ClearBridge Energy MLP Fund Inc.
Form N-CSR
January 27, 2017
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED

MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-22405

ClearBridge Energy MLP Fund Inc.

(Exact name of registrant as specified in charter)

620 Eighth Avenue, 49th Floor, New York, NY 10018

(Address of principal executive offices) (Zip code)

Robert I. Frenkel, Esq.

Legg Mason & Co., LLC

100 First Stamford Place

Stamford, CT 06902

(Name and address of agent for service)

Registrant s telephone number, including area code: (888) 777-0102

Date of fiscal year end: November 30

Date of reporting period: November 30, 2016

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ITEM 1. REPORT TO STOCKHOLDERS.

The **Annual** Report to Stockholders is filed herewith.

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Annual Report November 30, 2016

CLEARBRIDGE

ENERGY MLP

FUND INC. (CEM)

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Fund objective

The Fund s investment objective is to provide a high level of total return with an emphasis on cash distributions.

The Fund seeks to achieve its objective by investing primarily in master limited partnerships (MLPs) in the energy sector.

Letter from the chairman

Dear Shareholder,

We are pleased to provide the annual report of ClearBridge Energy MLP Fund Inc. for the twelve-month reporting period ended November 30, 2016. Please read on for a detailed look at prevailing economic and market conditions during the Fund s reporting period and to learn how those conditions have affected Fund performance.

As always, we remain committed to providing you with excellent service and a full spectrum of investment choices. We also remain committed to supplementing the support you receive from your financial advisor. One way we accomplish this is through our website, www.lmcef.com. Here you can gain immediate access to market and investment information, including:

- Fund prices and performance,
- Market insights and commentaries from our portfolio managers, and
- A host of educational resources.

We look forward to helping you meet your financial goals.

Sincerely,

Jane Trust, CFA

Chairman, President and Chief Executive Officer

December 30, 2016

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Investment commentary

Economic review

The pace of U.S. economic activity fluctuated during the twelve months ended November 30, 2016 (the reporting period). Looking back, the U.S. Department of Commerce reported that fourth quarter 2015 U.S. gross domestic product (GDP)[i] growth was 0.9%. First and second quarter 2016 GDP growth was 0.8% and 1.4%, respectively. The U.S. Department of Commerce s final reading for third quarter 2016 GDP growth released after the reporting period ended was 3.5%. The improvement in GDP growth in the third quarter 2016 reflected an increase in private inventory investment, an acceleration in exports, smaller decreases in state and local government spending and an upturn in federal government spending.

While there was a pocket of weakness in May 2016, job growth in the U.S. was solid overall and a tailwind for the economy during the reporting period. When the reporting period ended on November 30, 2016, the unemployment rate was 4.6%, as reported by the U.S. Department of Labor. This represented the lowest level since August 2007. The percentage of longer-term unemployed also declined over the period. In November 2016, 24.8% of Americans looking for a job had been out of work for more than six months, versus 26.3% when the period began.

After an extended period of maintaining the federal funds rate[ii] at a historically low range between zero and 0.25%, the Federal Reserve Board (the Fed)[iii] increased the rate at its meeting on December 16, 2015. This marked the first rate hike since 2006. In particular, the U.S. central bank raised the federal funds rate to a range between 0.25% and 0.50%. The Fed then kept rates on hold at every meeting prior to its meeting in mid-December 2016. On December 14, 2016, after the reporting period ended, the Fed raised rates to a range between 0.50% and 0.75%. In the Fed s statement after the December meeting it said, The Committee expects that economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.

As always, thank you for your confidence in our stewardship of your assets.

Sincerely,

Jane Trust, CFA

Chairman, President and Chief Executive Officer

December 30, 2016

All investments are subject to risk including the possible loss of principal. Past performance is no guarantee of future results.

[i] Gross domestic product (GDP) is the market value of all final goods and services produced within a country in a given period of time.

[ii] The federal funds rate is the rate charged by one depository institution on an overnight sale of immediately available funds (balances at the Federal Reserve) to another depository institution; the rate may vary from depository institution to depository institution and from day to day.

[iii] The Federal Reserve Board (the Fed) is responsible for the formulation of U.S. policies designed to promote economic growth, full employment, stable prices and a sustainable pattern of international trade and payments.

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Fund overview

Q. What is the Fund s investment strategy?

A. The Fund s investment objective is to provide a high level of total return with an emphasis on cash distributions. The Fund seeks to achieve its objective by investing primarily in master limited partnerships (MLPs) in the Energy sector. The Fund considers an entity to be within the Energy sector if it derives at least 50% of its revenues from the business of exploring, developing, producing, gathering, transporting, processing, storing, refining, distributing, mining or marketing natural gas, natural gas liquids (including propane), crude oil, refined petroleum products or coal.

We focus primarily on energy-related MLPs with stable, predictable cash flows, using a bottom-up process to find MLPs that we believe offer sustainable and predictable distributions, as well as relatively low direct commodity exposure. We also seek out companies with the potential to grow their businesses, and thereby their distributions, over time, evaluating companies based on their geographic footprints, the markets and types of assets they invest in, their balance sheet strength and their ability to make accretive acquisitions.

ClearBridge Investments, LLC is the Fund s subadviser. The portfolio managers primarily responsible for overseeing the day-to-day management of the Fund are Richard A. Freeman, Michael Clarfeld, CFA, Chris Eades, and Peter Vanderlee, CFA.

Q. What were the overall market conditions during the Fund s reporting period?

A. The major U.S. equity broad indices posted positive returns for the twelve-month reporting period ended November 30, 2016, as the Dow Jones Industrial Average (DJIA)[i] and the S&P 500 Index[ii] gained 10.91% and 8.06%, respectively. The NASDAQ Composite Index[iii] lagged somewhat but still gained 5.53% during the reporting period. Throughout the period, investors focused on the Federal Reserve Board s (the Fed)[iv] rate strategy, underwhelming but improving U.S. economic reports, volatile and suppressed commodity prices, and political events in the United States and Europe.

The market traded roughly flat until a correction in the early part of 2016, when stocks fell. Investors became increasingly concerned about mediocre corporate profits and signs that the U.S. economy was slowing down; in addition, the price of oil dropped to $26 per barrel on concerns over a supply-demand imbalance. Combined with ongoing worries about the rate of global economic growth, persistently low interest rates and political risks highlighted in late June by Brexit , the United Kingdom s surprise vote to leave the European Union there were numerous potential pitfalls for the market through the first half of 2016. But, by-and-large, the market shook off these concerns after hitting a February 11, 2016 low to rise to record highs in August 2016. In October 2016, concerns about the economic implications of the outcome of the volatile U.S. presidential election campaign hurt stocks, as most major U.S. indices experienced a small drop. But optimism reigned after the election of Donald Trump as the next president of the United States, as investors came to view his likely economic policies favorably, pushing indices to new heights. Oil prices recovered somewhat by April 2016 and traded roughly in the

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Fund overview (cont d)

$40-$50 range for the remainder of the reporting period, but remained volatile within that band as investors weighed supply and demand drivers like the Organization of Petroleum Exporting Countries (OPEC) planned production cuts, the re-introduction of Libyan and Iranian oil, and global economic growth concerns.

The U.S. economy continued to expand during the reporting period, though U.S. gross domestic product (GDP) growth as measured by the U.S. Department of Commerce remained tepid in the early part of the reporting period, averaging just above 1%. Third quarter 2016 GDP growth picked up substantially, however, hitting 3.2% on strong consumer spending and better-than-expected net exports. The employment situation continued to improve as well. Despite some slowing in non-farm payroll increases in the last three months of the reporting period in addition to a lackluster May 2016, when just 24,000 new jobs were created the overall picture of employment appeared strong, with the average number of new jobs created each month during the year ended November 30, 2016, coming in at roughly 188,000. Meanwhile, the Fed s preferred measure of inflation core personal consumption expenditures continued its slow march upward to the central bank s long-term target. After the Fed raised interest rates once in late 2015, mixed economic data in the summer convinced the Fed to keep rates static for the remainder of the twelve-month reporting period. Persistently low rates contributed to further flatten the yield curve[vi] in the U.S., and with trillions of dollars in negative-yielding sovereign debt in Japan and Europe, investors sought potential return in income-generating equities in the Consumer Staples, Real Estate, Telecommunication Services and Utilities sectors. At its bottom, the ten-year Treasury yield hit 1.37% in early July 2016, the lowest level in decades. But this dynamic began to shift toward the end of the third quarter and into the fourth quarter of 2016, as cyclical sectors[1] began to make a comeback.

This trend was further boosted with the election of Donald Trump as the next president of the United States. Post-election optimism that the president elect and the incoming Republican Congress would likely boost economic growth via tax cuts, a reduction in regulations and infrastructure spending buoyed markets and gave new winds in the sails of financials, energy and industrials stocks. The market has now embedded greater inflation expectations and higher interest rates. Bond prices fell and the yield curve steepened, as the ten-year Treasury yield came in near 2.4% to close out the reporting period.

Q. What were the overall market conditions for the MLP sector during the reporting period?

A. In late 2015 and early 2016, MLP stocks were exceedingly weak due largely to both plummeting oil prices and fears that MLP companies would not be able to access capital markets to fund capital expenditure commitments. Oil prices have increased roughly 90% off the February 11, 2016 bottom. Investor sentiment toward MLP stocks has improved with oil prices, as the Alerian MLP Index[vii] gained 9.28% during the reporting

[1] Cyclicals consists of the following sectors: Energy, Financials, Materials and Industrials.

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period. While capital market access for MLPs was dramatically reduced in the early part of the year when commodity prices were collapsing, access to capital has improved dramatically as the commodities have recovered, alleviating fears that the companies would not be able to fund capital expenditures.

The second half of the reporting period was a volatile time for energy commodities, as concerns abounded on continued strength of the U.S. dollar, global oil supply-demand imbalances, the entry of Libyan and Iranian oil, and the likelihood of an agreement by OPEC to cut production. Trump s victory in November 2016 was seen, on balance, as mostly positive for the MLP industry. The president elect s policies on energy tilt toward a reduction in regulations, easing pipeline construction and U.S. energy independence, all ideas that should allow for further build-out of energy transportation infrastructure. The investment case for MLPs relies in large part on one s outlook for energy production. As the primary movers, processers and storers of oil and gas, MLP fundamentals rely most significantly on the volume of oil and gas produced. Thus, more production should be beneficial for MLPs. However, a boost in U.S. oil and gas production could keep prices tempered for the foreseeable future, possibly negatively impacting sentiment toward MLP stocks. To close out the reporting period, OPEC agreed to a modest production cut of 1.2 million barrels of oil per day, pushing the price of West Texas Intermediate crude oil up to $49.44, from $46.86 at the end of October 2016. The focus will now be on implementation and adherence to the agreement, which should provide some movement toward a supply-demand balance.

We have also seen mergers and acquisitions and roll-up activity in the MLP space pick up in the last year, in particular, general partner (GP) acquisitions of their limited partner (LP). The GP normally has a cost effective way of raising capital for growth projects in the LP, but if the LP cannot raise capital because of an over-leveraged balance sheet and growing cost of equity, growth projects will be difficult to finance. In this situation it may make sense to consolidate the GP and LP or cut the distribution at the LP. But in general, in our view, MLP balance sheets are in decent shape. For those MLPs with stretched balance sheets, reduced capital spending can reduce leverage metrics over time. Cash flow growth from new projects can also reduce balance sheet leverage if these incremental cash flows are used to reduce debt instead of increasing distributions. Finally, a cut in distributions can help reduce leverage, but we have yet to see major cuts to distributions.

It is also important to remember that while oil dominates the headlines, it is not the only game in town. In fact, natural gas is actually the more important commodity for U.S. oil and gas producers, as gas constitutes 54% of total oil and gas production, compared to 37% for crude oil and 9% for natural gas liquids (NGLs), a resource that is found alongside oil and gas.

While stabilizing oil prices have reduced concern about the outlook for the U.S. oil industry, it is precisely the advent of low-cost shale gas that makes the outlook for natural gas so robust. As the price of natural gas has declined, it has become cost competitive with coal as a fuel source for generating electricity. With competitive costs and a far better environmental profile than coal, natural gas has taken significant market share. Given America s tremendous

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Fund overview (cont d)

supply of low-cost natural gas and the environmental benefits of gas compared to coal, we expect this trend to continue.

In addition to coal-to-gas switching, low-cost gas is continuing to drive renewed manufacturing activity and increased petrochemical production, which further increase the demand for gas. And in a development that was unimaginable just a few years ago, the U.S. is now a net exporter of natural gas. The first liquefied natural gas (LNG) export facility came online in February of this year, and others are expected to follow in the years ahead. The combination of all of these demand drivers results in a robust outlook for natural gas production, regardless of the price of oil. This should also create strong growth for MLPs for years to come. Thus, for natural gas, lower prices are actually driving increased demand for gas. Increased demand requires increased production and increased production means more infrastructure that will, in turn, drive growth for the midstream MLPs.

Q. How did we respond to these changing market conditions?

A. With the sharp correction in late 2015 and early 2016, the Fund reduced leverage in the portfolio to decrease risk and remain within required leverage limitations. Lower leverage resulted in reduced net asset value (NAV[iii]) and, in February 2016, the Fund decreased its quarterly distribution accordingly. Despite the volatility experienced during the reporting period, our view of MLP fundamentals remains largely intact. Over the long term we expect growing U.S. production of oil and gas will necessitate increased energy infrastructure investment. We expect MLPs to provide this required infrastructure which should lead to continued distribution growth from the Fund s portfolio holdings. We believe continued modest distribution growth, ready access to capital markets, healthy balance sheets and improved investor sentiment position MLP stocks well going forward.

Through energy pricing cycles, our investment approach has remained consistent. We continue to focus on MLP and infrastructure companies that are engaged in the midstream sector transportation, processing and storage of crude oil, natural gas and natural gas liquids. These companies are generally less exposed to the volatility of commodity prices and have business models that are largely fee-based. We focus on companies with high-quality assets, healthy balance sheets and good growth prospects.

Performance review

For the twelve months ended November 30, 2016, ClearBridge Energy MLP Fund Inc. returned 2.48% based on its NAV and -8.32% based on its New York Stock Exchange (NYSE) market price per share. The Lipper Energy MLP Closed-End Funds Category Average[ix] returned 10.27% over the same time frame. Please note that Lipper performance returns are based on each fund s NAV.

The Fund s underperformance relative to the Lipper Energy MLP Closed-End Funds Category Average was largely due to the negative impacts of the cost of reducing the leverage of the Fund during the reporting period. Further, the inability of the Fund to redeem outstanding notes and preferred shares quickly during the correction added to relative underperformance. The redemption of the outstanding notes and preferred shares caused the Fund to incur prepayment penalties, as well as the write

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off of debt issuance and offering costs and the write off of preferred stock offering costs. Outside the negative impacts to NAV from the reduction of the Fund s leverage, the Fund s portfolio performance attribution was positive for sector and security selection effects relative to the Alerian MLP Index over the reporting period.

During the twelve-month period, the Fund made distributions to shareholders totaling $1.42 per share, which included a return of capital of $0.84 per share. The performance table shows the Fund s twelve-month total return based on its NAV and market price as of November 30, 2016. **Past performance is no guarantee of future results.**

Performance Snapshot as of November 30, 2016

Price Per Share	12-Month Total Return**
$16.39 (NAV)	2.48%
$15.30 (Market Price)	-8.32%

All figures represent past performance and are not a guarantee of future results.

**** Total returns are based on changes in NAV or market price, respectively. Returns reflect the deduction of all Fund expenses, including management fees, operating expenses, and other Fund expenses. Returns do not reflect the deduction of brokerage commissions or taxes that investors may pay on distributions or the sale of shares.**

Total return assumes the reinvestment of all distributions, including returns of capital, at NAV.

Total return assumes the reinvestment of all distributions, including returns of capital, in additional shares in accordance with the Fund s Dividend Reinvestment Plan.

Q. What were the leading contributors to performance?

A. The Gathering/Processing, Liquids Transportation & Storage, and Natural Gas Transportation & Storage sub-sectors contributed meaningfully to absolute performance during the reporting period. In terms of individual Fund holdings, the top contributors to performance for the period were Targa Resources Corp., ONEOK Partners LP, Williams Partners LP, CONE Midstream Partners LP and DCP Midstream Partners LP.

Q. What were the leading detractors from performance?

A. The Diversified Energy Infrastructure and Shipping sub-sectors detracted meaningfully from absolute performance during the reporting period. In terms of individual Fund holdings, leading detractors from performance for the period included positions in Energy Transfer Equity LP, Kinder Morgan Inc., Targa Resources Partners LP, MarkWest Energy Partners LP and Teekay LNG Partners LP.

Q. Were there any significant changes to the Fund during the reporting period?

A. During the reporting period, we established several new Fund positions, including NuStar Energy LP, AmeriGas Partners LP, TallGrass Energy Partners LP, a private placement in Rice Midstream Partners and Dominion Midstream Partners LP. During the period, Targa Resources Partners LP was acquired by Targa Resources Corp. and MarkWest Energy Partners LP was acquired by MPLX LP. We also sold out of Energy Transfer Equity LP, Columbia Pipeline Partners LP, Teekay LNG Partners LP, EQT GP Holdings LP and Rose Rock Midstream LP.

Looking for additional information?

The Fund is traded under the symbol CEM and its closing market price is available in most newspapers under the NYSE listings. The daily NAV is available on-line under the symbol XCEMX on most financial websites. *Barron s* and the *Wall Street Journal s* Monday edition both carry closed-end fund tables that provide additional information. In addition, the Fund

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Fund overview (cont d)

issues a quarterly press release that can be found on most major financial websites as well as www.lmcef.com (click on the name of the Fund).

In a continuing effort to provide information concerning the Fund, shareholders may call 1-888-777-0102 (toll free), Monday through Friday from 8:00 a.m. to 5:30 p.m. Eastern Time, for the Fund s current NAV, market price and other information.

Thank you for your investment in ClearBridge Energy MLP Fund Inc. As always, we appreciate that you have chosen us to manage your assets and we remain focused on achieving the Fund s investment goals.

Sincerely,

Michael Clarfeld, CFA

Portfolio Manager

ClearBridge Investments, LLC

Chris Eades

Portfolio Manager

ClearBridge Investments, LLC

Richard A. Freeman

Portfolio Manager

ClearBridge Investments, LLC

Peter Vanderlee, CFA

Portfolio Manager

ClearBridge Investments, LLC

December 16, 2016

RISKS: The Fund is a non-diversified, closed-end management investment company designed primarily as a long-term investment and not as a trading vehicle. The Fund is not intended to be a complete investment program and, due to the uncertainty inherent in all investments, there can be no assurance that the Fund will achieve its investment objective. The Fund s common stock is traded on the New York Stock Exchange. Similar to stocks, the Fund s share price will fluctuate with market conditions and, at the time of sale, may be worth more or less than the original investment. Shares of closed-end funds often trade at a discount to their net asset value. Because the Fund is non-diversified, it may be more susceptible to economic, political or regulatory events than a diversified fund. All investments are subject to risk, including the risk of loss. MLP distributions are not guaranteed and there is no assurance that all distributions will be tax deferred. Investments in MLP securities are subject to unique risks. The Fund s concentration of investments in energy-related MLPs subjects it to the risks of MLPs and the energy sector, including the risks of declines in energy and commodity prices, decreases in energy demand, adverse weather conditions, natural or other disasters, changes in government regulation, and changes in tax laws. Leverage may result in greater volatility of NAV and the market price of common shares and increases a shareholder s risk of loss. The Fund may make significant investments in derivative instruments. Derivative instruments can be illiquid, may disproportionately increase losses and have a potentially large impact on Fund performance. The Fund may invest in small capitalization or illiquid securities which can increase the risk and volatility of the Fund.

Portfolio holdings and breakdowns are as of November 30, 2016 and are subject to change

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and may not be representative of the portfolio managers current or future investments. The Fund s top ten holdings (as a percentage of net assets) as of November 30, 2016 were: Enterprise Products Partners LP (13.8%), Magellan Midstream Partners LP (9.4%), Buckeye Partners LP (9.0%), Brookfield Infrastructure Partners LP (8.9%), Genesis Energy LP (8.7%), Energy Transfer Partners LP (8.6%), ONEOK Partners LP (8.4%), Enbridge Energy Partners LP (7.5%), Targa Resources Corp. (7.4%) and Plains All American Pipeline LP (7.1%). Please refer to pages 9 through 10 for a list and percentage breakdown of the Fund s holdings.

The mention of sector breakdowns is for informational purposes only and should not be construed as a recommendation to purchase or sell any securities. The information provided regarding such sectors is not a sufficient basis upon which to make an investment decision. Investors seeking financial advice regarding the

appropriateness of investing in any securities or investment strategies discussed should consult their financial professional. The Fund s top five sector holdings (as a percentage of net assets) as of November 30, 2016 were: Liquids Transportation & Storage (48.7%), Diversified Energy Infrastructure (41.3%), Gathering/Processing (28.7%), Natural Gas Transportation & Storage (9.7%) and Global Infrastructure (8.9%). The Fund s portfolio composition is subject to change at any time.

All investments are subject to risk including the possible loss of principal. Past performance is no guarantee of future results. All index performance reflects no deduction for fees, expenses or taxes. Please note that an investor cannot invest directly in an index.

The information provided is not intended to be a forecast of future events, a guarantee of future results or investment advice. Views expressed may differ from those of the firm as a whole.

[i] The Dow Jones Industrial Average (DJIA) is a widely followed measurement of the stock market. The average is comprised of thirty stocks that represent leading companies in major industries. These stocks, widely held by both individual and institutional investors, are considered to be all blue-chip companies.

[ii] The S&P 500 Index is an unmanaged index of 500 stocks and is generally representative of the performance of larger companies in the U.S.

[iii] The NASDAQ Composite Index is a market-value weighted index, which measures all securities listed on the NASDAQ stock market.

[iv] The Federal Reserve Board (the Fed) is responsible for the formulation of U.S. policies designed to promote economic growth, full employment, stable prices and a sustainable pattern of international trade and payments.

[v] Gross domestic product (GDP) is the market value of all final goods and services produced within a country in a given period of time.

[vi] The yield curve is the graphical depiction of the relationship between the yield on bonds of the same credit quality but different maturities.

[vii] The Alerian MLP Index is a composite of the fifty most prominent energy master limited partnerships (MLPs) and is calculated using a float-adjusted, capitalization-weighted methodology.

[viii] Net asset value (NAV) is calculated by subtracting total liabilities, including liabilities associated with financial leverage (if any), from the closing value of all securities held by the Fund (plus all other assets) and dividing the result (total net assets) by the total number of the common shares outstanding. The NAV fluctuates with changes in the market prices of securities in which the Fund has invested. However, the price at which an investor may buy or sell shares of the Fund is the Fund s market price as determined by supply of and demand for the Fund s shares.

[ix] Lipper, Inc., a wholly-owned subsidiary of Reuters, provides independent insight on global collective investments. Returns are based on the twelve-month period ended November 30, 2016, including the reinvestment of all distributions, including returns of capital, if any, calculated among the 24 funds in the Fund s

Lipper category.

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Fund at a glance (unaudited)

Investment breakdown (%) as a percent of total investments

The bar graph above represents the composition of the Fund s investments as of November 30, 2016 and November 30, 2015. The Fund is actively managed. As a result, the composition of the Fund s investments is subject to change at any time.

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Schedule of investments

November 30, 2016

ClearBridge Energy MLP Fund Inc.

Security	Shares/ Units	Value
Master Limited Partnerships 147.9%		
Diversified Energy Infrastructure 41.3%		
Energy Transfer Partners LP	2,814,046	$ 98,829,296
Enterprise Products Partners LP	6,089,308	157,895,756
Genesis Energy LP	2,853,243	99,692,310
ONEOK Partners LP	2,309,066	96,518,959
Plains GP Holdings LP, Class A Shares	607,751	21,368,525
Total Diversified Energy Infrastructure		*474,304,846*
Gathering/Processing 28.7%		
Antero Midstream Partners LP	906,167	25,526,724
Blueknight Energy Partners LP	53,989	356,327
CONE Midstream Partners LP	1,663,080	37,086,684
DCP Midstream Partners LP	1,452,372	50,295,642
Dominion Midstream Partners LP	350,000	8,960,000
Enable Midstream Partners LP	1,426,301	22,278,822
EnLink Midstream Partners LP	4,270,315	74,815,919
Rice Midstream Partners LP	695,930	14,638,167 [(a)]
Tallgrass Energy Partners LP	403,950	18,921,018
Western Gas Partners LP	1,345,866	76,808,573
Total Gathering/Processing		*329,687,876*
General Partner 2.3%		
Tallgrass Energy GP LP	1,068,720	*25,863,024*
Global Infrastructure 8.9%		
Brookfield Infrastructure Partners LP	3,243,436	*102,168,234*
Liquids Transportation & Storage 48.7%		
Buckeye Partners LP	1,610,570	103,624,074
Enbridge Energy Partners LP	3,469,218	85,689,685
Holly Energy Partners LP	869,872	28,062,071
Magellan Midstream Partners LP	1,561,161	108,110,399
NuStar Energy LP	1,006,105	48,031,453
PBF Logistics LP	1,463,970	27,303,040
Plains All American Pipeline LP	2,472,926	81,482,912
Sunoco Logistics Partners LP	1,795,090	42,525,682
Tesoro Logistics LP	728,965	34,356,120
Total Liquids Transportation & Storage		*559,185,436*
Natural Gas Transportation & Storage 9.7%		
Spectra Energy Partners LP	206,180	8,760,588
TC Pipelines LP	824,544	43,824,514

See Notes to Financial Statements.

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Schedule of investments (cont d)

November 30, 2016

ClearBridge Energy MLP Fund Inc.

Security	Rate	Shares/ Units	Value
Natural Gas Transportation & Storage continued			
Williams Partners LP		1,613,850	$ 58,905,525
Total Natural Gas Transportation & Storage			*111,490,627*
Oil/Refined Products 4.6%			
MPLX LP		1,603,426	*52,672,544*
Propane 2.1%			
AmeriGas Partners LP		539,552	*24,215,094*
Refining 1.0%			
Western Refining Logistics LP		573,740	*11,819,044*
Shipping 0.6%			
Golar LNG Partners LP		281,069	*6,262,217*
Total Master Limited Partnerships (Cost $1,336,000,777)			**1,697,668,942**
		Shares	
Common Stocks 11.7%			
Energy 7.4%			
Oil, Gas & Consumable Fuels 7.4%			
Targa Resources Corp.		1,591,462	**84,809,010**
Industrials 4.3%			
Transportation Infrastructure 4.3%			
Macquarie Infrastructure Corp.		607,210	**49,754,788**
Total Common Stocks (Cost $70,590,576)			**134,563,798**
Total Investments before Short-Term Investments (Cost $1,406,591,353)			**1,832,232,740**
	Rate		
Short-Term Investments 0.7%			
State Street Institutional Treasury Money Market Fund, Premier Class (Cost $8,352,087)	0.256%	8,352,087	**8,352,087**
Total Investments 160.3% (Cost $1,414,943,440#)**			**1,840,584,827**
Mandatory Redeemable Preferred Stock, at Liquidation Value (4.8)%			(55,000,000)
Liabilities in Excess of Other Assets (55.5)%			(637,330,270)
Total Net Assets Applicable to Common Shareholders 100.0%			**$ 1,148,254,557**

** The entire portfolio is subject to lien, granted to the lender and Senior Note holders, to the extent of the borrowing outstanding and any additional expenses.

[a] Security is valued in good faith in accordance with procedures approved by the Board of Directors (See Note 1).

Aggregate cost for federal income tax purposes is $1,185,974,092.

See Notes to Financial Statements.

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Statement of assets and liabilities

November 30, 2016

Assets:	
Investments, at value (Cost $1,414,943,440)	$ 1,840,584,827
Dividends and distributions receivable	1,264,940
Interest receivable	2,381
Prepaid expenses	105,094
Total Assets	***1,841,957,242***
Liabilities:	
Senior Secured Notes (net of deferred debt issuance and offering costs of $2,242,654) (Note 6)	367,757,346
Deferred tax liability (Note 10)	224,389,888
Mandatory Redeemable Preferred Stock ($100,000 liquidation value per share; 550 shares issued and outstanding) (net of deferred offering costs of $1,010,129) (Note 7)	53,989,871
Loan payable (Note 5)	25,000,000
Current tax payable	9,661,478
Interest payable	5,958,899
Payable for securities purchased	4,890,242
Investment management fee payable	1,294,534
Distributions payable to Mandatory Redeemable Preferred Stockholders	93,581
Directors fees payable	21,355
Accrued expenses	645,491
Total Liabilities	***693,702,685***
Total Net Assets Applicable to Common Shareholders	**$ 1,148,254,557**
Net Assets Applicable to Common Shareholders:	
Common stock par value ($0.001 par value, 70,079,518 shares issued and outstanding; 100,000,000 shares authorized)	$ 70,080
Paid-in capital in excess of par value	843,655,080
Accumulated net investment loss, net of income taxes	(116,032,508)
Accumulated net realized gain on investments, net of income taxes	152,485,514
Net unrealized appreciation on investments, net of income taxes	268,076,391
Total Net Assets Applicable to Common Shareholders	**$ 1,148,254,557**
Common Shares Outstanding	70,079,518
Net Asset Value Per Common Share	$16.39

See Notes to Financial Statements.

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Statement of operations

For the Year Ended November 30, 2016

Investment Income:	
Dividends and distributions	$ 136,123,065
Return of capital (Note 1(f))	(137,213,153)
Net Dividends and Distributions	**(1,090,088)**
Interest	62,012
Total Investment Loss	***(1,028,076)***
Expenses:	
Interest expense (Note 5, 6 and 7)	21,124,336
Investment management fee (Note 2)	15,609,234
Distributions to Mandatory Redeemable Preferred Stockholders (Notes 1 and 7)	3,569,744
Amortization and write-off of preferred stock offering costs (Note 7)	1,546,068
Amortization and write-off of debt issuance and offering costs (Note 6)	1,038,952
Legal fees	413,241
Commitment fees (Note 5)	369,222
Directors fees	297,606
Audit and tax fees	282,400
Transfer agent fees	223,676
Fund accounting fees	91,871
Stock exchange listing fees	63,435
Franchise taxes	60,894
Shareholder reports	41,914
Rating agency fees	24,399
Insurance	23,743
Custody fees	13,219
Miscellaneous expenses	468,952
Total Expenses	***45,262,906***
Net Investment Loss, before income taxes	**(46,290,982)**
Net current and deferred tax benefit (Note 10)	13,512,100
Net Investment Loss, net of income taxes	**(32,778,882)**
Realized and Unrealized Gain (Loss) on Investments (Notes 1, 3 and 10):	
Net Realized Gain (Loss) From:	
Investment transactions	28,156,818
Deferred tax expense (Note 10)	(10,418,023)
Net Realized Gain, net of income taxes	***17,738,795***
Change in Net Unrealized Appreciation (Depreciation) From:	
Investments	53,417,755
Deferred tax expense (Note 10)	(20,509,016)
Change in Net Unrealized Appreciation (Depreciation), net of income taxes	***32,908,739***
Net Gain on Investments, net of income taxes	**50,647,534**
Increase in Net Assets Applicable to Common Shareholders From Operations	**$ 17,868,652**

See Notes to Financial Statements.

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Statements of changes in net assets

For the Years Ended November 30,	2016	2015
Operations:		
Net investment loss, net of income taxes	$ (32,778,882)	$ (10,790,638)
Net realized gain, net of income taxes	17,738,795	33,705,019
Change in net unrealized appreciation (depreciation), net of income taxes	32,908,739	(719,448,790)
Increase (Decrease) in Net Assets Applicable to Common Shareholders From Operations	***17,868,652***	***(696,534,409)***
Distributions to Common Shareholders From (Note 1):		
Dividends	(40,355,034)	
Return of capital	(58,970,638)	(118,288,348)
Decrease in Net Assets From Distributions to Common Shareholders	***(99,325,672)***	***(118,288,348)***
Fund Share Transactions:		
Reinvestment of distributions (377,546 and 366,176 shares issued, respectively)	5,087,821	6,855,195
Shelf registration offering costs (Note 8)		(581)
Increase in Net Assets From Fund Share Transactions	***5,087,821***	***6,854,614***
Decrease in Net Assets Applicable to Common Shareholders	***(76,369,199)***	***(807,968,143)***
Net Assets Applicable to Common Shareholders:		
Beginning of year	1,224,623,756	2,032,591,899
End of year*	**$1,148,254,557**	**$ 1,224,623,756**
*Includes accumulated net investment loss, net of income taxes, of:	$(116,032,508)	$(83,253,626)

See Notes to Financial Statements.

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Statement of cash flows

For the Year Ended November 30, 2016

Increase (Decrease) in Cash:	
Cash Provided (Used) by Operating Activities:	
Net increase in net assets applicable to common shareholders resulting from operations	$ 17,868,652
Adjustments to reconcile net increase in net assets resulting from operations to net cash provided (used) by operating activities:	
Purchases of portfolio securities	(418,923,810)
Sales of portfolio securities	785,105,395
Net purchases, sales and maturities of short-term investments	7,211,913
Return of capital	137,213,153
Increase in dividends and distributions receivable	(14,616)
Increase in interest receivable	(2,381)
Decrease in prepaid expenses	31,282
Decrease in current tax receivable	5,166,384
Increase in payable for securities purchased	4,890,242
Decrease in investment management fee payable	(432,489)
Increase in Directors fees payable	182
Decrease in interest payable	(1,574,658)
Increase in current tax payable	9,661,478
Increase in accrued expenses	333,121
Decrease in distributions payable to Mandatory Redeemable Preferred Stockholders	(227,929)
Decrease in deferred tax liability	(17,046,986)
Net realized gain on investments	(28,156,818)
Change in net unrealized appreciation (depreciation) of investments	(53,417,755)
Net Cash Provided by Operating Activities*	***447,684,360***
Cash Flows From Financing Activities:	
Distributions paid on common stock	(94,237,851)
Redemption of Senior Secured Notes	(147,000,000)
Decrease in loan payable	(65,000,000)
Redemption of Mandatory Redeemable Preferred Stock	(145,000,000)
Decrease in deferred debt issuance and offering costs	1,022,484
Decrease in preferred stock offering costs	1,542,960
Net Cash Used in Financing Activities	***(448,672,407)***
Net Decrease in Cash	**(988,047)**
Cash at Beginning of Year	988,047
Cash at End of Year	
Non-Cash Financing Activities:	
Proceeds from reinvestment of distributions	$ 5,087,821

* Included in operating expenses is cash of $23,074,132 paid for interest and commitment fees on borrowings and $19,680,318 paid for income taxes, net of refunds, if any.

See Notes to Financial Statements.

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Financial highlights

For a common share of capital stock outstanding throughout each year ended November 30:	2016[1]	2015[1]	2014[1]	2013[1]	2012[1]
Net asset value, beginning of year	$17.57	$29.32	$26.63	$22.91	$20.95
Income (loss) from operations:					
Net investment income	(0.47)	(0.16)	(0.30)	(0.27)	(0.21)
Net realized and unrealized gain (loss)	0.71	(9.88)	4.62	5.55	3.64
Total income (loss) from operations	***0.24***	***(10.04)***	***4.32***	***5.28***	***3.43***
Less distributions to common shareholders from:					
Dividends	(0.58)			(1.56)	
Return of capital	(0.84)	(1.71)	(1.63)		(1.47)
Total distributions to common shareholders	***(1.42)***	***(1.71)***	***(1.63)***	***(1.56)***	***(1.47)***
Net asset value, end of year	$16.39	$17.57	$29.32	$26.63	$22.91
Market price, end of year	$15.30	$18.36	$27.57	$27.35	$23.20
Total return, based on NAV[2,3]	***2.48%***	***(35.58)%***	***16.38%***	***23.38%***	***16.74%***
Total return, based on Market Price[4]	***(8.32)%***	***(28.02)%***	***6.87%***	***25.17%***	***13.30%***
Net assets applicable to common shareholders, end of year (millions)	$1,148	$1,225	$2,033	$1,839	$1,535
Ratios to average net assets:					
Management fees	1.46	1.41	1.24	1.26	1.30
Other expenses	2.77[5]	1.56	0.95	0.95	0.62
Subtotal	***4.23[5]***	***2.97***	***2.19***	***2.21***	***1.92***
Income tax expense	1.63	[6]	8.57	11.88	9.06
Total expenses	***5.86[5]***	***2.97***	***10.76***	***14.09***	***10.98***
Net investment loss, net of income taxes	(3.06)[5]	(0.62)	(1.03)	(1.07)	(0.94)
Portfolio turnover rate	**24%**	**8%**	**14%**	**21%**	**10%**
Supplemental data:					
Loan and Debt Issuance Outstanding, End of Year (000s)	$395,000	$607,000	$532,000	$425,000	$465,000
Asset Coverage Ratio for Loan and Debt Issuance Outstanding[7]	405%	335%	482%	533%	430%
Asset Coverage, per $1,000 Principal Amount of Loan and Debt Issuance Outstanding[7]	$4,046	$3,347	$4,821[8]	$5,327[8]	$4,302[8]
Weighted Average Loan and Debt Issuance (000s)	$400,902	$606,178	$474,679	$452,644	$445,461
Weighted Average Interest Rate on Loan and Debt Issuance	4.55%[9]	3.29%	3.49%	3.00%	1.64%
Mandatory Redeemable Preferred Stock at Liquidation Value, End of Year (000s)	$55,000	$200,000			