



February 2013

MLPs: Orchestrating Logistics for the US Revolution

Overview



The US energy revolution is in full force. The traditional economics of supply and demand are driving price changes for crude oil, natural gas and natural gas liquids (NGLs) that are forcing the evolution of the gathering, processing, transportation and storage business for these commodities and their by-products. The energy revolution is revitalizing and reshaping manufacturing in the US, especially the chemical and steel industries. Electric utilities are quickly migrating from coal to natural gas as the cheaper and cleaner fuel. Some US energy products are so cheap and in such abundance that we are watching as billions of dollars are committed towards the building of export infrastructure. MLPs are in the sweet spot, reconfiguring and growing their transportation networks in the fastest growing energy market in the world, responding to their customers' needs for solutions. MLPs enjoy visible earnings through long-term contracts, growing demand for their services and expertise, and an infrastructure landscape requiring years of additional development. The exponentially powerful impact of low interest rates is the final driver fueling compelling earnings from this sector.

We anticipate a better year for MLPs' market performance in 2013, after lagging the S&P 500 in 2012 for the first time in 12 years. MLP distribution yields ended the year high. According to Credit Suisse, since 1996 when the yield differential between the US 10-year and MLPs are greater than 400 bps, there are often outsized returns the following 12 months:

- Average performance has been 36.9%, median 39.9%
- 93.6% the following 12 months are positive
- 66% of the observations have exceeded 30%
- 50% of the observations have exceeded 40%

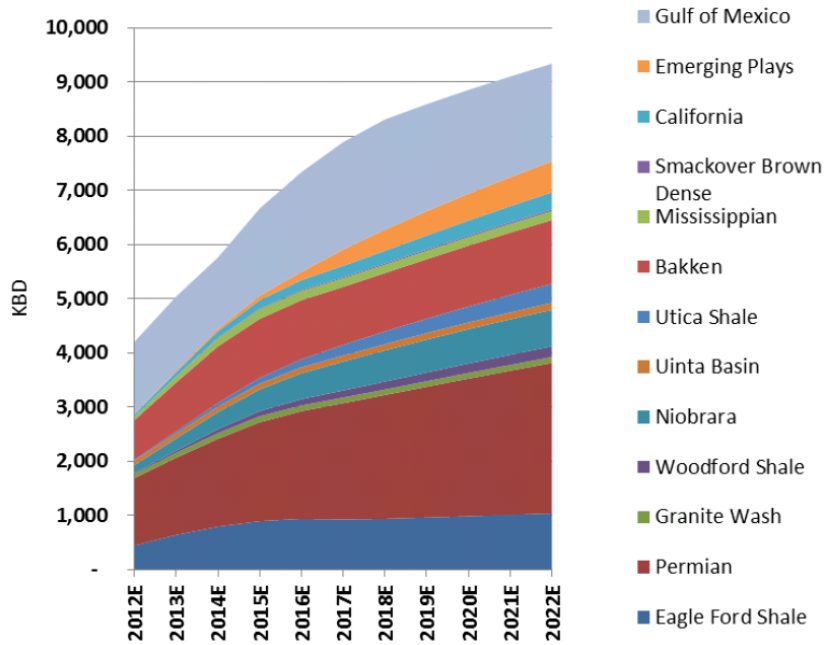
Our preferred themes for 2013 include Crude Oil and Refined Products Midstream, General Partners, Gathering & Processing MLPs whose business models are primarily fee dependent, MLPs positioned to capitalize on liquids exports and high yielding turnarounds with attractive assets where investors are paid 7% plus for the wait. There are also a number of non-traditional MLPs coming to market. Several merit close analysis.

Crude Oil and Refined Products Logistics

The price of crude oil is high. The business is very profitable for producers. High prices coupled with abundant and growing supply, attractive refinery economics in the mid-continent and Gulf Coast, and need for product along the Atlantic and Pacific coasts, are creating extensive and attractive opportunities for MLPs active in this sector. The US has oil shale that may be 4 times larger than the proven reserves in Saudi Arabia. There are 3 shale oil formations with very prolific drilling and production: the Eagle Ford and Permian (Texas) and the Bakken (North Dakota).

Figure 1.

Shale Oil Production Growth Forecasts 2012 through 2022

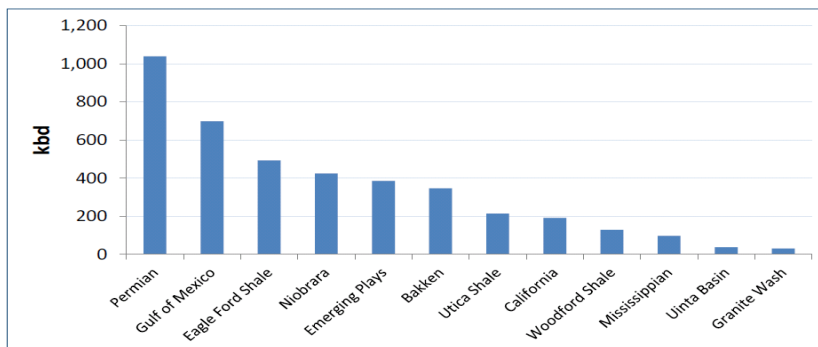


Source: Credit Suisse

More recently, reports suggest that recoverable oil from the Green River formation in western Colorado may be even larger than the Bakken. Not only are new crude oil and refined product pipelines in demand but also train and truck fleets. Producers are preferring optionality moving product from infrastructure light areas like the Bakken and opting instead for trucks and trains. Many producers elect to move their product to the east rather than the congested bottleneck of Cushing, OK where crude oil has been in oversupply for sometime. With crude oil, there is an implicit arbitrage opportunity by transporting product from one location to another. More recently, crude oil differentials are being driven by volumes rather than quality. MLPs are expert at helping customers capture these spreads.

Figure 2.

Oil Production Growth Forecast by Region 2012 through 2018



Source: Credit Suisse

This chart summarizes the expected oil production by region through 2018. This includes both traditional and non-traditional (horizontal) wells. Regions with the largest production require the most additional mid-stream infrastructure. The Bakken started with no infrastructure and has become one of the most desirable regions in the country for MLPs wanting to grow their crude oil footprint.

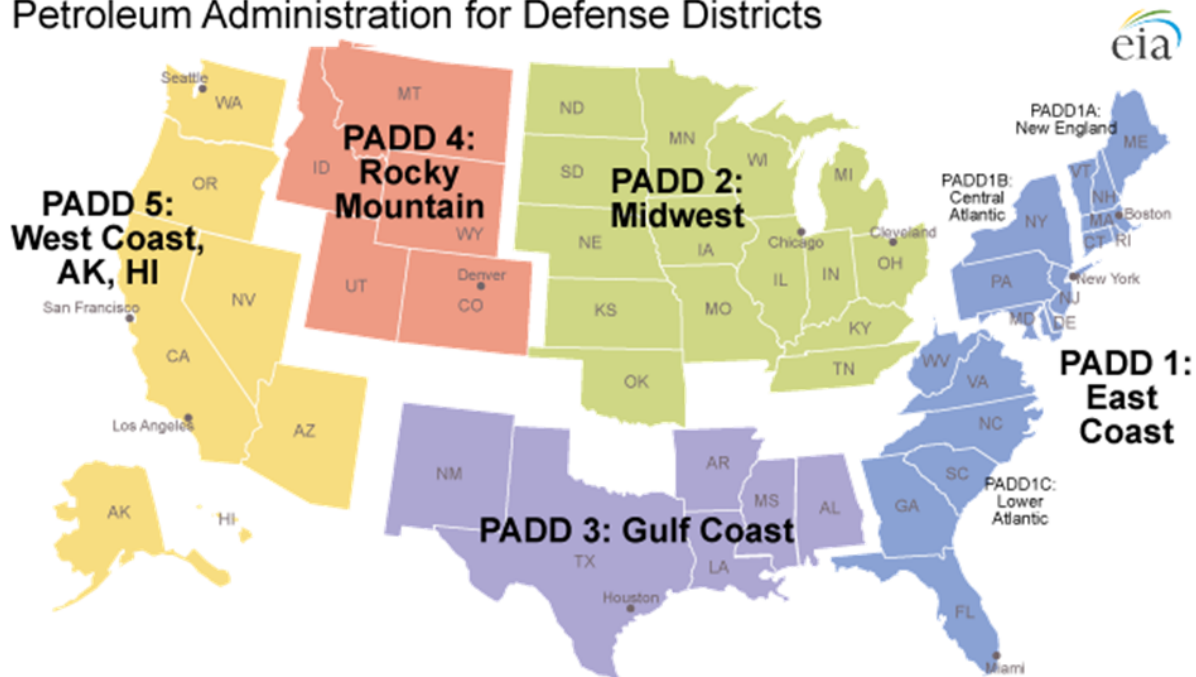


The US Refinery Scene

In the US, the large production of light sweet crude is creating a game changer for the North American oil supply balance between heavy and light. There are 5 PADDs in the US, regional organization of fuels derived from petroleum products (see Figure 3). PADD 2 (Midwest) and PADD 3 (Gulf Coast) are driving WTI and Canadian benchmark prices. Refinery pricing is based upon Brent, but congestion in the Cushing, OK hub has driven down mid-continent crude oil prices, providing a windfall for mid-continent refiners. The US is banned from exporting crude oil (with a few exceptions), but is emerging as a leading exporter of refined crude oil products. The inability to export crude oil is creating a glut of light sweet. US refineries retooled their operations some years ago to rely on heavier crude oil. Thus, there is a product mismatch between the abundance of light sweet and the refineries' needs for heavy. MLPs are problem solvers. They have been focusing on the lack of Cushing takeaway to the Gulf Coast. **EPD** and **EEP** have built and now manage the Seaway Expansion taking product to the Gulf. Along with the Seaway Twinning and the Keystone Gulf, set to begin operations in 2014, there should be approximately 1.4 million bbl/d of additional capacity out of Cushing. Experts suggest the congestion of light sweet is simply being moved from PADD 2 to PADD 3. Light sweet will be flowing from Cushing to the Gulf Coast to join the abundant light production from the Eagle Ford and Permian Basins. Currently, producers in the Bakken have preferred to move product to the Atlantic Basin (PADD 1) and the Gulf Coast (PADD 3) by rail. Optionality has proven to be of high value to producers as they seek flexibility to avoid future areas of congestion like we have seen in Cushing the past few years. KMP is building a pipeline to carry crude from the Permian in West Texas to the refiners in California. Producers appreciate this option to avoid the potential glut along the Gulf Coast.

Figure 3.

Petroleum Administration for Defense Districts





Drilling operation in the Marcellus Shale.

Low Prices for Natural Gas and NGLs are Sowing Seeds for US Growth

As we look out at 2013, we see the impact that low prices of natural gas (“NG”) and NGLs are having on the US landscape and the resulting opportunities for MLPs. NG is in oversupply following robust drilling and production during 2012. Although the production of dry gas slowed, the higher value wet gas (dry gas with NGLs) continued to flow. Following a historically warm winter in 2012, the demand for NG and for propane (an NGL component) plummeted along with price. But cheap NG and good weather encouraged electric utilities to switch over from coal to NG more quickly than expected. Cheap NG has also encouraged chemical and steel companies to commit to bringing production back to the US and to build new plants. We see cities like Manhattan turning to NG as a cheaper source of energy. The role for MLPs is instrumental for each of these areas. MLPs provide storage options for utilities who must always have access to an adequate fuel supply. Similarly, MLPs provide pipelines and transportation services to chemical and other manufacturing facilities. MLPs build and manage pipelines to bring product to cities like New York and Montreal. Ethane prices also plummeted in 2012 and will likely remain out of balance until 2016, when additional ethylene cracker production comes on line. These plants cost several billion dollars and take about 3 years to build. Cheap ethane encouraged a European chemical company to commit to buying ethane from the US and importing it to Europe, the first time ever that ethane will be used in place of naphtha in Europe as a feedstock. Propane prices should recover as the export market grows beginning in 2013 when new Gulf Coast facilities come online. **EPD** and **NGLS** have recently completed Gulf Coast dehydrogenators that will export propane to the Caribbean and Latin America.



Pipeline construction in the Marcellus Shale.

The Export Scene

There are three areas for export growth: refined products, NGLs and LNG. Since 2005, the US has been a net exporter of refined products. This trend is likely to continue as we watch crude oil volumes expand in the US. Largest demand will emanate from Central and Latin America.

According to Wells Fargo, NGLs are slated to grow 30% by 2015. As previously mentioned, NGLs are currently the biggest value in wet gas. Marcellus ethane is earmarked to move via pipeline to Philadelphia and by ship to Europe. The greatest challenge of ethane export is cooling it down for shipping. As the technology is improved and expanded, the US may well see further interest by European chemical companies choosing ethane over naphtha as their feedstock.

EPD and **NGLS** have built propane export facilities along the Gulf Coast. Both MLPs see this as an important growth opportunity with as much export demand as the US can supply. This demand should help alleviate the glut of propane and bring the propane market back into balance later in 2013.

LNG export facilities are an important focus for the industry. There is a large price differential between NG prices in Europe and Asia versus the US. Some Asian countries and/or businesses within those countries, are choosing to enter long term contracts for the purchase of LNG. As of January 2013, 19 applications to build LNG export facilities in the US have been made. The Cheniere Sabine Pass was the first to be approved for export to non-Free Trade Agreement countries. Cheniere Energy Partners, L.P. (“Cheniere Partners”), under its subsidiary Sabine Pass Liquefaction, LLC, is developing a project to add liquefaction services at the Sabine Pass LNG terminal in Cameron Parish, Louisiana. The Liquefaction Project will transform the Sabine Pass terminal into the world’s first bi-directional facility capable of exporting natural gas in addition to regasifying imported LNG. The Liquefaction Project has been designed for up to four modular LNG trains, each with an average liquefaction capacity of approximately 4.5 million tons per annum (“mtpa”). Currently, LNG exporters are able to export to Free Trade Agreement countries only. Each must get specific authorization to export to non-FTA countries. Other important LNG projects include Shell and Kinder Morgan at Elba Island. MLPs with an extensive Gulf footprint are at an advantage for providing services to the exporters. Many MLPs already have a presence servicing LNG import facilities. Should the LNG export business develop as many anticipate, this sector may be a strong growth driver for specific MLPs over the coming decade. There are also LNG export initiatives underway in Canada. The US and Canada are important trading partners. Where we have imported energy products from Canada for decades, the US abundance of NG and NGLs have created new flows across our northern border as well.



Cheniere LNG facilities construction.



Natural gas pipelines construction concurrently with wind turbine construction along a ridge in the Marcellus.

2013 MLP Outlook Summary

Given the backdrop of the US energy revolution, MLPs should be in a strong position for growth over the coming decades. Currently some of the best opportunities and most immediate channels for growth are in the Crude Oil & Refined Products area. That said, robust opportunities are also in many of the other MLP sectors. The low price of NG and NGLs is transforming the US petrochemical industry and bringing chemical, steel and other manufacturing back to the US as cheap fuel more than offsets more expensive labor. Although cheap NG and NGL process have created headwinds for some MLPs with exposure to these areas, the changes taking place today are setting the stage for attractive opportunities in the future. Gathering & Processing MLPs have been moving more towards fee based revenues which helps their predictability of cash flows. General Partners are attractively positioned, earning IDRs without the need for raising equity capital. Some MLPs are transitioning their business models and footprint to have better exposure to growth areas, be it sector or regional. Several seem attractive and relatively undervalued when compared to the premium put on the fastest distribution growers during 2012. We are encouraged that 2013 has started out strong, really catching up, for MLPs' 2012 underperformance compared to other assets classes. We remain cautious about a potential correction in the equity market and potential volatility in the prices of crude oil, NG and NGLs, which impacted MLPs during parts of 2012. At the moment, MLP correlations to these markets have been generally falling. But change often comes quickly. Nonetheless, we remain positive on the long term fundamentals for MLPs and their role in building and managing important parts of the US energy infrastructure network.