



**Energy Value Chain Update Call  
Prepared Remarks  
Nov. 7, 2018**

**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, Matt Sallee and Rob Thummel. And we're going to review the state of the energy sector as we near the end of 2018.

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Now, before we start, we want to reiterate our strategy of making an impact through investing in essential assets and income investing. Our infrastructure investments span across energy, sustainable and social infrastructure strategies. Our sustainable infrastructure strategy includes some renewable energy investments in our TYG fund and we are continuing to explore other vehicles. We also offer active and passive water strategies, including our global water ESG fund. Tortoise's social infrastructure platform provides capital for social infrastructure projects through separately-managed accounts, private funds and an interval fund. As our social infrastructure platform has expanded, we are building out a team to support that effort.

With that, let's start with a review of energy sector highlights with Matt Sallee.

**Matt Sallee:** Thanks Pam. Thanks to all and good afternoon. After strong second quarter double-digit returns, the broader energy sector pulled back, closing the quarter nearly flat with the S&P Energy Select Sector® Index returning 0.5%. Upstream oil and gas producers had a slightly negative performance in the quarter with the Tortoise North American Oil and Gas Producers Index<sup>SM</sup> returning -0.9%, driven in part by slowing production growth in the Permian basin. The midstream sector fared better with the Tortoise North American Pipeline Index<sup>SM</sup> up 1.1% and MLPs performed well with the Tortoise MLP Index® up 5.2% for the quarter, benefitting from strong second quarter earnings driven by increasing volumes and need for more takeaway capacity. And as noted in our last call, the Federal Energy Regulatory Commission (FERC) changed direction from its March income tax allowance decision, creating a positive catalyst for MLPs. However, energy has been no place to hide, with broad energy ending October down 11%, and with producers off 17%. MLPs held in a little better, yet were still down 7%.

As we monitor 3<sup>rd</sup> quarter earnings calls, energy companies are generally reporting in-line to slightly better than expectations. Investors continue to favor returning greater cash flow to shareholders over capex increases, and in midstream, simplification transactions continue with an outcome focused on higher distribution coverage with an ability to self-fund new projects. Relative to previous sell-offs, the oil market and company fundamentals are on much stronger footing. Balance sheets are healthy and new project potential over the next several years are compelling.

**Pam Kearney:** Thanks, Matt. Rob, turning to you what's your view on the broad crude oil market and how is the upstream energy sector benefitting?

**Rob Thummel:** So, the fundamentals remain in place, keeping crude oil prices stable over the long-term. This is key for the energy markets. The global oil supply glut has been eliminated. Currently, global oil inventories are slightly below normal or the 5-year average. Global oil demand has risen 33 out of the last

34 years. We expect the trend in oil demand growth to continue. In 2018, global oil demand is forecasted to grow by 1.5 million barrels per day according to the EIA. Looking forward, a rising U.S. dollar and tariffs are creating some concern about future oil demand growth. However, we still expect oil demand growth in 2019 to exceed 1 million barrels per day. The supply side of the equation is what is causing near-term volatility in oil prices. The key question continues to be can Saudi Arabia keep increasing oil production to offset declining production in Venezuela and now Iran. So far, Saudi Arabia has been successful yet the Iran sanctions are not yet in full effect so expect higher-than-normal volatility in oil prices for the remainder of the year. In the U.S., crude oil production continues to increase. In fact, the U.S. became the world's largest oil producer during the third quarter. The U.S. is making an impact on stabilizing oil prices by doubling 2008 production levels. Think about this, over the next several years, the U.S. is positioning itself to export as much oil as it produced in 2005.

So, in our opinion, stable oil prices remain the key to bringing investors back to the energy sector. In 2018, there has been a big shift in the way many oil and gas producers' and their management teams run their companies. Most management teams have shifted their focus to returns on equity and generating free cash flow to return to shareholders. We applaud this change and expect investors to see a more pronounced benefit of this change in 2019 and beyond.

**Pam Kearney:** Thanks Rob. Brian, what's our view on oil prices?

**Brian Kessens:** West Texas Intermediate (WTI) crude oil prices opened the third quarter at the high \$74.15 per barrel, hit a low for the period of \$65.01 in August, and ended the quarter slightly lower at than the start of the quarter at \$73.25 per barrel. Brent closed higher, up almost 7% as geopolitical tensions continued to rise regarding Iranian sanctions. In more recent days, WTI has traded in the low-\$60's.

Looking ahead, we expect WTI oil prices to average \$65-\$75 per barrel in 2019 as global demand growth continues in the face of little spare capacity. We also expect rising U.S. oil production and Permian capacity constraints to continue, causing the WTI and Brent price difference to be \$10-\$15 per barrel.

With WTI now well above the \$40 breakeven price in the U.S., we expect producers will maintain active drilling programs, yet be prudent in capital allocation as investors increasingly call for more return of cash to shareholders as Rob mentioned. This discipline gives us more conviction in higher oil prices.

**Pam Kearney:** Thanks Brian. Rob, Can you update us on the natural gas sector?

**Rob Thummel:** Have you seen prices lately? Natural gas prices have been rising. We have entered the winter heating season for natural gas which is really important. Natural gas inventories set a new record low for levels entering the heating season. In fact, natural gas inventories have not been this low entering the winter season since 2005. The U.S. natural gas sector also continues to make an impact as well. Natural gas used to generate electricity is displacing coal and is resulting in lower carbon dioxide emissions in the U.S. Low cost U.S.-produced natural gas is also assisting in supply the growing demand for liquefied natural gas or LNG. According to the International Gas Union, global LNG demand has grown at a rate of 6% per year since 2000 and demand is expected to double to 75 bcf per day by 2035. Current utilization rates on existing LNG facilities is approximately 82% so new facilities will need to be built to accommodate growing LNG demand. This is where the U.S. comes into play. By 2023, we project the U.S. to be the second or third largest supplier of LNG exports in the world behind only Qatar and possibly Australia.

**Pam Kearney:** Okay, thanks. Matt, turning to you and the midstream, sector where do we stand on MLP simplifications and what do these transactions mean for MLP investors?

**Matt Sallee:** We have made great progress this year as MLPs continued to simplify their structure through consolidation and/or elimination of incentive distribution rights or IDRs. For background, with the energy downturn that started in mid-2014, MLPs have morphed in what we're calling Version 1.0 to Version 2.0. The change has been highlighted by several characteristics, including, as I mentioned

earlier, higher distribution coverage, lower leverage and less reliance on equity capital markets. The target there is to improve cost of capital by eliminating those IDRs.

For context, in 2007, only about 4% of the Tortoise MLP Index® by weight didn't have IDRs. In 2012, that number had moved higher, to about 28%. In 2017, a nice improvement, ending at about half or 52%. However, the trend to eliminate IDRs really accelerated this year. In fact, we project 2018 to end with about ¾'s of the MLP Index without IDRs and 2019 we think it could end with about 85% without IDRs. Also, if we look at just the top 20 MLPs by market cap, we think about 95% of the weight of the index of the top 20 companies will not have IDRs by year-end 2019. That's quite a change. And while there may be 15% of the total index still with IDRs by year-end 2019, the average general partner cash flow take of those companies will be a mere 7.5%. We believe the GP burden becomes too great when it goes over 30%, so even though 15% of the index may still have IDRs, the cash flow burden will be minimal. Honestly, we wouldn't be surprised if we are being a bit conservative on that estimate.

With all that simplification activity, investors are curious if MLPs are going away. The short answer is no, not in our view. Let me explain why. At a very high level, we assess potential investments by the quality of management, the assets and their cash flows. These factors determine whether or not we will invest and if so how much. Furthermore, we view a general partner and a limited partner as one security for position sizing purposes. So recent examples like Antero or Williams where the MLP is acquired by the C-Corp sponsor, that didn't result in a smaller investable universe. It simply changes the makeup of our investable universe. Obviously this view is pretty high level, greatly simplified and a lot more goes into selection and sizing including financial models, valuation, what's going on across the value chain and energy themes, but my point is the same. We really analyze companies based off these key metrics, not whether or not they are structured as a MLP or C-Corp.

**Pam Kearney:** Brian, Following this simplification activity, how is distribution coverage and leverage trending and what has it meant for valuations?

**Brian Kessens:** Midstream companies are in a much better position to self-fund growth capex following simplification. Distribution coverage is higher versus historical levels. In 2018, we expect coverage to average 1.3x, whereas over the past decade, coverage averaged between 1.1 – 1.2x. And in 2019, we anticipate coverage will improve even further. Leverage levels are even healthier relative to history, with debt/EBITDA now at 3.7x and trending lower. We forecast leverage levels will be at 3.5x in 2020.

Regarding valuation, and similar to last quarter, Enterprise value to EBITDA and Price to Distributable Cash Flow metrics remain well outside of historical norms. And as of September 30th, they implied the sector is 19% and 45% cheap respectively on 2019 estimates. And versus utilities and REITs, MLPs are approximately 16% and 44% cheaper, respectively. From a total return outlook, we expect cash distribution growth of 5-7% over the next 12 months ex-dividend cuts, with the combined yield and distribution growth translating to total returns of 13-15% over the next 12 months.

In midstream, we believe healthy North American energy fundamentals and the need for more infrastructure, including for export, support improving valuations. As those catalysts manifest, we think the MLP sector will attract increased fund flows, resulting in improved equity valuations.

**Pam Kearney:** Thanks Brian. Matt, what kind of access do MLPs have to capital markets?

**Matt Sallee:** Well, capital markets activity really slowed during the third quarter with MLPs and other pipeline companies raising less than \$4 billion in total capital, with nearly all of that debt. Looking forward, we expect follow-on equity issuance to remain the exception in funding capital expenditures and expect companies will continue to access the debt markets along with that using a combination of internal cash flow.

As coverage for MLPs has grown, they are redirecting that cash flow back into the business and funding the equity portion of their capex budgets with that internally generated cash flow. By 2020, we anticipate the funding will be close to 50% debt and 50% internally generated cash flow, and during this time period,

we expect leverage will tick lower as new projects come online, which boosts EBITDA. In cases where a company's capital budget exceeds what can be financed with retained cash flow and debt we expect they would look to the private market for capital and also would consider non-core asset sales.

**Pam Kearney:** Thanks Matt. Rob turning to you, can you walk us through the downstream segment?

**Rob Thummel:** Sure, so refiners and petrochemical companies reported elevated cash flow for the second quarter and continued to enjoy healthy fundamentals during the third quarter. Crude oil basis differentials remained wide, leading to high margins for those refiners able to buy crude oil at Midland and/or WTI prices. New petrochemical facilities came on-line, increasing both ethane demand and prices. Over the last several years, processing plants commonly rejected ethane due to low prices. But given the increase in demand, we expect ethane rejection to become less common, benefiting the petrochemical industry.

Now moving now to solar, wind and natural gas fired generation where growth is resulting in reduced carbon dioxide emissions from the power sector. The renewable energy sector continues to grow with U.S. wind generation expected 8% growth of year-over-year in 2018, and U.S. solar generation expected to rise year-over-year by 26% according to the EIA.

Ultimately, growing U.S. energy exports are significantly changing the balance of U.S. net imports of energy. So net imports peaked in 2005 at over 30 quadrillion BTUs. By the end of 2017, that number shrunk by over 75% to about 7 quadrillion BTUs. The trend continues. For the first six months of 2018, net imports were down by another 45% relative to the same period in 2017, according to the EIA and specific to crude oil and petroleum, net imports fell almost 90% from the peak in 2005. That trend will continue if the U.S. exports nearly 5 million barrels per day of oil in 2023 as is forecasted by the International Energy Agency (IEA).

**Pam Kearney:** Thanks Rob. Brian, how does this effect the trade discussions and how do you expect that to impact the energy sector?

**Brian Kessens:** While trade talks certainly come up a lot, our view on the possible impact to the energy sector is fairly straightforward. As long as demand for the underlying product doesn't change materially, then there would be a substitution effect. So if demand s from China of U.S. commodities declines due to a trade war, the supply will simply go to another interested buyer. While the path of supply movements around the world may change, the end result is the supply will simply go to a different location. To-date, Chinese demand has remained stable and unaffected.

From a currency perspective, crude oil is priced in U.S. dollars, so to the extent the dollar strengthens against other currencies, there is some potential effect on the buying power of emerging markets or other economies. Nonetheless, oil demand has remained pretty inelastic in the past, especially in emerging markets.

**Pam Kearney:** Okay thanks. Matt, turning to regulatory matters, what key activities are we tracking?

**Matt Sallee:** Circling back to July, the Federal Energy Regulatory Commission (FERC) issued its final notice of proposed rule-making related to the treatment of income taxes for natural gas cost of service pipelines. That notice effectively softened and clarified the initial decision announced in the first quarter.

Next, President Trump recently nominated Bernard L. McNamee (R) to fill the vacated FERC seat that would bring the FERC to its full five commissioners. That hearing is slated for November 15<sup>th</sup>. On October 24<sup>th</sup>, Kevin McIntyre stepped down as FERC Chairman citing health issues. He does plan to hold a seat as a commissioner, and President Trump designated Neil Chatterjee to replace him as that Chairman.

There were two other regulatory events that were headwinds during the quarter. I'll start with Prop 112 on the Colorado ballot that was seeking to increase the drilling setback from structures to 2,500 feet. Related to this, the Colorado Oil and Gas Conservation Commission estimates it would have reduced drillable land by up to 85% in non-federal areas which is where a lot of the activity was going on in Colorado. The proposition did not pass and the exposed names had a nice relief rally today. From here, we expect the industry will work with the state to come up with a compromise to address the public's concerns on this issue in a way that isn't detrimental to the Colorado economy.

Also, the U.S. Fourth Circuit Court vacated the Mountain Valley Pipeline's (MVP) Nationwide 12 Permit. This halted pipeline construction at all stream crossings in West Virginia and Virginia, covering more than half of the 303 mile route. We believe work will restart in January and the 4<sup>th</sup> quarter 2019 in-service date is still achievable, yet the cost of the project has increased materially following the regulatory delays and work stoppages. So that's been a challenge for them.

**Pam Kearney:** Okay, thanks Matt. So, we'll wrap-up, with a recap of what we covered in today's call:

- First, the global crude oil inventory overhang has been eliminated and we are currently at 34 million barrels under the five year average
- Despite U.S. production growth, we believe the global crude oil supply/demand balance is tight and will likely remain so in 2019
- In midstream, healthy North American energy fundamentals, need for more infrastructure, growing importance of exports, should support compelling valuations
- Pipeline infrastructure constraints, specifically in the Permian, could result in a lower-than-anticipated production in the short-term, but as infrastructure build-out in the Permian picks up, we expect an increase in commodity exports
- Simplifications and IDR elimination transactions are improving cost of capital and GP/LP alignment enhancing corporate governance
- As catalysts play out, the MLP sector expected to attract fund flows resulting in improved equity valuations
- And lastly, we believe these factors demonstrate a compelling opportunity for energy for the remainder of 2018 and 2019.

We want to thank you all for joining us today. We look forward to talking with you again. In the meantime, we invite you to visit our website at [www.tortoiseadvisors.com](http://www.tortoiseadvisors.com) and please check out our latest TortoiseTalk commentary piece and our Tortoise QuickTake energy podcast series where we share our views on timely energy events. Thank you.

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