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The Case for Energy Infrastructure in Your Portfolio August 2019

Summary

- Pipelines are widely considered the cornerstone of energy infrastructure. Because revenues are largely based on fees, whether from pipelines, storage facilities, or processing plants, energy infrastructure companies tend to generate stable cash flows, which support attractive dividends.
- For investors, energy infrastructure provides income, diversification, real asset exposure, and growth potential.
 Energy infrastructure also offers attractive qualities relative to a broad energy investment.
- Current valuations compare favorably with history and relative to other sectors.
- From a portfolio construction standpoint, energy infrastruct ure can fit within an energy, income, real assets, or equity growth sleeve.

Explanatory notes:

Energy infrastructure and midstream are used interchangeably throughout this piece. Energy infrastructure refers to those companies that transport, store, or process hydrocarbons, typically for a fee per unit of energy. The Alerian MLP Infrastructure Index (AMZI) and the Alerian Midstream Energy Select Index (AMEI) are used to represent midstream energy infrastructure. These indices represent the two main types of energy infrastructure funds – C-Corp funds and RIC-compliant funds. These are discussed in more detail in the section titled "Allocating to energy infrastructure."

When comparing energy infrastructure with equities, the S&P 500 Index is used as a proxy for the broader market. Utilities and REITs are also used for comparison purposes as income-oriented investments. Utilities are represented by the S&P 500 Utilities Index, a composite of utility stocks in the S&P 500. Real Estate Investment Trusts (REITs) are represented by the Real Estate 50 Index, a supplemental benchmark to the FTSE NAREIT US Real Estate Index Series.

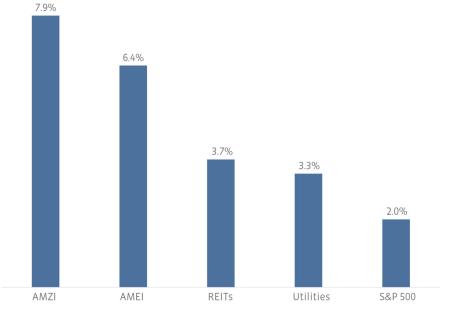
Why invest in energy infrastructure?

The primary benefits of investing in energy infrastructure include income, diversification, real asset exposure and potential growth. We explore these benefits in more detail below.

1) Income with potential tax-deferral.

Master Limited Partnerships (MLPs) have long attracted investors searching for yield. Because they do not pay taxes at the entity level, MLPs are able to pass more of their cash flows on to investors as distributions. As an added benefit, typically 70-100% of MLP distributions are considered a tax-deferred return of capital. Taxes on the return of capital portion of the distribution are not paid until the investment in the MLP is sold.

As represented by the Alerian MLP Infrastructure Index (AMZI) in the chart below, MLPs offer more generous yields than other income-oriented equity investments. Though more modest than MLPs, midstream corporations also offer attractive yields relative to other sectors. The Alerian Midstream Energy Select Index (AMEI), which consists of 75% midstream C-Corporations and 25% midstream MLPs, provides a greater yield than traditional income investments or the broader market as shown. On average over the past ten years, the yield difference between the AMZI and AMEI has been 180 basis points, compared to the more recent difference of 150 basis points.

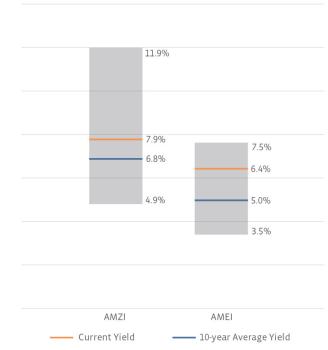




Souce: Alerian, Bloomberg as of June 28, 2019

Taking a broader view, the average yields for the AMZI and AMEI over the last ten years have been 6.8% and 5.0%, respectively, as shown below. Current yields are more than 100 basis points above the ten-year average for both indices.

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Current Yields Compare Favorably to 10-Year Averages, Are Well Within the 10-Year Range

A one-day 12.5% yield on 2/11/16 was excluded from AMZI's 10-year range as an outlier. Source: Alerian as of June 28, 2019

2) Diversification.

Energy infrastructure provides diversification relative to broader market indices as well as other income-oriented investments. For portfolios increasingly allocated to passive products tracking well-known market indices, the diversification benefit of midstream may be particularly attractive. For example, there are currently only three midstream corporations included in the S&P 500 – ONEOK (OKE), The Williams Companies (WMB), and Kinder Morgan (KMI). MLPs are not included in broader market indices. While the correlation with the broader market has increased in more recent years, MLPs and midstream have a similar correlation to the S&P 500 as REITs over the last ten years as shown below.

Correlation to the S&P 500

	Utilities	REITS	Bonds	AMEI	AMZI
3-year	0.26	0.52	-0.09	0.68	0.69
5-year	0.23	0.50	-0.08	0.67	0.67
10-year	0.32	0.64	-0.15	0.66	0.61

Source: Bloomberg as of June 28, 2019

Notably, energy infrastructure has relatively low correlations with other incomeoriented investments, including REITs, Utilities, and Bonds, as shown in the table below. Adding midstream to an income portfolio with these investments could provide diversification while also enhancing the income profile of the portfolio.

	Correlation to AMZI			Correlation to AMEI			
	Utilities	REITS	Bonds		Utilities	REITS	Bonds
3-year	0.05	0.50	0.02	3-year	0.11	0.61	0.05
5-year	0.09	0.36	0.03	5-year	0.14	0.39	0.06
10-year	0.22	0.40	0.03	10-year	0.32	0.49	0.08

Source: Bloomberg as of June 28, 2019

3) Real asset exposure.

Real assets provide potential protection in an environment of rising inflation. Energy infrastructure companies often have contracts that are indexed to inflation annually. As an example, the fees charged by interstate liquids¹ pipelines are often subject to the Federal Energy Regulatory Commission's (FERC) indexing methodology, which is based on the change in the producer price index for finished goods (PPI-FG). FERC sets the ceiling for raising tariffs on these pipelines using the annual change in the PPI-FG plus an adjustment (currently PPI-FG + 1.23%). Beyond intrastate liquids pipelines, many midstream companies have service agreements for other assets that include an annual inflation escalator.

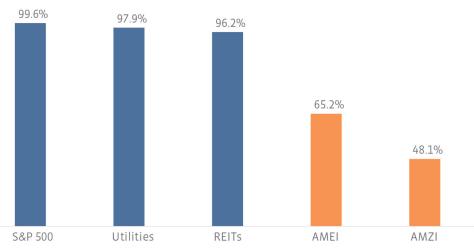
4) Growth potential.

Growth companies generate cash flows (or earnings) at a faster growth rate than the broader economy and have ample opportunities to reinvest in their business. By this definition, North American energy infrastructure companies are growth companies. At the entity and index level, historical EBITDA growth numbers are often distorted by acquisitions. For example, average annual EBITDA growth among AMZI constituents for 2018 was approximately 24%. For a less skewed perspective free from the impact of acquisitions, forward company guidance can be used to evaluate growth. The average implied 2019 EBITDA growth among nineteen midstream companies earlier this year was 8.4% using the midpoint of guidance and 2018 adjusted EBITDA. Of those nineteen companies, nine were guiding to double-digit percentage EBITDA growth. Clearly, growth profiles will vary by company, but the growth prospects for energy infrastructure are likely better than many would expect for a subsector of energy.

Over the next several years, the outlook for growth remains robust and is being driven by increasing energy production and exports from the US and Canada, which will require more energy infrastructure. Based on a 2018 study from the Interstate Natural Gas Association of America, it is estimated that the US and Canada will require \$521 billion in energy infrastructure investments from 2018 to 2035². This forecast implies ample opportunity for midstream companies to reinvest cash flows into growth projects.

How do valuations compare currently?

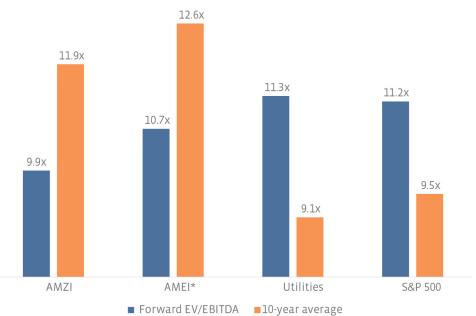
From a valuation perspective, midstream is trading well below its 2014 peak, while the broader market is near all-time highs. As shown below, midstream is trading at a discount to history based on forward enterprise value to EBITDA, whereas the S&P 500 and Utilities are at premiums. Current energy infrastructure valuations are also attractive relative to private equity multiples paid for midstream assets over the past year, with transactions completed at 11-14x EBITDA multiples. Discounted valuations relative to history and relative to private equity transactions have attracted interest in MLPs and midstream from value-focused investors.



MLPs and Midstream are Trading Well Below All-Time Highs Current Prices as a Percentage of All-Time Highs

Source: Bloomberg and Alerian as of June 28, 2019





Forward EV/EBITDA based on Bloomberg 2020 EBITDA estimates. *10-average reflects data since launch on April 1, 2013. Source: Bloomberg and Alerian as of June 28, 2019

Where does energy infrastructure fit in your portfolio?

Energy infrastructure could fit in multiple portfolio sleeves depending on the objective of the investor. Specifically, we will discuss energy infrastructure as an energy, equity income, real assets, or equity growth allocation.

1) Energy.

Energy infrastructure offers many attractive benefits relative to a broad investment in energy as represented by the S&P Energy Select Sector Index (IXE). In addition to providing greater income, midstream is also less correlated with oil prices and tends to perform more defensively in an environment of falling oil prices. The defensive quality of midstream relates to the fee-based nature of the business model. Midstream companies collect a fee for each unit of energy transported, stored, or processed, limiting their direct exposure to commodity price fluctuations. For investors desiring energy exposure with less volatility (as measured by standard deviation below), higher yields, and a lower correlation with oil prices, midstream may be an attractive option.

	AMZI	AMEI	IXE
Yield	7.9%	6.4%	3.5%
Investment Grade Weighting	76.5%	68.0%	98.6% ¹
Constituents	23	38	29
5-year Correlations			
WTI	0.53	0.59	0.71
S&P 500	0.67	0.67	0.68
10-year Correlations			
WTI	0.52	0.58	0.71
S&P 500	0.61	0.66	0.77
Trailing 10-year Standard Deviation	21.7%	18.2%	22.1%
8-year Sharpe Ratio*	0.23	0.42	0.09
Market Capitalization (Billions)	\$271	\$531	\$1,248

Midstream vs. IXE

¹IXE's investment grade weighting is estimated based on weights for XLE, the ETF which tracks the IXE *Sharpe Ratios are calculated using total return. Source: Alerian, Bloomberg as of June 28, 2019

2) Income.

Energy infrastructure is a natural fit for income portfolios given its attractive yields. That said, the higher yield of MLPs and midstream corporations does not come without some risk. These equities may see greater volatility than other yield investments, and midstream investments should not be viewed as a proxy for a fixed income investment. These are equities with some exposure to oil price fluctuations, particularly in terms of sentiment. A typical income portfolio may allocate 5-10% or potentially more to energy infrastructure depending on the risk and return objectives of the portfolio. As previously discussed, the low correlation of MLPs and midstream with traditional income investments can provide diversification benefits to an income portfolio in addition to enhancing yield.

3) Real assets.

Commodities, real estate, infrastructure, and gold can all be classified as real assets. The benefits of real assets are diversification and inflation protection. Real assets typically have low correlations with stocks and bonds making them complementary to traditional portfolios. As discussed above, midstream contracts often have inflation protection built into them, and midstream assets represent "steel in the ground."

4) Equity growth.

When considering an energy infrastructure investment, growth is probably not top of mind. Typically, investors will look to sectors such as technology or healthcare for growth. However, the trends in North American oil and natural gas production support a strong growth proposition for energy infrastructure, as discussed above.

How can energy infrastructure benefit a portfolio?

No one buys a new piece of furniture without first considering how it will be incorporated with the existing fixtures in a room. In the same way, investors must consider how allocating to a sector will impact the look of an overall portfolio, including its risk, diversification, income, and return profile.

While past performance does not guarantee future results, it is informative to look at a few examples of how adding energy infrastructure to portfolios can impact the historical returns, yield, standard deviation, and Sharpe Ratio, which compares the return and risk of an investment. The first example begins with an incomeoriented portfolio consisting of 50% equity and 50% fixed income using indices. To simulate adding energy infrastructure, the table below assumes a 5% allocation to the Alerian MLP Infrastructure Index (AMZI) and the Alerian Midstream Energy Select Index (AMEI) with a proportional decline in both the equity and fixed income investments. In this example, the 5% allocation to the AMZI or AMEI increases the overall portfolio yield by 7.5% and 4.1%, respectively. Annualized total return increases with the addition of the energy infrastructure investments, but standard deviation also increases. As a result, the Sharpe Ratio for the portfolios with energy infrastructure is slightly lower than the original 50/50 portfolio.

Simulated 10-year Income Portfolios

	50%/50% Equity & Fixed Income	With 5% AMZI	With 5% AMEI
Annualized Total Return	9.41%	9.50%	9.59%
Average Yield	2.66%	2.86%	2.77%
Standard Deviation	7.34%	7.60%	7.64%
Sharpe Ratio	1.26	1.23	1.23

Equities in the portfolio are represented by the Russell 1000 Value Index.

The Bloomberg Barclays US Aggregate Bond Index accounts for 90% of the fixed income portion of each portfolio.

The S&P 500 High Yield Corporate Bond Index accounts for 10% of the fixed income portion of each portfolio. AMZI and AMEI each have a 5% weighting in their respective portfolios with the other equity and the fixed income weights equally adjusted to 47.5%.

Portfolio simulations assume constant weights over the 10-year period.

Source: Bloomberg as of July 12, 2019

To provide another example, the simulation below begins with a typical default portfolio of 60% equity and 40% fixed income. The simulation assumes that the fixed income weighting remains stable, while 5% from the equity sleeve is allocated to the AMZI and AMEI. The addition of energy infrastructure lowers the standard deviation in this example, and the Sharpe Ratio is largely the same. The annualized total return is slightly lower, despite the higher yield of the portfolios with energy infrastructure. With the modest 5% allocation to the AMZI and AMEI, the yield increases by 10.1% and 6.1%, respectively.

	60%/40% Equity & Fixed Income	With 5% AMZI	With 5% AMEI		
Annualized Total Return	10.99%	10.76%	10.86%		

Simulated 10-Year 60/40 Portfolios

Average Yield 2.28% 2.51% 2.42% **Standard Deviation** 8.60% 8.47% 8.50% Sharpe Ratio 1.27 1.26 1.27

Equities in the portfolios are represented by the S&P 500 Index

The fixed income portion of each portfolio is represented by the Bloomberg Barclays US Aggregate Bond Index. AMZI and AMEI each have a 5% weighting and are included in the 60% equity portion of their respective portfolios. Portfolio simulations assume constant weights over the 10-year period. Source: Bloomberg as of July 12, 2019

The simulations above provide backward-looking examples of how the addition of energy infrastructure would have impacted a typical income portfolio and 60/40 portfolio over the past ten years. Over that time period, oil markets weathered a significant downcycle beginning in 2014 while the broader market thrived in what has been often labeled the longest bull market on record. These events limit the usefulness of these historical examples.

Allocating to energy infrastructure.

Allocations to energy infrastructure will vary depending on a number of factors: the type of portfolio, risk and return preferences, and the investor's outlook. Within a broad, diversified portfolio, energy infrastructure may represent a modest 3-5% of the total portfolio. Within an income portfolio, the weighting to energy infrastructure may be up to 10% or potentially even greater.

Once an allocation has been decided, an investor must then decide how to gain exposure to the energy infrastructure space. Clearly, one way is to directly invest in MLPs or midstream corporations. A direct investment in an MLP will generate a Schedule K-1 for tax reporting purposes. If an investor would prefer MLP exposure without receiving a K-1, there are three main types of MLP access products from which to choose – C-Corp funds, RIC-compliant funds, and Exchange Traded Notes.

C-Corp funds: Any open-ended fund or mutual fund, closed-end fund, or exchangetraded fund that owns more than 25% MLPs will be taxed as a corporation. The result is a tax drag, which will cause performance of the fund to differ from the performance of the underlying securities or the underlying index for passive products. As the underlying securities experience gains, C-Corp funds will accrue a deferred tax liability to account for corporate and state taxes. With the lowered corporate tax rate of 21%, future tax drag will be muted relative to the 35% rate in place previously. The primary attraction of C-Corp funds is the tax-deferred yield they provide, given the significant MLP weighting.

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RIC-compliant funds: Funds that own less than 25% MLPs will not pay taxes at the fund level, allowing the entire return to be passed on to investors. In other words, RIC-compliant funds do not have tax drag. There are other nuances to keep in mind, however. RIC-compliant funds have lower yields relative to C-Corp funds because of their lower MLP weighting. It is also important to understand the holdings of the other 75% of a RIC-compliant fund to ensure desired exposure.

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Exchange Traded Notes (ETNs): Unlike C-Corp or RIC-compliant funds, ETNs are unsecured debt obligations of the issuing bank. Holders of ETNs are exposed to the credit risk of the issuer. The issuing bank agrees to pay the investor a return as specified in the issuance documents. MLP ETNs can track a basket of MLPs without any tax drag. However, as notes, coupons are taxed at ordinary income rates. For this reason, ETNs are more suitable for tax-advantaged accounts.

The infographic below summarizes the advantages and disadvantages of the three main MLP product types.



*Due to expense ratio being taken from NAV, and income being treated as return of capital /qualified dividend **Due to expense ratio being taken from coupon, and coupon being taxed as ordinary income

*** Due to lower MLP exposure

Source: Alerian

Conclusion

When weighing investment options for a portfolio, the attractive qualities of energy infrastructure merit consideration. The multi-faceted benefits of an energy infrastructure allocation include income, diversification, real asset exposure, and growth potential. An allocation to energy infrastructure may fit within the energy, income, real assets, or equity growth sleeve of a portfolio. Relative to a broader investment in energy, the energy infrastructure subsector stands out for its generous yields and its defensive performance amid oil price volatility as a result of the fee-based nature of the midstream business model.

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