



# CBRE CLARION SECURITIES MASTER LIMITED PARTNERSHIPS KEY ROLE IN THE U.S. ENERGY RENAISSANCE

JANUARY 2014

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SECURITIES

# MASTER LIMITED PARTNERSHIPS KEY ROLE IN THE U.S. ENERGY RENAISSANCE EXECUTIVE SUMMARY



*Investment in Master Limited Partnerships (MLPs) is an ideal way for investors to participate in the growth of production from U.S. energy resources in the future while collecting an attractive distribution today.*

- Oil and natural gas production in the U.S. is growing after decades of declines as a result of advances in energy extraction technology and massive capital investment.
- U.S. oil and natural gas supply growth is expected to continue to drive down energy costs for U.S. companies and consumers, which will enhance U.S. economic growth.
- The impact of the rise of U.S.-sourced production is magnified for those companies that use natural gas and natural gas liquids as inputs for chemical products. As a result, petrochemical companies are making large capital investments in the U.S. to take advantage of these cheap inputs.
- The transforming landscape of U.S. onshore production is also creating massive opportunities for MLPs that are needed to build the infrastructure required to bring new production to regional and global markets. MLPs are taking action across the energy value chain to capture those opportunities.
- MLPs are more important than ever to the energy value chain equation, as a result of producer outsourcing and MLP sector growth. Producers are depending on MLPs to facilitate the execution of the promise of the U.S. Energy Renaissance by developing the necessary pathways and processing capacity to manage the new supply.
- In addition to their exposure to the U.S. Energy Renaissance, MLPs exhibit attractive investment characteristics including:
  1. High current distribution yield from historically predictable cash flow streams
  2. Annual distribution growth that has exceeded inflation
  3. Historically superior risk-adjusted returns relative to other equities and asset classes
  4. Competitive strength driven by high barriers to entry resulting from capital intensity and existing infrastructure networks

JANUARY 2014

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## MLP MARKET BACKGROUND

Master Limited Partnerships (MLPs) are partnerships traded on major U.S. securities exchanges (NYSE or NASDAQ). The total return combination of distribution growth and current yield that MLPs provide has attracted an increasing number of individual and institutional investors in recent years, and the sector has grown dramatically.

### STRUCTURE

MLPs do not pay corporate income tax and they generally produce regular, quarterly income for their investors (limited partners) through cash distributions. MLPs are able to maintain partnership tax status as a result of Section 7704(c) of the U.S. Internal Revenue Code, which states that at least 90% of gross income must come from qualifying activities. In addition to certain real estate and financial activities, qualifying activities include: the extraction, transportation, processing, and storage of fossil fuels (oil, natural gas) and certain of fossil fuel byproducts. We refer to MLPs in this paper as those devoted to energy activities.

Key Differences Between MLPs & Corporations		
	MLP	Corporation
Stock Type/Income Stream	Units/Distributions	Shares/Dividends
Taxation Level	Investor level only	Corporate & Investor level
Tax Reporting	K-1	1099
Tax Deferrals on Distributions/Dividends	Yes	No
Investor Base	Majority retail	Dominated by institutions
General Partner/Incentive Distribution Rights	Yes	No
Voting Rights	Limited	Yes

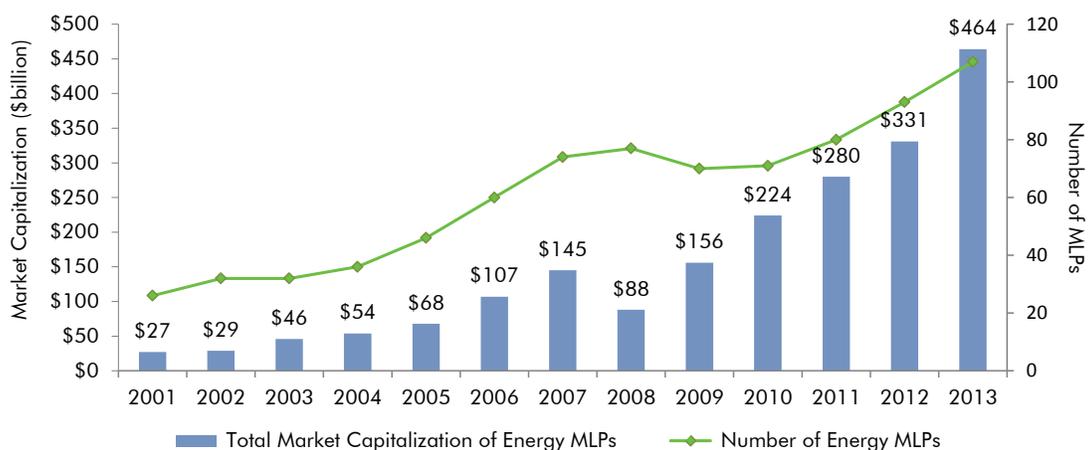
### ASSETS

Most MLPs operate midstream assets, which are assets that connect oil and natural gas producers to distributors and end users, adding value with gathering, processing, transportation, storage and other services. These services are typically provided under long-term fixed-fee contracts, making volume the primary performance driver, which buffers MLPs from exposure to cash flow volatility from commodity prices. MLPs generally benefit from increased oil and natural gas production activity on one end and from increased demand for oil and natural gas (and their byproducts) on the other end of the energy value chain.

### MARKET SIZE

The MLP sector is comprised of 107 MLPs with a combined market cap of approximately \$464 billion. MLPs operating midstream assets represent 83% of that total market capitalization and MLPs with investment grade credit ratings make up 58% of the total market capitalization. MLPs range in size from approximately \$200 million of market capitalization up to \$60 billion, with a median of \$1.9 billion. While there is a disparity among the liquidity of each individual MLP, as a sector MLPs are larger and more actively-traded than ever before.

#### Market Capitalization and Number of MLPs



Source: FactSet and Wells Fargo Securities as of 12/31/2013

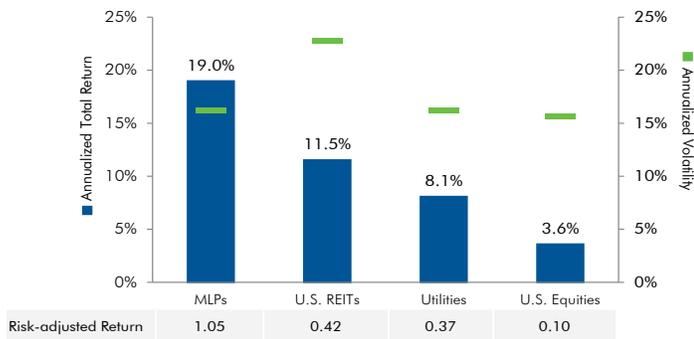
## INVESTMENT CHARACTERISTICS

- Have strong cash flow visibility based on the mostly fee-based nature of revenue streams
- Have performed well historically with strong absolute and relative returns over the last 10 years
- Operate businesses with high barriers to entry that exhibit defensive characteristics
- Offer direct exposure to growth in U.S. energy supply and worldwide energy demand
- Trade at attractive yields relative to other stocks and income-oriented securities
- Have historically provided enhanced portfolio diversification and protection from inflation

### MLPs offer investors:

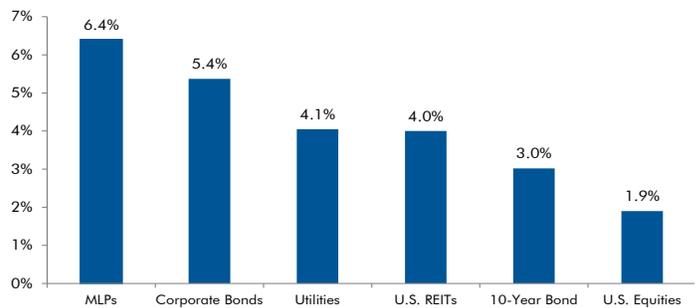
- **Attractive current income**
- **Strong capital appreciation potential from expected growing distributions**
- **Portfolio diversification**
- **Strong historical returns and lower volatility**

### Returns Comparison



Source: CBRE Clarion derived from FactSet. Returns are compounded from 1/1/2000-12/31/2013. MLPs: Alerian MLP Index; U.S. REITs: FTSE NAREIT Equity Index; Utilities: Dow Jones Utilities Index; U.S. Equities: S&P 500 Index

### Yield Comparison

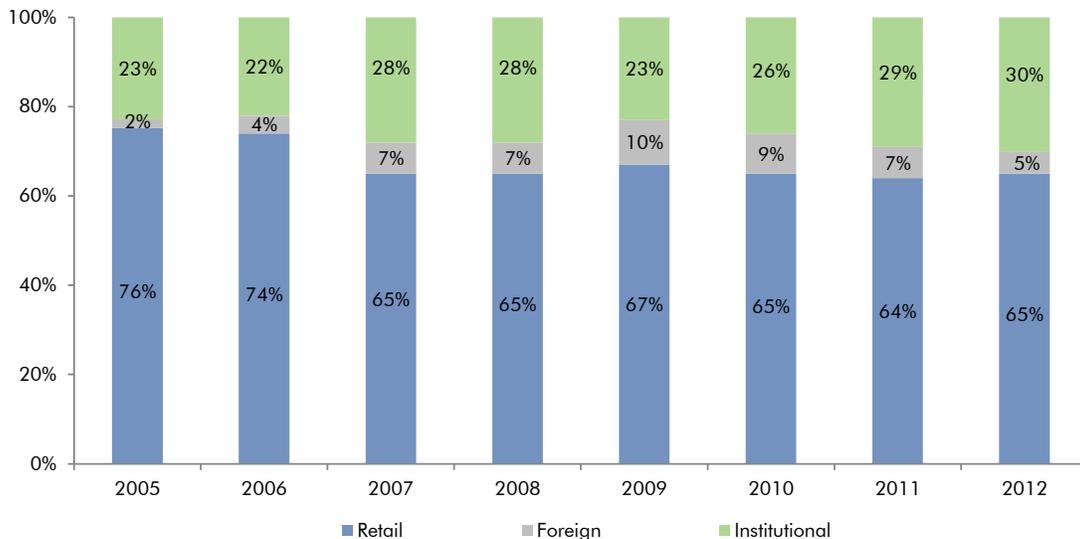


Source: CBRE Clarion derived from Bloomberg and FactSet as of 12/31/2013. MLPs: Average of all MLP's in the Alerian MLP Index; Corporate Bonds: Moody's BAA Corporate Bond Index; Utilities: Dow Jones Utilities Index; 10-Year Bond: U.S. 10 Year Treasury Bond; U.S. Equities: S&P 500 Index

## OWNERSHIP

MLPs typically have a general partner (G.P.) that controls the business, while investors buy limited partner (L.P.) units. Ownership of those L.P. units have historically been dominated by individual investors, but the percentage of institutional and foreign ownership of MLPs has grown in recent years from 25% to 35% (see below), which has been helped by attractive returns and increased trading volume of MLPs.

### MLP Ownership Breakdown



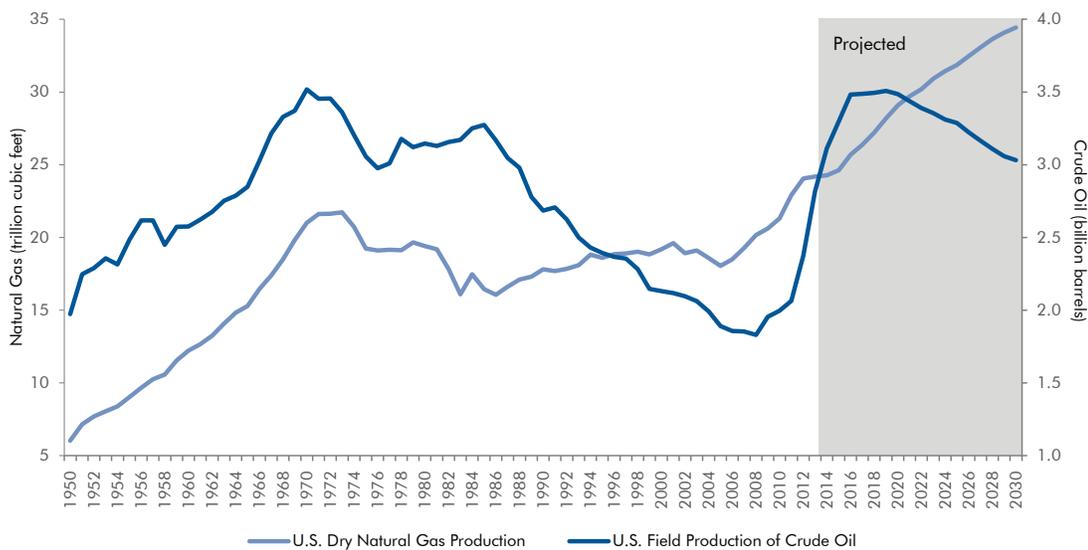
Source: PricewaterhouseCoopers LLP and Wells Fargo Securities, LLC as of 12/31/2012

## U.S. ENERGY RENAISSANCE

Horizontal drilling and hydraulic fracturing (a.k.a. “fracking”, the process of opening fissures in underground rocks by injecting a mixture of sand and water at high pressure) technology, combined with persistently high oil prices, have unlocked new production from shale and other unconventional reserves, leading to a turnaround in U.S. oil and natural gas production. As shown in the chart below, U.S. field production of crude oil was mostly in decline from 1971 through 2008. In 2009, oil production increased 6.8%, and from 2009-2012 increased a total of 29.8%, according to the U.S. Energy Information Administration (EIA).

Once 2013 production data is released, the U.S. is expected to have been the world’s largest producer of oil and natural gas combined in the world, having already surpassed Russia to become the world’s largest natural gas producer in 2009. For oil production specifically, the U.S. is expected to surpass Russia and Saudi Arabia by 2016 to become the world’s top producer, albeit until 2020.

Historical and Projected U.S. Energy Resource Production



Source: U.S. Energy Information Administration as of 12/31/2013

Growth in natural gas production started several years prior to the oil production resurgence. While natural gas production growth has been less dramatic than that of oil, and is expected to grow at a slower rate through 2020, its growth has been strong as production increased 16.6% from 2009 to 2012, and is expected to grow 20.9% from 2012 to 2020. Natural gas production is also expected to continue to grow through 2030, while oil production is expected to peak around 2019.

Dow Chemical has announced four U.S. Gulf Coast chemical plant investment projects totaling \$3-4 billion in capital from 2012 through 2017.

Dow has described the plan as a “comprehensive investment plan to further connect its U.S. operations with cost-advantaged feedstocks from increasing supplies of U.S. shale gas and deliver long-term competitive advantage for Dow’s downstream business.”<sup>1</sup>

<sup>1</sup>“Dow U.S. Gulf Coast Investments on Track to Deliver Competitive Advantage Through Shale Gas,” The Dow Chemical Company press release, December 03, 2012. website: <http://www.dow.com/news/press-releases/article/?id=6119>.

In July 2012, Methanex Corporation announced its plans to spend \$550mm relocate 1mm ton/year methanol plant from its Chile site to Geismar, Louisiana, at a cost of approximately \$550mm.

President & CEO Bruce Aitken, regarding the announcement: “[the project] allows us to capitalize on the current low natural gas price environment in North America.”<sup>1</sup>

In April 2013, Methanex also plans to spend an additional \$550mm to relocate a second 1mm ton/year methanol plant from its Chile site to Geismar, Louisiana.

President & CEO John Floren: “Relocating a second plant to Louisiana allows us to benefit quickly from the competitive natural gas price environment in North America.”<sup>2</sup>

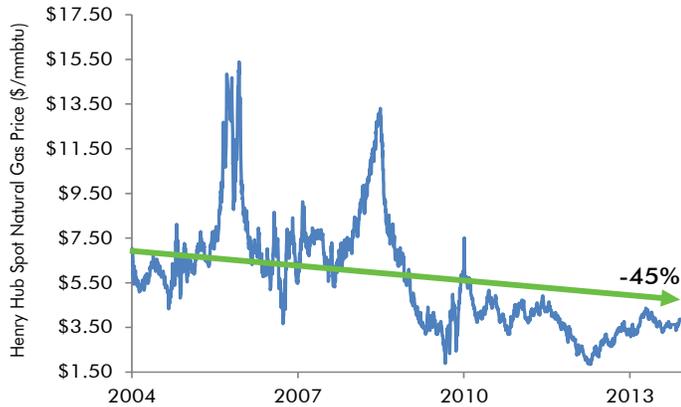
<sup>1</sup>“Methanex Proceeds with Louisiana Project,” Methanex Corporation press release, July 25, 2012. website: <http://methanex.mwnewsroom.com/press-releases/methanex-proceeds-with-louisiana-project-tsx-mx-201207250807944001>.

<sup>2</sup>“Methanex Proceeds with a Second Methanol Plant in Geismar, Louisiana,” Methanex Corporation press release, April 24, 2013. website: <http://methanex.mwnewsroom.com/press-releases/methanex-proceeds-with-a-second-methanol-plant-in-tsx-mx-201304250868889001>

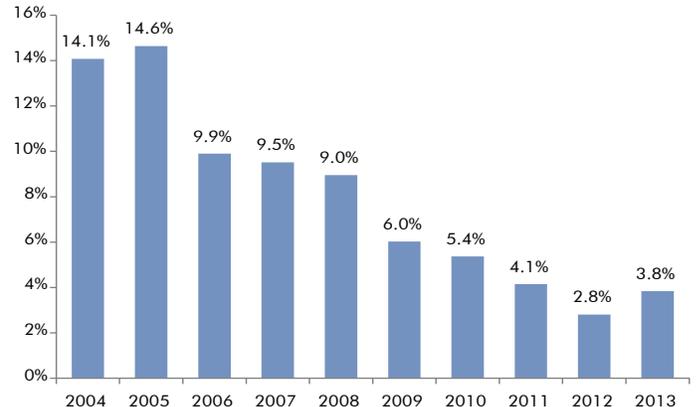
## INDUSTRIAL AND MANUFACTURING RENAISSANCE

Natural gas supply overwhelmed the market and sent natural gas prices to multi-decade lows in 2012. Prices recovered on an absolute basis in 2013, but abundant natural gas and limited export capabilities have caused natural gas to continue to trade at a wider than historical discount to domestic crude oil (lower-right chart below). Lower natural gas prices have reduced energy costs for companies and individuals, enhancing the sustainability of the U.S. economic recovery, and helping domestic manufacturing companies to become more competitive globally.

Daily Spot Natural Gas Price



Natural Gas Price (% of Oil Price)



Source: CBRE Clarion derived from Bloomberg as of 12/31/2013

Source: CBRE Clarion derived from Bloomberg as of 12/31/2013

Cheaper natural gas has created a wide discount for natural gas-based feedstocks (i.e. raw materials) for chemical manufacturers relative to alternatives. Cheap natural gas-based feedstocks have enticed petrochemical companies to increase their use relative to oil-based feedstocks. Ethylene crackers (the plants that turn the feedstocks into refined chemicals that form the base in the manufacturing of industrial chemicals and certain plastics) have historically used a mix of oil-based and natural gas-based feedstocks. In 2004, approximately 65% of the feedstock used in U.S. ethylene crackers was natural gas-derived (NGLs like ethane and propane mostly) vs. crude-based feedstocks. In 2013, natural-gas derived feedstocks grew to account for 91% of the total feedstock used.

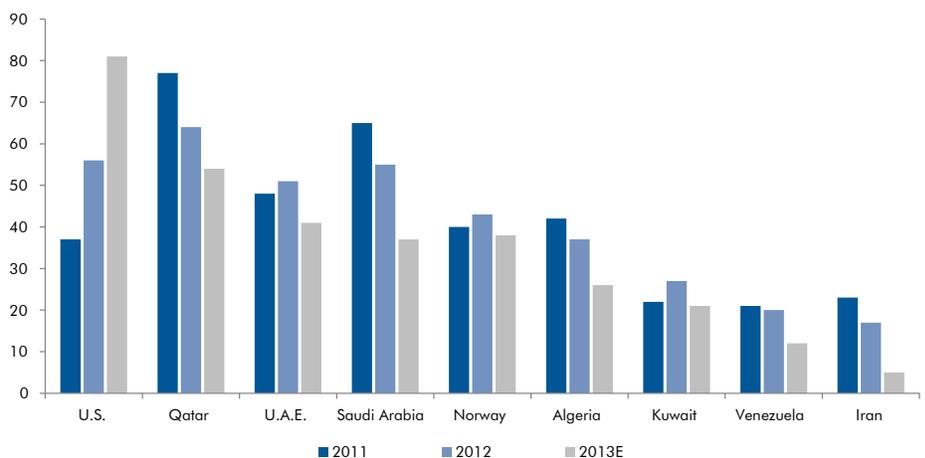
In addition to accounting for more of existing petrochemical capacity, discounted natural gas-based inputs have led chemical companies to announce multi-billion dollar plans to build new plants in the U.S. over the next several years to capture the cost advantage. Large multi-national chemical companies are making long-term global capital allocation decisions with regard to where they add capacity, and the U.S. has the clear cost advantage relative to the rest of the world.

While these plants are under development and being constructed, several MLPs have developed export terminals for certain NGLs (mostly propane) as a result of the global demand for cheaper U.S. NGLs. Because of these efforts by MLPs, the U.S. was expected to become the largest propane exporter in the world in 2013 (see chart below).

Enterprise Products Partners L.P. (NYSE: EPD), the MLP that exports the most propane, believes that the U.S. propane and ethane market will remain oversupplied domestically through at least 2020, creating sustainable opportunities to build out additional export facilities.<sup>1</sup> As U.S. oil byproducts and NGLs become a more important part of the global supply and demand equation, MLPs will play a larger role on the global stage, setting up future avenues for growth.

<sup>1</sup>"Enterprise Products Partners L.P. Wells Fargo Pipeline & MLP Symposium," Enterprise Products Partners L.P. presentation, December 10, 2013. website: <http://phx.corporate-ir.net/phoenix.zhtml?c=80547&p=irol-presentations2013>

Top Propane Exporting Countries

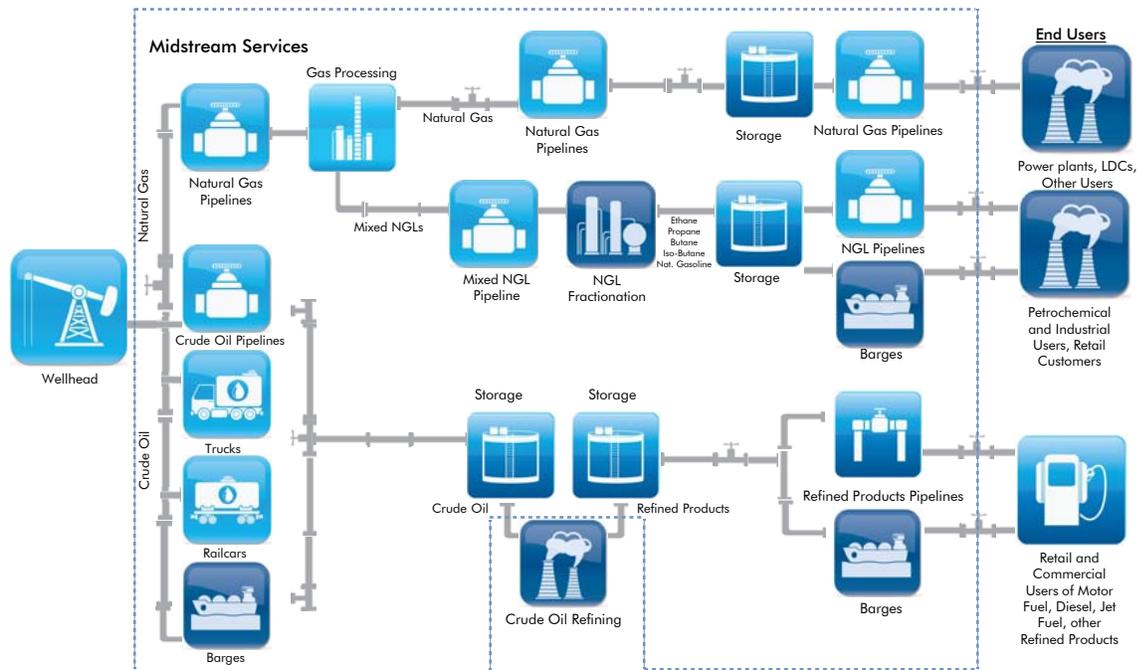


Source: Enterprise Products Partners LP as of 12/31/2013. "E" refers to estimates.

## MLP OPPORTUNITIES ACROSS THE MIDSTREAM VALUE CHAIN

The majority of MLPs operate assets that make up the midstream portion of the crude oil or natural gas value chain (the activities depicted within the dashed box in the diagram below). Of the \$464 billion of energy MLP sector market capitalization, approximately \$387 billion represents MLPs that operate midstream assets. The midstream portion of the value chain consists of a wide range of activities with different competitive dynamics. In general, however, midstream activities have less commodity price exposure than drilling for oil & natural gas (upstream) or operating refineries (downstream), as a result of the long-term, fee-based nature of the contracts that typically cover such midstream activities.

### Energy Value Chain



Source: CBRE Clarion as of 12/31/2013

MLPs are more important than ever to the energy value chain equation. Large integrated oil and natural gas producers have increasingly sold their midstream assets (mostly to MLPs) to free up capital for development. As a result, MLPs now own and operate the majority of domestic energy midstream assets.

Producers will rely heavily on MLPs to develop the necessary infrastructure to manage the new supply. To ensure access to processing or pipeline transportation capacity, producers generally engage MLPs under long-term, fee-based agreements. Resource supply is only part of the energy independence answer. Getting supply to a market for a reasonable cost is a critical component, and MLPs remain the preferred solution.

MLPs are taking action across the energy value chain and will continue to benefit from the U.S. Energy Renaissance in four primary ways.

#### 1. Building infrastructure to link major energy hubs

Example: Magellan Midstream Partners (NYSE: MMP) invested \$430 million to convert and reverse an existing refined products pipeline into a crude oil pipeline that ships oil from the Permian Basin in West Texas to the Houston area.

#### 2. Building infrastructure to service upstream companies and their growing production (supply-push)

Example: Markwest Energy Partners (NYSE: MWE) has announced or is constructing a total of 8 natural gas processing plants serving production in the Marcellus Shale region that combine to account for the majority of MWE's 2014 capital budget guidance of \$2.05 billion.

#### 3. Building infrastructure to service downstream users of energy commodities (demand-pull)

Example: Enterprise Products Partners (NYSE: EPD) recently completed its eighth expansion of fractionation capacity at its Mont Belvieu, TX site that will allow for increased production of individual NGLs to feed into plants along the U.S. Gulf Coast and into export facilities.

#### 4. Building infrastructure to services burgeoning export prospects

Example: Targa Resource Partners (NYSE: NGLS) will spend \$480 million to build out its propane export terminal at its Galena Park site along the Houston Ship Channel

Also, recent discussions around the potential lifting of the decades-long ban on crude oil exports would create additional infrastructure development opportunities for midstream MLPs.

## MLP INVESTMENT PROJECTS

Estimates of the oil and natural gas infrastructure buildout requirements vary and seem to become obsolete very quickly as production continues to grow. An off-cited June 2011 study by the Interstate Natural Gas Association of America (INGAA) estimated that \$338 billion of capital will need to be invested in oil and natural gas infrastructure from 2011 through 2035, or \$14 billion per year, and MLPs play a dominant role in this activity.

From 2008 through 2012, MLPs invested approximately \$74 billion in midstream projects, or \$15 billion per year (as shown in the chart below). It is estimated that MLPs will invest \$75 billion of capital on projects in the next three years (\$25 billion annually), including \$30 billion in 2013, which implies that the INGAA report may underestimate the investment capital opportunity for MLPs. The announced backlog of crude oil pipeline projects alone stands at \$51 billion for projects that will be placed into service by MLPs and related midstream corporations between 2014 and 2018.

Capital Spent on Investment Projects by MLPs



Source: Wells Fargo Securities as of 12/31/2013. "E" refers to estimates.

The Energy Renaissance and its positive effect on the U.S. economy may take decades to play out. MLPs should continue to play a prominent role as a service provider and a funding mechanism for continued new shale supply development, and they should continue to earn attractive risk-adjusted rates of return on projects that help close the infrastructure gap.





## CONCLUSION

The Energy Renaissance is just beginning to reshape the landscape of North American oil and gas infrastructure. MLPs remain best positioned to be the primary capital provider for the massive buildout of the energy infrastructure required to support new oil and natural gas production.

We believe MLPs offer investors the ability to participate in the U.S. Energy Renaissance and potential the upside from activity on the supply side and the demand side (including exports) of the energy value chain. In the meantime, investors are expected to collect a relatively attractive current distribution yield, largely supported by long-term fee-based contracts.

MLPs have delivered attractive returns over the long-term, outperforming other U.S.-focused yield-based equities while producing lower levels of volatility, ultimately achieving significantly better risk-adjusted returns.

It is important to note, however, that there will be winners and losers within the MLP space, and stock price performance of individual MLPs will vary. We believe that investing in MLPs through an active manager with substantial knowledge of individual MLP asset footprints and the trends impacting those assets has never been more important.

We welcome the opportunity to share with you our capabilities at CBRE Clarion Securities for investment in this growing asset class. For more information, please contact:

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## GLOSSARY

**Alerian MLP Index** is a composite of the 50 most prominent energy Master Limited Partnerships (MLPs) that provides investors with an unbiased, comprehensive benchmark for this emerging asset class. The index, which is calculated using a float-adjusted, capitalization-weighted methodology, is disseminated real-time on a price-return basis (NYSE: AMZ) and on a total-return basis (NYSE: AMZX).

**FTSE NAREIT Equity Index** is an unmanaged market cap weighted index comprised of equity REITs. The NAREIT Equity index is available daily. The NAREIT Equity index includes healthcare and net lease REITs, but excludes real estate operating companies. The requirement for inclusion in this index is for a company to be an exchange listed equity REIT. There is no minimum size or liquidity requirement for an equity REIT to be included in this index.

**Standard & Poor's 500 Index** is an unmanaged capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

**Dow Jones Utilities Index** also known as the "Dow Jones Utilities") is a stock index from Dow Jones Indexes that keeps track of the performance of 15 prominent utility companies.

**Moody's BAA Corporate Bond Index** reflects the average yield of constituent corporate bonds that have been given Moody's Baa credit rating. Corporate bonds can receive ratings that range from a high of Aaa to a low of C. Bonds given the Baa rating are considered as medium-grade obligations, meaning they are neither highly protected nor poorly secured. Bonds rated Baa and above are considered investment grade.

## IMPORTANT DISCLOSURES

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**Past performance of various investment strategies, sectors, vehicles and indices are not indicative of future results.** Investing in Master Limited Partnerships involves risks, including the potential loss of principal. MLPs are typically controlled by a general partner, and therefore investors in the limited partnership units may have limited control and voting rights. MLPs present tax risks for unit holders associated with the ownership of partnership interests, including any changes in the tax status of the structure. Distributions from MLPs are subject to change, may be subject to interest rate risks, and may be subject to different tax treatments. MLP equities are subject to risks similar to those associated with direct ownership of energy and infrastructure assets, such as commodity risks, supply and demand risks, operational risks, and regulatory risks among others. Portfolios concentrated in MLPs and infrastructure securities may experience price volatility and other risks associated with non-diversification. While equity securities may offer the potential for greater long-term growth than some debt securities, they generally have higher volatility. There is no guarantee that risk can be managed successfully. There are no assurances performance will match or outperform any particular benchmark. Indices are unmanaged and not available for direct investment. A01162014

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