



**Duff & Phelps
Select Energy MLP Fund Inc.**

ANNUAL REPORT

**Not FDIC Insured
No Bank Guarantee
May Lose Value**

November 30, 2017

MESSAGE TO SHAREHOLDERS

Dear Duff & Phelps Select Energy MLP Fund Inc. Shareholder:



Enclosed is the annual report for the Duff & Phelps Select Energy MLP Fund Inc. (DSE) that discusses performance for the 12 months ended November 30, 2017. The report includes commentary from the portfolio management team at Duff & Phelps Investment Management on market conditions and the fund's performance during the period.

For the fiscal year ended November 30, 2017, the fund's net asset value (NAV) decreased 14.36%, including \$0.88 in reinvested distributions, and its market price decreased 17.77%. For the same period, the average NAV of the constituents of the Broadridge Energy MLP Closed-End Fund category decreased 8.09%¹, including reinvested dividends.

On behalf of the investment professionals at Duff & Phelps, I welcome new investors to the fund and thank all of our shareholders for entrusting your assets to us. If you have any questions, our customer service team is available to assist you at 1-866-270-7788 or through the closed-end fund section of our website, www.virtus.com.

Sincerely,



George R. Aylward
President, Chief Executive Officer, and Director
Duff & Phelps Select Energy MLP Fund Inc.

January 2018

This information does not represent an offer, or the solicitation of an offer, to buy or sell securities of the Fund.

Performance data quoted represents past results. Past performance is no guarantee of future results, and current performance may be higher or lower than the performance shown above.

¹ Average NAV performance as calculated for the Broadridge MLP Peer Group may differ from any constituent fund's stated performance.

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
MANAGER'S DISCUSSION OF FUND PERFORMANCE
NOVEMBER 30, 2017
(Unaudited)

About the Fund:

The Duff & Phelps Select Energy MLP Fund Inc. (NYSE: DSE) (the "Fund" or "DSE") invests at least 80% of its Managed Assets in energy master limited partnerships ("MLPs"). The Fund's "Managed Assets" are equal to its net assets plus any outstanding preferred stock and/or borrowings made for the purpose of leverage. The Fund may invest up to 20% of its Managed Assets in securities of issuers either: (i) in the energy sector and that are not MLPs or (ii) that produce products that are primarily for the use of companies in the energy sector (such as sand miners, certain chemical companies, and coking coal processors). The Fund's investment objective is to seek a high level of total return resulting from a combination of current tax-deferred distributions and capital appreciation. *There is no guarantee that the Fund will achieve its investment objective.*

The use of leverage currently enables the Fund to issue preferred stock and/or borrow at short-term rates and invest at higher yields on its investments. As of November 30, 2017, the Fund's leverage consisted of \$35 million in outstanding Fixed Rate Mandatory Redeemable Preferred Shares ("MRP Shares") and \$50 million of borrowings made pursuant to a line of credit which combined represented approximately 37% of the Fund's total assets.

Portfolio Review – Duff & Phelps Investment Management Co. ("DPIM")

The Duff & Phelps Select Energy MLP Fund Inc. is subadvised by Duff & Phelps Investment Management Co., and managed by a team of two dedicated MLP investment professionals with average industry experience of more than 18 years: David D. Grumhaus, Jr., Senior Portfolio Manager, and Charles Georgas, CFA, Portfolio Manager. The following commentary is provided by the portfolio management team at DPIM, and covers the period from December 1, 2016 through November 30, 2017.

How did the equity markets and MLPs perform during the Fund's fiscal year ended November 30, 2017?

The Fund's semiannual report commentary described the reversal in MLP performance after a strong start to the fiscal year. Unfortunately, this weak performance continued in the second half of the year as well. While the equity markets posted strong returns, MLPs, as measured by the Alerian MLP Index, struggled, finishing the fiscal year down 6.83% on a total return basis.

What made the underperformance particularly painful was that oil, which had been blamed for much of the weakness in MLPs over the past three years, rallied in the second half of the Fund's fiscal year. As measured by the West Texas Intermediate (WTI), oil ended November 2017 at \$57.40 per barrel. On the same day, OPEC agreed to extend production cuts through the end of 2018. The initial announcement of cuts by OPEC in November of 2016 led to expectations of a breakout in oil prices. Nevertheless, after a rally early in the fiscal year, oil prices fell on stubbornly high inventories and fears about big U.S. production growth. Oil finally bottomed below \$43 in June 2017, then moved steadily higher over the next five months. However, despite oil's 35% upward move, MLPs declined 1.4% on a total return basis during the same period.

MLPs continued to suffer from poor sentiment and a lack of new money coming into the space. Equity issuance by MLPs, both through equity offerings and at-the-market (ATM) equity issuance, far exceeded fund flows. While MLPs have done a lot to restructure their companies and fix their balance sheets, it has been a slow process. A number of companies still have too much leverage and weak distribution coverage ratios. In the last quarter of the fiscal year, we

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
MANAGER'S DISCUSSION OF FUND PERFORMANCE (Continued)
NOVEMBER 30, 2017
(Unaudited)

saw distribution cuts from Genesis Energy and Plains All-American (for the second time), and industry bellwether Enterprise Products announced a decision to slow its distribution growth. Over the 12 months, MLPs also continued to hurt themselves and the sector with questionable transactions, most notably Rice Energy agreeing in June 2017 to merge with Equitable Resources without any regard to the negative effects it would have on its MLP, Rice Midstream Partners. Despite concerns about leverage, funding, and overly aggressive growth, a number of MLPs (most notably Plains All American Pipeline LP, Nustar Energy LP, Genesis Energy LP and Targa Resources Corp) also announced big asset acquisitions and, in most cases, equity raises, all of which caused their stock prices and the sector to languish.

During the 12-month period, both the macro environment and the position of MLPs strengthened. U.S. natural gas liquid (NGL) prices moved significantly higher and U.S. natural gas volumes jumped, driven by higher exports to Mexico and new LNG facilities that came on line. While restructurings were painful for the sector, they left the MLPs with stronger balance sheets and lower costs of capital.

What factors affected the Fund's performance during the fiscal year?

The 12 months ended November 30, 2017 were difficult for the Fund. For the year, the Fund fell 14.36% on a NAV basis and 17.77% on a market basis. Performance continued to be affected by the Fund's leverage, which was above 30% for most of the year. The use of leverage has always been a component of our strategy, but it tends to detract during a falling market. Furthermore, while the successful completion of the Fund's offering of MRP Shares in February 2017 was an important step in providing more stability to the Fund, the timing was less than ideal as we received the proceeds just as the MLPs peaked for the year.

Like the sector, the Fund experienced a strong first quarter of the fiscal year, up 10.9%. Unfortunately, returns were negative in each of the last three quarters as the sector fell 15.3% during that time. The top five contributors to the Fund's performance during the fiscal year were MPLX LP, Sunoco LP, Williams Partners, ONEOK Partners, and GasLog Partners. MPLX and Williams benefitted from announcements of incentive distribution rights (IDR) restructurings with their respective general partner (GP) sponsors, along with drop downs of additional assets, in the case of MPLX, and deleveraging upon the sale of non-core assets by Williams Partners. Sunoco LP also announced a significant deleveraging event with the sale of 1,100 convenience stores to 7-Eleven for \$3.3 billion and a take-or-pay fuel supply agreement. ONEOK Partners was acquired by its GP sponsor, ONEOK Inc., at an attractive multiple, and GasLog Partners continued to expand its portfolio with contracted shippers adding incremental cargoes of LNG.

The five largest detractors to the Fund's performance were Energy Transfer Partners, Plains All American Pipeline LP, Enbridge Energy Partners, NuStar Energy LP, and Genesis Energy LP. All five MLPs owned assets in the petroleum transportation and storage segment, the weakest sector overall during the year within the midstream space. Plains experienced headwinds in its crude supply & logistics segment, and facing pressure from credit agencies, reduced its distribution in order to deleverage its balance sheet. Energy Transfer struggled with funding issues and faced ongoing regulatory challenges in the northeast with its Rover Pipeline after experiencing a similar fate with the Dakota Access Pipeline in North Dakota. Enbridge, faced with a stretched balance sheet and structural issues, announced a distribution reset, as did Genesis Energy in an effort to reduce leverage after making several sizable acquisitions. NuStar Energy experienced sharply lower distribution coverage in the aftermath of an acquisition at a rich multiple of a highly sought-after gathering system in the Permian basin.

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
MANAGER'S DISCUSSION OF FUND PERFORMANCE (Continued)
NOVEMBER 30, 2017
(Unaudited)

The preceding information is the opinion of portfolio management only through the end of the period of the report as stated on the cover. Any such opinions are subject to change at any time based upon market conditions and should not be relied upon as investment advice.

There can be no assurance that the Fund will achieve its investment objectives.

The Fund's portfolio holdings are subject to change and may not be representative of the portfolio managers' current or future investments. The mention of individual securities held by the Fund is for informational purposes only and should not be construed as a recommendation to purchase or sell any securities. Investors seeking financial advice regarding the appropriateness of investing in any securities or investment strategies discussed should consult their financial professional.

Equity Securities: The market price of equity securities may be adversely affected by financial market, industry, or issuer-specific events. Focus on a particular style or on small or medium-sized companies may enhance that risk.

MLPs: Investments in Master Limited Partnerships may be adversely impacted by tax law changes, regulation, or factors affecting underlying assets. The Fund has elected to be treated as a "C" corporation, for United States federal and state income tax purposes. Accordingly, the Fund may pay federal and applicable state corporate taxes.

Leverage: When a fund leverages its portfolio, the value of its shares may be more volatile and all other risks may be compounded.

Energy Sector Concentration: The Fund's investments are concentrated in the energy sector and may present more risks than if the Fund were broadly diversified over numerous sectors of the economy.

Market Price/NAV: Shares of closed-end funds often trade at a discount to their net asset value, which may increase investors' risk of loss. At the time of sale, an investor's shares may have a market price that is above or below the Fund's NAV.

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
NOVEMBER 30, 2017
(Unaudited)

The following tables present the portfolio holdings within certain sectors or countries as a percentage of total investments as of November 30, 2017.

<u>Asset Allocation</u>	
Energy	98%
Other (includes short-term investment)	<u>2</u>
Total	<u><u>100%</u></u>

<u>Country Weightings</u>	
United States (includes short-term investment)	94%
Marshall Islands	<u>6</u>
Total	<u><u>100%</u></u>

<u>Sector Weightings</u>	
Traditional Midstream	86%
Marine/Shipping	6
Downstream/Other	6
Short-Term Investment	<u>2</u>
Total	<u><u>100%</u></u>

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
KEY INVESTMENT TERMS
NOVEMBER 30, 2017 (Unaudited)

Alerian MLP Index

The Alerian MLP Index is the leading gauge of large- and mid-cap energy Master Limited Partnerships (MLPs). The float-adjusted, capitalization-weighted index, which includes 50 prominent companies and captures approximately 75% of available market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis. The index is unmanaged, its returns do not reflect any fees, tax assets or liabilities, expenses, or sales charges, and it is not available for direct investment.

Broadridge Energy MLP Closed-End Fund Average

The Broadridge Energy MLP Closed-End Fund Average is the average net asset value (NAV) performance of all funds within the Lipper fund classification of Energy MLP closed-end funds, which invest primarily in Master Limited Partnerships (MLPs) engaged in the transportation, storage, and processing of minerals and natural resources. Returns include the reinvestment of all distributions, including returns of capital, if any, calculated among the funds.

Master Limited Partnerships (MLPs)

Entities commonly referred to as “MLPs” are generally organized under state law as limited partnerships or limited liability companies. The securities issued by many MLPs are listed and traded on a securities exchange. An MLP typically issues general partner and limited partner interests, or managing member and member interests. The general partner or managing member manages and often controls, has an ownership stake in, and is normally eligible to receive incentive distribution payments from, the MLP. If publicly traded, MLPs must derive at least 90% of their gross income from qualifying sources as described in the Internal Revenue Code in order to be treated as partnerships for United States federal income tax purposes.

Organization of the Petroleum Exporting Countries (OPEC)

The Organization of the Petroleum Exporting Countries was originally organized in September 1960 with 5 member countries and there are currently 12 member countries. The organization’s objective is to co-ordinate and unify petroleum policies among member countries, in order to secure fair and stable prices for petroleum producers; an efficient, economic and regular supply of petroleum to consuming nations; and a fair return on capital to those investing in the industry.

West Texas Intermediate (WTI)

WTI is a light sweet crude oil that is produced, refined and consumed in North America and is one of the three primary benchmarks used for oil pricing.

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
SCHEDULE OF INVESTMENTS
NOVEMBER 30, 2017

(\$ reported in thousands)

	SHARES/ UNITS	VALUE		SHARES/ UNITS	VALUE
COMMON STOCKS—10.1%			Natural Gas Pipelines—26.3%		
Diversified—1.8%			Spectra Energy		
ONEOK, Inc.	52,201	\$ 2,709	Partners LP		
Gathering/Processing—8.3%			Tallgrass Energy		
Targa Resources Corp.	276,375	11,995	Partners LP		
TOTAL COMMON STOCKS			TC PipeLines LP		
(Identified Cost \$9,403)			Williams Partners LP		
14,704			38,138		
MASTER LIMITED PARTNERSHIPS AND RELATED COMPANIES—145.0%			Petroleum Transportation & Storage—25.2%		
Diversified—38.0%			Andeavor Logistics LP		
Energy Transfer			Enbridge Energy		
Partners LP	1,275,853	21,192	Partners LP		
Enterprise Products			Genesis Energy LP		
Partners LP	358,000	8,817	NuStar Energy LP		
MPLX LP	543,499	19,490	Plains All American		
NGL Energy Partners LP	450,000	5,625	Pipeline LP		
		55,124	36,472		
Downstream/Other—9.3%			TOTAL MASTER LIMITED PARTNERSHIPS AND RELATED COMPANIES		
Cheniere Energy			(Identified Cost \$275,926)		
Partners LP	220,000	5,920	210,161		
Sunoco LP	258,000	7,575	TOTAL LONG TERM INVESTMENTS—155.1%		
		13,495	(Identified Cost \$285,329)		
53,553			224,865		
Gathering/Processing—37.0%			SHORT-TERM INVESTMENT—3.7%		
Crestwood Equity			Money Market Mutual Fund—3.7%		
Partners LP	246,783	5,910	BlackRock Liquidity		
DCP Midstream LP	336,000	11,807	Funds FedFund Portfolio		
Enable Midstream			– Institutional Shares		
Partners LP	380,000	5,692	(seven-day effective yield 0.963%) ⁽¹⁾		
EnLink Midstream			5,305,690		
Partners LP	1,081,399	17,292	TOTAL SHORT-TERM INVESTMENT		
Hess Midstream			(Identified Cost \$5,306)		
Partners LP	116,361	2,460	5,306		
Rice Midstream			TOTAL INVESTMENTS—158.8%		
Partners LP	124,500	2,593	(Identified Cost \$290,635)		
Western Gas Partners LP	174,000	7,799	Other assets and liabilities,		
		53,553	net—(58.8)%		
53,553			(85,216)		
Marine/Shipping—9.2%			NET ASSETS—100.0%		
GasLog Partners LP	366,830	8,107	\$144,955		
KNOT Offshore					
Partners LP	261,000	5,272			
		13,379			

See Notes to Financial Statements

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
SCHEDULE OF INVESTMENTS (Continued)
NOVEMBER 30, 2017

(\$ reported in thousands)

Footnote Legend:

- ⁽¹⁾ Shares of this fund are publicly offered and its prospectus and annual report are publicly available.
- ⁽²⁾ All or a portion of the portfolio is segregated as collateral for borrowings.

The following table provides a summary of inputs used to value the Fund's investments as of November 30, 2017 (see Security Valuation Note 2A in the Notes to Financial Statements):

	Total Value at November 30, 2017	Level 1 Quoted Prices
Equity Securities:		
Common Stocks	\$ 14,704	\$ 14,704
Master Limited Partnerships and Related Companies	210,161	210,161
Short-Term Investments	5,306	5,306
Total Investments	\$230,171	\$230,171

There were no securities valued using significant observable inputs (Level 2) or significant unobservable inputs (Level 3) at November 30, 2017.

There were no transfers between Level 1, Level 2, or Level 3 related to securities held at November 30, 2017.

See Notes to Financial Statements

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
STATEMENT OF ASSETS AND LIABILITIES
NOVEMBER 30, 2017

(Reported in thousands except shares and per share amounts)

Assets	
Investment in securities at value (Identified cost \$290,635)	\$ 230,171
Receivables	
Dividends	5
Deferred tax asset, net (Note 5)	25
Prepaid directors' retainer	15
Prepaid expenses	9
Total assets	<u>230,225</u>
Liabilities	
Cash overdraft	86
Payables	
Borrowings (Note 9)	50,000
Fixed rate mandatory redeemable preferred shares (liquidation preference \$35,000, net of deferred offering costs of \$511) (Note 8)	34,489
Investment advisory fees	190
Administration and accounting fees	37
Interest payable on fixed rate mandatory redeemable preferred shares (Note 8)	259
Professional fees	128
Interest payable on borrowings (Note 9)	3
Transfer agent fees and expenses	2
Other accrued expenses	76
Total liabilities	<u>85,270</u>
Net Assets	<u><u>\$ 144,955</u></u>
Net Assets Consist of:	
Common stock (\$0.001 par value 100,000,000 shares authorized)	\$ 26
Capital paid in on shares of beneficial interest	400,776
Accumulated undistributed net investment income (loss), net of taxes	(14,193)
Accumulated undistributed net realized gain (loss), net of taxes	(181,190)
Net unrealized appreciation (depreciation) on investments, net of taxes	(60,464)
Net Assets	<u><u>\$ 144,955</u></u>
Net Asset Value Per Share	
(Net assets/shares outstanding) Shares outstanding 26,147,844	<u>5.54</u>

See Notes to Financial Statements

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
STATEMENT OF OPERATIONS
YEAR ENDED NOVEMBER 30, 2017

(\$ reported in thousands)

Investment Income

Dividends and distributions	\$ 21,827
Less return of capital distributions (Note 2C)	(20,861)
	966
Total investment income	966

Expenses

Investment advisory fees	2,698
Administration and accounting fees	399
Professional fees	205
Directors fees and expenses	204
Printing fees and expenses	83
Amortization of offering costs on preferred shares (Note 8)	59
Franchise taxes	43
Transfer agent fees and expenses	12
Custodian fees	4
Miscellaneous	102
	3,809
Total expenses before interest expense	3,809
Interest expense on preferred shares (Note 8)	1,268
Interest expense on borrowings (Note 9)	1,104
	6,181
Total expenses after interest expense	6,181
Net investment income (loss) before income taxes	(5,215)
Net tax benefit (expense)	—

Net investment income (loss) **(5,215)**

Net Realized and Unrealized Gain (Loss) on Investments

Net realized gain (loss) on investments before income taxes	(16,360)
Net tax benefit (expense)	—
	(16,360)
Net realized gain (loss) on investments	(16,360)
Net change in unrealized appreciation (depreciation) on investments before income taxes ...	(3,828)
Deferred tax benefit (expense)	—
	(3,828)
Net change in unrealized appreciation (depreciation)	(3,828)

Net realized and unrealized gain (loss) on investments after income taxes **(20,188)**

Net increase (decrease) in net assets resulting from operations **\$(25,403)**

See Notes to Financial Statements

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
STATEMENTS OF CHANGES IN NET ASSETS

(\$ reported in thousands)

	Year Ended November 30, 2017	Year Ended November 30, 2016
INCREASE/(DECREASE) IN NET ASSETS		
From Operations		
Net investment income (loss)	\$ (5,215)	\$ (2,706)
Net realized gain (loss)	(16,360)	(107,447)
Net change in unrealized appreciation (depreciation)	(3,828)	131,059
	<u>(25,403)</u>	<u>20,906</u>
From Distributions to Shareholders		
Return of capital	(22,970)	(22,879)
	<u>(22,970)</u>	<u>(22,879)</u>
From Capital Share Transactions		
Reinvestment of distributions resulting in the issuance of common stock (71,683 and 103,770 shares, respectively) ..	468	767
	<u>468</u>	<u>767</u>
	<u>(47,905)</u>	<u>(1,206)</u>
Net increase (decrease) in net assets		
Net Assets		
Beginning of period	192,860	194,066
End of period	<u>\$144,955</u>	<u>\$ 192,860</u>
Accumulated undistributed net investment income (loss) net of taxes at end of period	\$ (14,193)	\$ (8,978)

See Notes to Financial Statements

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED NOVEMBER 30, 2017

Increase (Decrease) in cash

Cash Flows Provided by (Used for) Operating Activities:

Net increase (decrease) in net assets resulting from operations \$(25,403)

Adjustments to reconcile net increase (decrease) in net assets resulting from operations to net cash provided/(used) by operating activities:

Proceeds from sales of long-term investments	58,248
(Increase) Decrease in investment securities sold receivable	3,242
Purchase of long-term investments	(54,471)
Increase (Decrease) in investment securities purchased payable	(3,424)
Net (purchases) or sales of short-term securities	(3,451)
Net change in unrealized (appreciation)/depreciation on investments	3,828
Net realized (gains)/loss on investments	16,360
Return of capital distributions on investments	20,861
Proceeds from litigation settlements	13
(Increase) Decrease in dividends receivable	(4)
(Increase) Decrease in prepaid expenses	10
(Increase) Decrease in prepaid directors' retainer	(1)
Increase (Decrease) in interest payable on borrowings	(88)
Increase (Decrease) in interest payable on fixed rate mandatory redeemable preferred shares	259
Increase (Decrease) in affiliated expenses payable	(12)
Increase (Decrease) in unaffiliated expenses payable	(40)

Cash provided by (used) for operating activities 15,927

Cash provided by (used for) financing activities:

Cash proceeds from borrowings	7,000
Cash payments to reduce borrowings	(35,000)
Cash proceeds from fixed rate mandatory redeemable preferred shares	34,489
Cash dividends paid to shareholders	(22,502)
Increase (Decrease) in bank overdraft	86

Cash provided by (used for) financing activities (15,927)

Net increase (decrease) in cash

—

Cash:

Cash at beginning of period —

Cash at end of period \$ —

Supplemental cash flow information:

Reinvestment of dividends and distributions	\$ 468
Cash paid during the period for interest on borrowings	1,192
Cash paid during the period for interest on mandatory redeemable preferred shares	1,009

See Notes to Financial Statements

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
FINANCIAL HIGHLIGHTS
SELECTED PER SHARE DATA AND RATIOS FOR A SHARE OUTSTANDING
THROUGHOUT EACH PERIOD

	For the Year Ended			From Inception ⁽¹⁾
	November 30, 2017	November 30, 2016	November 30, 2015	to November 30, 2014
PER SHARE OPERATING DATA:				
Net asset value, beginning of period	\$ 7.40	\$ 7.47	\$ 17.35	\$ 19.10 ⁽¹⁾⁽²⁾
Income from investment operations:				
Net investment income/(loss) ⁽³⁾	(0.20)	(0.10)	(0.15)	(0.09)
Net realized and unrealized gain/(loss)	(0.78)	0.91	(8.15)	(1.30)
Total from investment operations	(0.98)	0.81	(8.30)	(1.39)
Dividends and/or Distributions to Shareholders:				
Distributions from return of capital	(0.88)	(0.88)	(1.58)	(0.32)
Total dividends and distributions to shareholders	(0.88)	(0.88)	(1.58)	(0.32)
Offering costs charged to paid in capital	—	—	—	(0.04)
Net asset value, end of period	\$ 5.54	\$ 7.40	\$ 7.47	\$ 17.35
Market price, end of period ⁽⁴⁾	\$ 5.37	\$ 7.47	\$ 7.29	\$ 15.80
Total return, net asset value ⁽⁵⁾	(14.36)%	13.58%	(50.79)%	(7.64)% ⁽⁷⁾
Total return, market value ⁽⁵⁾	(17.77)%	17.48%	(47.24)%	(19.72)% ⁽⁷⁾
Net assets, end of period (000's)	\$144,955	\$192,860	\$194,066	\$448,635
RATIOS/SUPPLEMENTAL DATA:				
Ratio of total expenses after interest expense to average net assets ⁽⁶⁾	3.40%	2.52%	2.28%	2.02% ⁽⁸⁾⁽⁹⁾
Ratio of net investment income/(loss) to average net assets	(2.86)%	(1.59)%	(1.20)%	(1.16)% ⁽⁸⁾⁽⁹⁾
Portfolio turnover rate	20%	28%	20%	22% ⁽⁹⁾
Bank Borrowings:				
Loan outstanding, end of period (000's)	\$ 50,000	\$ 78,000	\$ 94,500	\$193,500
Asset coverage for loan outstanding, end of period	460%	347%	305%	332%
Asset coverage for total leverage (borrowing and preferred), at end of period	271%	—	—	—

⁽¹⁾ The Fund commenced operations on June 25, 2014, the date which its initial public offering shares were issued.

⁽²⁾ Initial public offering price of \$20.00 per share less sales load of \$0.90.

⁽³⁾ Calculated based on average shares outstanding.

⁽⁴⁾ Closing Price – New York Stock Exchange.

See Notes to Financial Statements

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
FINANCIAL HIGHLIGHTS (Continued)
SELECTED PER SHARE DATA AND RATIOS FOR A SHARE OUTSTANDING
THROUGHOUT EACH PERIOD

- ⁽⁵⁾ Total Return on Market Value is calculated assuming a purchase of common shares on the opening of the first day and sale on the closing of the last day of each period reported. Dividends and distributions are assumed, for purposes of this calculation, to be reinvested at prices obtained under the Fund's Automatic Reinvestment and Cash Purchase Plan. Total Return on Market Value is not annualized for periods of less than one year. Brokerage commissions that a shareholder may pay are not reflected. Total Return on Market Value does not reflect the deduction of taxes that a shareholder may pay on fund distributions or the sale of fund shares. Total Return on NAV uses the same methodology but with use of net asset value for the beginning, ending and reinvestment values.
- ⁽⁶⁾ Ratio of operating expenses to average net assets, before interest expense and before tax benefit (expense) was 2.09%, 1.97%, 1.84%, and 1.73% for the periods ended November 30, 2017, November 30, 2016, November 30, 2015, and November 30, 2014, respectively.
- ⁽⁷⁾ Not annualized.
- ⁽⁸⁾ Annualized.
- ⁽⁹⁾ Ratio is calculated starting June 30, 2014, the date the Fund began accruing expenses.

See Notes to Financial Statements

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
NOTES TO FINANCIAL STATEMENTS
NOVEMBER 30, 2017

Note 1. Organization

The Fund is organized as a non-diversified, closed-end management investment company registered under the Investment Company Act of 1940, as amended (the "1940 Act"). The Fund was incorporated as a Maryland corporation on March 28, 2014. The Fund's initial public offering was on June 25, 2014, and the Fund commenced investment operations on June 30, 2014. The Fund's investment objective is to seek a high level of total return resulting from a combination of current tax-deferred distributions and capital appreciation. *There can be no assurance that the Fund will achieve its investment objective.*

Note 2. Significant Accounting Policies

The Fund is an investment company that follows the accounting and reporting guidance of Accounting Standards Codification Topic 946 applicable to Investment Companies.

The following is a summary of significant accounting policies followed by the Fund in the preparation of its financial statements. The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of increases and decreases in net assets from operations during the reporting period. Actual results could differ from those estimates, and those differences could be significant.

A. Security Valuation

Security valuation procedures for the Fund, which include nightly price variance, as well as back-testing items such as bi-weekly unchanged price, monthly secondary source and transaction analysis, have been approved by the Board of Directors of the Fund (the "Board", or the "Directors"). All internally fair valued securities are approved by a valuation committee approved by the Board (the "Valuation Committee"). The Valuation Committee is comprised of certain members of management and convenes independently from portfolio management. All internally fair valued securities are updated daily and reviewed in detail by the Valuation Committee monthly unless changes occur within the period. The Valuation Committee reviews the validity of the model inputs and any changes to the model. Fair valuations are reviewed quarterly by the Board.

The Fund utilizes a fair value hierarchy which prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The Fund's policy is to recognize transfers between levels at the end of the reporting period.

- Level 1 – quoted prices in active markets for identical securities (security types generally include listed equities).
- Level 2 – prices determined using other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).
- Level 3 – prices determined using significant unobservable inputs (including the Valuation Committee's own assumptions in determining the fair value of investments).

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
NOTES TO FINANCIAL STATEMENTS (Continued)
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A description of the valuation techniques applied to the Fund's major categories of assets and liabilities measured at fair value on a recurring basis is as follows:

Equity securities are valued at the official closing price (typically last sale) on the exchange on which the securities are primarily traded or, if no closing price is available, at the last bid price and are categorized as Level 1 in the hierarchy. Restricted equity securities and private placements that are not widely traded, are illiquid, or are internally fair valued by the Valuation Committee, are generally categorized as Level 3 in the hierarchy.

Certain non-U.S. securities may be fair valued in cases where closing prices are not readily available or are deemed not reflective of readily available market prices. For example, significant events (such as movement in the U.S. securities market, or other regional and local developments) may occur between the time that non-U.S. markets close (where the security is principally traded) and the time that the Fund calculates its net asset value ("NAV") (at the close of regular trading on the New York Stock Exchange ("NYSE"), generally 4 p.m. Eastern time) that may impact the value of securities traded in these non-U.S. markets. In such cases the Fund fair values non-U.S. securities using an independent pricing service which considers the correlation of the trading patterns of the non-U.S. security to the intraday trading in the U.S. markets for investments such as American Depositary Receipts, financial futures, Exchange-Traded Funds, and certain indexes, as well as prices for similar securities. Such fair valuations are categorized as Level 2 in the hierarchy. Because the frequency of significant events is not predictable, fair valuation of certain non-U.S. common stocks may occur on a frequent basis.

Debt securities, including restricted securities, are valued based on evaluated quotations received from independent pricing services or from dealers who make markets in such securities. For most bond types, the pricing service utilizes matrix pricing that considers one or more of the following factors: yield or price of bonds of comparable quality, coupon, maturity, current cash flows, type, and current day trade information, as well as dealer supplied prices. These valuations are generally categorized as Level 2 in the hierarchy. Structured debt instruments, such as mortgage-backed and asset-backed securities, may also incorporate collateral analysis and utilize cash flow models for valuation and are generally categorized as Level 2 in the hierarchy. Pricing services do not provide pricing for all securities and therefore indicative bids from dealers are utilized which are based on pricing models used by market makers in the security and are generally categorized as Level 2 in the hierarchy. Debt securities that are not widely traded, are illiquid, or are internally fair valued by the Valuation Committee, are generally categorized as Level 3 in the hierarchy.

Listed derivatives that are actively traded are valued based on quoted prices from the exchange and are categorized as Level 1 in the hierarchy. Over-the-counter derivative contracts, which include forward currency contracts and equity-linked instruments, do not require material subjectivity as pricing inputs are observed from actively quoted markets and are categorized as Level 2 in the hierarchy.

Investments in open-end mutual funds are valued at NAV. Investments in closed-end funds are valued as of the close of regular trading on the NYSE each business day. Both are categorized as Level 1 in the hierarchy.

A summary of the inputs used to value the Fund's net assets by each major security type is disclosed at the end of the Schedule of Investments for the Fund. The inputs or

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
NOTES TO FINANCIAL STATEMENTS (Continued)
NOVEMBER 30, 2017

methodologies used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

B. Security Transactions and Investment Income

Security transactions are recorded on the trade date. Realized gains and losses from sales of securities are determined on the identified cost basis. Dividend income is recognized on the ex-dividend date or, in the case of certain foreign securities, as soon as the Fund is notified. Interest income is recorded on the accrual basis. The Fund amortizes premiums and accretes discounts using the effective interest method.

C. Investment Income and Return of Capital Estimates

The Fund invests in master limited partnerships (“MLPs”) which make distributions that are primarily attributable to return of capital. The Fund records investment income and return of capital in the Statement of Operations using management’s estimate of the percentage of income included in the distributions received from each MLP based on historical information from the MLPs and other industry sources. These estimates may be adjusted based on information received from the MLPs after the tax and fiscal year ends.

The return of capital portion of the MLP distributions is a reduction to investment income and a reduction in the cost basis of each investment which increases net realized gain (loss) and net change in unrealized appreciation (depreciation). If the return of capital distributions exceed its cost basis, the distributions are treated as realized gains. The actual amounts of income and return of capital are only determined by each MLP after its fiscal year-end and may differ from the estimated amounts. For the period ended November 30, 2017, the Fund estimates that 100% of the MLP distributions received will be treated as a return of capital.

D. Federal and State Income Taxes

Due to the fact that the Fund invests primarily in MLPs, it cannot qualify as a Regulated Investment Company under current tax laws. Thus, the Fund is treated as a regular corporation, or “C” corporation, for U.S. income tax purposes. Accordingly, the Fund generally is subject to U.S. federal income tax on its taxable income at statutory rates applicable to “C” corporations (currently at a maximum rate of 35%). The Fund may also be subject to a 20% alternative minimum tax to the extent that alternative minimum tax exceeds the Fund’s regular income tax liability. In addition, as a “C” corporation, the Fund is subject to various state income taxes by reason of its investments in MLPs (state effective rate currently estimated at 2.06%, net of federal tax benefit). As a limited partner in the MLPs, the Fund includes its distributable share of the MLP’s taxable income in computing its own taxable income.

E. Income Tax Accounting Policy

The Fund applies Accounting Standards Codification (ASC) 740 (Income Taxes) in computing the income tax provision. The Fund records deferred income taxes to reflect 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. Such temporary differences are principally: (i) taxes on unrealized gains (losses), which are attributable to the temporary difference between fair market value and tax basis, and (ii) the net tax benefit of accumulated net operating losses and capital

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
NOTES TO FINANCIAL STATEMENTS (Continued)
NOVEMBER 30, 2017

loss carryforwards. Deferred tax assets and liabilities are measured using effective tax rates expected to apply to taxable income in the years such temporary differences are realized or otherwise settled. To the extent the Fund has a deferred tax asset, consideration is given to whether or not a valuation allowance is required. The determination of whether a valuation allowance is required is based upon whether it is more likely than not that some portion or all of the deferred tax asset will not be realized. The Fund considers all positive and negative evidence in assessing any valuation allowance including the nature, frequency and severity of current and cumulative losses, forecasts of future profitability, the duration of statutory carryforward periods and the associated risk that operating and capital loss carryforwards may expire unused. The Fund also accrues additional tax expense relating to uncertain tax positions and includes interest and penalties on such positions as a component of tax expense.

F. Distributions to Shareholders

Distributions to shareholders are declared and paid on a quarterly basis and are recorded on the ex-dividend date. The Fund uses a cash flow-based distribution approach in amounts based on the Fund's net cash flow received from portfolio investments, i.e., cash distributions received from the Fund's investments in MLPs less expenses.

The estimated character of the distributions paid will either be dividends (ordinary income eligible to be treated as qualified dividend income) or returns of capital. Distributions made from current or accumulated earnings and profits of the Fund will be taxable to shareholders as dividend income. Distributions that are in amounts greater than the Fund's current and accumulated earnings and profits will represent returns of capital to the extent of a shareholder's basis in their common shares, and such distributions will correspondingly increase the realized gain upon the sale of their common shares (or decrease the realized loss). Additionally, distributions not paid from current or accumulated earnings and profits that exceed a shareholder's tax basis in their common shares will generally be taxed as a capital gain. This estimate is based on the Fund's operating results during the period. The Fund is unable to make a final determination as to the tax character of distributions until after the end of the calendar year when the Fund can determine earnings and profits for federal income tax purposes.

The Fund will inform shareholders of the final tax character of its distributions on Form 1099-DIV in February 2018. For the period ended November 30, 2017, we currently estimate that 100% of the distributions will be considered returns of capital for federal income tax purposes.

G. Foreign Currency Translation

Non-U.S. investment securities and other assets and liabilities denominated in foreign currencies are translated into U.S. dollar amounts at the foreign currency exchange rate effective at the end of the reporting period. Cost of investments is translated at the currency exchange rate effective at the trade date. The gain or loss resulting from a change in currency exchange rates between the trade and settlement date of a portfolio transaction is treated as a gain or loss on foreign currency. Likewise, the gain or loss resulting from a change in currency exchange rates between the date income is accrued and the date it is paid is treated as a gain or loss on foreign currency. The Fund does not isolate that portion of the results of operations arising from changes in

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
NOTES TO FINANCIAL STATEMENTS (Continued)
NOVEMBER 30, 2017

foreign exchange rates on investments from the fluctuations arising from changes in the market prices of securities held. Such fluctuations are included with the net realized and unrealized gain or loss on investments.

H. Expenses

Expenses incurred together by the Fund and other affiliated open- and closed-end funds are allocated in proportion to the net assets of each such fund, except where allocation of direct expense to each fund or an alternative allocation method can be more appropriately used.

In addition to the net annual operating expenses that the Fund bears directly, the shareholders of the Fund indirectly bear the Fund's pro rata expenses of any underlying mutual funds in which the Fund invests.

Note 3. Investment Advisory Fees and Related Party Transactions
(\$ reported in thousands)

A. Adviser

Virtus Alternative Investment Advisers, Inc. (the "Adviser"), an indirect wholly-owned subsidiary of Virtus Investment Partners, Inc. ("Virtus"), is the investment adviser of the Fund. The Adviser supervises the Fund's investment program and general operations of the Fund, including the Fund's subadviser. As compensation for its services to the Fund, the Adviser receives a monthly fee at an annual rate of 1.00% of the Fund's average daily Managed Assets. "Managed Assets" is defined as the value of the total assets of the Fund minus the sum of all accrued liabilities of the Fund (other than the aggregate amount of any outstanding preferred stock, borrowings or other indebtedness entered into for the purpose of leverage).

B. Subadviser

Duff & Phelps Investment Management Co. ("DPIM"), an indirect wholly-owned subsidiary of Virtus, is the subadviser of the Fund. The subadviser is responsible for the day-to-day portfolio management of the Fund. For its services, DPIM receives an annual fee, payable monthly from the Adviser. No fee is paid to DPIM directly from the Fund.

C. Administration Services

Virtus Fund Services, LLC ("VFS"), an indirect wholly-owned subsidiary of Virtus, serves as the administrator to the Fund. For the services provided by the administrator under the Administration Agreement, the Fund pays the administrator a monthly asset-based fee calculated on the Fund's average daily managed assets.

For the period ended November 30, 2017, the Fund incurred administration fees totaling \$270 which are included in the Statement of Operations within the line item "Administration and accounting fees."

D. Directors

For the period ended November 30, 2017, the Fund incurred Directors' fees totaling \$171 which are included in the Statement of Operations within the line item "Directors fees and expenses."

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
NOTES TO FINANCIAL STATEMENTS (Continued)
NOVEMBER 30, 2017

E. Affiliated Shareholder

As of November 30, 2017, affiliates of Virtus Investment Partners, Inc. held 7,980 shares of the Fund, which represent 0.03% of shares of common stock outstanding. The shares may be sold at any time.

Note 4. Purchases and Sales of Securities

(\$ reported in thousands)

Purchases and sales of securities (excluding U.S. Government and agency securities, and short term investments) during the period ended November 30, 2017, were as follows:

<u>Purchases</u>	<u>Sales</u>
\$54,471	\$58,248

There were no purchases or sales of long-term U.S. Government and agency securities for the period ended November 30, 2017.

Note 5. Income Tax Information

(\$ reported in thousands)

The Fund's taxes include current and deferred income taxes. Current income taxes reflect the estimated income tax liability of the Fund as of the period ended November 30, 2017. Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting and tax purposes. The Fund's tax expense or benefit is recognized on the Statement of Operations based on the component of income or gains (losses) to which such expense or benefit relates.

The Fund's income tax provision consists of the following as of November 30, 2017:

	<u>Current tax expense (benefit)</u>	<u>Deferred tax expense (benefit)</u>	<u>Valuation Allowance expense (benefit)</u>	<u>Total tax expense (benefit)</u>
Federal tax expense (benefit) . . .	\$—	\$(7,478)	\$7,478	\$—
State tax expense (benefit)	—	(1,365)	1,365	—
Total tax expense (benefit)	<u>\$—</u>	<u>\$(8,843)</u>	<u>\$8,843</u>	<u>\$—</u>

The reconciliation between the federal statutory income tax rate of 35% and the effective tax rate on net investment income (loss) and realized and unrealized gain (loss) is as follows:

	<u>Amount</u>	<u>Rate</u>
Application of statutory income tax rate	\$(8,891)	-35.00%
State income taxes, net of federal benefit	(523)	-2.06
Permanent differences, net	464	1.83
Change in estimated state deferred rate	(420)	-1.65
Return to provision and other	527	2.07
Effect of valuation allowance	<u>8,843</u>	<u>34.81</u>
Total income tax expense (benefit)	<u>\$ —</u>	<u>0.00%</u>

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
NOTES TO FINANCIAL STATEMENTS (Continued)
NOVEMBER 30, 2017

Components of the Fund's net deferred tax asset (liability) as of November 30, 2017, are as follows:

Deferred tax asset:

Capital loss carryforward (tax basis)	\$ 68,073
Net operating loss carryforward (tax basis)	23,405
Net unrealized loss on investments (tax basis)	3,189
AMT credit carryforward	25
Charitable contribution carryforward	25
Net deferred tax asset before valuation allowance	<u>94,717</u>
Less: Valuation allowance	(94,692)
Net deferred tax asset (liability)	<u><u>\$ 25</u></u>

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 MLP units held, and to estimate their associated deferred tax benefit/liability. Such estimates are made in good faith. From time to time, as new information becomes available, the Fund will modify its estimates or assumptions regarding its tax benefit/liability which may have a material impact on the Fund's net asset value. Realization of the deferred tax assets and carryforwards are dependent, in part, on generating sufficient taxable income of the appropriate character prior to expiration of the loss carryforwards.

At the period ended November 30, 2017, the Fund had net operating loss carryforwards ("NOL") available for federal income tax purposes of \$63,158. If not utilized, the federal NOL will expire in years 2033 through 2037. Additionally, as of November 30, 2017, the Fund had capital loss carryforwards of \$183,692 which may be carried forward for 5 years. If not utilized, the capital loss will expire in years 2018 through 2022. The Fund has recorded a valuation allowance of \$94,692 for the net deferred tax asset at November 30, 2017, except for the portion related to the AMT tax credit, as the Fund believes it is more likely than not that the asset will not be realized within the relevant carryforward period. The AMT tax credit carryforward does not expire.

For all open tax years and all major taxing jurisdictions, management of the Fund has concluded that there are no significant uncertain tax positions that would require recognition in the financial statements. All tax years since inception remain open and subject to examination by tax jurisdictions. Currently the Fund is under IRS examination for the tax-years ended October 31, 2015 and November 30, 2015. Furthermore, management of the Fund is 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.

At November 30, 2017, federal tax cost and aggregate gross unrealized appreciation (depreciation) of securities held is as follows:

<u>Federal Tax Cost</u>	<u>Unrealized Appreciation</u>	<u>Unrealized (Depreciation)</u>	<u>Net Unrealized Appreciation (Depreciation)</u>
\$238,766	\$43,887	\$(52,483)	\$(8,596)

The differences between the book basis and tax basis of unrealized appreciation (depreciation) and the cost of investments is primarily attributable to MLP earnings and basis adjustments.

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
NOTES TO FINANCIAL STATEMENTS (Continued)
NOVEMBER 30, 2017

Note 6. Indemnifications

Under the Fund's organizational documents, its officers and Directors are indemnified against certain liabilities arising out of the performance of their duties to the Fund. In addition, in the normal course of business, the Fund enters into contracts that provide a variety of indemnifications to other parties. The Fund's maximum exposure under these arrangements is unknown as this would involve future claims that may be made against the Fund and that have not occurred. However, the Fund has not had prior claims or losses pursuant to such arrangements and expects the risk of loss to be remote.

Note 7. Capital Transactions

At November 30, 2017, the Fund had one class of common stock, par value \$0.001 per share, of which 100,000,000 shares are authorized and 26,147,844 shares are outstanding. Registered shareholders may elect to have all distributions paid by check mailed directly to the shareholder by Computershare as dividend paying agent. Pursuant to the Automatic Reinvestment and Cash Purchase Plan (the "Plan"), shareholders not making such election will have all such amounts automatically reinvested by Computershare, as the Plan agent, in whole or fractional shares of the Fund, as the case may be. During the periods ended November 30, 2017 and November 30, 2016, there were 71,683 and 103,770 shares issued pursuant to the Plan, respectively.

Note 8. Fixed Rate Mandatory Redeemable Preferred Shares

On February 8, 2017, the Fund issued 1,400,000 MRP Shares in two series each with a liquidation preference of \$25.00 per share. Proceeds from the issuances were used to reduce the size of the Fund's outstanding loan under its credit agreement and to make additional investments.

Key terms of each series of MRP Shares at November 30, 2017, are as follows:

<u>Series</u>	<u>Shares Outstanding</u>	<u>Liquidation Preference</u>	<u>Rate</u>	<u>Mandatory Redemption Date</u>
A	400,000	\$10,000,000	4.02%	2/08/2022
B	1,000,000	25,000,000	4.65%	2/08/2027
Total	<u>1,400,000</u>	<u>\$35,000,000</u>		

The Fund incurred costs in connection with the issuance of the MRP Shares. These costs were recorded as a deferred charge and are being amortized over the respective life of each series of MRP Shares. Amortization expense of these deferred offering costs of \$59,399 is included under the caption "Amortization of offering costs on preferred shares" on the Statement of Operations and the unamortized balance is deducted from the carrying amount of the MRP Shares under the caption "Fixed rate mandatory redeemable preferred shares" on the Statement of Assets and Liabilities.

Holders of the MRP Shares are entitled to receive quarterly cumulative cash dividend payments on the first business day following each quarterly dividend date which is the last day of each of March, June, September and December. These dividend payments are shown on the Statement of Operations under the caption "Interest expense on preferred shares."

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
NOTES TO FINANCIAL STATEMENTS (Continued)
NOVEMBER 30, 2017

MRP Shares are subject to optional and mandatory redemption by the Fund in certain circumstances. The redemption price per share is equal to the sum of the liquidation preference per share plus any accumulated but unpaid dividends plus, in some cases, an early redemption premium (which varies based on the date of redemption). The MRPS are not listed on any exchange or automated quotation system. The fair value of the MRP Shares is estimated to be their liquidation preference. The MRPS are categorized as Level 2 within the fair value hierarchy. The Fund is subject to certain restrictions relating to the MRP Shares such as maintaining certain asset coverage, effective leverage ratio and overcollateralization ratio requirements. Failure to comply with these restrictions could preclude the Fund from declaring any distributions to common shareholders and could trigger the mandatory redemption of the MRP Shares at liquidation value.

In general, the holders of the MRP Shares and of the Common Stock have equal voting rights of one vote per share. The holders of the MRP Shares are entitled to elect two members of the Board of Directors, and separate class votes are required on certain matters that affect the respective interests of the MRP Shares and the Common Stock.

Note 9. Borrowings

(\$ reported in thousands)

On July 21, 2017, the Fund renewed its Credit Agreement (the "Agreement") with a commercial bank (the "Bank") that allows the Fund to borrow cash from the Bank, up to a limit of \$66,000 ("Commitment Amount"). Borrowings under the Agreement are collateralized by investments of the Fund. The Agreement results in the Fund being subject to certain covenants including asset coverage and portfolio composition (among others). If the Fund fails to meet or maintain certain covenants as required under the Agreement, the Fund may be required to repay immediately, in part or in full, the loan balance outstanding under the Agreement, necessitating the sale of securities at potentially inopportune times. Interest is charged at LIBOR (London Interbank Offered Rate) plus an additional percentage rate on the amount borrowed. Commitment fees are charged on the undrawn balance, if less than 75% of the Commitment Amount is outstanding as a loan to the Fund. Total commitment fees paid and accrued for the period ended November 30, 2017 were \$15 and are included in interest expense on borrowings on the Statement of Operations. The Agreement has a term of 364 days and is renewable by the Fund with the Bank's consent and the approval of the Board. The Agreement can also be converted into a 179 day fixed term facility, one time at the Fund's option. From December 1, 2016 to November 30, 2017, the average daily borrowings under the Agreement and the weighted daily average interest rate were \$59,400 and 1.841%, respectively. At November 30, 2017, the amount of such outstanding borrowings was as follows:

<u>Outstanding Borrowings</u>	<u>Interest Rate</u>
\$50,000	2.175%

Note 10. Credit Risk and Asset Concentrations

The Fund may invest a high percentage of its assets in specific sectors of the market in the pursuit of its investment objective. Fluctuations in these sectors of concentration may have a greater impact on the Fund, positive or negative, than if the Fund did not concentrate its investments in such sectors.

DUFF & PHELPS SELECT ENERGY MLP FUND INC.
NOTES TO FINANCIAL STATEMENTS (Continued)
NOVEMBER 30, 2017

The Fund's investments are concentrated in the energy sector and may present more risks than if the Fund were broadly diversified over numerous sectors of the economy. A downturn in the energy sector would have a larger impact on the Fund than on an investment company that does not concentrate in the sector. The performance of the securities in the energy sector may lag the performance of other industries or the broader market as a whole.

The Fund borrows through its line of credit for the purpose of leveraging its portfolio. While leverage presents opportunities for increasing the Fund's total return, it also has the effect of potentially increasing losses. Accordingly, any event which adversely affects the value of an investment held by the Fund would be magnified to the extent the Fund is leveraged.

Note 11. Regulatory Matters and Litigation

From time to time, the Adviser, DPIM and/or their respective affiliates may be involved in litigation and arbitration as well as examinations and investigations by various regulatory bodies, including the Securities and Exchange Commission (the "SEC"), involving compliance with, among other things, securities laws, client investment guidelines, laws governing the activities of broker-dealers and other laws and regulations affecting their products and other activities. At this time, the Adviser believes that the outcomes of such matters are not likely, either individually or in the aggregate, to be material to these financial statements.

Note 12. Recent Accounting Pronouncement

In October 2016, the SEC released its Final Rule on Investment Company Reporting Modernization (the "Rule"). The Rule contains amendments to Regulation S-X which impacts financial statement presentation, particularly the presentation of derivative investments. The financial statements presented are in compliance with the most recent Regulation S-X amendments.

Note 13. Subsequent Events

Management has evaluated the impact of all subsequent events on the Fund through the date the financial statements were issued, and has determined that the following subsequent event requires recognition or disclosure in these financial statements.

On December 20, 2017, Congress passed the Tax Cut and Jobs Act (the "Act"), which provides a significant overhaul of the U.S. tax code, and the President signed the bill into law on December 22, 2017. The federal tax rate for corporations declines from 35% to 21% effective with tax years beginning after December 31, 2017. Based on management's preliminary assessment of the Act, the value of the deferred tax asset ("DTA") will be reduced by approximately \$34.7 million. However, the Fund carries a valuation allowance against the DTA and therefore, the fund expects no net asset value impact as the Fund's deferred tax assets are fully reserved (see Note 5 - Income Tax Information). At this time, management is continuing to evaluate the implications to the Fund, as well as the impact the Act's implementation may have on the financial statements and the accompanying notes.



Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
Duff & Phelps Select Energy MLP Fund Inc.:

In our opinion, the accompanying statement of assets and liabilities, including the schedule of investments, and the related statements of operations, of changes in net assets, and of cash flows and the financial highlights present fairly, in all material respects, the financial position of Duff & Phelps Select Energy MLP Fund Inc. (the "Fund") as of November 30, 2017, the results of its operations and its cash flows for the year then ended, the changes in its net assets for each of the two years in the period then ended and the financial highlights for each of the periods indicated, in conformity with accounting principles generally accepted in the United States of America. These financial statements and financial highlights (hereafter referred to as "financial statements") are the responsibility of the Fund's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits, which included confirmation of securities as of November 30, 2017 by correspondence with the custodian and brokers, provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP

Philadelphia, Pennsylvania
January 22, 2018

CERTIFICATION

The Fund's Chief Executive Officer ("CEO") will file the required annual CEO certification regarding compliance with the NYSE's listing standards no more than 30 days after the Fund's annual shareholder meeting. The Fund also has included the certifications of the Fund's CEO and Principal Financial Officer required by Section 302 of the Sarbanes-Oxley Act in the Fund's Form N-CSR filed with the SEC for the period of this report.

KEY INFORMATION

Shareholder Relations: 1-866-270-7788

For general information and literature, as well as updates on net asset value, share price, major industry groups and other key information. Shareholders may contact the above-referenced toll-free number.

REINVESTMENT PLAN

The Reinvestment Plan (the "Plan") offers shareholders a convenient way to acquire additional shares of the Fund. Registered holders will be automatically placed in the Plan. If shares are held at a brokerage firm, contact your broker about participation in the Plan.

REPURCHASE OF SECURITIES

Notice is hereby given in accordance with Section 23(c) of the 1940 Act that the Fund may from time to time purchase its shares of common stock in the open market when Fund shares are trading at a discount from their net asset value.

PROXY VOTING INFORMATION (FORM N-PX)

The Adviser and subadvisers vote proxies relating to portfolio securities in accordance with procedures that have been approved by the Fund's Board. You may obtain a description of these procedures, along with information regarding how the Fund voted proxies during the most recent 12-month period ended June 30, free of charge, by calling toll-free 1-866-270-7788. This information is also available through the SEC's website at <http://www.sec.gov>.

FORM N-Q INFORMATION

The Fund files a complete schedule of portfolio holdings with the SEC for the first and third quarters of each fiscal year on Form N-Q. Form N-Q is available on the SEC's website at <http://www.sec.gov>. Form N-Q may be reviewed and copied at the SEC's Public Reference Room. Information on the operation of the SEC's Public Reference Room can be obtained by calling toll-free 1-800-SEC-0330.

CONSIDERATION OF ADVISORY AND SUBADVISORY AGREEMENTS BY THE BOARD OF DIRECTORS

The Board of Directors (the “Board”) of Duff & Phelps Select Energy MLP Fund Inc. (the “Fund”) is responsible for determining whether to approve the continuation of the investment advisory agreement (the “Advisory Agreement”) between the Fund and Virtus Alternative Investment Advisers, Inc. (“VAIA”) and of the subadvisory agreement with Duff & Phelps Investment Management Co. (the “Subadviser”) (the “Subadvisory Agreement”) (together with the Advisory Agreement, the “Agreements”). At an in-person meeting held on November 14, 2017, the Board, including a majority of the Directors who are not interested persons, as defined in the Investment Company Act of 1940, as amended (the “1940 Act”), of the Fund (the “Independent Directors”) considered and approved the continuation of each Agreement due for renewal, as further discussed below.

In connection with the approval of the Agreements, the Board requested and evaluated information provided by VAIA and the Subadviser” which, in the Board’s view, constituted information necessary for the Board to form a judgment as to whether the renewal of each of the Agreements would be in the best interests of the Fund and its shareholders. The Board also considered information furnished throughout the year at regular Board meetings with respect to the services provided by VAIA and the Subadviser, including quarterly performance reports prepared by management containing reviews of investment results and periodic presentations from the Subadviser with respect to the Fund. The Board noted the affiliation of the Subadviser with VAIA, and potential conflicts of interest.

The Board was separately advised by independent legal counsel throughout the process. For each Agreement, the Board considered all the criteria separately with respect to the Fund and its shareholders. The Board considered all factors that it considered relevant, including those discussed below. The Board did not identify any one factor as all-important or controlling, and each Director attributed different weights to the various factors. The Board also discussed the proposed approval of the Agreements in executive sessions with its independent legal counsel at which no representatives of VAIA or the Subadviser were present.

Nature, Extent and Quality of Services

The Directors received in advance of the meeting various data and information regarding the nature, extent and quality of the services provided under the Agreements, including responses by VAIA and the Subadviser to detailed requests submitted by independent legal counsel to the Independent Directors on their behalf. The Directors also previously had received presentations by VAIA’s and the Subadviser’s senior management personnel. The responses to the information requests and the presentations included, among other things, information about the: background, experience and investment philosophy of senior management and investment personnel responsible for managing the Fund; resources, operations and compliance structure of VAIA and the Subadviser; and the investment process, investment strategies, personnel, compliance procedures, and overall performance of VAIA and the Subadviser.

In considering the Agreement with VAIA, the Board considered VAIA’s process for supervising and managing the Subadviser, including: (a) VAIA’s ability to select and monitor the Subadviser; (b) VAIA’s ability to provide the services necessary to monitor the Subadviser’s compliance with the Fund’s investment objectives, policies and restrictions as well as provide other oversight activities; and (c) VAIA’s ability and willingness to identify instances in which the Subadviser should be replaced and to carry out the required changes. The Directors also considered: (a) the experience and capability of VAIA’s management and other personnel; (b) the financial condition of VAIA, and whether it had the financial wherewithal to provide a high level and quality of services to the Fund; (c) the quality of VAIA’s own regulatory and legal compliance policies,

CONSIDERATION OF ADVISORY AND SUBADVISORY AGREEMENTS BY THE BOARD OF DIRECTORS (Continued)

procedures and systems; (d) the nature, extent and quality of administrative and other services provided by VAIA and its affiliates to the Fund; (e) VAIA's supervision of the Fund's other service providers; and (f) VAIA's risk management processes. It was noted that an affiliate of VAIA serves as administrator to the Fund. The Board also took into account its knowledge of VAIA's management and the quality of the performance of VAIA's duties, as well as information from the Fund's Chief Compliance Officer regarding the Fund's compliance policies and procedures established pursuant to Rule 38a-1 under the 1940 Act.

With respect to the services provided by the Subadviser, the Board considered information provided to the Board by the Subadviser, including the Subadviser's Form ADV, as well as information provided throughout the past year. The Board noted that the Subadviser provided portfolio management, compliance with the Fund's investment policies and procedures, compliance with applicable securities laws and assurances thereof. The Board also noted that VAIA's and the Subadviser's management of the Fund must be carried out in accordance with the investment objectives, policies and restrictions set forth in the Fund's prospectus and statement of additional information. The Board considered the Subadviser's portfolio management services, including: (a) the scope of its operations; (b) its portfolio management capabilities; (c) the breadth and depth of its management, investment and research personnel; and (d) the various support services that it provides to the Fund. The Board considered the investment management process and strategies employed by the Subadviser, and experience and capability of the Subadviser's management and other personnel committed by the Subadviser to the Fund. The Board also considered the: (a) quality of the Subadviser's regulatory and legal compliance policies, procedures and systems; and (b) the Subadviser's brokerage and trading practices, including with respect to best execution and soft dollars. The Board also took into account the Subadviser's risk assessment and monitoring process. The Board noted the Subadviser's regulatory history, including the fact that the Subadviser was not currently involved in any regulatory actions, investigations, or material litigation.

Investment Performance

The Board considered performance reports and discussions at Board meetings throughout the year, as well as a report (the "Broadridge Report") for the Fund prepared by Broadridge Financial Solutions, Inc., an independent third party provider of investment company data, furnished in connection with the contract renewal process. The Broadridge Report presented the Fund's performance relative to a peer group of other closed-end funds (the "Performance Universe") and relevant indexes, as selected by Broadridge. The Board also considered performance information presented by management and took into account management's discussion of the same, including the effect of market conditions on the Fund's performance. The Board noted that it also reviews on a quarterly basis detailed information about both the Fund's performance results and portfolio composition, as well as the Subadviser's investment strategies. The Board noted VAIA's expertise and resources in monitoring the performance, investment style and risk-adjusted performance of the Subadviser. The Board also took into account its discussions with management regarding factors that contributed to the performance of the Fund.

The Board considered that, while the Fund's performance for the year-to-date and 1- and 3-year periods ended June 30, 2017 was below the median of the Performance Universe for the same periods, the Fund outperformed its benchmark for the 1-year period ended June 30, 2017. The Directors discussed the Fund's underperformance and the reasons therefor among themselves and with management, and noted that the Fund's long-term performance has been adversely affected by significant underperformance in 2014 and 2015.

CONSIDERATION OF ADVISORY AND SUBADVISORY AGREEMENTS BY THE BOARD OF DIRECTORS (Continued)

Management Fees and Total Expenses

The Board considered the fees charged to the Fund for advisory services as well as the total expense levels of the Fund. This information included comparisons of the Fund's net management fee and total expense level to those of its peer group (the "Expense Group"). In comparing the Fund's net management fee to that of comparable funds, the Board noted that such fee includes both advisory and administrative fees. The Board also noted that the subadvisory fee was paid by VAIA out of its management fees rather than paid separately by the Fund. In this regard, the Board took into account management's discussion with respect to the advisory/subadvisory fee structure, including the amount of the advisory fee retained by VAIA after payment of the subadvisory fee. The Directors also considered the fee rates payable by accounts and funds managed by the Subadviser.

In addition to the foregoing, the Board considered, among other data, the information set forth below with respect to the Fund's fees and expenses. The Board took into account management's discussion of the Fund's expenses, including the type and size of the Fund relative to the other funds in its Expense Group.

The Board noted that the Fund's contractual management fees were below the median of the Expense Group, and that the Fund's actual total expenses were above the median of the Expense Group.

Profitability

The Board also considered certain information relating to profitability that had been provided by VAIA. In this regard, the Board considered information regarding the overall profitability of VAIA for its management of the Fund, as well as its profits and those of its affiliates for managing and providing other services to the Fund, such as administrative services provided to the Fund by a VAIA affiliate. In addition to the fees paid to VAIA and its affiliates, including the Subadviser, the Board considered other benefits derived by VAIA or its affiliates from their relationship with the Fund. The Board reviewed the methodology used to allocate costs to the Fund, taking into account the fact that allocation methodologies are inherently subjective and various allocation methodologies may each be reasonable while producing different results. The Board concluded that the profitability to VAIA and its affiliates from the Fund was within a reasonable range in light of the quality of the services rendered to the Fund by VAIA and its affiliates, and other factors considered.

In considering the profitability to the Subadviser in connection with its relationship to the Fund, the Board noted that the fees payable under the Subadvisory Agreement are paid by VAIA out of the fees that VAIA receives under the Advisory Agreement, and not by the Fund. In considering the fees payable by VAIA to the Subadviser, the Board noted that, because the Subadviser is an affiliate of VAIA, its profitability might be directly or indirectly shared by VAIA and, therefore, the Board considered the profitability of VAIA and the Subadviser together. For each of the above reasons, the Board concluded that the profitability to the Subadviser and its affiliates from their relationship with the Fund was not a material factor in approval of the Subadvisory Agreement.

Economies of Scale

The Board considered the extent to which economies of scale would be realized as the Fund's assets grow, and whether the fee levels reflect these economies of scale for the benefit of Fund shareholders. The Board noted that economies of scale may develop for certain funds as their assets increase and their fixed fund-level expenses decline as a percentage of assets, but that closed-end funds such as the Fund typically do not have the ability to increase substantially their asset base as do open-end funds.

CONSIDERATION OF ADVISORY AND SUBADVISORY AGREEMENTS BY THE BOARD OF DIRECTORS (Continued)

The Board also considered the advisory fee rate in relation to the current asset size of the Fund, and whether any economies of scale exist at that size. The Board concluded that, given the Fund's closed-end structure, no changes to the Fund's advisory and subadvisory fee structure were necessary or advisable at this time. The Board agreed that it would be appropriate to monitor this matter in the event that the assets of the Fund were to increase substantially via a secondary or rights offering, capital appreciation, reinvested dividends, the use of leverage or some other means.

Other Factors

The Board considered information regarding potential "fallout" or ancillary benefits that may be realized by VAIA, the Subadviser and their respective affiliates as a result of their relationships with the Fund. The Board noted that an affiliate of VAIA provides administrative services to the Fund. The Board noted management's discussion of the fact that, while the Subadviser is an affiliate of VAIA, there are no other direct benefits received by the Subadviser in providing investment advisory services to the Fund, other than the fee earned under the Subadvisory Agreement.

The Directors concluded that potential "fallout" benefits that VAIA and the Subadviser may receive, such as greater name recognition or increased ability to obtain research and brokerage services, as applicable, may, in some cases, benefit the Fund.

Conclusion

After considering all factors that it considered relevant, the Board, including a majority of the Independent Directors, approved the Agreements with respect to the Fund as in the best interests of the Fund and its shareholders.

DIVIDEND REINVESTMENT PLAN

It is the policy of Duff & Phelps Select Energy MLP Fund Inc. (the "Fund") to automatically reinvest distributions payable to holders ("Common Stockholders") of the Fund's shares of common stock, \$0.001 par value ("Common Stock"). A "registered" Common Stockholder automatically becomes a participant in the Fund's Automatic Reinvestment and Cash Purchase Plan (the "Plan"). The Plan authorizes the Fund to credit all shares of Common Stock to participants upon a distribution regardless of whether the shares are trading at a discount or premium to the net asset value. Registered Common Stockholders may terminate their participation and receive distributions in cash by contacting Computershare Trust Company, N.A. (the "Plan Administrator"). The termination will become effective with the next distribution if the Plan Administrator is notified at least 7 business days prior to the distribution payment date. Registered Common Stockholders that wish to change their distribution option from cash payment to reinvest may do so by contacting the Plan Administrator at 1-866-270-7788. In the case of banks, brokers, or other nominees which hold your shares for you as the beneficial owner, the Plan Administrator will administer the Plan based on the information provided by the bank, broker or nominee. To the extent that you wish to participate in the Plan, you should contact the broker, bank or nominee holding your shares to ensure that your account is properly represented. If necessary, you may have your shares taken out of the name of the broker, bank or nominee and register them in your own name. When a distribution is declared, nonparticipants in the Plan will receive cash. Participants in the Plan will receive shares of the Fund valued as described below.

If on the payable date of the distribution, the market price of the Fund's Common Stock is less than the net asset value, the Plan Administrator will buy Fund shares on behalf of the participant in the open market, on the NYSE or elsewhere. The price per share will be equal to the weighted average price of all shares purchased, including commissions. Commission rates are currently \$0.02 per share, although the rate is subject to change and may vary. If, following the commencement of purchases and before the Plan Administrator has completed its purchases, the trading price equals or exceeds the most recent net asset value of the Common Stock, the Plan Administrator may cease purchasing shares on the open market and the Fund may issue the remaining shares at a price equal to the greater of (a) the net asset value on the last day the Plan Administrator purchased shares or (b) 95% of the market price on such day. In the case where the Plan Administrator has terminated open market purchase and the Fund has issued the remaining shares, the number of shares received by the participant in respect of the cash distribution will be based on the weighted average of prices paid for shares purchased in the open market and the price at which the Fund issued the remaining shares. Under certain circumstances, the rules and regulations of the SEC may require limitation or temporary suspension of market purchases of shares under the Plan. The Plan Administrator will not be accountable for its inability to make a purchase during such a period.

If on the payable date of the distribution, the market price is equal to or exceeds the net asset value, participants will be issued new shares by the Fund at the greater of the (a) the net asset value on the payable date or (b) 95% of the market price on such date.

The automatic reinvestment of distributions will not relieve participants of any income tax which may be payable on such distributions. If you participate in the Plan, you will receive a Form 1099-DIV concerning the federal income tax status of distributions paid to you during the year.

As a participant in the Plan you will not pay any charge to have your distributions reinvested in additional shares. The Plan Administrator's fees for handling the reinvestment of distributions will be paid by the Fund. There will be no brokerage commissions for shares issued directly by the Fund in payment of distributions. However, each participant will pay a pro rata share of brokerage

DIVIDEND REINVESTMENT PLAN (Continued)

commissions incurred (currently \$0.02 per share, but may vary and is subject to change) with respect to the Plan Administrator's open market purchases in connection with the reinvestment of distributions.

Participants in the Plan have the option of making additional cash payments for investment in shares of the Fund. Such payments can be made in any amount from \$100 per payment to \$3,000 per month. The Plan Administrator will use the funds received to purchase Fund shares in the open market on the 15th of each month or the next business day if the 15th falls on a weekend or holiday (the "Investment Date"). The purchase price per share will be equal to the weighted average price of all shares purchased on the Investment Date, including commissions. There is no charge to Common Stockholders for such cash purchases. The Plan Administrator's fee will be paid by the Fund. However, each participating Common Stockholder will pay pro rata share of brokerage commissions incurred (currently \$0.02 per share, but may vary and is subject to change) with respect to the Plan Administrator's open market purchases in connection with all cash investments. Voluntary cash payments should be sent to Computershare Trust Company, N.A., P.O. Box 43078, Providence, RI 02940-3078.

Participants have an unconditional right to obtain the return of any cash payment if the Plan Administrator receives written notice at least 5 business days before such payment is to be invested.

Participants in the Plan may purchase additional shares by means of an Automatic Monthly Investment of not less than \$100 nor more than \$3,000 per month by electronic funds transfer from a predesignated U.S. bank account. If a participant has already established a Plan account and wishes to initiate Automatic Monthly Investments, the participant must complete and sign an automatic monthly investment form and return it to the Plan Administrator together with a voided check or deposit slip for the account from which funds are to be withdrawn. Automatic monthly investment forms may be obtained from the Plan Administrator by calling 1-866-270-7788.

Common Stockholders wishing to liquidate shares held with the Plan Administrator must do so in writing or by calling 1-866-270-7788. The Plan Administrator does not charge a fee for liquidating your shares; however, a brokerage commission of \$0.02 will be charged. This charge may vary and is subject to change.

Once terminated, you may re-enroll in the Plan (provided you still have shares registered in your name) by contacting the Plan Administrator at 1-866-270-7788.

For more information regarding the Plan, please contact the Plan Administrator at 1-866-270-7788 or visit our website at Virtus.com.

The Fund reserves the right to amend or terminate the Plan as applied to any voluntary cash payments made and any dividend or distribution paid subsequent to written notice of the change sent to the members of the Plan at least 90 days before the record date for such distribution. The Plan also may be amended or terminated by the Plan Administrator with at least 90 days written notice to participants in the Plan.

FUND MANAGEMENT TABLES

Information pertaining to the Directors and Officers of the Company as of December 31, 2017, is set forth below.

The address of each individual, unless otherwise noted, is c/o Duff & Phelps Select Energy MLP Fund Inc. 100 Pearl Street, Hartford, CT 06103.

Disinterested Directors

Name, Year of Birth, Year Elected, and Number of Portfolios in Fund Complex Overseen by Director	Principal Occupation(s) During Past 5 Years and Other Directorships Held by Director
Philip R. McLoughlin YOB: 1946 Elected: 2011 Chairman 95 Portfolios	Private investor (since 2010); Director and Chairman (since 2016), Virtus Total Return Fund Inc. and Virtus Global Dividend & Income Fund Inc.; Director and Chairman (since 2014), Duff & Phelps Select Energy MLP Fund Inc.; Trustee and Chairman (since 2013), Virtus Alternative Solutions Trust (3 portfolios); Trustee and Chairman (since 2011), Virtus Global Multi-Sector Income Fund; Chairman and Trustee (since 2003), Virtus Variable Insurance Trust (9 portfolios); Director (since 1995), closed-end funds managed by Duff & Phelps Investment Management Co. (4 funds); Director (since 1991) and Chairman (since 2010), Lazard World Trust Fund (closed-end investment firm in Luxembourg); and Trustee (since 1989) and Chairman (since 2002), Virtus Mutual Fund Family (75 portfolios).
William R. Moyer YOB: 1944 Elected: 2012 4 Portfolios	Private investor (since 2004); Financial and Operations Principal (since 2006), Newcastle Distributors LLC (broker dealer); Partner (2006 to 2012), CrossPond Partners, LLC (investment management consultant); Director (since 2016), Virtus Global Dividend & Income Fund Inc.; Director (since 2017), Virtus Total Return Fund Inc.; Trustee (2013 to 2016), Virtus Alternative Solutions Trust; Director (since 2014), Duff & Phelps Select Energy MLP Fund Inc.; Trustee (since 2011), Virtus Global Multi-Sector Income Fund; and Director and Treasurer, (since 1986), CT Invention Convention
James M. Oates YOB: 1946 Elected: 2013 91 Portfolios	Managing Director (since 1994), Wydown Group (consulting firm). Director (since 2016), Virtus Total Return Fund Inc. and Virtus Global Dividend & Income Fund Inc.; Trustee (since 2016) Virtus Variable Insurance Trust (9 portfolios); Director (since 2014), Duff & Phelps Select Energy MLP Fund Inc.; Trustee (since 2013), Virtus Alternative Solutions Trust (3 portfolios); Trustee (since 2011), Virtus Global Multi-Sector Income Fund; Chairman (2005 to 2017) and Trustee (since 2005), John Hancock Fund Complex (227 portfolios); Director (2002 to 2014), New Hampshire Trust Company; Chairman (2000 to 2016), Emerson Investment Management, Inc.; Non-Executive Chairman (2000 to 2014), Hudson Castle Group, Inc. (formerly IBEX Capital Markets, Inc.) (financial services); Chairman and Director (1999 to 2014), Connecticut River Bank; Director (since 1996), Stifel Financial; and Trustee (since 1987), Virtus Mutual Fund Family(75 portfolios).
James B. Rogers, Jr. YOB: 1942 Elected: 2016 4 Portfolios	Director (since 1986), Virtus Total Return Fund Inc. and Virtus Global Dividend & Income Fund Inc.; Trustee/Director (since 2016), Virtus Global Multi-Sector Income Fund and Duff & Phelps Select Energy MLP Fund Inc.; Independent Director (since 2017), JSC AgroGard-Finance; Non-Executive Director (since 2016), Crusader Resources Limited; Director (since 2014), First China Financial Network Holdings Limited; Director (since 2014), Phos Agro; Director (since 2012), Spanish Mountain Gold Limited; Director (since 2011), Genagro Services, Ltd.; Director (2013 to 2014), FAB Universal Corp.; Director (since 2009), 2009 Holdings Pte Ltd.; Chairman (since 2007), Beeland Enterprises Inc.; Director (since 2007), Beeland Holdings Pte Ltd.; and Chairman (since 1980), Beeland Interests (Media and Investments);

FUND MANAGEMENT TABLES (Continued)

Name, Year of Birth, Year Elected, and Number of Portfolios in Fund Complex Overseen by Director	Principal Occupation(s) During Past 5 Years and Other Directorships Held by Director
R. Keith Walton YOB: 1964 Elected: 2016 4 Portfolios	Vice President (2013 to 2017), Strategy, Arizona State University; Vice President (2011 to 2013), Global Government & Affairs, Alcoa; Senior Managing Director (2010), BSE Management LLC; Principal and Chief Administrative Officer (2007 to 2009), Global Infrastructure Partners; Trustee/Director (since 2016), Virtus Global Multi-Sector Income Fund and Duff & Phelps Select Energy MLP Fund Inc.; Director (since 2004), Virtus Total Return Fund Inc.; Director (since 2013), Virtus Global Dividend & Income Fund Inc.; and Director (since 2006), Blue Crest Capital Management Funds.
Brian T. Zino YOB: 1952 Elected: 2016 4 Portfolios	Trustee (since 2016), Virtus Global Multi-Sector Income Fund; Director (since 2016), Duff & Phelps Select Energy MLP Fund Inc.; Director (since 2014), Virtus Total Return Fund Inc. and Virtus Global Dividend & Income Fund Inc.; Trustee, Bentley University (since 2011); Director (1986 to 2008) and President (1994 to 2008), J&W Seligman Co. Inc.; Director (1998 to 2009), Chairman (2002 to 2004) and Vice Chairman (2000 to 2002), ICI Mutual Insurance Company; Member, Board of Governors of ICI (1998 to 2008).

Interested Director

The individual listed below is an “interested person” of the Fund, as defined in Section 2(a)(19) of the 1940 Act, as amended, and the rules and regulations thereunder.

Name, Year of Birth, Year Elected, and Number of Portfolios in Fund Complex Overseen by Director	Principal Occupation(s) During Past 5 Years and Other Directorships Held by Director
George R. Aylward* Trustee and President YOB: 1964 Elected: 2012 93 Portfolios	Director, President and Chief Executive Officer (since 2008), Virtus Investment Partners, Inc. and/or certain of its subsidiaries; various senior officer positions with Virtus affiliates (since 2005). Chairman and Trustee (since 2015), Virtus ETF Trust II (2 funds); Trustee and President (since 2013), Virtus Alternative Solutions Trust (3 portfolios); Director (since 2013), Virtus Global Funds, PLC (2 portfolios); Trustee (since 2012) and President (since 2010), Virtus Variable Insurance Trust (9 portfolios); Director, President and Chief Executive Officer (since 2014), Duff & Phelps Select Energy MLP Fund Inc.; Trustee, President and Chief Executive Officer (since 2011), Virtus Global Multi-Sector Income Fund; Trustee and President (since 2006), Virtus Mutual Fund Family (75 portfolios); and Director, President and Chief Executive Officer (since 2006), Virtus Global Dividend & Income Fund Inc. and Virtus Total Return Fund Inc.

* Mr. Aylward is an “interested person,” as defined in the 1940 Act, by reason of his position as President and Chief Executive Officer of Virtus Investment Partners, Inc. (“Virtus”), the ultimate parent company of the Adviser, and various positions with its affiliates, including the Adviser.

Advisory Board Member

Name, Year of Birth, Year Elected, and Number of Portfolios in Fund Complex Overseen by Director	Principal Occupation(s) During Past 5 Years and Other Directorships Held by Director
William H. Wright II YOB: 1960 Advisory Member Appointed: 2016	Director (since 1999) and Chairman (since 2010), Josiah Macy Foundation; Director of Mount Sinai Health Systems (since 1999); Managing Director of Morgan Stanley (1982 to 2010); Member of Yale University Council (2001 to 2012); Chairman of the Board of Yale Alumni Fund (2004 to 2006); Director (2013 to 2016) Virtus Total Return Fund Inc. and Virtus Global Dividend and Income Fund Inc.

FUND MANAGEMENT TABLES (Continued)

Officers Who Are Not Directors

Name, Address and Year of Birth	Position(s) Held with Fund and Length of Time Served	Principal Occupation(s) During Past 5 Years
Francis G. Waltman YOB: 1962	Executive Vice President (since 2013); Senior Vice President (2011 to 2013).	Executive Vice President, Product Development (since 2009), Virtus Investment Partners, Inc. and/or certain of its subsidiaries; various senior officer positions (since 2006) with Virtus affiliates; Executive Vice President (since 2013), Senior Vice President (2008 to 2013), Virtus Mutual Fund Family; Executive Vice President (since 2013), Senior Vice President (2010 to 2013), Virtus Variable Insurance Trust; Executive Vice President (since 2013), Senior Vice President (2011 to 2013), Virtus Global Multi-Sector Income Fund; Executive Vice President (since 2014), Duff & Phelps Select Energy MLP Fund Inc.; Director (since 2013), Virtus Global Funds PLC; and Executive Vice President (since 2013), Virtus Alternative Solutions Trust.
Nancy J. Engberg YOB: 1956	Vice President and Chief Compliance Officer since 2011.	Senior Vice President (since 2017), Vice President (2008 to 2017) and Chief Compliance Officer (2008 to 2011 and since 2016), Virtus Investment Partners, Inc. and/or certain of its subsidiaries; various officer positions (since 2003) with Virtus affiliates; Senior Vice President (since 2017), Vice President (2011 to 2017) and Chief Compliance Officer (since 2011), Virtus Mutual Fund Family; Senior Vice President (since 2017), Vice President (2010 to 2017) and Chief Compliance Officer (since 2011), Virtus Variable Insurance Trust; Senior Vice President (since 2017), Vice President (2011 to 2017) and Chief Compliance Officer (since 2011), Virtus Global Multi-Sector Income Fund; Senior Vice President (since 2017), Vice President (2012 to 2017) and Chief Compliance Officer (since 2012), Virtus Total Return Fund Inc. and Virtus Global Dividend & Income Fund Inc.; Senior Vice President (since 2017), Vice President (2013 to 2017) and Chief Compliance Officer (since 2013), Virtus Alternative Solutions Trust; Senior Vice President (since 2017), Vice President (2014 to 2017) and Chief Compliance Officer (since 2014), Duff & Phelps Select Energy MLP Fund Inc.; Chief Compliance Officer (since 2015), ETFis Series Trust I, and Virtus ETF Trust II.

FUND MANAGEMENT TABLES (Continued)

Name, Address and Year of Birth	Position(s) Held with Fund and Length of Time Served	Principal Occupation(s) During Past 5 Years
<p>W. Patrick Bradley YOB: 1972</p>	<p>Executive Vice President (since 2016); Senior Vice President (2013 to 2016); Vice President (2011 to 2013), Chief Financial Officer and Treasurer (since 2011).</p>	<p>Executive Vice President, Fund Services (since 2016), Senior Vice President, Fund Services (2010 to 2016), Virtus Investment Partners, Inc. and/or certain of its subsidiaries; various officer positions (since 2006) with Virtus affiliates; Executive Vice President (since 2016), Senior Vice President (2013 to 2016), Vice President (2011 to 2013), Chief Financial Officer and Treasurer (since 2004), Virtus Variable Insurance Trust; Executive Vice President (since 2016), Senior Vice President (2013 to 2016), Vice President (2011 to 2013), Chief Financial Officer and Treasurer (since 2006), Virtus Mutual Fund Family; Executive Vice President (since 2016), Senior Vice President (2013 to 2016), Vice President (2012 to 2013) and Treasurer and Chief Financial Officer (since 2010), Virtus Total Return Fund Inc. and Virtus Global Dividend & Income Fund Inc.; Executive Vice President (since 2016), Senior Vice President (2013 to 2016), Vice President (2011 to 2013), Chief Financial Officer and Treasurer (since 2011), Virtus Global Multi-Sector Income Fund; Executive Vice President (since 2016), Senior Vice President (2014 to 2016), Chief Financial Officer and Treasurer (since 2014), Duff & Phelps Select Energy MLP Fund Inc.; Vice President and Assistant Treasurer (since 2011), Duff & Phelps Global Utility Income Fund Inc.; Director (since 2013), Virtus Global Funds, PLC; and Executive Vice President (since 2016), Senior Vice President (2013 to 2016), and Chief Financial Officer and Treasurer (since 2013), Virtus Alternative Solutions Trust.</p>
<p>William Renahan YOB: 1970</p>	<p>Vice President, Chief Legal Officer, Counsel and Secretary since 2012.</p>	<p>Vice President, Chief Legal Officer, and Secretary of various Virtus-affiliated and Duff & Phelps closed-end funds (since 2012); Secretary (since 2014) and General Counsel (since 2015) of Duff & Phelps Investment Management Co.; and Managing Director, Legg Mason, Inc. and predecessor firms (1999 to 2012).</p>

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DUFF & PHELPS SELECT ENERGY MLP FUND INC.

101 Munson Street
Greenfield, MA 01301-9668

Board of Directors

George R. Aylward
Philip R. McLoughlin, Chairman
William R. Moyer
James M. Oates
James B. Rogers, Jr.
R. Keith Walton
Brian T. Zino
William H. Wright II, Advisory Member

Officers

George R. Aylward, President and Chief
Executive Officer
Francis G. Waltman, Executive Vice
President
W. Patrick Bradley, Executive Vice
President, Chief Financial Officer and
Treasurer
Nancy J. Engberg, Senior Vice President
and Chief Compliance Officer
William Renahan, Vice President, Chief
Legal Officer and Secretary

Investment Adviser

Virtus Alternative Investment Advisers, Inc.
100 Pearl Street
Hartford, CT 06103-4506

Administrator

Virtus Fund Services, LLC
100 Pearl Street
Hartford, CT 06103-4506

Custodian

Bank of New York Mellon
225 Liberty Street
New York, NY 10286-1048

Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP
2 Commerce Square Suite 1700
2001 Market Street
Philadelphia, PA 19103-7042

Transfer Agent

Computershare Trust Company NA
P.O. Box 43078
Providence, RI 02940-3078

Fund Counsel

Sullivan & Worcester LLP
1666 K Street, NW
7th Floor
Washington, DC 20006

How to Contact Us

Shareholder Services 1-866-270-7788
Website www.Virtus.com

Important Notice to Shareholders

The Securities and Exchange Commission has modified mailing regulations for semiannual and annual shareholder fund reports to allow mutual fund companies to send a single copy of these reports to shareholders who share the same mailing address. If you would like additional copies, please call Mutual Fund Services at 1-866-270-7788.



Duff & Phelps
Select Energy MLP Fund Inc.

c/o Computershare Investor Services
P.O. Box 43078
Providence, RI 02940

For more information about
Virtus Closed-End Funds, please
contact us at **1-866-270-7788**
or **closedendfunds@virtus.com**
or visit **Virtus.com**.