margins tightened. Diversified downstream companies continued to unlock the value of their midstream assets and utilities were helped by lower interest rates.

Petrochemicals were positive as new ethylene capacity started to come online. From 2017-2020 the increase in ethylene capacity is likely to raise ethane consumption. We think this validates the U.S. as a low cost supplier of plastics to the rest of the world and bodes well for pipelines transporting the ethane feedstock.

Renewable generation, particularly large-scale wind and solar, continue to be developed at a fast pace. Wind generation is expected to increase by approximately 25% and solar is expected to increase by nearly 50% from the end of 2016 to the end of 2018.

**Matt Sallee: *Well no energy discussion is complete without getting your view on oil prices, Rob. What's your outlook for oil prices and how does demand play into that view?***

**Rob Thummel:** An improvement in crude oil prices could provide the support for a second half rally. What is the catalyst for higher oil prices? As global oil inventories move closer to the 5-year average, we expect crude oil prices to respond positively and move back toward \$50 per barrel. We are entering the period when oil demand is the strongest and the supply glut should see a meaningful impact from the OPEC production cuts. With that said, oil appears to be range-bound at \$50-\$60 longer-term. If oil prices remain below \$45 per barrel then the pace of 2018 U.S. production growth should moderate.

At a company level, we feel energy executives must work to control what they can and execute on plans they have laid out to investors. Healthy balance sheets are likely to be rewarded as avoiding the pitfalls of the most recent downturn will prove beneficial for relative outperformance.

Looking more broadly, over the next five years, we see crude oil, natural gas and natural gas liquids production in the U.S. increasing meaningfully. Additionally, we believe exports will play a vital role as the U.S. continues its march to being a major global player in energy on the supply side. There are always bumps in the road in any transition and this is a significant transition we are in, brought about by the exploitation of shale resources.

**Matt Sallee: *Last question, Brian: How about the regulatory environment? Any news on that front?***

**Brian Kessens:** The energy regulatory environment continued to improve as evidenced by Energy Secretary Rick Perry's recent comments that highlighted the theme of America achieving energy dominance. He pointed out by 2018 the U.S. is expected to be a net energy exporter of natural gas. Based on this comment, it appears that the U.S. government will continue to be supportive of liquefied natural gas or LNG exports. The Secretary also discussed clean energy, highlighting that the U.S. already leads the world in lowering emissions.

On the FERC front, Commissioner Colette Honorable stepped down at the end of her term in June, leaving acting Chairman Cheryl LaFleur as the only remaining active commissioner. Essential decisions are currently at a standstill until two more commissioners are seated in order to establish a quorum. Importantly, two individuals have been appointed and are currently in the approval process, only needing a Senate confirmation.

**Matt Sallee: *So to recap highlights from this discussion, we think:***

- Sentiment clearly has been challenged for energy and correlations with crude oil have been higher than normal for midstream companies.
- Equity capital markets are challenged, but debt markets do remains attractive and wide open and alternative means of financing are available.
- Midstream valuations are compelling and provide a solid yield as fundamentals improve and volumes are expected to continue to move higher in the back half of the year.
- Our long-term outlook for the midstream sector remains positive with a projection for capital investments of approximately \$125 billion from 2017 to 2019.
- We do expect U.S. and global oil inventories to decline throughout the second half of 2017 as we enter a period when oil demand is the strongest and the supply glut should see a meaningful impact from the OPEC production cuts.
- As global oil inventories move closer to the 5-year average, we would expect crude oil prices to respond positively and move back toward \$50 per barrel.
- One final thought, in times like these it's helpful to keep the big picture in mind. Energy infrastructure is an essential part of our economy and midstream cash flows have been steadily growing during the downturn in oil prices on the back of fee-based revenue and volume growth.

That concludes our prepared question and answer session. Thank you all for joining us today. We look forward to talking with you again. In the meantime, we invite you to check out our Tortoise QuickTake podcast series where we share our views on timely energy events.

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#### **Tortoise North American Pipeline Index<sup>SM</sup>**

The Tortoise North American Pipeline Index<sup>SM</sup> is a float-adjusted, capitalization weighted index of pipeline companies headquartered in the United States and Canada. A pipeline company is defined as a company that either 1) has been assigned a standard industrial classification (“SIC”) system code that indicates the company operates in the energy pipeline industry or 2) has at least 50% of its assets, cash flow or revenue associated with the operation or ownership of energy pipelines. Pipeline companies engage in the business of transporting natural gas, crude oil and refined products, storing, gathering and processing such as gas, crude oil and products and local gas distribution. The index includes pipeline companies structured as corporations, limited liability companies and master limited partnerships (MLPs).

#### **Tortoise MLP Index<sup>®</sup>**

The Tortoise MLP Index<sup>®</sup> is a float-adjusted, capitalization weighted index of energy master limited partnerships (MLPs). The index is comprised of publicly traded companies organized in the form of limited partnerships or limited liability companies engaged in transportation, production, processing and/or storage of energy commodities.

#### **Tortoise North American Oil & Gas Producers Index<sup>SM</sup>**

The Tortoise North American Oil & Gas Producers Index<sup>SM</sup> is a float-adjusted, capitalization weighted index of North American energy companies primarily engaged in the production of crude oil, condensate, natural gas or natural gas liquids (NGLs). The index includes exploration and production companies

structured as corporations, limited liability companies and master limited partnerships but excludes United States royalty trusts.

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