**Energy Value Chain Update Call**
**Prepared Remarks**
**Oct. 25, 2017**

**Ed Russell**: Good afternoon and welcome to Tortoise's Energy Value Chain update call. I'm Ed Russell, Senior Managing Director at Tortoise. Today we're going to review the state of the energy sector and provide our energy 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 for information only and shall not constitute an offer to sell or a solicitation of an offer to buy any securities.

Before we start with our energy update, we want to make you aware of our recent announcement. Last week, we announced the signing of a definitive agreement for a buyout of Tortoise Investments, the parent company of Tortoise Capital Advisors. Subject to certain customary closing conditions, a vehicle formed by Lovell Minnick Partners and owned by certain private funds sponsored by Lovell Minnick and a group of institutional co-investors, including Harbourvest, AlpInvest, and several additional limited partners, will purchase the controlling equity stake in Tortoise currently held by Montage Investments, LLC and retiring co-founders of Tortoise. Tortoise will maintain its independence and autonomy with its brand, investment processes and day-to-day portfolio management remaining unchanged. Upon closing of the transaction, the Investment Committee will be comprised of Kevin Birzer, as well as Matt Sallee, James Mick and Brian Kessens and Rob Thummel, , all of whom are current Investment Committee members. Brad Adams, currently Chief Executive Officer, Principal Financial Officer and Treasurer of each of the Tortoise closed-end funds, will also serve on the Investment Committee for the closed-end funds. We are excited about our fit with the team at Lovell Minnick. But most importantly, we will remain focused on our goal of outstanding investment performance to our clients while providing top quality service. We anticipate the transaction closing by the end of the first quarter of 2018.

**Ed Russell: *Today I'm joined by Rob Thummel and Brian Kessens, Portfolio Managers, and as I mentioned, part of the Investment Committee. Rob and Brian, I've got a list of questions, but let's get down to what's happening right now. We've had a rough couple of days in the MLP space. Could you talk about what you think is going on?***

**Rob Thummel:** Sure Ed. So obviously we've seen the MLP market trade off over the last several days. We think it's more technical rather than fundamental. And we're going talk to you more about the fundamentals and why we think the fundamentals remain intact. But technicals like tax loss selling and potentially total return swap activity are some of the factors we think that have driven the recent weakness in the market. And frankly, it's been obviously frustrating to you as investors and frustrating to us as well.

**Brian Kessens:** And another reason is that some of the sell-off started a week ago Monday, which coincided with the BP MLP IPO launching. BP is looking to raise $850 million. We understand some investors may be selling to make room for it in their portfolio. After all it is a very high quality sponsor that being BP that's aiming to grow distributions at a double digit clip starting off at virtually no debt and mostly fee-based assets. That IPO prices tonight and then begins trading tomorrow so I think it that will be helpful to get that $850 million raised and off the market.

**Ed Russell*: Thanks, moving onto Rob, can you talk about third quarter performance for the energy sector?***

**Rob Thummel:** Sure. In the short term, sectors go in and out of favor but over the long term we think cash flow growth drives value. This year the energy sector, including MLPs, have experienced more downs than ups. Some of that could be attributable to tax loss selling as well as portfolio positioning for new IPOs but over the long term we continue to forecast increases in the cash flows of the energy companies that we are investing in. Therefore, we remain positive regarding the outlook for the energy sector. Energy stocks did appear to be on the road to recovery during the third quarter. Oil prices led the comeback in energy stocks as West Texas Intermediate or WTI opened the quarter at $46.04 per barrel and closed it at $51.67, a significant improvement from its low of $42.31 on June 21st. WTI rose by 12% during the third quarter and by 9% during the month of September. The price improvement was a result of declines in U.S. and global inventories, rising global oil demand and lower OPEC imports.

Moving to performance, after the weak performance during the first half of the year, the energy sector has shown signs of life. The sector as represented by the S&P Energy Select Sector Index® rose by 7% during the third quarter. Only the tech sector outperformed energy during the quarter. The Tortoise North American Oil and Gas Producers Index SM, (TNEP) and the Tortoise North American Pipeline Index SM returned 8.7% and 2.1% respectively for the quarter while MLPs as represented by the Tortoise MLP Index® declined by 2.0%. The third quarter had been trending positive for MLPs before a couple of announcements during the earnings season seemed to turn the tide negative. A surprise announcement by Plains All American of a second distribution cut within 18 months resulted in the market dropping further. Additionally, Energy Transfer Partners followed up that announcement with a $1 billion overnight equity offering, the largest of the quarter that was not received particularly well. Both highlighted investor concerns around balance sheets and the health of the equity capital markets.

**Ed Russell:** ***Brian, Rob mentioned the Plains distribution cut, there were a couple of other negative MLP distribution announcements that unsettled the market. Can you update us on those, and what you think that means for midstream valuations going forward?***

**Brian Kessens:** Sure. Enterprise Products Partners, one of the largest MLPs, noted in its third quarter distribution announcement, that it will slow growth from approximately 5% annually to approximately 2.5%, with the goal of retaining more excess cash flow and eliminating the need for external equity financing. Enterprise will also consider share buybacks.

Also, Genesis Energy cut its third quarter distribution by approximately 31%, despite having coverage over 1.0x and growing the previous quarter, as management noted the board felt it was a poor use of capital to pay an 11% yield. Notably, neither company attributed the change to deteriorating business fundamentals, which remain solid. So with that backdrop, let's look at how the sector is evolving.

To start, the return of an equity security can be broken into three components, dividend yield, earnings per share growth and the change in the market multiple. Similarly, MLP returns have traditionally been almost the same, except distribution growth was utilized in lieu of earnings per share growth. And for MLPs, debt and equity capital markets were utilized to fund capex programs and acquisitions.

So what's changed and why would Enterprise slow its growth to build coverage and ultimately use excess cash flow for capex? The prolonged energy market downturn, coupled with the poor equity capital market access, has led these companies to adjust strategy and reduce reliance on the equity markets to fund growth. As a quick history lesson, the industry faced a similar issue in 2007-2009 during the financial crisis as the market was clearly down and all capital markets dried up. What was distinctly different though was the duration of the disruption. From the peak in mid-July 2007, the market bottomed in November of 2008. However, by early January 2010, a mere 30 months later, the market passed its prior peak from 2007. Contrast that to this cycle, where the MLP market peaked in late August 2014 and troughed in February 2016. At current market levels, we remain 32% below the prior peak from mid-2014, or a full 38 months and still counting. Hence the potential adjustment that companies are contemplating to compete in today's market.

Higher coverage and the subsequent use of retained cash flow allows for several potential benefits:
1) Greater accretion from reduced dilution
2) Accelerated debt reduction
3) Likely reduced stock price volatility

From a valuation perspective, the focus likely shifts for some, away from simply distribution growth per unit and more towards distributable cash flow growth per unit. Said another way, distribution growth will likely be less than growth in cash available for distribution, in order to build distribution coverage. Ultimately, MLP returns could look a lot like a traditional equity security.

We anticipate this will potentially result in others slowing growth, similar to Enterprise. We further anticipate this may result in others at high yields, similar to Genesis, cutting their distribution. We utilize a variety of tools to assess fair value, including cash flow multiples, which would be independent of distribution growth and are much more focused on distributable cash flow growth as opposed to distributed cash flow growth. So yield and growth, spreads to other securities, whether fixed income or equity, and cash flow multiples are all still important in terms of assessing value for midstream companies.

Going forward, we expect returns to be more comprised of (1) underlying distribution growth in distributable cash flow, (2) debt reduction and (3) potential share or unit buybacks.

**Ed Russell:** ***Rob, you want to add your thoughts on midstream valuations?***

**Rob Thummel:** We think cash flow multiples remain in a very attractive territory, with 2018 projected multiples for MLPs at least one standard deviation below normal. Note, price to distributable cash flow is the inverse of the distribution cash flow yield, which is another metric that we utilize to normalize companies in terms of vastly different coverage ratios and may gain more traction with investors as well.

**Ed Russell:** ***Brian, you mentioned the IPO in the market, can you give us a little more color on the capital markets in general and the M&A environment for midstream companies?***

**Brian Kessens:** The equity capital markets remain challenged.  Once again, the third quarter was very thin, with almost half coming from units issued to sponsors. A big chunk of the remainder, about $1billion was in a single deal completed by Energy Transfer Partners, as mentioned earlier. ATM markets have been lighter as well, about half of 2016's average so far in 2017. MLPs would clearly prefer better access to equity markets and positive sentiment would help generate that. Debt market issuance remains robust and wide open. And alternative financing tools, such as PIPE deals, remain available to companies and we would expect these to supplement or replace more traditional overnight offerings of equity until the market heals.

Merger and acquisition activity among MLPs and other pipeline companies remained stable totaling about $15 billion, though still lower than typical. Andeavor Logistics LP had the two largest announced transactions of the quarter, in deals valued at about $2.4 billion and $3.8 billion. Looking ahead, we expect growth in energy supply and demand supporting projected internal capital investment of $125 billion from 2017 - 2019.

**Ed Russell:** ***Rob, I know you're asked this question all the time on Bloomberg and CNBC, but I'm going to ask it here. What's your outlook on oil prices going forward?***

**Rob Thummel:** At Tortoise, we believe that U.S. oil prices will remain range-bound between $50-$60 per barrel through the end of 2018. In our opinion, stable oil prices are the key, allowing the management teams that operate the most critical energy assets to differentiate themselves. We do see the potential for some near-term events to cause a spike in oil prices such as an extension of the OPEC production cut agreement through the end of 2018, reimplementation of sanctions on Iran, and/or potential for sanctions on Venezuela. Nevertheless, if oil prices remain stable, then we think the environment is constructive for investors to return to the energy sector.

**Ed Russell:** ***Brian, anything you want to add on the upstream sector?***

**Brian Kessens:** Upstream oil and gas producers, as represented by the Tortoise North American Oil and Gas Producers Index$^{SM}$ returned 2.1% for the quarter. While crude oil prices improved; however, there were basin-specific headwinds. For example, some Permian producers reported a lower-than-expected crude oil production percentage relative to natural gas production percentage. Stability was the market expectation, and this decline surprised investors. We think the change in percentage resulted from an increase in the absolute level of natural gas production and not from a decline in crude oil production, and believe fears of a sharp decline in the crude oil 'cut' are unfounded.

We do believe that the Permian basin will remain a key, growing oil supply basin. In fact, 50% of the U.S. oil rig count is operating in the Permian basin currently. The Energy Information Administration forecasts 2018 production to grow by 500,000 barrels per day with the largest contribution of growth coming from the Permian. Longer term, we believe the Permian will remain the lowest cost oil basin in the U.S. Some parts of the Permian can even produce oil at a lower cost than some OPEC countries, which positions it as one of the low cost suppliers of crude oil to the rest of the world. We expect higher absolute volumes of oil, natural gas and natural gas liquids, driving a need for additional energy infrastructure to gather, process and transport the higher volumes. More broadly, U.S. crude oil production is expected to average 9.3 million barrels per day (MMbbl/d) in 2017. The 2018 EIA forecast is for 9.8 MMbbl/d which if reached, it would be a record high.

**Ed Russell:** ***And last, but not least, Rob can you walk us through the downstream segment?***

**Rob Thummel:** While Hurricane Harvey did wreak some havoc on the Houston area at the end of August, energy assets proved remarkably durable during the storm, incurring minimal downtime and little physical damage. The expectation was for capacity to potentially remain offline for weeks, yet operational impact on key assets was minimal. As expected, refining margins widened as gasoline prices increased due to production being taken off-line. Even with international and state level rhetoric toward electric vehicles, we don't expect electric vehicles to materially displace refined product demand in the near future. Even assuming exponential electric vehicle sales growth, the vast majority of automobiles will continue to be powered by the internal combustion engine over the next decade. We do believe renewables will continue to play an increasing role in electricity generation, as solar generation is expected to increase by more than 50% from the end of 2016 to the end of 2018 according to the EIA.

**Ed Russell:** ***Brian, can you provide an update and outlook on what I personally think is an often overlooked natural gas sector?***

**Brian Kessens:** Certainly, the natural gas prices were flat during the quarter, opening at $2.94 per million British thermal units (MMBtu) and closing at $2.89. Currently, natural gas storage injections are running below the 5-year average, partly due to strong liquefied natural gas, or LNG exports.

Because of new export capabilities through LNG, and exports to Mexico as well as an increase in domestic consumption, we believe the demand outlook is particularly strong. Renewables are a big part of the story moving forward and we firmly believe they are here to stay. Natural gas serves as a perfect complement to renewables as it can be turned on and off quickly to alleviate concerns when the sun doesn't shine or the wind doesn't blow.

On the supply side, we think increased takeaway capacity coming online over the next year will enable significant production growth, with expected production to average 72.3 billion cubic feet per day in 2017, rising to 78.7 in 2018 according to Bentek.

**Ed Russell:** ***Rob, can you touch on the geopolitical risk and what that can do to the energy environment?***

**Rob Thummel:** In the past, geopolitical risk has added a significant premium to oil prices but has essentially disappeared since the OPEC 2014 Thanksgiving Day oil price plunge. Geopolitical risk was heightened recently with the Iraqi Kurds voting to declare independence from Iraq. In retaliation, Turkey threatened to block exports out of Kurdistan that could disrupt the flow of as much as 500,000 barrels of oil a day. Additional geopolitical risk is present in Iran, the third largest OPEC oil producer, producing over 4 million barrels per day. President Trump has suggested that Iran is violating the nuclear deal. Iran oil production has increased by approximately one million barrels per day after the sanctions targeting Iran's oil and gas sector were removed in early 2016. If sanctions were re-instituted on Iran's oil and gas sector then oil prices would likely move higher.

**Ed Russell: *Brian, anything we should be watching for on the Washington front or the regulatory area?***

**Brian Kessens**: A couple of things to highlight, starting with tax reform. Clearly lacking in detail currently, yet the tax reform proposal released appears to be just fine for MLPs as it potentially includes immediate expensing of capex and a pass through rate of 25%, which would be well below the highest marginal rate. Regarding pipelines and permitting activity, the FERC has been very constructive after reaching a quorum. States remain more challenging. While some states have pushed back, we have heard anecdotally that states are simply taking longer to release permits in order to ensure a stronger legal defense in the event it is subsequently challenged.

**Ed Russell:** Thanks Brian and Rob, so let's recap the highlights from the discussion:

- The energy segment is showing signs of life with oil prices moving up from a June low of $42.31
- Over the long term we are forecasting increases in cash flows of the energy companies that we invest in
- Crude oil markets continue to rebalance
- Equity capital markets remain extremely challenged and that is putting pressure on growth for some MLPs
- We're seeing a shift in the way some MLPs operate is likely, with Enterprise Products Partners leading the way
- It is likely to be an interesting couple of quarters as companies determine their distribution policies, but we remain confident in the underlying cash flows of the companies in the portfolio
- Our long-term outlook for the midstream sector is expected growth in energy supply and demand supporting projected internal capital investment of $125 billion from 2017 - 2019.
- Natural gas demand outlook is strong with new export capabilities through LNG, exports to Mexico and an increase in domestic consumption. And renewables are a big part of the story going forward
- The tax reform proposal appears positive for MLPs and potentially includes immediate expensing of capex and a pass through rate of 25% which would be well below the highest marginal rate
- In summary, we believe the U.S. will be a winner in the next 5 years in terms of the global energy landscape, as we export our low cost resources around the world. The result will be a constructive environment for midstream operators to continue to link the supply with the demand.

**Ed Russell:** Thank you all for joining us today. As we celebrate our 15 year anniversary we want to thank you for your interest and support in Tortoise. 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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