

ClearBridge Energy MLP Fund Inc.

Form N-CSRS

July 25, 2018

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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: May 31, 2018

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ITEM 1. REPORT TO STOCKHOLDERS.

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

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Semi-Annual Report

May 31, 2018

CLEARBRIDGE

ENERGY MLP

FUND INC. (CEM)

INVESTMENT PRODUCTS: NOT FDIC INSURED NO BANK GUARANTEE MAY LOSE VALUE

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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 semi-annual report of ClearBridge Energy MLP Fund Inc. for the six-month reporting period ended May 31, 2018. Please read on for Fund performance information and a detailed look at prevailing economic and market conditions during the Fund's reporting period.

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,

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Jane Trust, CFA

Chairman, President and Chief Executive Officer

June 29, 2018

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Investment commentary

Economic review

Economic activity in the U.S. was somewhat mixed during the six months ended May 31, 2018 (the reporting period). Looking back, the U.S. Department of Commerce reported that third and fourth quarter 2017 U.S. gross domestic product (GDP) growth was 3.2% and 2.9%, respectively. Finally, the U.S. Department of Commerce's final reading for first quarter 2018 GDP growth released after the reporting period ended was 2.0%. More modest GDP growth in the first quarter reflected decelerations in personal consumption expenditures (PCE), exports, state and local government spending, and federal government spending and a downturn in residential fixed investment. These movements were partly offset by a smaller decrease in private inventory investment and a larger increase in nonresidential fixed investment.

Job growth in the U.S. was solid overall and supported the economy during the reporting period. When the reporting period ended on May 31, 2018, the unemployment rate was 3.8%, as reported by the U.S. Department of Labor. This was the lowest unemployment rate since April 2000. The percentage of longer-term unemployed declined during the reporting period. In May 2018, 19.4% of Americans looking for a job had been out of work for more than six months, versus 22.9% when the period began.

ClearBridge Energy MLP Fund Inc.

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Investment commentary (cont d)

Market review

Q. How did the Federal Reserve Board (the Fed) respond to the economic environment?

A. The Fed increased the federal funds rateⁱⁱⁱ twice during the reporting period. Looking back, at its meeting that concluded on September 20, 2017 before the reporting period began the Fed kept rates on hold but reiterated its intention to begin reducing its balance sheet, saying, "In October, the Committee will initiate the balance sheet normalization program." At its meeting that ended on December 13, 2017, the Fed raised rates to a range between 1.25% and 1.50%. As expected, the Fed kept rates on hold at its meeting that concluded on January 31, 2018. However, at its meeting that ended on March 21, 2018, the Fed again raised the federal funds rate, moving it to a range between 1.50% and 1.75%. Finally, at its meeting that concluded on June 13, 2018 after the reporting period ended the Fed raised the federal funds rate to a range between 1.75% and 2.00%.

Q. What factors impacted the U.S. stock market during the reporting period?

A. Despite times of weakness, the U.S. stock market posted positive results for the reporting period. The market moved higher during the first two months of the period and reached several new all-time highs. This was driven by overall solid corporate profits, signs of continued economic growth and, in December 2017, the signing of the U.S. tax reform bill. However, the market then gave back a portion of its gains in February and March 2018. This occurred given concerns that the Fed may raise interest rates more aggressively than previously expected. In addition, there were fears of a global trade war and several high profile issues in the technology industry. The market ended the reporting period on a positive note, as it rallied in April and May 2018. All told, for the six months ended May 31, 2018, the S&P 500 Index^{iv} gained 3.16%.

Looking at the U.S. stock market more closely, small-cap stocks, as measured by the Russell 2000 Index^v, generated the strongest results, returning 6.47% over the reporting period. In contrast, large-cap stocks, as measured by the Russell 1000 Index^{vi}, gained 3.33% and mid-cap stocks, as measured by the Russell Midcap Index^{vii}, returned 2.59%. From an investment style perspective, growth and value stocks, as measured by the Russell 3000 Growth^{viii} and Russell 3000 Value^{ix} Indices, returned 7.21% and -0.17%, respectively, during the six months ended May 31, 2018.

Looking at the energy master limited partnership (MLP) market, over the six-month reporting period ended May 31, 2018, the Alerian MLP Index^x returned 5.71%. Oil prices rose steadily throughout most of the reporting period, faltering temporarily in February 2018 in sympathy with the equity market as it corrected and as inventories rose, and again late in May 2018 in advance of June's Organization of the Petroleum Exporting Countries (OPEC) meeting, which some investors feared would bring an easing of supply cuts. Broadly, prices were buoyed by strong global demand stemming from synchronized global growth, steady non-U.S. production cuts and elevated geopolitical risks to supply. A Federal Energy Regulatory Commission (FERC)ⁱ ruling in March 2018, changing how MLPs will be allowed to calculate allowed rates of return on some interstate pipelines, led to a temporary downdraft in MLPs. The MLP market regained all of these losses by the

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end of May 2018, however, as investors began to understand that not all MLP companies were affected by the FERC ruling and valuations for the sector remained attractive.

Performance review

For the six months ended May 31, 2018, ClearBridge Energy MLP Fund Inc. returned 11.28% based on its net asset value (NAVⁱⁱⁱ) and 19.23% based on its New York Stock Exchange (NYSE) market price per share. The Lipper Energy MLP Closed-End Funds Category Average returned 8.58% over the same time frame. Please note that Lipper performance returns are based on each fund's NAV.

During this six-month period, the Fund made distributions to shareholders totaling \$0.71 per share. As of May 31, 2018, the Fund estimates that all of the distributions constituted a return of capital*. The performance table shows the Fund's six-month total return based on its NAV and market price as of May 31, 2018. **Past performance is no guarantee of future results.**

Performance Snapshot as of May 31, 2018

(unaudited)

Price Per Share

\$14.72 (NAV)

\$14.48 (Market Price)

6-Month
Total Return**

11.28% #

19.23%

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

formance figures for periods shorter than one year represent cumulative figures and are not annualized.

**** 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, if any, at NAV.

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

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 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

*This estimate is not for tax purposes. The Fund will issue a Form 1099 with final composition of the distributions for tax purposes after year-end. A return of capital is not taxable and results in a reduction in the tax basis of a shareholder's investment. For more information about a distribution's composition, please refer to the Fund's distribution press release or, if applicable, the Section 19 notice located in the press release section of our website, www.lmcef.com (click on the name of the Fund).

#On December 22, 2017, the Fund adjusted its deferred tax liability balance to reflect updated assumptions regarding effective tax rates, resulting in a one-time increase to the NAV.

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Investment commentary (cont d)

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,

Jane Trust, CFA

Chairman, President and Chief Executive Officer

June 29, 2018

***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. The Fund's investments are subject to a number of risks, including stock market risk, MLP risk, market events risk and portfolio management risk. 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.*

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.

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- 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 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.

- iii 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.

- iv 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.

- v The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 is a subset of the Russell 3000 Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2,000 of the smallest securities based on a combination of their market cap and current index membership. The Russell 3000 Index measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the U.S. equity market.

- vi The Russell 1000 Index measures the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 Index and includes approximately 1,000 of the largest securities based on a combination of their market cap and current index membership. The Russell 1000 represents approximately 90% of the U.S. market.

- vii The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell Midcap is a subset of the Russell 1000 Index. It includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The Russell Midcap represents approximately 31% of the total market capitalization of the Russell 1000 companies.

- viii The Russell 3000 Growth Index measures the performance of the broad growth segment of the U.S. equity universe. It includes those Russell 3000 Index companies with higher price-to-book ratios and higher forecasted growth values. (A price-to-book ratio is the price of a stock compared to the difference between a company's assets and liabilities.)

- ix The Russell 3000 Value Index measures the performance of the broad value segment of the U.S. equity universe. It includes those Russell 3000 Index companies with lower price-to-book ratios and lower forecasted growth values.

- x 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.

- xi The Federal Energy Regulatory Commission, or FERC, is an independent agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines as well as licensing hydropower projects.

- xii 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.

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Lipper, Inc., a wholly-owned subsidiary of Reuters, provides independent insight on global collective investments. Returns are based on the six-month period ended May 31, 2018, including the reinvestment of all distributions, including returns of capital, if any, calculated among the 24 funds in the Fund's Lipper category.

ClearBridge Energy MLP Fund Inc.

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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 May 31, 2018 and November 30, 2017. The Fund is actively managed. As a result, the composition of the Fund's investments is subject to change at any time.

ClearBridge Energy MLP Fund Inc. 2018 Semi-Annual Report

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Schedule of investments (unaudited)

May 31, 2018

ClearBridge Energy MLP Fund Inc.

	Shares/ Units	Value
Security		
Master Limited Partnerships 133.7%		
Crude/Refined Products Pipelines 3.2%		
BP Midstream Partners LP	1,576,262	\$ 33,684,719
Diversified Energy Infrastructure 37.7%		
Energy Transfer Partners LP	6,236,819	118,437,193
Enterprise Products Partners LP	6,258,768	180,878,395
Genesis Energy LP	3,479,323	76,405,933
Plains GP Holdings LP, Class A Shares	607,751	14,932,442
Total Diversified Energy Infrastructure		390,653,963
Gathering/Processing 29.2%		
Antero Midstream Partners LP	443,237	13,407,919
Blueknight Energy Partners LP	53,989	199,759
CNX Midstream Partners LP	1,042,370	19,534,014
DCP Midstream LP	1,422,372	59,611,611
Dominion Energy Midstream Partners LP	305,630	3,912,064
Enable Midstream Partners LP	2,062,737	34,117,670
EnLink Midstream Partners LP	4,590,315	78,494,386
EQT Midstream Partners LP	155,000	8,653,650
Rice Midstream Partners LP	468,000	8,643,960
Tallgrass Energy Partners LP	606,950	26,505,507
Western Gas Partners LP	965,456	49,885,112
Total Gathering/Processing		302,965,652
General Partner 2.1%		
Tallgrass Energy GP LP	1,028,720	22,127,767
Global Infrastructure 4.9%		
Brookfield Infrastructure Partners LP	1,326,156	50,526,525
Liquids Transportation & Storage 31.0%		
Buckeye Partners LP	1,558,350	56,178,518
Enbridge Energy Partners LP	5,264,218	51,852,547
Holly Energy Partners LP	834,872	24,528,539
Magellan Midstream Partners LP	1,307,011	91,360,069
NuStar Energy LP	441,025	10,778,651
PBF Logistics LP	1,413,970	28,350,099
Plains All American Pipeline LP	2,471,926	58,090,261
Total Liquids Transportation & Storage		321,138,684
Natural Gas Transportation & Storage 13.5%		
Spectra Energy Partners LP	853,580	25,726,901
TC Pipelines LP	889,544	21,633,710

See Notes to Financial Statements.

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ClearBridge Energy MLP Fund Inc.

	Shares/ Units	Value
Security		
<i>Natural Gas Transportation & Storage continued</i>		
Williams Partners LP	2,316,480	\$ 92,195,904
<i>Total Natural Gas Transportation & Storage</i>		<i>139,556,515</i>
<i>Oil/Refined Products 9.5%</i>		
Andeavor Logistics LP	999,202	42,865,765
MPLX LP	1,028,846	36,945,860
Shell Midstream Partners LP	827,374	18,524,904
<i>Total Oil/Refined Products</i>		<i>98,336,529</i>
<i>Propane 2.2%</i>		
AmeriGas Partners LP	539,552	22,321,266
<i>Shipping 0.4%</i>		
Golar LNG Partners LP	231,069	3,875,027
Total Master Limited Partnerships (Cost \$1,201,054,246)		1,385,186,647
	Shares	
Common Stocks 23.5%		
Energy 21.1%		
<i>Oil, Gas & Consumable Fuels 21.1%</i>		
ONEOK Inc.	1,831,093	124,807,299
SemGroup Corp., Class A Shares	1,100,280	27,837,084
Targa Resources Corp.	1,361,682	66,218,596
Total Energy		218,862,979
Industrials 2.4%		
<i>Transportation Infrastructure 2.4%</i>		
Macquarie Infrastructure Corp.	647,210	25,047,027
Total Common Stocks (Cost \$184,728,130)		243,910,006
Total Investments before Short-Term Investments (Cost \$1,385,782,376)		1,629,096,653
	Rate	
Short-Term Investments 2.2%		
State Street Institutional Treasury Money Market Fund, Premier Class (Cost \$23,488,371)	1.668%	23,488,371
Total Investments* 159.4% (Cost \$1,409,270,747)		1,652,585,024
Mandatory Redeemable Preferred Stock, at Liquidation Value (5.3)%		(55,000,000)
Liabilities in Excess of Other Assets (54.1)%		(561,119,326)
Total Net Assets Applicable to Common Shareholders 100.0%		\$ 1,036,465,698

* 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.

See Notes to Financial Statements.

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May 31, 2018

Assets:

Investments, at value (Cost \$1,409,270,747)	\$ 1,652,585,024
Income tax receivable	3,376,474
Dividends and distributions receivable	529,799
Interest receivable	33,801
Prepaid expenses	66,256
Total Assets	1,656,591,354

Liabilities:

Senior Secured Notes (net of deferred debt issuance and offering costs of \$1,737,363) (Note 6)	368,262,637
Deferred tax liability (Note 9)	117,068,548
Loan payable (Note 5)	73,000,000
Mandatory Redeemable Preferred Stock (\$100,000 liquidation value per share; 550 shares issued and outstanding) (net of deferred offering costs of \$767,485) (Note 7)	54,232,515
Interest payable	5,862,794
Investment management fee payable	1,273,676
Distributions payable to Mandatory Redeemable Preferred Stockholders	81,497
Directors' fees payable	14,474
Accrued expenses	329,515
Total Liabilities	620,125,656
Total Net Assets Applicable to Common Shareholders	\$ 1,036,465,698

Net Assets Applicable to Common Shareholders:

Common stock par value (\$0.001 par value, 70,414,962 shares issued and outstanding; 100,000,000 shares authorized)	\$ 70,415
Paid-in capital in excess of par value	782,986,955
Accumulated net investment loss, net of income taxes	(99,455,331)
Accumulated net realized gain on investments, net of income taxes	166,562,606
Net unrealized appreciation on investments, net of income taxes	186,301,053
Total Net Assets Applicable to Common Shareholders	\$ 1,036,465,698

Common Shares Outstanding	70,414,962
Net Asset Value Per Common Share	\$14.72

See Notes to Financial Statements.

Table of Contents**Statement of operations** (unaudited)

For the Six Months Ended May 31, 2018

Investment Income:	
Dividends and distributions	\$ 64,293,407
Return of capital (Note 1(e))	(55,009,223)
Net Dividends and Distributions	9,284,184
Interest	120,049
Less: Foreign taxes withheld	(6,962)
Total Investment Income	9,397,271
Expenses:	
Interest expense (Notes 5, 6 and 7)	7,765,213
Investment management fee (Note 2)	7,557,832
Distributions to Mandatory Redeemable Preferred Stockholders (Notes 1 and 7)	1,099,438
Amortization of debt issuance and offering costs (Note 6)	168,123
Directors' fees	134,793
Audit and tax fees	133,792
Legal fees	107,883
Transfer agent fees	105,853
Amortization of preferred stock offering costs (Note 7)	80,733
Commitment fees (Note 5)	57,090
Franchise taxes	47,369
Fund accounting fees	43,560
Shareholder reports	19,135
Stock exchange listing fees	17,931
Insurance	7,731
Rating agency fees	7,447
Custody fees	6,669
Miscellaneous expenses	67,380
Total Expenses	17,427,972
Net Investment Loss, before income taxes	(8,030,701)
Net current and deferred tax benefit (Note 9)	37,560,439
Net Investment Income, net of income taxes	29,529,738
Realized and Unrealized Gain (Loss) on Investments (Notes 1, 3 and 9):	
Net Realized Gain (Loss) From:	
Investment transactions	12,560,886
Deferred tax expense (Note 9)	(3,127,642)
Net Realized Gain, net of income taxes	9,433,244
Change in Net Unrealized Appreciation (Depreciation) From:	
Investments	61,049,056
Deferred tax benefit (Note 9)	10,502,591
Change in Net Unrealized Appreciation (Depreciation), net of income taxes	71,551,647
Net Gain on Investments, net of income taxes	80,984,891
Increase in Net Assets Applicable to Common Shareholders From Operations	\$ 110,514,629

See Notes to Financial Statements.

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For the Six Months Ended May 31, 2018 (unaudited)
and the Year Ended November 30, 2017

	2018	2017
Operations:		
Net investment income (loss), net of income taxes	\$ 29,529,738	\$ (12,952,561)
Net realized gain, net of income taxes	9,433,244	88,577,321
Change in net unrealized appreciation (depreciation), net of income taxes	71,551,647	(153,326,985)
<i>Increase (Decrease) in Net Assets Applicable to Common Shareholders From Operations</i>	<i>110,514,629</i>	<i>(77,702,225)</i>
Distributions to Common Shareholders From (Note 1):		
Dividends		(83,933,473)
Return of capital	(49,935,739)	(15,639,641)
<i>Decrease in Net Assets From Distributions to Common Shareholders</i>	<i>(49,935,739)</i>	<i>(99,573,114)</i>
Fund Share Transactions:		
Reinvestment of distributions (165,870 and 169,574 shares issued, respectively)	2,348,719	2,558,871
<i>Increase in Net Assets From Fund Share Transactions</i>	<i>2,348,719</i>	<i>2,558,871</i>
<i>Increase (Decrease) in Net Assets Applicable to Common Shareholders</i>	<i>62,927,609</i>	<i>(174,716,468)</i>
Net Assets Applicable to Common Shareholders:		
Beginning of period	973,538,089	1,148,254,557
End of period*	\$ 1,036,465,698	\$ 973,538,089
*Includes accumulated net investment loss, net of income taxes, of:	\$(99,455,331)	\$(128,985,069)

See Notes to Financial Statements.

Table of Contents**Statement of cash flows (unaudited)**

For the Six Months Ended May 31, 2018

Increase (Decrease) in Cash:**Cash Provided (Used) by Operating Activities:**

Net increase in net assets applicable to common shareholders resulting from operations	\$ 110,514,629
Adjustments to reconcile net increase in net assets resulting from operations to net cash provided (used) by operating activities:	
Purchases of portfolio securities	(65,532,464)
Sales of portfolio securities	54,174,496
Net purchases, sales and maturities of short-term investments	(6,592,938)
Return of capital	55,009,223
Decrease in dividends and distributions receivable	455,673
Decrease in prepaid expenses	33,412
Decrease in income tax receivable	1,337,502
Increase in interest receivable	(11,069)
Increase in investment management fee payable	65,689
Decrease in Directors' fees payable	(11,334)
Decrease in interest payable	(90,676)
Decrease in accrued expenses	(76,105)
Decrease in distributions payable to Mandatory Redeemable Preferred Stockholders	(6,042)
Decrease in deferred tax liability	(46,321,890)
Net realized gain on investments	(12,560,886)
Change in net unrealized appreciation (depreciation) of investments	(61,049,056)
Net Cash Provided by Operating Activities*	29,338,164

Cash Flows From Financing Activities:

Distributions paid on common stock	(47,587,020)
Proceeds from loan facility borrowings	59,000,000
Repayment of loan facility borrowings	(41,000,000)
Decrease in deferred debt issuance and offering costs	168,122
Decrease in preferred stock offering costs	80,734
Net Cash Used in Financing Activities	(29,338,164)

Cash at Beginning of Period**Cash at End of Period****Non-Cash Financing Activities:**

Proceeds from reinvestment of distributions	\$2,348,719
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* Included in operating expenses is cash of \$7,930,827 paid for interest and commitment fees on borrowings and \$49,000 paid for income taxes, net of refunds, if any.

See Notes to Financial Statements.

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For a common share of capital stock outstanding throughout each year ended November 30, unless otherwise noted:

	2018 ^{1,2}	2017 ¹	2016 ¹	2015 ¹	2014 ¹	2013 ¹
Net asset value, beginning of period	\$13.86	\$16.39	\$17.57	\$29.32	\$26.63	\$22.91
Income (loss) from operations:						
Net investment income (loss)	0.42	(0.18)	(0.47)	(0.16)	(0.30)	(0.27)
Net realized and unrealized gain (loss)	1.15	(0.93)	0.71	(9.88)	4.62	5.55
<i>Total income (loss) from operations</i>	<i>1.57</i>	<i>(1.11)</i>	<i>0.24</i>	<i>(10.04)</i>	<i>4.32</i>	<i>5.28</i>
Less distributions to common shareholders from:						
Dividends		(1.20)	(0.58)			(1.56)
Return of capital	(0.71) ³	(0.22)	(0.84)	(1.71)	(1.63)	
<i>Total distributions to common shareholders</i>	<i>(0.71)</i>	<i>(1.42)</i>	<i>(1.42)</i>	<i>(1.71)</i>	<i>(1.63)</i>	<i>(1.56)</i>
Net asset value, end of period	\$14.72	\$13.86	\$16.39	\$17.57	\$29.32	\$26.63
Market price, end of period	\$14.48	\$12.75	\$15.30	\$18.36	\$27.57	\$27.35
<i>Total return, based on NAV^{4,5}</i>	<i>11.28%</i>	<i>(7.34)%</i>	<i>2.48%</i>	<i>(35.58)%</i>	<i>16.38%</i>	<i>23.38%</i>
<i>Total return, based on Market Price⁶</i>	<i>19.23%</i>	<i>(8.63)%</i>	<i>(8.32)%</i>	<i>(28.02)%</i>	<i>6.87%</i>	<i>25.17%</i>
Net assets applicable to common shareholders, end of period (millions)	\$1,036	\$974	\$1,148	\$1,225	\$2,033	\$1,839
Ratios to average net assets:						
Management fees	1.46% ⁷	1.42%	1.46%	1.41%	1.24%	1.26%
Other expenses	1.92 ⁷	1.70	2.77 ⁸	1.56	0.95	0.95
<i>Subtotal</i>	<i>3.38⁷</i>	<i>3.12</i>	<i>4.23⁸</i>	<i>2.97</i>	<i>2.19</i>	<i>2.21</i>
Income tax expense	⁹	⁹	1.63	⁹	8.57	11.88
<i>Total expenses</i>	<i>3.38⁷</i>	<i>3.12</i>	<i>5.86⁸</i>	<i>2.97</i>	<i>10.76</i>	<i>14.09</i>
Net investment income (loss), net of income taxes	5.72 ⁷	(1.14)	(3.06) ⁸	(0.62)	(1.03)	(1.07)
Portfolio turnover rate	3%	12%	24%	8%	14%	21%
Supplemental data:						
Loan and Debt Issuance Outstanding, End of Period (000s)	\$443,000	\$425,000	\$395,000	\$607,000	\$532,000	\$425,000
Asset Coverage Ratio for Loan and Debt Issuance Outstanding ¹⁰	346%	342%	405%	335%	482%	533%
Asset Coverage, per \$1,000 Principal Amount of Loan and Debt Issuance Outstanding ¹⁰	\$3,464	\$3,420	\$4,046	\$3,347	\$4,821 ¹¹	\$5,327 ¹¹
Weighted Average Loan and Debt Issuance (000s)	\$425,280	\$421,671	\$400,902	\$606,178	\$474,679	\$452,644
Weighted Average Interest Rate on Loan and Debt Issuance	3.66%	3.60%	4.55% ¹²	3.29%	3.49%	3.00%
Mandatory Redeemable Preferred Stock at Liquidation Value, End of Period (000s)	\$55,000	\$55,000	\$55,000	\$200,000		
Asset Coverage Ratio for Mandatory Redeemable Preferred Stock ¹³	308%	303%	355%	252%		
Asset Coverage, per \$100,000 Liquidation Value per Share of Mandatory Redeemable Preferred Stock ¹³	\$308,126	\$302,820	\$355,168	\$251,750		

See Notes to Financial Statements.

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¹ Per share amounts have been calculated using the average shares method.

² For the six months ended May 31, 2018 (unaudited).

³ The actual source of the Fund's current fiscal year distributions may be from net investment income, return of capital or a combination of both. Shareholders will be informed of the tax characteristics of the distributions after the close of the fiscal year.

⁴ Performance figures may reflect compensating balance arrangements, fee waivers and/or expense reimbursements. In the absence of compensating balance arrangements, fee waivers and/or expense reimbursements, the total return would have been lower. Past performance is no guarantee of future results. Total returns for periods of less than one year are not annualized.

⁵ The total return calculation assumes that distributions are reinvested at NAV. Past performance is no guarantee of future results. Total returns for periods of less than one year are not annualized.

⁶ The total return calculation assumes that distributions are reinvested in accordance with the Fund's dividend reinvestment plan. Past performance is no guarantee of future results. Total returns for periods of less than one year are not annualized.

⁷ Annualized.

⁸ Includes non-recurring prepayment penalties, the write off of debt issuance and offering costs and the write off of preferred stock offering costs recognized during the period totaling 0.73% of average assets.

⁹ For the six months ended May 31, 2018 and years ended November 30, 2017 and 2015, the net income tax benefit was 4.34% (not annualized), 4.20% and 23.47%, respectively. The net income tax benefit is not reflected in the Fund's expense ratios.

¹⁰ Represents value of net assets plus the loan outstanding, debt issuance outstanding and mandatory redeemable preferred stock at the end of the period divided by the loan and debt issuance outstanding at the end of the period.

¹¹ Added to conform to current period presentation.

¹² Includes prepayment penalties recognized during the period.

¹³ Represents value of net assets plus the loan outstanding, debt issuance outstanding and mandatory redeemable preferred stock at the end of the period divided by the loan, debt issuance and mandatory redeemable preferred stock outstanding at the end of the period.

[See Notes to Financial Statements.](#)

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Notes to financial statements (unaudited)

1. Organization and significant accounting policies

ClearBridge Energy MLP Fund Inc. (the "Fund") was incorporated in Maryland on March 31, 2010 and is registered as a non-diversified, closed-end management investment company under the Investment Company Act of 1940, as amended (the "1940 Act"). The Board of Directors authorized 100 million shares of \$0.001 par value common stock. 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. There can be no assurance that the Fund will achieve its investment objective.

Under normal market conditions, the Fund will invest at least 80% of its Managed Assets in MLPs in the energy sector (the "80% policy"). For purposes of the 80% policy, the Fund considers investments in MLPs to include investments that offer economic exposure to public and private MLPs in the form of equity securities of MLPs, securities of entities holding primarily general partner or managing member interests in MLPs, securities that are derivatives of interests in MLPs, including I-Shares, exchange-traded funds that primarily hold MLP interests and debt securities of MLPs. 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 of natural gas, natural gas liquids (including propane), crude oil, refined petroleum products or coal. "Managed Assets" means net assets plus the amount of any borrowings and assets attributable to any preferred stock of the Fund that may be outstanding.

The following are significant accounting policies consistently followed by the Fund and are in conformity with U.S. generally accepted accounting principles ("GAAP"). Estimates and assumptions are required to be made regarding assets, liabilities and changes in net assets resulting from operations when financial statements are prepared. Changes in the economic environment, financial markets and any other parameters used in determining these estimates could cause actual results to differ. Subsequent events have been evaluated through the date the financial statements were issued.

(a) Investment valuation. Equity securities for which market quotations are available are valued at the last reported sales price or official closing price on the primary market or exchange on which they trade. The valuations for fixed income securities (which may include, but are not limited to, corporate, government, municipal, mortgage-backed, collateralized mortgage obligations and asset-backed securities) and certain derivative instruments are typically the prices supplied by independent third party pricing services, which may use market prices or broker/dealer quotations or a variety of valuation techniques and methodologies. The independent third party pricing services use inputs that are observable such as issuer details, interest rates, yield curves, prepayment speeds, credit risks/spreads, default rates and quoted prices for similar securities. Investments in open-end funds are valued at the closing net asset value per share of each fund on the day of valuation. If independent third party pricing services are unable to supply prices for a

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portfolio investment, or if the prices supplied are deemed by the manager to be unreliable, the market price may be determined by the manager using quotations from one or more broker/dealers or at the transaction price if the security has recently been purchased and no value has yet been obtained from a pricing service or pricing broker. When reliable prices are not readily available, such as when the value of a security has been significantly affected by events after the close of the exchange or market on which the security is principally traded, but before the Fund calculates its net asset value, the Fund values these securities as determined in accordance with procedures approved by the Fund's Board of Directors.

The Board of Directors is responsible for the valuation process and has delegated the supervision of the daily valuation process to the Legg Mason North Atlantic Fund Valuation Committee (the "Valuation Committee"). The Valuation Committee, pursuant to the policies adopted by the Board of Directors, is responsible for making fair value determinations, evaluating the effectiveness of the Fund's pricing policies, and reporting to the Board of Directors. When determining the reliability of third party pricing information for investments owned by the Fund, the Valuation Committee, among other things, conducts due diligence reviews of pricing vendors, monitors the daily change in prices and reviews transactions among market participants.

The Valuation Committee will consider pricing methodologies it deems relevant and appropriate when making fair value determinations. Examples of possible methodologies include, but are not limited to, multiple of earnings; discount from market of a similar freely traded security; discounted cash-flow analysis; book value or a multiple thereof; risk premium/yield analysis; yield to maturity; and/or fundamental investment analysis. The Valuation Committee will also consider factors it deems relevant and appropriate in light of the facts and circumstances. Examples of possible factors include, but are not limited to, the type of security; the issuer's financial statements; the purchase price of the security; the discount from market value of unrestricted securities of the same class at the time of purchase; analysts' research and observations from financial institutions; information regarding any transactions or offers with respect to the security; the existence of merger proposals or tender offers affecting the security; the price and extent of public trading in similar securities of the issuer or comparable companies; and the existence of a shelf registration for restricted securities.

For each portfolio security that has been fair valued pursuant to the policies adopted by the Board of Directors, the fair value price is compared against the last available and next available market quotations. The Valuation Committee reviews the results of such back testing monthly and fair valuation occurrences are reported to the Board of Directors quarterly.

The Fund uses valuation techniques to measure fair value that are consistent with the market approach and/or income approach, depending on the type of security and the particular circumstance. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable securities. The income approach uses valuation techniques to discount estimated future cash flows to present value.

Table of Contents**Notes to financial statements (unaudited) (cont d)**

GAAP establishes a disclosure hierarchy that categorizes the inputs to valuation techniques used to value assets and liabilities at measurement date. These inputs are summarized in the three broad levels listed below:

Level 1 quoted prices in active markets for identical investments

Level 2 other significant observable inputs (including quoted prices for similar investments, interest rates, prepayment speeds, credit risk, etc.)

Level 3 significant unobservable inputs (including the Fund's own assumptions in determining the fair value of investments)
The inputs or methodologies used to value securities are not necessarily an indication of the risk associated with investing in those securities.

The following is a summary of the inputs used in valuing the Fund's assets carried at fair value:

Description	ASSETS			Total
	Quoted Prices (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Long-term investments :				
Master limited partnerships	\$ 1,385,186,647			\$ 1,385,186,647
Common stocks	243,910,006			243,910,006
Total long-term investments	1,629,096,653			1,629,096,653
Short-term investments	23,488,371			23,488,371
Total investments	\$ 1,652,585,024			\$ 1,652,585,024

See Schedule of Investments for additional detailed categorizations.

(b) Net asset value. The Fund determines the net asset value of its common stock on each day the NYSE is open for business, as of the close of the customary trading session (normally 4:00 p.m. Eastern Time), or any earlier closing time that day. The Fund determines the net asset value per share of common stock by dividing the value of the Fund's securities, cash and other assets (including interest accrued but not collected) less all its liabilities (including accrued expenses, borrowings, interest payables and the aggregate liquidation value (i.e., \$100,000 per outstanding share) of the Mandatory Redeemable Preferred Stock), net of income taxes, by the total number of shares of common stock outstanding.

(c) Master limited partnerships. Entities commonly referred to as MLPs are generally organized under state law as limited partnerships or limited liability companies. The Fund intends to primarily invest in MLPs receiving partnership taxation treatment under the Internal Revenue Code of 1986, as amended (the Code), and whose interests or units are traded on securities exchanges like shares of corporate stock. To be treated as a partnership for U.S. federal income tax purposes, an MLP whose units are traded on a securities exchange must receive at least 90% of its income from qualifying sources such as interest,

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dividends, real estate rents, gain from the sale or disposition of real property, income and gain from mineral or natural resources activities, income and gain from the transportation or storage of certain fuels, and, in certain circumstances, income and gain from commodities or futures, forwards and options with respect to commodities. Mineral or natural resources activities include exploration, development, production, processing, mining, refining, marketing and transportation (including pipelines) of oil and gas, minerals, geothermal energy, fertilizer, timber or industrial source carbon dioxide. An MLP consists of a general partner and limited partners (or in the case of MLPs organized as limited liability companies, a managing member and members). The general partner or managing member typically controls the operations and management of the MLP and has an ownership stake in the partnership. The limited partners or members, through their ownership of limited partner or member interests, provide capital to the entity, are intended to have no role in the operation and management of the entity and receive cash distributions. The MLPs themselves generally do not pay U.S. federal income taxes. Thus, unlike investors in corporate securities, direct MLP investors are generally not subject to double taxation (i.e., corporate level tax and tax on corporate dividends). Currently, most MLPs operate in the energy and/or natural resources sector.

(d) Concentration risk. Concentration in the energy sector may present more risks than if the Fund were broadly diversified over numerous sectors of the economy. A downturn in the energy sector of the economy could have a larger impact on the Fund than on an investment company that does not concentrate in the sector. At times, the performance of securities of companies in the sector may lag the performance of other sectors or the broader market as a whole.

(e) Return of capital estimates. Distributions received from the Fund's investments in MLPs generally are comprised of income and return of capital. The Fund records investment income and return of capital based on estimates made at the time such distributions are received. Such estimates are based on historical information available from each MLP and other industry sources. These estimates may subsequently be revised based on information received from MLPs after their tax reporting periods are concluded.

For the six months ended May 31, 2018, the Fund estimated that approximately 89% of the MLP distributions received would be treated as a return of capital. The Fund recorded as return of capital the amount of \$56,999,790 of dividends and distributions received from its investments.

Additionally, the Fund recorded revisions to the return of capital estimates from the year ended November 30, 2017 in the amount of a \$1,990,567 increase in dividends and distributions received from investments.

(f) Security transactions and investment income. Security transactions are accounted for on a trade date basis. Interest income (including interest income from payment-in-kind securities), adjusted for amortization of premium and accretion of discount, is recorded on the accrual basis. Dividends and distributions are recorded on the

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Notes to financial statements (unaudited) (cont d)

ex-dividend date for dividends received in cash and/or securities. Foreign dividend income is recorded on the ex-dividend date or as soon as practicable after the Fund determines the existence of a dividend declaration after exercising reasonable due diligence. The cost of investments sold is determined by use of the specific identification method. To the extent any issuer defaults or a credit event occurs that impacts the issuer, the Fund may halt any additional interest income accruals and consider the realizability of interest accrued up to the date of default or credit event.

(g) Distributions to shareholders. Distributions to common shareholders are declared and paid on a quarterly basis and are recorded on the ex-dividend date. The estimated characterization of the distributions paid to common shareholders will be either a dividend (ordinary income) or distribution (return of capital). This estimate is based on the Fund's operating results during the period. The Fund anticipates that 100% of its current period distribution to common shareholders will be treated as return of capital. The actual tax characterization of the common stock distributions made during the current period will not be determined until after the end of the fiscal year when the Fund can determine its earnings and profits and, therefore, may differ from the preliminary estimates.

Distributions to holders of Mandatory Redeemable Preferred Stock (MRPS) are accrued on a daily basis as described in Note 7 and are treated as an operating expense as required by GAAP. For tax purposes, the payments made to the holders of the Fund's MRPS are treated as a dividend (ordinary income) or distribution (return of capital) similar to the treatment of distributions made to common shareholders as described above. The Fund anticipates that 100% of its current period distribution to the MRPS shareholders will be treated as return of capital. The actual tax characterization of the MRPS distributions made during the current period will not be determined until after the end of the fiscal year when the Fund can determine its earnings and profits and, therefore, may differ from the preliminary estimates.

(h) Compensating balance arrangements. The Fund has an arrangement with its custodian bank whereby a portion of the custodian's fees is paid indirectly by credits earned on the Fund's cash on deposit with the bank.

(i) Partnership accounting policy. The Fund records its pro rata share of the income (loss) and capital gains (losses), to the extent of distributions it has received, allocated from the underlying partnerships and accordingly adjusts the cost basis of the underlying partnerships for return of capital. These amounts are included in the Fund's Statement of Operations.

(j) Federal and other taxes. The Fund, as a corporation, is obligated to pay federal and state income tax on its taxable income. The Fund invests its assets primarily in MLPs, which generally are treated as partnerships for federal income tax purposes. As a limited partner in the MLPs, the Fund includes its allocable share of the MLP's taxable income in computing its own taxable income. The Fund, and entities in which the Fund invests, may be subject to audit by the Internal Revenue Service or other applicable tax authorities. The Fund's taxable income or tax liability for prior taxable years could be adjusted if there is an audit of the

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Fund, or of any entity that is treated as a partnership for tax purposes in which the Fund holds an equity interest. The Fund may be required to pay tax, as well as interest and penalties, in connection with such an adjustment.

Deferred income taxes reflect (i) taxes on unrealized gains (losses), which are attributable to the temporary difference between fair market value and book basis, (ii) the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and, as applicable, (iii) the net tax benefit of accumulated net operating losses, capital losses and tax credit carryforwards. To the extent the Fund has a deferred tax asset, consideration is given as to whether or not a valuation allowance is required. The need to establish a valuation allowance for deferred tax assets is assessed periodically by the Fund based on Financial Accounting Standards Board (FASB), Accounting Standards Codification Topic 740, Income Taxes (ASC 740) that it is more likely than not that some portion or all of the deferred tax asset will not be realized. In the assessment for a valuation allowance, consideration is given to all positive and negative evidence related to the realization of the deferred tax asset. This assessment considers, among other matters, the nature, frequency and severity of current and cumulative losses, forecasts of future profitability (which are highly dependent on future allocations of taxable income and future cash distributions from the Fund's MLP holdings), the duration of statutory carryforward periods and the associated risk that net operating losses, capital losses and tax credit carryforwards may expire unused.

For all open tax years and for all major jurisdictions, management of the Fund has concluded that there are no significant uncertain tax positions that would require recognition in the financial statements. Furthermore, management of the Fund is also not aware of any tax positions for which it is reasonably possible that the total amounts of unrecognized tax benefits will significantly change in the next twelve months.

The Fund may rely to some extent on information provided by the MLPs, which may not necessarily be timely, to estimate taxable income allocable to the MLP units held in the portfolio and to estimate the associated deferred tax liability. Such estimates are made in good faith. From time to time, as new information becomes available, the Fund modifies its estimates or assumptions regarding the deferred tax liability.

The Fund's policy is to classify interest and penalties associated with underpayment of federal and state income taxes, if any, as income tax expense on its Statement of Operations. The 2013 through 2017 tax years remain open and subject to examination by tax jurisdictions.

(k) Reclassification. GAAP requires that certain components of net assets be reclassified to reflect permanent differences between financial and tax reporting. These reclassifications have no effect on net assets or net asset value per share. During the period ended May 31, 2018, the Fund had no reclassifications.

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Notes to financial statements (unaudited) (cont d)

2. Investment management agreement and other transactions with affiliates

Legg Mason Partners Fund Advisor, LLC (LMPFA) is the Fund's investment manager and ClearBridge Investments, LLC (ClearBridge) is the Fund's subadviser. LMPFA and ClearBridge are wholly-owned subsidiaries of Legg Mason, Inc. (Legg Mason).

Under the investment management agreement, the Fund pays LMPFA an annual fee, paid monthly, in an amount equal to 1.00% of the Fund's average daily Managed Assets.

LMPFA provides administrative and certain oversight services to the Fund. LMPFA delegates to the subadviser the day-to-day portfolio management of the Fund. For its services, LMPFA pays ClearBridge monthly 70% of the net management fee it receives from the Fund.

During periods in which the Fund utilizes financial leverage, the fees paid to LMPFA will be higher than if the Fund did not utilize leverage because the fees are calculated as a percentage of the Fund's assets, including those investments purchased with leverage.

All officers and one Director of the Fund are employees of Legg Mason or its affiliates and do not receive compensation from the Fund.

3. Investments

During the six months ended May 31, 2018, the aggregate cost of purchases and proceeds from sales of investments (excluding short-term investments) were as follows:

Purchases	\$ 65,532,464
Sales	54,174,496

4. Derivative instruments and hedging activities

During the six months ended May 31, 2018, the Fund did not invest in derivative instruments.

5. Loan

Effective May 29, 2018, the Fund has a revolving credit agreement with The Bank of Nova Scotia (Credit Agreement), which allows the Fund to borrow up to an aggregate amount of \$150,000,000 and renews daily for a 179-day term, unless notice to the contrary is given to the Fund. The Fund pays a commitment fee on the unutilized portion of the loan commitment amount at an annual rate of 0.25%, except that the commitment fee is 0.15% in the event that the aggregate outstanding principal balance of the loan is equal to or greater than 75% of \$150,000,000. The interest on the loan is calculated at a variable rate based on LIBOR plus any applicable margin. Securities held by the Fund are subject to a lien, granted to The Bank of Nova Scotia, to the extent of the borrowing outstanding and any additional expenses. The Fund's Credit Agreement contains customary covenants that, among other things, may limit the Fund's ability to pay distributions in certain circumstances, incur additional debt, change its fundamental investment policies and engage in certain transactions, including mergers and consolidations and require asset coverage ratios in addition to those required by the 1940 Act. In addition, the Credit Agreement may be subject to early termination under certain conditions and may contain other provisions that could limit the Fund's ability to utilize borrowing under the agreement. Interest expense related to this loan

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for the period ended May 31, 2018 was \$16,232. For the period ended May 31, 2018, the Fund incurred commitment fees of \$1,604. For the period ended May 31, 2018, based on the number of days during the reporting period that the Fund had an outstanding balance under the Credit Agreement, the Fund had an average daily loan balance outstanding of \$73,000,000 and the weighted average interest rate was 2.71%. At May 31, 2018, the Fund had \$73,000,000 of borrowings outstanding per this credit agreement.

Prior to May 29, 2018, the Fund had a 364-day revolving credit agreement with State Street Bank and Trust Company (*Prior Credit Agreement*), which allowed the Fund to borrow up to an aggregate amount of \$100,000,000. The *Prior Credit Agreement* terminated on May 29, 2018. The Fund paid a commitment fee at annual rate of 0.25% on the unutilized portion of the loan commitment amount. The interest on the loan was calculated at variable rates based on LIBOR, plus any applicable margin. Securities held by the Fund were subject to a lien, granted to State Street Bank and Trust Company, to the extent of the borrowing outstanding and any additional expenses. The Fund's *Prior Credit Agreement* contained customary covenants that, among other things, may have limited the Fund's ability to pay distributions in certain circumstances, incur additional debt, change its fundamental investment policies and engage in certain transactions, including mergers and consolidations and require asset coverage ratios in addition to those required by the 1940 Act. In addition, the *Prior Credit Agreement* may have been subject to early termination under certain conditions and may have contained other provisions that could have limited the Fund's ability to utilize borrowing under the agreement. Interest expense related to this loan for the period ended May 29, 2018 was \$685,206. For the period ended May 29, 2018, the Fund incurred commitment fees of \$55,486. For the period ended May 29, 2018, based on the number of days during the reporting period that the Fund had an outstanding balance under the *Prior Credit Agreement*, the Fund had an average daily loan balance outstanding of \$54,983,240 and the weighted average interest rate was 2.54%.

6. Senior secured notes

At May 31, 2018, the Fund had \$370,000,000 aggregate principal amount of fixed-rate senior secured notes (*Senior Notes*) outstanding. Interest expense related to the *Senior Notes* for the six months ended May 31, 2018 was \$7,063,775. Costs incurred by the Fund in connection with the *Senior Notes* are recorded as a deferred charge, which are amortized over the life of the notes. Securities held by the Fund are subject to a lien, granted to the *Senior Notes* holders, to the extent of the borrowings outstanding and any additional expenses. The *Senior Notes* holders and the lender have equal access to the lien (See Note 5).

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The table below summarizes the key terms of each series of Senior Notes at May 31, 2018.

Security	Amount	Rate	Maturity	Estimated Fair Value
Senior secured notes:				
Series B	\$ 40,393,013	3.53%	July 12, 2019	\$ 40,454,322
Series C	\$ 82,401,747	4.06%	July 12, 2022	\$ 83,264,199
Series D	\$ 72,707,423	4.21%	July 12, 2024	\$ 73,792,672
Series A	\$ 40,393,013	3.65%	June 6, 2023	\$ 40,038,672
Series B	\$ 40,393,013	3.78%	June 6, 2025	\$ 39,845,939
Series A	\$ 12,925,764	4.20%	April 30, 2026	\$ 13,064,776
Series H	\$ 12,117,904	2.87%	June 11, 2021	\$ 11,837,126
Series I	\$ 20,196,507	3.46%	June 11, 2025	\$ 19,847,764
Series J	\$ 20,196,507	3.56%	June 11, 2027	\$ 19,426,803
Series K	\$ 28,275,109	3.76%	June 11, 2030	\$ 27,056,432
	\$ 370,000,000			\$ 368,628,705

The Senior Notes are not listed on any exchange or automated quotation system. The estimated fair value of the Senior Notes was calculated, for disclosure purposes, based on estimated market yields and credit spreads for comparable instruments with similar maturity, terms and structure. The Senior Notes are categorized as Level 3 within the fair value hierarchy.

7. Mandatory redeemable preferred stock

At May 31, 2018, the Fund had 550 shares of fixed rate Mandatory Redeemable Preferred Stock (MRPS) outstanding with an aggregate liquidation value of \$55,000,000. Offering costs incurred by the Fund in connection with the MRPS issuance are being amortized to expense over the respective life of each series of MRPS.

The table below summarizes the key terms of each series of the MRPS at May 31, 2018.

Series	Term Redemption Date	Rate	Shares	Liquidation Preference Per Share	Aggregate Liquidation Value	Estimated Fair Value
Series A	1/8/21	3.85%	52	\$ 100,000	\$ 5,200,000	\$ 5,128,296
Series B	1/8/23	4.18%	64	\$ 100,000	\$ 6,400,000	\$ 6,311,152
Series C	6/11/21	3.52%	58	\$ 100,000	\$ 5,800,000	\$ 5,667,258
Series D	6/11/25	4.16%	160	\$ 100,000	\$ 16,000,000	\$ 15,535,289
Series E	6/11/21	3.52%	52	\$ 100,000	\$ 5,200,000	\$ 5,080,990
Series F	6/11/25	4.16%	82	\$ 100,000	\$ 8,200,000	\$ 7,961,836
Series G	6/11/27	4.26%	82	\$ 100,000	\$ 8,200,000	\$ 7,926,033
					\$ 55,000,000	\$ 53,610,854

The MRPS are not listed on any exchange or automated quotation system. The estimated fair value of the MRPS was calculated, for disclosure purposes, based on estimated market yields and credit spreads for comparable instruments with similar maturity, terms and structure. The MRPS are categorized as Level 3 within the fair value hierarchy.

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Holders of MRPS are entitled to receive quarterly cumulative cash dividends payable on the first business day following each quarterly dividend date (February 15, May 15, August 15 and November 15). In the event of a rating downgrade of any series of the MRPS below A by Fitch Ratings Inc., the applicable dividend rate will increase, according to a predetermined schedule, by 0.5% to 4.0%.

The MRPS rank senior to the Fund's outstanding common stock and on parity with any other preferred stock. The Fund may, at its option, redeem the MRPS, in whole or in part, at the liquidation preference amount plus all accumulated but unpaid dividends plus the make whole amount equal to the discounted value of the remaining scheduled payments. If the Fund fails to maintain a total leverage (debt and preferred stock) asset coverage ratio of at least 225% or is in default of specified rating agency requirements, the MRPS are subject to mandatory redemption under certain provisions.

The Fund may not declare dividends or make other distributions on shares of its common stock unless the Fund has declared and paid full cumulative dividends on the MRPS, due on or prior to the date of the common stock dividend or distribution, and meets the MRPS asset coverage and rating agency requirements.

The holders of the MRPS have one vote per share and vote together with the holders of common stock of the Fund as a single class except on matters affecting only the holders of MRPS or the holders of common stock. Pursuant to the 1940 Act, holders of the MRPS have the right to elect two Directors of the Fund, voting separately as a class.

8. Stock repurchase program

On November 16, 2015, the Fund announced that the Fund's Board of Directors (the Board) had authorized the Fund to repurchase in the open market up to approximately 10% of the Fund's outstanding common stock when the Fund's shares are trading at a discount to net asset value. The Board has directed management of the Fund to repurchase shares of common stock at such times and in such amounts as management reasonably believes may enhance stockholder value. The Fund is under no obligation to purchase shares at any specific discount levels or in any specific amounts. During the six months ended May 31, 2018, the Fund did not repurchase any shares.

9. Income taxes

On December 22, 2017, the U.S. government signed into law comprehensive tax reform legislation commonly known as the Tax Cuts and Jobs Act of 2017 (the Tax Act). The Tax Act makes broad and complex changes to the Code, including but not limited to, (1) reducing the U.S. federal corporate income tax rate from 35% to 21%; (2) repealing the corporate alternative minimum tax (AMT); (3) creating a new limitation on the deductibility of business interest expense; and (4) changing the rules related to usage of net operating loss carryforwards. These changes generally go into effect for tax years beginning after December 31, 2017.

The modifications to the Code also significantly impact the MLPs in which the Fund invests. The ramification of these changes on the Fund are, as of yet, unknown.

Table of Contents**Notes to financial statements (unaudited) (cont d)**

The U.S. Securities and Exchange Commission (SEC) also issued Staff Accounting Bulletin No. 118 (SAB 118), which provides guidance on accounting for the income tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the enactment of the Tax Act for companies to complete the accounting under ASC 740. In accordance with SAB 118, in the financial statements that include the reporting period in which the Tax Act was enacted, a company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete, but it is able to determine a reasonable estimate, it must record a provisional estimate in the financial statements. If the company cannot determine a provisional estimate to be included in the financial statements, it should continue to apply ASC 740 on the basis of the provisions of the tax laws that were in effect immediately before the enactment of the Tax Act.

Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. As a result of the reduction in the U.S. federal corporate income tax rate under the Tax Act, the Fund has revalued its net deferred tax liability. This decrease was reflected in the Fund's net asset value reported on December 22, 2017. The Fund's revaluation of its net deferred tax liability is based on analyses and interpretations of information currently available. Uncertainties remain regarding the impact of the Tax Act due to future regulatory and rulemaking processes, prospects of additional corrective or supplemental legislation, and potential trade or other litigation. As a result, the actual impact on the net deferred tax liability may vary from the amount initially recorded. The Fund has been and will continue to assess the impact of the Tax Act during the measurement period, which should be no longer than one year from the date of enactment. No material adjustment has been recorded to the provisional revaluing of net deferred tax liability subsequent to the enactment of the Tax Act.

The Fund's current and deferred income tax provision for the respective categories on the Statement of Operations are as follows:

	Net Investment Loss	Net Realized Gain	Change in Net Unrealized Appreciation	Total
Current tax expense (benefit)	\$ 1,386,502			\$ 1,386,502
Deferred tax expense (benefit)	(38,946,941)	\$ 3,127,642	\$ (10,502,591)	(46,321,890)
Total tax expense (benefit)	\$ (37,560,439)	\$ 3,127,642	\$ (10,502,591)	\$ (44,935,388)

The Fund's federal and state income tax provision consist of the following:

	Federal	State	Total
Current tax expense (benefit)	\$ 1,275,068	\$ 111,434	\$ 1,386,502
Deferred tax expense (benefit)	(40,217,003)	(6,104,887)	(46,321,890)
Total tax expense (benefit)	\$ (38,941,935)	\$ (5,993,453)	\$ (44,935,388)

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Total income taxes have been computed by applying the U.S. federal statutory income tax rate of 21% plus a blended net state income tax rate of 2.4%. The Fund applied this rate to net investment income (loss) and realized and unrealized gains (losses) on investments before income taxes in computing its total income tax expense (benefit).

During the period, the Fund's combined federal and state income tax rate decreased from 37.0% to 23.4% due to the enactment of the Tax Act, which reduced the U.S. federal corporate income tax rate from 35% to 21%. This decrease resulted in the additional income tax benefit and corresponding decrease in the Fund's effective tax rate outlined below.

The provision for income taxes differs from the amount derived from applying the statutory income tax rate to net investment income (loss) and realized and unrealized gains (losses) before income taxes as follows:

Provision at statutory rates	21.00%	\$ 13,771,641
State taxes, net of federal tax benefit	2.40%	1,573,902
Non-deductible distributions on MRPS	0.42%	276,160
Dividends received deduction	(0.70)%	(461,667)
Change in U.S. federal tax rate	(91.68)%	(60,122,292)
Other, net	0.04%	26,868
Total tax expense (benefit)	(68.52)%	\$ (44,935,388)

Components of the Fund's net deferred tax asset (liability) as of May 31, 2018 are as follows:

Deferred tax assets

Net operating loss carryforward	\$ 19,775,752
Other deferred tax assets	346,745

Deferred tax liabilities

Unrealized gains on investment securities	(56,935,541)
Basis reduction resulting from differences in the book vs. taxable income received from MLPs	(80,255,504)
Total net deferred tax asset (liability)	\$ (117,068,548)

At May 31, 2018, the Fund had federal and state net operating loss carryforwards of \$84,277,625 and \$37,967,082 (net of state apportionment), respectively (deferred tax asset of \$19,775,752). Several states compute net operating losses before apportionment, therefore the value of the state net operating loss carryforward disclosed may fluctuate for changes in apportionment factors. Realization of the deferred tax asset related to the net operating loss carryforwards is dependent, in part, on generating sufficient taxable income in each respective jurisdiction prior to expiration of the loss carryforwards. If not utilized, the federal net operating loss carryforward expires in tax year 2037, and the state net operating loss carryforwards expire in tax years between 2020 and 2037.

Although the Fund currently has a net deferred tax liability, it periodically reviews the recoverability of its deferred tax assets based on the weight of available evidence. When assessing the recoverability of its deferred tax assets, significant weight is given to the effects of

Table of Contents**Notes to financial statements (unaudited) (cont d)**

potential future realized and unrealized gains on investments and the period over which these deferred tax assets can be realized. Based on the Fund's assessment, it has determined that it is more likely than not that its deferred tax assets will be realized through future taxable income of the appropriate character. Accordingly, no valuation allowance has been established on the Fund's deferred tax assets. The Fund will continue to assess the need for a valuation allowance in the future. Significant declines in the fair value of its portfolio of investments may change the Fund's assessment regarding the recoverability of its deferred tax assets and may result in a valuation allowance. If a valuation allowance is required to reduce any deferred tax asset in the future, it could have a material impact on the Fund's net asset value and results of operations in the period it is recorded.

At May 31, 2018, the cost basis of investments for Federal income tax purposes was \$1,065,961,681. At May 31, 2018, gross unrealized appreciation and depreciation of investments for Federal income tax purposes were as follows:

Gross unrealized appreciation	\$ 663,437,616
Gross unrealized (depreciation)	(76,814,273)
Net unrealized appreciation (depreciation) before tax	\$ 586,623,343
Net unrealized appreciation (depreciation) after tax	\$ 449,353,481

Table of Contents**Additional shareholder information** (unaudited)**Results of annual meeting of shareholders**

The Annual Meeting of Shareholders of ClearBridge Energy MLP Fund Inc. was held on April 6, 2018 for the purpose of considering and voting upon the election of Directors. The following table provides information concerning the matter voted upon at the Meeting:

Election of directors

	Common Shares and Preferred Shares (together, as a single class)	Common Shares and Preferred Shares (together, as a single class)	Preferred Shares	Preferred Shares
Nominees	Votes For	Votes Withheld	Votes For	Votes Withheld
Leslie H. Gelb	55,267,008	1,143,884		
William R. Hutchinson	55,392,286	1,018,606		
Jane Trust			480	0

At May 31, 2018, in addition to Leslie H. Gelb, William R. Hutchinson and Jane Trust, the other Directors of the Fund were as follows:

Robert D. Agdern

Carol L. Colman

Daniel P. Cronin

PaoloM. Cucchi

Eileen A. Kamerick

Riordan Roett

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Dividend reinvestment plan (unaudited)

On December 15, 2016, the Fund announced that the Board of Directors has authorized changes to the Fund's Dividend Reinvestment Plan (the Plan) with respect to dividend reinvestment determinations and transaction fees for Plan participants selling their shares. A copy of the revised Plan is included below.

Effective July 1, 2017, the Fund uses the dividend payment date to determine if new shares are issued or shares are purchased in the open market for Plan participants reinvesting their distributions. If on the payment date the closing market price (plus \$0.03 per share commission) is at or above the net asset value (NAV), the Fund will issue new shares of common stock. Newly issued shares of common stock will be issued at a price equal to the greater of (a) the NAV per share on the date prior to issuance or (b) 95% of the closing market price per share. If the closing market price (plus \$0.03 per share commission) is lower than the NAV per share on the payment date, the Plan Agent will receive the distribution in cash and purchase common stock in the open market. In addition, effective July 1, 2017, fees paid by Plan participants to sell Fund shares decreased, with Plan participants paying a \$5.00 transaction fee plus a \$0.05 per share commission upon a sale of shares held pursuant to the Plan.

Revised dividend reinvestment plan:

Unless you elect to receive distributions in cash (i.e., opt-out), all dividends, including any capital gain dividends and return of capital distributions, on your Common Stock will be automatically reinvested by Computershare Trust Company, N.A., as agent for the stockholders (the Plan Agent), in additional shares of Common Stock under the Fund's Dividend Reinvestment Plan (the Plan). You may elect not to participate in the Plan by contacting the Plan Agent. If you do not participate, you will receive all cash distributions paid by check mailed directly to you by Computershare Trust Company, N.A., as dividend paying agent.

If you participate in the Plan, the number of shares of Common Stock you will receive will be determined as follows:

(1) If the market price of the Common Stock (plus \$0.03 per share commission) on the payment date (or, if the payment date is not a NYSE trading day, the immediately preceding trading day) is equal to or exceeds the net asset value per share of the Common Stock at the close of trading on the NYSE on the payment date, the Fund will issue new Common Stock at a price equal to the greater of (a) the net asset value per share at the close of trading on the NYSE on the payment date or (b) 95% of the market price per share of the Common Stock on the payment date.

(2) If the net asset value per share of the Common Stock exceeds the market price of the Common Stock (plus \$0.03 per share commission) at the close of trading on the NYSE on the payment date, the Plan Agent will receive the dividend or distribution in cash and will buy Common Stock in the open market, on the NYSE or elsewhere, for your account as soon as practicable commencing on the trading day following the payment date and terminating no later than the earlier of (a) 30 days after the dividend or distribution payment date, or (b) the payment date for the next succeeding dividend or distribution to be made to the stockholders; except when necessary to comply with applicable provisions of the federal securities laws. If during this period: (i) the market

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price (plus \$0.03 per share commission) rises so that it equals or exceeds the net asset value per share of the Common Stock at the close of trading on the NYSE on the payment date before the Plan Agent has completed the open market purchases or (ii) if the Plan Agent is unable to invest the full amount eligible to be reinvested in open market purchases, the Plan Agent will cease purchasing Common Stock in the open market and the Fund shall issue the remaining Common Stock at a price per share equal to the greater of (a) the net asset value per share at the close of trading on the NYSE on the day prior to the issuance of shares for reinvestment or (b) 95% of the then current market price per share.

Common Stock in your account will be held by the Plan Agent in non-certificated form. Any proxy you receive will include all shares of Common Stock you have received under the Plan. You may withdraw from the Plan (i.e., opt-out) by notifying the Plan Agent in writing at 462 South 4th Street, Suite 1600, Louisville, KY 40202 or by calling the Plan Agent at 1-888-888-0151. Such withdrawal will be effective immediately if notice is received by the Plan Agent not less than ten business days prior to any dividend or distribution record date; otherwise such withdrawal will be effective as soon as practicable after the Plan Agent's investment of the most recently declared dividend or distribution on the Common Stock.

Plan participants who sell their shares will be charged a service charge (currently \$5.00 per transaction) and the Plan Agent is authorized to deduct brokerage charges actually incurred from the proceeds (currently \$0.05 per share commission). There is no service charge for reinvestment of your dividends or distributions in Common Stock. However, all participants will pay a pro rata share of brokerage commissions incurred by the Plan Agent when it makes open market purchases. Because all dividends and distributions will be automatically reinvested in additional shares of Common Stock, this allows you to add to your investment through dollar cost averaging, which may lower the average cost of your Common Stock over time. Dollar cost averaging is a technique for lowering the average cost per share over time if the Fund's net asset value declines. While dollar cost averaging has definite advantages, it cannot assure profit or protect against loss in declining markets.

Automatically reinvesting dividends and distributions does not mean that you do not have to pay income taxes due upon receiving dividends and distributions. Investors will be subject to income tax on amounts reinvested under the Plan.

The Fund reserves the right to amend or terminate the Plan if, in the judgment of the Board of Directors, the change is warranted. The Plan may be terminated, amended or supplemented by the Fund upon notice in writing mailed to stockholders at least 30 days prior to the record date for the payment of any dividend or distribution by the Fund for which the termination or amendment is to be effective. Upon any termination, you will be sent cash for any fractional share of Common Stock in your account. You may elect to notify the Plan Agent in advance of such termination to have the Plan Agent sell part or all of your Common Stock on your behalf. Additional information about the Plan and your account may be obtained from the Plan Agent at 462 South 4th Street, Suite 1600, Louisville, KY 40202 or by calling the Plan Agent at 1-888-888-0151.

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ClearBridge

Energy MLP Fund Inc.

Directors

Robert D. Agdern

Carol L. Colman

Daniel P. Cronin

Paolo M. Cucchi

Leslie H. Gelb

William R. Hutchinson

Eileen A. Kamerick

Riordan Roett

Jane Trust

Chairman

Officers

Jane Trust

President and Chief Executive Officer

Richard F. Sennett

Principal Financial Officer

Todd F. Kuehl

Chief Compliance Officer

Jenna Bailey

Identity Theft Prevention Officer

Robert I. Frenkel

Secretary and Chief Legal Officer

Thomas C. Mandia

Assistant Secretary

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Jennifer S. Berg

Treasurer

Jeanne M. Kelly

Senior Vice President

ClearBridge Energy MLP Fund Inc.

620 Eighth Avenue

49th Floor

New York, NY 10018

Investment manager

Legg Mason Partners Fund Advisor, LLC

Subadviser

ClearBridge Investments, LLC

Custodian

The Bank of New York Mellon (BNY)*

Transfer agent

Computershare Inc.

462 South 4th Street, Suite 1600,

Louisville, KY 40202

* Effective June 11, 2018, BNY became custodian.

Independent registered public accounting firm

PricewaterhouseCoopers LLP

Baltimore, MD

Legal counsel

Simpson Thacher & Bartlett LLP

425 Lexington Avenue

New York, NY 10017-3909

New York Stock Exchange Symbol

CEM

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Legg Mason Funds Privacy and Security Notice

Your Privacy and the Security of Your Personal Information is Very Important to the Legg Mason Funds

This Privacy and Security Notice (the **Privacy Notice**) addresses the Legg Mason Funds' privacy and data protection practices with respect to nonpublic personal information the Funds receive. The Legg Mason Funds include any funds sold by the Funds' distributor, Legg Mason Investor Services, LLC, as well as Legg Mason-sponsored closed-end funds. The provisions of this Privacy Notice apply to your information both while you are a shareholder and after you are no longer invested with the Funds.

The Type of Nonpublic Personal Information the Funds Collect About You

The Funds collect and maintain nonpublic personal information about you in connection with your shareholder account. Such information may include, but is not limited to:

Personal information included on applications or other forms;

Account balances, transactions, and mutual fund holdings and positions;

Bank account information, legal documents, and identity verification documentation;

Online account access user IDs, passwords, security challenge question responses; and

Information received from consumer reporting agencies regarding credit history and creditworthiness (such as the amount of an individual's total debt, payment history, etc.).

How the Funds Use Nonpublic Personal Information About You

The Funds do not sell or share your nonpublic personal information with third parties or with affiliates for their marketing purposes, or with other financial institutions or affiliates for joint marketing purposes, unless you have authorized the Funds to do so. The Funds do not disclose any nonpublic personal information about you except as may be required to perform transactions or services you have authorized or as permitted or required by law. The Funds may disclose information about you to:

Employees, agents, and affiliates on a **need to know** basis to enable the Funds to conduct ordinary business or to comply with obligations to government regulators;

Service providers, including the Funds' affiliates, who assist the Funds as part of the ordinary course of business (such as printing, mailing services, or processing or servicing your account with us) or otherwise perform services on the Funds' behalf, including companies that may perform statistical analysis, market research and marketing services solely for the Funds;

Permit access to transfer, whether in the United States or countries outside of the United States to such Funds' employees, agents and affiliates and service providers as required to enable the Funds to conduct ordinary business, or to comply with obligations to government regulators;

The Funds' representatives such as legal counsel, accountants and auditors to enable the Funds to conduct ordinary business, or to comply with obligations to government regulators;

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Legg Mason Funds Privacy and Security Notice (cont'd)

Fiduciaries or representatives acting on your behalf, such as an IRA custodian or trustee of a grantor trust. Except as otherwise permitted by applicable law, companies acting on the Funds' behalf, including those outside the United States, are contractually obligated to keep nonpublic personal information the Funds provide to them confidential and to use the information the Funds share only to provide the services the Funds ask them to perform.

The Funds may disclose nonpublic personal information about you when necessary to enforce their rights or protect against fraud, or as permitted or required by applicable law, such as in connection with a law enforcement or regulatory request, subpoena, or similar legal process. In the event of a corporate action or in the event a Fund service provider changes, the Funds may be required to disclose your nonpublic personal information to third parties. While it is the Funds' practice to obtain protections for disclosed information in these types of transactions, the Funds cannot guarantee their privacy policy will remain unchanged.

Keeping You Informed of the Funds' Privacy and Security Practices

The Funds will notify you annually of their privacy policy as required by federal law. While the Funds reserve the right to modify this policy at any time they will notify you promptly if this privacy policy changes.

The Funds' Security Practices

The Funds maintain appropriate physical, electronic and procedural safeguards designed to guard your nonpublic personal information. The Funds' internal data security policies restrict access to your nonpublic personal information to authorized employees, who may use your nonpublic personal information for Fund business purposes only.

Although the Funds strive to protect your nonpublic personal information, they cannot ensure or warrant the security of any information you provide or transmit to them, and you do so at your own risk. In the event of a breach of the confidentiality or security of your nonpublic personal information, the Funds will attempt to notify you as necessary so you can take appropriate protective steps. If you have consented to the Funds using electronic communications or electronic delivery of statements, they may notify you under such circumstances using the most current email address you have on record with them.

In order for the Funds to provide effective service to you, keeping your account information accurate is very important. If you believe that your account information is incomplete, not accurate or not current, if you have questions about the Funds' privacy practices, or our use of your nonpublic personal information, write the Funds using the contact information on your account statements, email the Funds by clicking on the Contact Us section of the Funds' website at www.leggmason.com, or contact the Funds at 1-888-777-0102.

Revised April 2018

NOT PART OF THE SEMI-ANNUAL REPORT

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ClearBridge Energy MLP Fund Inc.

ClearBridge Energy MLP Fund Inc.

620 Eighth Avenue

49th Floor

New York, NY 10018

Notice is hereby given in accordance with Section 23(c) of the Investment Company Act of 1940, as amended, that from time to time the Fund may purchase, at market prices, shares of its common stock and preferred stock.

The Fund files its complete schedule of portfolio holdings with the Securities and Exchange Commission (SEC) for the first and third quarters of each fiscal year on Form N-Q. The Fund's Forms N-Q are available on the SEC's website at www.sec.gov. The Fund's Forms N-Q may be reviewed and copied at the SEC's Public Reference Room in Washington, D.C., and information on the operation of the Public Reference Room may be obtained by calling 1-800-SEC-0330. To obtain information on Form N-Q from the Fund, shareholders can call 1-888-777-0102.

Information on how the Fund voted proxies relating to portfolio securities during the prior 12-month period ended June 30th of each year and a description of the policies and procedures that the Fund uses to determine how to vote proxies relating to portfolio securities are available (1) without charge, upon request, by calling 1-888-777-0102, (2) at www.lmcef.com and (3) on the SEC's website at www.sec.gov.

This report is transmitted to the shareholders of the ClearBridge Energy MLP Fund Inc. for their information. This is not a prospectus, circular or representation intended for use in the purchase of shares of the Fund or any securities mentioned in this report.

Computershare Inc.

462 South 4th Street, Suite 1600

Louisville, KY 40202

CBAX013771 7/18 SR18-3386

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ITEM 2. CODE OF ETHICS.

Not applicable.

ITEM 3. AUDIT COMMITTEE FINANCIAL EXPERT.

Not applicable.

ITEM 4. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

Not applicable.

ITEM 5. AUDIT COMMITTEE OF LISTED REGISTRANTS.

Not applicable.

ITEM 6. SCHEDULE OF INVESTMENTS.

Included herein under Item 1.

ITEM 7. DISCLOSURE OF PROXY VOTING POLICIES AND PROCEDURES FOR CLOSED-END
MANAGEMENT INVESTMENT COMPANIES.

Not applicable.

ITEM 8. INVESTMENT PROFESSIONALS OF CLOSED-END MANAGEMENT INVESTMENT COMPANIES.

Not applicable.

ITEM 9. PURCHASES OF EQUITY SECURITIES BY CLOSED-END MANAGEMENT INVESTMENT
COMPANY AND AFFILIATED PURCHASERS.

Not applicable.

ITEM 10. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

Not applicable.

ITEM 11. CONTROLS AND PROCEDURES.

- (a) The registrant's principal executive officer and principal financial officer have concluded that the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the "1940 Act")) are effective as of a date within 90 days of the filing date of this report that includes the disclosure required by this paragraph, based on their evaluation of the disclosure controls and procedures required by Rule 30a-3(b) under the 1940 Act and 15d-15(b) under the Securities Exchange Act of 1934.
- (b) There were no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the second fiscal quarter of the period covered by this report that have materially affected, or are likely to materially affect the registrant's internal control over financial reporting.

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ITEM 12. EXHIBITS.

(a) (1) Not applicable.

Exhibit 99.CODE ETH

(a) (2) Certifications pursuant to section 302 of the Sarbanes-Oxley Act of 2002 attached hereto.

Exhibit 99.CERT

(b) Certifications pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 attached hereto.

Exhibit 99.906CERT

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this Report to be signed on its behalf by the undersigned, there unto duly authorized.

ClearBridge Energy MLP Fund Inc.

By: /s/ Jane Trust
Jane Trust
Chief Executive Officer

Date: July 25, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ Jane Trust
Jane Trust
Chief Executive Officer

Date: July 25, 2018

By: /s/ Richard F. Sennett
Richard F. Sennett
Principal Financial Officer

Date: July 25, 2018