

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

FIRST TRUST ENERGY INFRASTRUCTURE FUND

Form N-CSRS

August 07, 2017

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT
COMPANIES

Investment Company Act file number 811-22528

First Trust Energy Infrastructure Fund

(Exact name of registrant as specified in charter)

120 East Liberty Drive, Suite 400
Wheaton, IL 60187

(Address of principal executive offices) (Zip code)

W. Scott Jardine, Esq.

First Trust Portfolios L.P.
120 East Liberty Drive, Suite 400
Wheaton, IL 60187

(Name and address of agent for service)

registrant's telephone number, including area code: 630-765-8000

Date of fiscal year end: November 30

Date of reporting period: May 31, 2017

Form N-CSR is to be used by management investment companies to file reports with the Commission not later than 10 days after the transmission to stockholders of any report that is required to be transmitted to stockholders under Rule 30e-1 under the Investment Company Act of 1940 (17 CFR 270.30e-1). The Commission may use the information provided on Form N-CSR in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-CSR, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-CSR unless the Form displays a currently valid Office of Management and Budget ("OMB") control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. ss. 3507.

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

ITEM 1. REPORTS TO STOCKHOLDERS.

The Report to Shareholders is attached herewith.

FIRST TRUST
ENERGY INFRASTRUCTURE FUND (FIF)

SEMI-ANNUAL REPORT
FOR THE SIX MONTHS ENDED
MAY 31, 2017

ENERGY INCOME PARTNERS, LLC

FIRST TRUST

TABLE OF CONTENTS

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
SEMI-ANNUAL REPORT
MAY 31, 2017

Shareholder Letter.....	1
At a Glance.....	2
Portfolio Commentary.....	3
Portfolio of Investments.....	5
Statement of Assets and Liabilities.....	10
Statement of Operations.....	11
Statements of Changes in Net Assets.....	12
Statement of Cash Flows.....	13
Financial Highlights.....	14
Notes to Financial Statements.....	15
Additional Information.....	23

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

This report contains certain forward-looking statements within the meaning of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended. Forward-looking statements include statements regarding the goals, beliefs, plans or current expectations of First Trust Advisors L.P. ("First Trust" or the "Advisor") and/or Energy Income Partners, LLC ("EIP" or the "Sub-Advisor") and their respective representatives, taking into account the information currently available to them. Forward-looking statements include all statements that do not relate solely to current or historical fact. For example, forward-looking statements include the use of words such as "anticipate," "estimate," "intend," "expect," "believe," "plan," "may," "should," "would" or other words that convey uncertainty of future events or outcomes.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of First Trust Energy Infrastructure Fund (the "Fund") to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. When evaluating the information included in this report, you are cautioned not to place undue reliance on these forward-looking statements, which reflect the judgment of the Advisor and/or Sub-Advisor and their respective representatives only as of the date hereof. We undertake no

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

obligation to publicly revise or update these forward-looking statements to reflect events and circumstances that arise after the date hereof.

MANAGED DISTRIBUTION POLICY

The Board of Trustees of the Fund has approved a managed distribution policy for the Fund (the "Plan") in reliance on exemptive relief received from the Securities and Exchange Commission that permits the Fund to make periodic distributions of long-term capital gains as frequently as monthly each tax year. Under the Plan, the Fund currently intends to continue to pay a recurring monthly distribution in the amount of \$0.11 per Common Share that reflects the distributable cash flow of the Fund. A portion of this monthly distribution may include realized capital gains. This may result in a reduction of the long-term capital gain distribution necessary at year end by distributing realized capital gains throughout the year. The annual distribution rate is independent of the Fund's performance during any particular period. Accordingly, you should not draw any conclusions about the Fund's investment performance from the amount of any distribution or from the terms of the Plan. The Board of Trustees may amend or terminate the Plan at any time without prior notice to shareholders.

PERFORMANCE AND RISK DISCLOSURE

There is no assurance that the Fund will achieve its investment objective. The Fund is subject to market risk, which is the possibility that the market values of securities owned by the Fund will decline and that the value of the Fund shares may therefore be less than what you paid for them. Accordingly, you can lose money by investing in the Fund. See "Risk Considerations" in the Additional Information section of this report for a discussion of certain other risks of investing in the Fund.

Performance data quoted represents past performance, which is no guarantee of future results, and current performance may be lower or higher than the figures shown. For the most recent month-end performance figures, please visit <http://www.ftportfolios.com> or speak with your financial advisor. Investment returns, net asset value and common share price will fluctuate and Fund shares, when sold, may be worth more or less than their original cost.

The Advisor may also periodically provide additional information on Fund performance on the Fund's webpage at <http://www.ftportfolios.com>.

HOW TO READ THIS REPORT

This report contains information that may help you evaluate your investment in the Fund. It includes details about the Fund and presents data and analysis that provide insight into the Fund's performance and investment approach.

By reading the portfolio commentary by the portfolio management team of the Fund, you may obtain an understanding of how the market environment affected the Fund's performance. The statistical information that follows may help you understand the Fund's performance compared to that of relevant market benchmarks.

It is important to keep in mind that the opinions expressed by personnel of EIP are just that: informed opinions. They should not be considered to be promises or advice. The opinions, like the statistics, cover the period through the date on the cover of this report. The material risks of investing in the Fund are spelled out in the prospectus, the statement of additional information, this report and other Fund regulatory filings.

SHAREHOLDER LETTER

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
SEMI-ANNUAL LETTER FROM THE CHAIRMAN AND CEO
MAY 31, 2017

Dear Shareholders:

First Trust Advisors L.P. ("First Trust") is pleased to provide you with this semi-annual report containing detailed information and the financial statements for your investment in the First Trust Energy Infrastructure Fund. We encourage you to read this report and discuss it with your financial advisor.

Five months into the new year and under a new U.S. President, the stock market has continued to rise. President Donald Trump's pro-growth, pro-U.S. policy ideas have, in our opinion, created optimism about the U.S. economy. Indeed, from Trump's election date (November 8, 2016) through May 31, 2017, the S&P 500(R) Index (the "Index") posted a total return of over 14%, according to Bloomberg. While we are optimistic about the U.S. economy, we are also well aware that no one can predict the future or know how a new administration will affect markets and the economy. This is why we always stress the importance of maintaining a long-term perspective, as we have done since First Trust's inception over 25 years ago.

As of May 31, 2017, the Index was up 8.66% (calendar year-to-date). While the current bull market (measuring from March 9, 2009 through May 31, 2017) is the second longest in history, it is still behind (by just over 4 years) the longest bull market, according to Bespoke Investment Group.

Thank you for giving First Trust the opportunity to be a part of your investment plan. We value our relationship with you and will continue our relentless focus on bringing you the types of investments that we believe could help you reach your financial goals.

Sincerely,

/s/ James A. Bowen

James A. Bowen
Chairman of the Board of Trustees
Chief Executive Officer of First Trust Advisors L.P.

Page 1

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
"AT A GLANCE"
AS OF MAY 31, 2017 (UNAUDITED)

FUND STATISTICS

Symbol on New York Stock Exchange	FIF
Common Share Price	\$18.14

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

Common Share Net Asset Value ("NAV")	\$19.41
Premium (Discount) to NAV	(6.54)%
Net Assets Applicable to Common Shares	\$340,607,944
Current Monthly Distribution per Common Share (1)	\$0.1100
Current Annualized Distribution per Common Share	\$1.3200
Current Distribution Rate on Common Share Price (2)	7.28%
Current Distribution Rate on NAV (2)	6.80%

COMMON SHARE PRICE & NAV (WEEKLY CLOSING PRICE)

	Common Share Price	NAV
5/16	16.56	18.74
	16.79	19.04
	17.05	19.18
	16.67	19.09
6/16	16.95	19.21
	17.49	19.75
	17.54	19.69
	17.68	20.07
	18.03	20.20
7/16	17.70	20.05
	17.62	19.73
	17.75	20.06
	17.97	20.06
8/16	17.79	19.64
	17.69	19.70
	17.51	19.58
	17.44	19.46
	18.33	20.18
9/16	19.19	20.09
	18.36	19.42
	18.39	19.60
	19.16	19.81
10/16	18.66	19.61
	17.03	18.54
	17.16	18.49
	17.91	18.86
11/16	18.54	19.37
	18.15	19.02
	18.13	19.54
	18.12	19.90
	18.39	20.22
12/16	18.03	20.16
	18.39	20.39
	18.57	20.29
	18.93	20.24
1/17	19.39	20.09
	19.29	20.26
	19.28	20.09
	18.94	20.10
2/17	19.11	20.06
	18.73	19.97
	18.23	19.65
	18.63	19.86
	18.49	19.90
3/17	19.30	20.15
	19.19	20.17
	19.15	20.00
	19.15	19.82

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

4/17	19.35	20.01
	18.63	19.71
	18.44	19.47
	18.36	19.58
	18.49	19.66
5/17	18.14	19.44

PERFORMANCE

		Average Annual
	6 Months Ended 5/31/2017	1 Year Ended 5/31/2017
		5 Years Ended 5/31/2017
<hr/>		
FUND PERFORMANCE (3)		
NAV	4.06%	11.37%
Market Value	-0.22%	17.79%
INDEX PERFORMANCE		
PHLX Utility Sector Index	17.13%	14.41%
Alerian MLP Total Return Index	2.28%	6.24%
Blended Index (4)	9.61%	10.59%

INDUSTRY CLASSIFICATION	% OF TOTAL INVESTMENTS
Electric Power & Transmission	35.3%
Natural Gas Transmission	24.2
Crude Oil Transmission	19.7
Petroleum Product Transmission	11.9
Propane	3.1
Coal	2.1
Natural Gas Gathering & Processing	1.9
Other	1.8
<hr/>	
Total	100.0%
	=====

TOP 10 HOLDINGS	% OF TOTAL INVESTMENTS
Enbridge Energy Management, LLC	7.6%
TransCanada Corp.	4.6
Enterprise Products Partners, L.P.	4.5
Plains GP Holdings, L.P.	3.9
Enbridge Income Fund Holdings, Inc. (CAD)	3.3
NextEra Energy Partners, L.P.	3.3
Williams (The) Cos., Inc.	3.2
Spectra Energy Partners, L.P.	2.8
Public Service Enterprise Group, Inc.	2.7
Eversource Energy, L.P.	2.6
<hr/>	
Total	38.5%

=====

- (1) Most recent distribution paid or declared through 5/31/2017. Subject to change in the future.
- (2) Distribution rates are calculated by annualizing the most recent distribution paid or declared through the report date and then dividing by Common Share Price or NAV, as applicable, as of 5/31/2017. Subject to change in the future.
- (3) Total return is based on the combination of reinvested dividend, capital gain and return of capital distributions, if any, at prices obtained by the Dividend Reinvestment Plan and changes in NAV per share for NAV returns and changes in Common Share Price for market value returns. Total returns do not reflect sales load and are not annualized for periods of less than one year. Past performance is not indicative of future results.
- (4) The blended index consists of the following: PHLX Utility Sector Index (50%) and Alerian MLP Total Return Index (50%).

Page 2

PORTFOLIO COMMENTARY

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
SEMI-ANNUAL REPORT
MAY 31, 2017 (UNAUDITED)

ADVISOR

First Trust Advisors L.P. ("First Trust") was established in 1991 and is located in Wheaton, Illinois. First Trust is a registered investment advisor which offers customized portfolio management using its structured, quantitative approach to security selection. As of May 31, 2017, First Trust managed or supervised \$107.206 billion in assets.

SUB-ADVISOR

Energy Income Partners, LLC ("EIP" or the "Sub-Advisor"), located in Westport, Connecticut, serves as the investment subadvisor to the First Trust Energy Infrastructure Fund (the "Fund"). EIP was founded in 2003 to provide professional asset management services in the area of energy-related master limited partnerships ("MLPs") and other high payout securities such as pipeline companies, power utilities, yield corporations ("YieldCos") (1), and energy infrastructure real estate investment trusts ("REITs"). EIP mainly focuses on investments in energy-related infrastructure assets such as pipelines, power transmission and distribution, petroleum storage and terminals that receive fee-based or regulated income from their corporate and individual customers. EIP manages or supervises approximately \$5.7 billion of assets as of May 31, 2017. Private funds advised by EIP include two partnerships for U.S. high net worth individuals. EIP also serves as an advisor to separately managed accounts for individuals and institutions, an open-end mutual fund and provides its model portfolio to unified managed accounts. Finally, EIP serves as a sub-advisor to three closed-end management investment companies in addition to the Fund, an actively managed exchange-traded fund ("ETF"), a sleeve of an actively managed

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

ETF, a sleeve of a series of a variable insurance trust and an open-end UCIT fund incorporated in Ireland. EIP is a registered investment advisor with the Securities and Exchange Commission.

PORTFOLIO MANAGEMENT TEAM

JAMES J. MURCHIE - CO-PORTFOLIO MANAGER, FOUNDER, CHIEF EXECUTIVE OFFICER AND PRINCIPAL OF ENERGY INCOME PARTNERS, LLC

EVA PAO - CO-PORTFOLIO MANAGER, PRINCIPAL OF ENERGY INCOME PARTNERS, LLC

JOHN TYSELAND - CO-PORTFOLIO MANAGER, PRINCIPAL OF ENERGY INCOME PARTNERS, LLC

COMMENTARY

FIRST TRUST ENERGY INFRASTRUCTURE FUND

The investment objective of the Fund is to seek a high level of total return with an emphasis on current distributions paid to shareholders. The Fund pursues its objective by investing primarily in securities of companies engaged in the energy infrastructure sector. These companies principally include publicly-traded MLPs and limited liability companies taxed as partnerships, MLP affiliates, YieldCos, pipeline companies, utilities and other infrastructure-related companies that derive at least 50% of their revenues from operating or providing services in support of infrastructure assets such as pipelines, power transmission and petroleum and natural gas storage in the petroleum, natural gas and power generation industries (collectively, "Energy Infrastructure Companies"). Under normal market conditions, the Fund invests at least 80% of its Managed Assets (total asset value of the Fund minus the sum of the Fund's liabilities other than the principal amount of borrowing) in securities of Energy Infrastructure Companies. There can be no assurance that the Fund will achieve its investment objective. The Fund may not be appropriate for all investors.

MARKET RECAP

As measured by the Alerian MLP Total Return Index ("AMZX") and the PHLX Utility Sector Index ("UTY"), the total return for the six months ended May 31, 2017 was 2.28% and 17.13%, respectively. These figures are according to data collected from several sources, including Alerian Capital Management and Bloomberg. While in the short term, share appreciation of Energy Infrastructure Companies can be volatile, the Sub-Advisor believes that over the longer term, such share appreciation will approximate growth in monthly cash distributions and dividends per share. Over the last 10 years, growth in MLP distributions and utility dividends has averaged 1.4% and 3.2%, respectively. Over the last 12 months, the cash distributions of MLPs represented by the AMZX decreased by about 6.4% and utilities represented by the UTY increased by about 4.6%.⁽²⁾

- (1) YieldCos are publicly-traded entities that own, operate and acquire contracted renewable and conventional generation and thermal and other infrastructure assets, which are generally not MLP-qualifying assets. Like MLPs, YieldCos generally seek to position themselves as vehicles for investors seeking stable and growing dividend income from a diversified portfolio of lower-risk, high-quality assets.
- (2) Source: Alerian Capital Management, Bloomberg, EIP calculations.

PORTFOLIO COMMENTARY (CONTINUED)

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
SEMI-ANNUAL REPORT
MAY 31, 2017 (UNAUDITED)

PERFORMANCE ANALYSIS

On a net asset value ("NAV") basis, the Fund provided a total return(3) of 4.06%, including the reinvestment of distributions for the six months ended May 31, 2017. This compares, according to collected data, to a 9.61% return for a blended index consisting of the UTY (50%) and the AMZX (50%) (the "Blended Index"). Unlike the Fund, the Blended Index does not incur fees and expenses. On a market value basis, the Fund had a total return, including the reinvestment of distributions, of -0.22% for the same period. As of May 31, 2017, the Fund's market price per share was \$18.14, while the NAV per Common Share was \$19.41, a discount of 6.54%. As of November 30, 2016, the Fund's market price per share was \$18.83, while the NAV per Common Share was \$19.32, a discount of 2.54%.

The Fund maintained its regular monthly Common Share distribution of \$0.11 per share for the six months ended May 31, 2017.

For the six months ended May 31, 2017, the Fund's NAV underperformed the 9.61% return of the Blended Index by 555 basis points. We believe the MLP structure and a high payout ratio is only suitable for a narrow set of long-lived assets that have stable non-cyclical cash flows, such as regulated pipelines or other infrastructure assets that are legal or natural monopolies. We believe this approach leads to a portfolio of companies at the blue-chip end of the spectrum with less volatility and higher growth. In our view, these types of companies tend to lag in up markets and outperform in down markets.

An important factor that affected the return of the Fund was its use of financial leverage through the use of a line of credit. The Fund has a committed facility agreement with The Bank of Nova Scotia, with a maximum commitment amount of \$130,000,000. The Fund uses leverage because the Sub-Advisor believes that, over time, leverage can enhance total return for common shareholders. However, the use of leverage can also increase the volatility of the Fund's NAV and therefore volatility of the Fund's Common Share price. For example, if the prices of securities held by the Fund decline, the effect of changes in common share NAV and common shareholder total return loss is magnified by the use of leverage. Conversely, leverage may enhance Common Share returns during periods when the prices of securities held by the Fund generally are rising. Unlike the Fund, AMZX and UTY are not leveraged. Leverage had a positive impact on the performance of the Fund over this reporting period.

MARKET AND FUND OUTLOOK

Corporate simplification involving pipeline companies and their associated MLPs began in late 2014 with Kinder Morgan and has continued with the ONEOK transaction that was announced earlier in 2017. These transactions have raised several questions about why they are occurring and what is driving them. Simply put, these transactions are a way to reduce the cost of equity financing. Normally a high payout entity like an MLP or a YieldCo is created because it lowers the cost of equity financing. Unlike normal corporations, the MLP structure can actually lead to a higher cost of equity financing over time if the management team strings together multiple years of stable earnings and consistent dividend growth. While typically this sort of long-term track record would lead to a higher valuation (and therefore a lower cost of equity financing), incentive payments paid by the MLP to its corporate parent that

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

holds the general partner interest have the opposite effect. These incentives increase with per share dividend growth at the LP level and are due on newly issued shares, as well as older shares that have experienced the growth. So, the more successful the MLP is in growing its dividends, the closer it gets to ultimately re-combining itself with the parent corporation or conducting some other transaction that eliminates the incentive payments that ultimately increase the cost of equity financing. In most cases, MLPs are merely a part of the corporate finance structure of a company. MLPs are created when they lower the cost of capital and rolled-up or acquired when they do not.

The Fund continues to seek to invest primarily in MLPs and other energy infrastructure companies with mostly non-cyclical cash flows, investment-grade ratings, conservative balance sheets, modest and/or flexible organic growth commitments and liquidity on their revolving lines of credit. Non-cyclical cash flows are, in our opinion, a good fit with a steady anticipated dividend distribution that is meant to be most or all of an energy infrastructure company's free cash flow.

- (3) Total return is based on the combination of reinvested dividends, capital gains and return of capital distributions, if any, at prices obtained by the Dividend Reinvestment Plan and changes in NAV per Common Share for NAV returns and changes in Common Share Price for market value returns. Total returns do not reflect sales load and are not annualized for periods of less than one year. Past performance is not indicative of future results.

Page 4

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
 PORTFOLIO OF INVESTMENTS
 MAY 31, 2017 (UNAUDITED)

SHARES	DESCRIPTION	

COMMON STOCKS - 90.2%		
ELECTRIC UTILITIES - 24.4%		
90,900	Alliant Energy Corp. (a).....	\$
134,500	American Electric Power Co., Inc.....	
114,500	Duke Energy Corp.....	
15,900	Edison International (a).....	
197,900	Emera, Inc. (CAD) (a).....	
180,000	Eversource Energy (a).....	
242,200	Exelon Corp.....	
165,400	Fortis, Inc. (CAD) (a).....	
265,300	Hydro One Ltd. (CAD) (a) (b).....	
64,000	IDACORP, Inc. (a).....	
18,900	NextEra Energy, Inc.....	
112,300	Southern (The) Co. (a).....	
153,400	Xcel Energy, Inc. (a).....	

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

GAS UTILITIES - 6.0%	
45,600	Atmos Energy Corp. (a).....
60,310	Chesapeake Utilities Corp. (a).....
110,500	New Jersey Resources Corp. (a).....
150,018	UGI Corp. (a).....
MULTI-UTILITIES - 18.6%	
127,200	ATCO, Ltd., Class I (CAD) (a).....
211,700	Canadian Utilities Ltd., Class A (CAD) (a).....
163,800	CMS Energy Corp. (a).....
94,120	National Grid PLC, ADR.....
179,800	NiSource, Inc.....
257,000	Public Service Enterprise Group, Inc. (a).....
102,900	SCANA Corp.....
92,900	Sempra Energy.....
65,200	WEC Energy Group, Inc. (a).....
OIL, GAS & CONSUMABLE FUELS - 40.8%	
2,051,714	Enbridge Energy Management, LLC (a) (c).....
595,200	Enbridge Income Fund Holdings, Inc. (CAD) (a).....
167,400	Enbridge, Inc.....
325,700	Inter Pipeline, Ltd. (CAD) (a).....
172,100	Keyera Corp. (CAD) (a).....
576,175	Kinder Morgan, Inc.....
144,900	ONEOK, Inc.....
637,100	Plains GP Holdings, L.P. (a).....
115,600	Targa Resources Corp.....
423,170	TransCanada Corp.....
480,600	Williams (The) Cos., Inc.....
WATER UTILITIES - 0.4%	
15,900	American Water Works Co., Inc. (a).....
TOTAL COMMON STOCKS.....	
(Cost \$302,373,312)	

See Notes to Financial Statements

Page 5

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
 PORTFOLIO OF INVESTMENTS (CONTINUED)
 MAY 31, 2017 (UNAUDITED)

SHARES/ UNITS	DESCRIPTION
------------------	-------------

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

MASTER LIMITED PARTNERSHIPS - 35.3%

CHEMICALS - 0.1%		
22,000	Westlake Chemical Partners, L.P. (a).....	\$
GAS UTILITIES - 1.7%		
122,152	AmeriGas Partners, L.P. (a).....	
12,500	Suburban Propane Partners, L.P.....	
INDEPENDENT POWER AND RENEWABLE ELECTRICITY PRODUCERS - 4.2%		
410,555	NextEra Energy Partners, L.P. (a) (d).....	
OIL, GAS & CONSUMABLE FUELS - 29.3%		
79,700	Alliance Holdings GP, L.P. (a).....	
317,030	Alliance Resource Partners, L.P. (a).....	
65,700	Buckeye Partners, L.P.....	
7,600	Dominion Energy Midstream Partners, L.P. (a).....	
727,700	Enterprise Products Partners, L.P.....	
112,200	EQT Midstream Partners, L.P. (a).....	
266,976	Holly Energy Partners, L.P. (a).....	
85,300	Magellan Midstream Partners, L.P.....	
133,972	NGL Energy Partners, L.P. (a).....	
109,800	ONEOK Partners, L.P. (a).....	
103,600	Phillips 66 Partners, L.P. (a).....	
65,000	Plains All American Pipeline, L.P.....	
41,000	Shell Midstream Partners, L.P. (a).....	
280,300	Spectra Energy Partners, L.P. (a).....	
47,328	Tallgrass Energy Partners, L.P. (a).....	
151,495	TC PipeLines, L.P. (a).....	
56,002	TransMontaigne Partners, L.P. (a).....	
75,000	Williams Partners, L.P.....	
TOTAL MASTER LIMITED PARTNERSHIPS.....		1
(Cost \$99,706,739)		

REAL ESTATE INVESTMENT TRUSTS - 1.3%

EQUITY REAL ESTATE INVESTMENT TRUSTS - 1.3%		
49,101	CorEnergy Infrastructure Trust, Inc.....	
142,050	InfraREIT, Inc. (a).....	
TOTAL REAL ESTATE INVESTMENT TRUSTS.....		
(Cost \$4,641,044)		
TOTAL INVESTMENTS - 126.8%.....		4
(Cost \$406,721,095) (e)		

NUMBER OF CONTRACTS	DESCRIPTION
CALL OPTIONS WRITTEN - (0.3%)	
1,250	AMERICAN ELECTRIC POWER CO., INC. CALL @ \$70.00 due August 2017.....

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

BUCKEYE PARTNERS, L.P. CALL
 600 @ 70.00 due June 2017 (f).....

Page 6

See Notes to Financial Statements

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
 PORTFOLIO OF INVESTMENTS (CONTINUED)
 MAY 31, 2017 (UNAUDITED)

NUMBER OF CONTRACTS	DESCRIPTION	
CALL OPTIONS WRITTEN (CONTINUED)		
	CMS ENERGY CORP. CALL	
800	@ \$50.00 due September 2017.....	\$
	DUKE ENERGY CORP. CALLS	
100	@ 85.00 due July 2017.....	
1,000	@ 87.50 due July 2017.....	
	ENBRIDGE, INC. CALLS	
1,400	@ 45.00 due July 2017.....	
200	@ 47.50 due July 2017 (f).....	
	ENTERPRISE PRODUCTS PARTNERS, L.P. CALLS	
5,000	@ 29.00 due June 2017 (f).....	
1,700	@ 28.00 due July 2017.....	
	EXELON CORP. CALLS	
1,000	@ 36.00 due July 2017.....	
500	@ 37.00 due July 2017.....	
900	@ 38.00 due October 2017.....	
	KINDER MORGAN, INC. CALLS	
500	@ 24.00 due June 2017.....	
2,000	@ 22.00 due July 2017.....	

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

500 @ 20.00 due September 2017.....
 2,700 @ 21.00 due September 2017.....

MAGELLAN MIDSTREAM PARTNERS, L.P. CALLS

200 @ 77.50 due June 2017 (f).....
 600 @ 80.00 due July 2017.....

NEXTERA ENERGY, INC. CALL

68 @ 135.00 due June 2017.....

NISOURCE, INC. CALL

1,000 @ 25.00 due July 2017.....

ONEOK, INC. CALLS

700 @ 52.50 due June 2017.....
 700 @ 55.00 due June 2017 (f).....

PLAINS ALL AMERICAN PIPELINE, L.P. CALLS

100 @ 29.00 due July 2017.....
 500 @ 31.00 due August 2017.....

SCANA CORP. CALLS

700 @ 70.00 due July 2017.....
 100 @ 70.00 due August 2017.....

See Notes to Financial Statements

Page 7

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
 PORTFOLIO OF INVESTMENTS (CONTINUED)
 MAY 31, 2017 (UNAUDITED)

NUMBER OF CONTRACTS	DESCRIPTION
CALL OPTIONS WRITTEN (CONTINUED)	

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

	TARGA RESOURCES CORP. CALLS		
1,000	@ \$60.00	due June 2017 (f)	\$
100	@ 60.00	due July 2017	
	TRANSCANADA CORP. CALLS		
3,400	@ 50.00	due August 2017	
800	@ 50.00	due November 2017	
	WILLIAMS (THE) COS., INC. CALLS		
2,100	@ 31.00	due July 2017	
2,700	@ 33.00	due July 2017	
	WILLIAMS PARTNERS, L.P. CALLS		
600	@ 42.50	due June 2017	
100	@ 42.50	due July 2017	
	TOTAL CALL OPTIONS WRITTEN		
	(Premiums received \$1,583,954)		
	OUTSTANDING LOAN - (36.6%)		(1
	NET OTHER ASSETS AND LIABILITIES - 10.1%		
	NET ASSETS - 100.0%		\$ 3

-
- (a) All or a portion of this security serves as collateral on the outstanding loan.
 - (b) This security is restricted in the U.S. and cannot be offered for public sale without first being registered under the Securities Act of 1933, as amended. This security is not restricted on the foreign exchange where it trades freely without any additional registration. As such, it does not require the additional disclosure required of restricted securities.
 - (c) Non-income producing security that makes payment-in-kind ("PIK") distributions. For the fiscal year-to-date period (December 1, 2016 through May 31, 2017), the Fund received 88,032 PIK shares of Enbridge Energy Management, LLC.
 - (d) NextEra Energy Partners, L.P. is taxed as a "C" corporation for federal income tax purposes.
 - (e) Aggregate cost for financial reporting purposes, which approximates the aggregate cost for federal income tax purposes. As of May 31, 2017, the aggregate gross unrealized appreciation for all securities in which there was an excess of value over tax cost was \$42,318,977 and the aggregate gross unrealized depreciation for all securities in which there was an

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

excess of tax cost over value was \$17,160,038.

- (f) This security is fair valued by the First Trust Advisors L.P.'s Pricing Committee in accordance with procedures adopted by the Fund's Board of Trustees, and in accordance with the provisions of the Investment Company Act of 1940, as amended. At May 31, 2017, securities noted as such are valued at \$(33,100) or (0.0)% of net assets.

ADR American Depository Receipt

CAD Canadian Dollar - Security is denominated in Canadian Dollars and is translated into U.S. Dollars based upon the current exchange rate.

Page 8

See Notes to Financial Statements

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
 PORTFOLIO OF INVESTMENTS (CONTINUED)
 MAY 31, 2017 (UNAUDITED)

INTEREST RATE SWAP AGREEMENTS:

COUNTERPARTY	FLOATING RATE (1)	EXPIRATION DATE	NOTIONAL AMOUNT	FIXED RATE (1)	
Bank of Nova Scotia	1 month LIBOR	10/08/20	\$ 36,475,000	2.121%	\$
Bank of Nova Scotia	1 month LIBOR	09/03/24	36,475,000	2.367%	
			-----		-----
			\$ 72,950,000		\$
			=====		=====

- (1) The Fund pays the fixed rate and receives the floating rate. The floating rate on May 31, 2017 was 0.993% and 0.995%, respectively.

VALUATION INPUTS

A summary of the inputs used to value the Fund's investments as of May 31, 2017 is as follows (see Note 3A - Portfolio Valuation in the Notes to Financial Statements):

	ASSETS TABLE		LEVEL 2 SIGNIFICANT OBSERVABLE INPUTS
	TOTAL VALUE AT 5/31/2017	LEVEL 1 QUOTED PRICES	
Common Stocks*.....	\$307,271,358	\$307,271,358	\$
Master Limited Partnerships*.....	120,141,158	120,141,158	
Real Estate Investment Trusts*.....	4,467,518	4,467,518	
	-----	-----	-----

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

Total Investments.....	\$431,880,034	\$431,880,034	\$
	=====	=====	=====

LIABILITIES TABLE

	TOTAL VALUE AT 5/31/2017	LEVEL 1 QUOTED PRICES	LEVEL 2 SIGNIFICANT OBSERVABLE INPUTS
	-----	-----	-----
Call Options Written.....	\$ (1,268,810)	\$ (1,051,160)	\$ (217,650)
Interest Rate Swaps**.....	(1,899,353)	--	(1,899,353)
	-----	-----	-----
Total.....	\$ (3,168,163)	\$ (1,051,160)	\$ (2,117,013)
	=====	=====	=====

* See Portfolio of Investments for industry breakout.

** See Interest Rate Swap Agreements for contract detail.

All transfers in and out of the Levels during the period are assumed to be transferred on the last day of the period at their current value. There were no transfers between Levels at May 31, 2017.

See Notes to Financial Statements

Page 9

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
STATEMENT OF ASSETS AND LIABILITIES
MAY 31, 2017 (UNAUDITED)

ASSETS:

Investments, at value (Cost \$406,721,095).....	.....
Cash.....	.....
Cash segregated as collateral for open swap contracts.....	.....
Receivables:	
Investment securities sold.....	.....
Dividends.....	.....
Prepaid expenses.....	.....
 Total Assets.....	.....

LIABILITIES:

Outstanding loan.....	.....
Options written, at value (Premiums received \$1,583,954).....	.....
Swap contracts, at value (\$569).....	.....
Payables:	
Investment advisory fees.....	.....
Interest and fees on loan.....	.....
Audit and tax fees.....	.....
Printing fees.....	.....
Administrative fees.....	.....
Transfer agent fees.....	.....

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

Custodian fees.....
Trustees' fees and expenses.....
Legal fees.....
Financial reporting fees.....
Other liabilities.....

Total Liabilities.....

NET ASSETS.....

NET ASSETS CONSIST OF:

Paid-in capital.....
Par value.....
Accumulated net investment income (loss).....
Accumulated net realized gain (loss) on investments, written options, swap contracts and
foreign currency transactions.....
Net unrealized appreciation (depreciation) on investments, written options, swap contracts and
foreign currency translation.....

NET ASSETS.....

NET ASSET VALUE, per Common Share (par value \$0.01 per Common Share).....

Number of Common Shares outstanding (unlimited number of Common Shares has been authorized).....

Page 10

See Notes to Financial Statements

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
STATEMENT OF OPERATIONS
FOR THE SIX MONTHS ENDED MAY 31, 2017 (UNAUDITED)

INVESTMENT INCOME:

Dividends (net of foreign withholding tax of \$268,435).....
Interest.....
Other.....

Total investment income.....

EXPENSES:

Investment advisory fees.....
Interest and fees on loan.....
Administrative fees.....
Printing fees.....
Custodian fees.....
Audit and tax fees.....
Transfer agent fees.....
Trustees' fees and expenses.....
Legal fees.....
Financial reporting fees.....
Other.....

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

Total expenses.....	
NET INVESTMENT INCOME (LOSS).....	
NET REALIZED AND UNREALIZED GAIN (LOSS):	
Net realized gain (loss) on:	
Investments.....	
Written options.....	
Swap contracts.....	
Foreign currency transactions.....	
Net realized gain (loss).....	
Net change in unrealized appreciation (depreciation) on:	
Investments.....	
Written options.....	
Swap contracts.....	
Foreign currency translation.....	
Net change in unrealized appreciation (depreciation).....	
NET REALIZED AND UNREALIZED GAIN (LOSS).....	
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM OPERATIONS.....	

See Notes to Financial Statements

Page 11

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
STATEMENTS OF CHANGES IN NET ASSETS

	SIX MONTH ENDED 5/31/20 (UNAUDITED)

OPERATIONS:	
Net investment income (loss).....	\$ 2,98
Net realized gain (loss).....	15,51
Net increase from payment by the sub-advisor.....	
Net change in unrealized appreciation (depreciation).....	(5,33)

Net increase (decrease) in net assets resulting from operations.....	13,16

DISTRIBUTIONS TO SHAREHOLDERS FROM:	
Net investment income.....	(11,58)
Net realized gain.....	
Return of capital.....	

Total distributions to shareholders.....	(11,58)

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

Total increase (decrease) in net assets.....	1,57
NET ASSETS:	
Beginning of period.....	339,02
End of period.....	\$ 340,60
Accumulated net investment income (loss) at end of period.....	\$ 99
COMMON SHARES:	
Common Shares at end of period*.....	17,55

* On September 15, 2016, the Fund commenced a share repurchase program. The program continued until March 15, 2017. The Fund did not repurchase any common shares while the program was in effect.

Page 12

See Notes to Financial Statements

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
STATEMENT OF CASH FLOWS
FOR THE SIX MONTHS ENDED MAY 31, 2017 (UNAUDITED)

CASH FLOWS FROM OPERATING ACTIVITIES:

Net increase (decrease) in net assets resulting from operations.....	\$ 13,16
Adjustments to reconcile net increase (decrease) in net assets resulting from operations to net cash provided by operating activities:	
Purchases of investments.....	(107,37)
Sales of investments.....	114,09
Proceeds from written options.....	4,22
Amount paid to close written options.....	(63)
Return of capital distributions received from investment in MLPs and REITs.....	3,50
Net realized gain/loss on investments and written options.....	(16,06)
Net change in unrealized appreciation/depreciation on investments and written options.....	5,58
Net change in unrealized appreciation/depreciation on swap contracts.....	(25)
Decrease in cash segregated as collateral for open swap contracts.....	1,54
CHANGES IN ASSETS AND LIABILITIES:	
Decrease in interest receivable.....	
Increase in dividends receivable.....	(87)
Increase in prepaid expenses.....	(1)
Increase in interest and fees on loan payable.....	3
Increase in investment advisory fees payable.....	2
Decrease in audit and tax fees payable.....	(2)
Decrease in legal fees payable.....	(
Decrease in printing fees payable.....	(1
Increase in administrative fees payable.....	
Decrease in custodian fees payable.....	(

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

Increase in transfer agent fees payable.....	1
Increase in Trustees' fees and expenses payable.....	(
Decrease in other liabilities payable.....)
CASH PROVIDED BY OPERATING ACTIVITIES.....	
CASH FLOWS FROM FINANCING ACTIVITIES:	
Distributions to Common Shareholders from net investment income.....	(11,58
Proceeds from borrowing.....	3,00
CASH USED IN FINANCING ACTIVITIES.....	
Increase in cash and foreign currency (a).....	
Cash and foreign currency at beginning of period.....	
CASH AND FOREIGN CURRENCY AT END OF PERIOD.....	
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:	
Cash paid during the period for interest and fees.....	

(a) Includes net change in unrealized appreciation (depreciation) on foreign currency of \$1,042.

See Notes to Financial Statements

Page 13

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
 FINANCIAL HIGHLIGHTS
 FOR A COMMON SHARE OUTSTANDING THROUGHOUT EACH PERIOD

	SIX MONTHS ENDED MAY 31, 2017 (UNAUDITED)	2016	2015	YEAR ENDED NOVEMBER 2014
Net asset value, beginning of period.....	\$ 19.32	\$ 18.19	\$ 25.97	\$ 22.30
INCOME FROM INVESTMENT OPERATIONS:				
Net investment income (loss).....	0.17	0.21	0.34	0.22
Net realized and unrealized gain (loss).....	0.58	2.58 (a)	(6.80)	6.20
Total from investment operations.....	0.75	2.79	(6.46)	6.42
Common Shares offering costs charged to paid-in capital.....	--	--	--	--
DISTRIBUTIONS PAID TO SHAREHOLDERS FROM:				
Net investment income.....	(0.66)	(0.23)	(0.36)	(0.45)
Net realized gain.....	--	(0.30)	(0.96)	(2.21)

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

Return of capital.....	--	(1.13)	--	(0.09)
Total distributions to Common Shareholders.....	(0.66)	(1.66)	(1.32)	(2.75)
Net asset value, end of period.....	\$ 19.41	\$ 19.32	\$ 18.19	\$ 25.97
Market value, end of period.....	\$ 18.14	\$ 18.83	\$ 16.16	\$ 23.00
TOTAL RETURN BASED ON NET ASSET VALUE (b)...	4.06%	18.35% (a)	(25.29)%	31.02%
TOTAL RETURN BASED ON MARKET VALUE (b).....	(0.22)%	29.84%	(25.05)%	19.18%

RATIOS TO AVERAGE NET ASSETS/SUPPLEMENTAL DATA:

Net assets, end of period (in 000's).....	\$340,608	\$339,029	\$319,282	\$455,849
Ratio of net expenses to average net assets.....	2.14% (c)	1.95%	1.83%	1.80%
Ratio of total expenses to average net assets excluding interest expense and fees on loan.....	1.53% (c)	1.54%	1.49%	1.53%
Ratio of net investment income (loss) to average net assets.....	1.71% (c)	1.14%	1.47%	0.88%
Portfolio turnover rate.....	21%	72%	42%	42%
INDEBTEDNESS:				
Total loan outstanding (in 000's).....	\$124,500	\$121,500	\$110,500	\$158,000
Asset coverage per \$1,000 of indebtedness (d).....	\$ 3,736	\$ 3,790	\$ 3,889	\$ 3,885

(a) During the years ended November 30, 2016, 2013 and 2012, the Fund received a reimbursement from the sub-advisor in the amounts of \$1,600, \$5,421 and \$104, respectively, in connection with trade errors, which represent less than \$0.01 per share. Since the sub-advisor reimbursed the Fund, there was no effect on the total return.

(b) Total return is based on the combination of reinvested dividend, capital gain and return of capital distributions, if any, at prices obtained by the Dividend Reinvestment Plan, and changes in net asset value per share for net asset value returns and changes in Common Share Price for market value returns. Total returns do not reflect sales load and are not annualized for periods of less than one year. Past performance is not indicative of future results.

(c) Annualized.

(d) Calculated by taking the Fund's total assets less the Fund's total liabilities, not including the loan outstanding, and dividing by the outstanding loan balance in 000's.

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
MAY 31, 2017 (UNAUDITED)

1. ORGANIZATION

First Trust Energy Infrastructure Fund (the "Fund") is a non-diversified, closed-end management investment company organized as a Massachusetts business trust on February 22, 2011 and is registered with the Securities and Exchange Commission ("SEC") under the Investment Company Act of 1940, as amended (the "1940 Act"). The Fund trades under the ticker symbol FIF on the New York Stock Exchange ("NYSE").

The Fund's investment objective is to seek a high level of total return with an emphasis on current distributions paid to shareholders. The Fund seeks to achieve its objective by investing primarily in securities of companies engaged in the energy infrastructure sector. Energy infrastructure companies principally include publicly-traded master limited partnerships and limited liability companies taxed as partnerships ("MLPs"), MLP affiliates, YieldCos., pipeline companies, utilities, and other infrastructure-related companies that derive at least 50% of their revenues from operating or providing services in support of infrastructure assets such as pipelines, power transmission and petroleum and natural gas storage in the petroleum, natural gas and power generation industries (collectively, "Energy Infrastructure Companies"). For purposes of the Fund's investment objective, total return includes capital appreciation of, and all distributions received from, securities in which the Fund will invest, taking into account the varying tax characteristics of such securities. There can be no assurance that the Fund will achieve its investment objective. The Fund may not be appropriate for all investors.

2. MANAGED DISTRIBUTION POLICY

The Board of Trustees of the Fund has approved a managed distribution policy for the Fund (the "Plan") in reliance on exemptive relief received from the Securities and Exchange Commission that permits the Fund to make periodic distributions of long-term capital gains as frequently as monthly each tax year. Under the Plan, the Fund currently intends to continue to pay a recurring monthly distribution in the amount of \$0.11 per Common Share that reflects the distributable cash flow of the Fund. A portion of this monthly distribution may include realized capital gains. This may result in a reduction of the long-term capital gain distribution necessary at year end by distributing realized capital gains throughout the year. The annual distribution rate is independent of the Fund's performance during any particular period. Accordingly, you should not draw any conclusions about the Fund's investment performance from the amount of any distribution or from the terms of the Plan. The Board of Trustees may amend or terminate the Plan at any time without prior notice to shareholders.

3. SIGNIFICANT ACCOUNTING POLICIES

The Fund is considered an investment company and follows accounting and reporting guidance under Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 946, "Financial Services-Investment Companies." The following is a summary of significant accounting policies consistently followed by the Fund in the preparation of its financial statements. The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts and disclosures in the financial statements. Actual results could differ from those estimates.

A. PORTFOLIO VALUATION

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

The net asset value ("NAV") of the Common Shares of the Fund is determined daily as of the close of regular trading on the NYSE, normally 4:00 p.m. Eastern time, on each day the NYSE is open for trading. If the NYSE closes early on a valuation day, the NAV is determined as of that time. Foreign securities are priced using data reflecting the earlier closing of the principal markets for those securities. The Fund's NAV per Common Share is calculated by dividing the value of all assets of the Fund (including accrued interest and dividends), less all liabilities (including accrued expenses, dividends declared but unpaid and any borrowings of the Fund) by the total number of Common Shares outstanding.

The Fund's investments are valued daily at market value or, in the absence of market value with respect to any portfolio securities, at fair value. Market value prices represent last sale or official closing prices from a national or foreign exchange (i.e., a regulated market) and are primarily obtained from third-party pricing services. Fair value prices represent any prices not considered market value prices and are either obtained from a third-party pricing service or are determined by the Pricing Committee of the Fund's investment advisor, First Trust Advisors L.P. ("First Trust" or the "Advisor"), in accordance with valuation procedures adopted by the Fund's Board of Trustees, and in accordance with provisions of the 1940 Act. Investments valued by the Advisor's Pricing Committee, if any, are footnoted as such in the footnotes to the Portfolio of Investments. The Fund's investments are valued as follows:

Common stocks, MLPs, real estate investment trusts ("REITs"), and other equity securities listed on any national or foreign exchange (excluding The Nasdaq Stock Market LLC ("Nasdaq") and the London Stock Exchange Alternative Investment Market ("AIM")) are valued at the last sale price on the exchange on which they are principally traded, or for Nasdaq and AIM securities, the official closing price. Securities traded on more than one securities exchange are valued at the last sale price or official closing price, as applicable, at the close of the securities exchange representing the principal market for such securities.

Exchange-traded options contracts are valued at the closing price in the market where such contracts are principally traded. If no closing price is available, exchange-traded options contracts are fair valued at the mean of their most recent bid and asked price, if available, and otherwise at their closing bid price. Over-the-counter options contracts are fair valued at the mean of their most recent bid and asked price, if available, and otherwise their closing bid price.

Page 15

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
MAY 31, 2017 (UNAUDITED)

Securities traded in an over-the-counter market are fair valued at the mean of their most recent bid and asked price, if available, and otherwise at their closing bid price.

Swaps are fair valued utilizing quotations provided by a third-party pricing service or, if the pricing service does not provide a value, by

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

quotes provided by the selling dealer or financial institution.

Certain securities may not be able to be priced by pre-established pricing methods. Such securities may be valued by the Fund's Board of Trustees or its delegate, the Advisor's Pricing Committee, at fair value. These securities generally include, but are not limited to, restricted securities (securities which may not be publicly sold without registration under the Securities Act of 1933, as amended (the "1933 Act")) for which a third-party pricing service is unable to provide a market price; securities whose trading has been formally suspended; a security whose market or fair value price is not available from a pre-established pricing source; a security with respect to which an event has occurred that is likely to materially affect the value of the security after the market has closed but before the calculation of the Fund's NAV or make it difficult or impossible to obtain a reliable market quotation; and a security whose price, as provided by the third-party pricing service, does not reflect the security's fair value. As a general principle, the current fair value of a security would appear to be the amount which the owner might reasonably expect to receive for the security upon its current sale. When fair value prices are used, generally they will differ from market quotations or official closing prices on the applicable exchanges. A variety of factors may be considered in determining the fair value of such securities, including, but not limited to, the following:

- 1) the type of security;
- 2) the size of the holding;
- 3) the initial cost of the security;
- 4) transactions in comparable securities;
- 5) price quotes from dealers and/or third-party pricing services;
- 6) relationships among various securities;
- 7) information obtained by contacting the issuer, analysts, or the appropriate stock exchange;
- 8) an analysis of the issuer's financial statements; and
- 9) the existence of merger proposals or tender offers that might affect the value of the security.

If the securities in question are foreign securities, the following additional information may be considered:

- 1) the value of similar foreign securities traded on other foreign markets;
- 2) ADR trading of similar securities;
- 3) closed-end fund trading of similar securities;
- 4) foreign currency exchange activity;
- 5) the trading prices of financial products that are tied to baskets of foreign securities;
- 6) factors relating to the event that precipitated the pricing problem;
- 7) whether the event is likely to recur; and

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

- 8) whether the effects of the event are isolated or whether they affect entire markets, countries or regions.

The Fund is subject to fair value accounting standards that define fair value, establish the framework for measuring fair value and provide a three-level hierarchy for fair valuation based upon the inputs to the valuation as of the measurement date. The three levels of the fair value hierarchy are as follows:

- o Level 1 - Level 1 inputs are quoted prices in active markets for identical investments. An active market is a market in which transactions for the investment occur with sufficient frequency and volume to provide pricing information on an ongoing basis.
- o Level 2 - Level 2 inputs are observable inputs, either directly or indirectly, and include the following:
 - o Quoted prices for similar investments in active markets.
 - o Quoted prices for identical or similar investments in markets that are non-active. A non-active market is a market where there are few transactions for the investment, the prices are not current, or price quotations vary substantially either over time or among market makers, or in which little information is released publicly.
 - o Inputs other than quoted prices that are observable for the investment (for example, interest rates and yield curves observable at commonly quoted intervals, volatilities, prepayment speeds, loss severities, credit risks, and default rates).
 - o Inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- o Level 3 - Level 3 inputs are unobservable inputs. Unobservable inputs may reflect the reporting entity's own assumptions about the assumptions that market participants would use in pricing the investment.

The inputs or methodologies used for valuing investments are not necessarily an indication of the risk associated with investing in those investments. A summary of the inputs used to value the Fund's investments as of May 31, 2017, is included with the Fund's Portfolio of Investments.

Page 16

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
MAY 31, 2017 (UNAUDITED)

B. OPTION CONTRACTS

The Fund is subject to equity price risk in the normal course of pursuing its

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

investment objective and may write (sell) options to hedge against changes in the value of equities. Also, the Fund seeks to generate additional income, in the form of premiums received, from writing (selling) the options. The Fund may write (sell) covered call or put options ("options") on all or a portion of the common stock and MLPs held in the Fund's portfolio as determined to be appropriate by Energy Income Partners, LLC ("EIP" or the "Sub-Advisor"). The number of options the Fund can write (sell) is limited by the amount of common stock and MLPs the Fund holds in its portfolio. The Fund will not write (sell) "naked" or uncovered options. When the Fund writes (sells) an option, an amount equal to the premium received by the Fund is included in "Options written, at value" on the Fund's Statement of Assets and Liabilities. Options are marked-to-market daily and their value will be affected by changes in the value and dividend rates of the underlying equity securities, changes in interest rates, changes in the actual or perceived volatility of the securities markets and the underlying equity securities and the remaining time to the options' expiration. The value of options may also be adversely affected if the market for the options becomes less liquid or trading volume diminishes.

Options the Fund writes (sells) will either be exercised, expire or be cancelled pursuant to a closing transaction. If the price of the underlying equity security exceeds the option's exercise price, it is likely that the option holder will exercise the option. If an option written (sold) by the Fund is exercised, the Fund would be obligated to deliver the underlying equity security to the option holder upon payment of the strike price. In this case, the option premium received by the Fund will be added to the amount realized on the sale of the underlying security for purposes of determining gain or loss and is included in "Net realized gain (loss) on investments" on the Statement of Operations. If the price of the underlying equity security is less than the option's strike price, the option will likely expire without being exercised. The option premium received by the Fund will, in this case, be treated as short-term capital gain on the expiration date of the option. The Fund may also elect to close out its position in an option prior to its expiration by purchasing an option of the same series as the option written (sold) by the Fund. Gain or loss on options is presented separately as "Net realized gain (loss) on written options" on the Statement of Operations.

The options that the Fund writes (sells) give the option holder the right, but not the obligation, to purchase a security from the Fund at the strike price on or prior to the option's expiration date. The ability to successfully implement the writing (selling) of covered call options depends on the ability of the Sub-Advisor to predict pertinent market movements, which cannot be assured. Thus, the use of options may require the Fund to sell portfolio securities at inopportune times or for prices other than current market value, which may limit the amount of appreciation the Fund can realize on an investment, or may cause the Fund to hold a security that it might otherwise sell. As the writer (seller) of a covered option, the Fund foregoes, during the option's life, the opportunity to profit from increases in the market value of the security covering the option above the sum of the premium and the strike price of the option, but has retained the risk of loss should the price of the underlying security decline. The writer (seller) of an option has no control over the time when it may be required to fulfill its obligation as a writer (seller) of the option. Once an option writer (seller) has received an exercise notice, it cannot effect a closing purchase transaction in order to terminate its obligation under the option and must deliver the underlying security to the option holder at the exercise price.

Over-the-counter options have the risk of the potential inability of counterparties to meet the terms of their contracts. The Fund's maximum equity price risk for purchased options is limited to the premium initially paid. In addition, certain risks may arise upon entering into option contracts including the risk that an illiquid secondary market will limit the Fund's ability to close out an option contract prior to the expiration date and that a change in

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

the value of the option contract may not correlate exactly with changes in the value of the securities hedged.

C. SWAP AGREEMENTS

The Fund may enter into total return equity swap and interest rate swap agreements. A swap is a financial instrument that typically involves the exchange of cash flows between two parties ("Counterparties") on specified dates (settlement dates) where the cash flows are based on agreed upon prices, rates, etc. Payment received or made by the Fund for interest rate swaps are recorded on the Statement of Operations as "Net realized gain (loss) on swap contracts." When an interest rate swap is terminated, the Fund will record a realized gain or loss equal to the difference between the proceeds from (or cost of) the closing transaction and the Fund's basis in the contract, if any. Generally, the basis of the contracts, if any, is the premium received or paid. Swap agreements are individually negotiated and involve the risk of the potential inability of the Counterparties to meet the terms of the agreement. In connection with these agreements, cash and securities may be identified as collateral in accordance with the terms of the respective swap agreements to provide assets of value and recourse in the event of default under the swap agreement or bankruptcy/insolvency of a party to the swap agreement. In the event of a default by a Counterparty, the Fund will seek withdrawal of the collateral and may incur certain costs exercising its rights with respect to the collateral. If a Counterparty becomes bankrupt or otherwise fails to perform its obligations due to financial difficulties, the Fund may experience significant delays in obtaining any recovery in a bankruptcy or other reorganization proceeding. The Fund may obtain only limited recovery or may obtain no recovery in such circumstances.

Swap agreements may increase or decrease the overall volatility of the investments of the Fund. The performance of swap agreements may be affected by changes in the specific interest rate, security, currency, or other factors that determine the amounts of payments due to and from the Fund. The Fund's maximum equity price risk to meet its future payments under swap agreements outstanding at May 31, 2017 is equal to the total notional amount as shown on the Portfolio of Investments. The notional amount represents the U.S. dollar value of the contract as of the day of the opening transaction or contract reset. When the Fund enters into a swap agreement, any premium paid is included in "Swap contracts, at value" on the Statement of Assets and Liabilities.

Page 17

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF) MAY 31, 2017 (UNAUDITED)

The Fund held interest rate swap agreements at May 31, 2017 to hedge against changes in borrowing rates under the Fund's committed facility agreement. An interest rate swap agreement involves the Fund's agreement to exchange a stream of interest payments for another party's stream of cash flows. Interest rate swaps do not involve the delivery of securities or other underlying assets or principal. Accordingly, the risk of loss with respect to interest rate swaps is limited to the net amount of interest payments that the Fund is contractually obligated to make. Cash segregated as collateral for open swap contracts in the

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

amount of \$4,121,988 is shown on the Statement of Assets and Liabilities.

D. SECURITIES TRANSACTIONS AND INVESTMENT INCOME

Securities transactions are recorded as of the trade date. Realized gains and losses from securities transactions are recorded on the identified cost basis. Dividend income is recorded on the ex-dividend date. Interest income is recorded daily on the accrual basis. The Fund will rely to some extent on information provided by MLPs, which is not necessarily timely, to estimate taxable income allocable to the MLP units held in the Fund's portfolio.

Distributions received from the Fund's investments in MLPs generally are comprised of return of capital and investment income. The Fund records estimated return of capital and investment income based on historical information available from each MLP. These estimates may subsequently be revised based on information received from the MLPs after their tax reporting periods are concluded. For the six months ended May 31, 2017, distributions of \$3,501,441 received from MLPs have been reclassified as return of capital. The cost basis of applicable MLPs has been reduced accordingly.

The Fund holds shares of REITs. Distributions from such investments may be comprised of return of capital, capital gains and income. The actual character of amounts received during the year is not known until after the REIT's fiscal year end. The Fund records the character of distributions received from REITs during the year based on estimates available. The characterization of distributions received by the Fund may be subsequently revised based on information received from the REITs after their tax reporting periods conclude.

E. DIVIDENDS AND DISTRIBUTIONS TO SHAREHOLDERS

The Fund intends to pay holders of its Common Shares a recurring monthly distribution that reflects the distributable cash flow of the Fund. Distributions will automatically be reinvested into additional Common Shares pursuant to the Fund's Dividend Reinvestment Plan unless cash distributions are elected by the shareholder.

Distributions from income and capital gains are determined in accordance with federal income tax regulations, which may differ from U.S. GAAP. Certain capital accounts in the financial statements are periodically adjusted for permanent differences in order to reflect their tax character. These permanent differences are primarily due to the varying treatment of income and gain/loss on portfolio securities held by the Fund and have no impact on net assets or NAV per Common Share. Temporary differences, which arise from recognizing certain items of income, expense and gain/loss in different periods for financial statement and tax purposes, will reverse at some point in the future.

The tax character of distributions paid during the fiscal year ended November 30, 2016 is as follows:

Distributions paid from:

Ordinary income.....	\$ 3,981,810
Capital gain.....	5,326,861
Return of capital.....	19,824,721

As of November 30, 2016, the components of distributable earnings and net assets on a tax basis were as follows:

Undistributed ordinary income.....	\$	--
Undistributed capital gains.....		--

Total undistributed earnings.....		--
Accumulated capital and other losses.....		(7,301,850)

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

Net unrealized appreciation (depreciation).....	33,903,845

Total accumulated earnings (losses).....	26,601,995
Other.....	(53,352)
Paid-in capital.....	312,480,673

Net assets.....	\$339,029,316
	=====

Page 18

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
MAY 31, 2017 (UNAUDITED)

F. INCOME TAXES

The Fund intends to continue to qualify as a regulated investment company by complying with the requirements under Subchapter M of the Internal Revenue Code of 1986, as amended, which includes distributing substantially all of its net investment income and net realized gains to shareholders. Accordingly, no provision has been made for federal and state income taxes. However, due to the timing and amount of distributions, the Fund may be subject to an excise tax of 4% of the amount by which approximately 98% of the Fund's taxable income exceeds the distributions from such taxable income for the calendar year.

The Fund intends to utilize provisions of the federal income tax laws, which allow it to carry a realized capital loss forward indefinitely following the year of the loss and offset such loss against any future realized capital gains. The Fund is subject to certain limitations under U.S. tax rules on the use of capital loss carryforwards and net unrealized built-in losses. These limitations apply when there has been a 50% change in ownership. At November 30, 2016, the Fund had capital loss carryforwards for federal income tax purposes of \$7,301,850.

Certain losses realized during the current fiscal year may be deferred and treated as occurring on the first day of the following fiscal year for federal income tax purposes. For the fiscal year ended November 30, 2016, the Fund had no qualified late year losses.

The Fund is subject to accounting standards that establish a minimum threshold for recognizing, and a system for measuring, the benefits of a tax position taken or expected to be taken in a tax return. Taxable years ending 2013, 2014, 2015 and 2016 remain open to federal and state audit. As of May 31, 2017, management has evaluated the application of these standards to the Fund and has determined that no provision for income tax is required in the Fund's financial statements for uncertain tax positions.

G. EXPENSES

The Fund will pay all expenses directly related to its operations.

H. FOREIGN CURRENCY

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

The books and records of the Fund are maintained in U.S. dollars. Foreign currencies, investments and other assets and liabilities are translated into U.S. dollars at the exchange rates prevailing at the end of the period. Purchases and sales of investments and items of income and expense are translated on the respective dates of such transactions. Unrealized gains and losses on assets and liabilities, other than investments in securities, which result from changes in foreign currency exchange rates have been included in "Net change in unrealized appreciation (depreciation) on foreign currency translation" on the Statement of Operations. Unrealized gains and losses on investments in securities which result from changes in foreign exchange rates are included with fluctuations arising from changes in market price and are shown in "Net change in unrealized appreciation (depreciation) on investments" on the Statement of Operations. Net realized foreign currency gains and losses include the effect of changes in exchange rates between trade date and settlement date on investment security transactions, foreign currency transactions and interest and dividends received and are shown in "Net realized gain (loss) on foreign currency transactions" on the Statement of Operations. The portion of foreign currency gains and losses related to fluctuation in exchange rates between the initial purchase settlement date and subsequent sale trade date is included in "Net realized gain (loss) on investments" on the Statement of Operations.

I. OFFSETTING ON THE STATEMENT OF ASSETS AND LIABILITIES

Offsetting assets and liabilities require entities to disclose both gross and net information about instruments and transactions eligible for offset on the Statements of Assets and Liabilities, and disclose instruments and transactions subject to master netting or similar agreements. These disclosure requirements are intended to help investors and other financial statement users better assess the effect or potential effect of offsetting arrangements on a fund's financial position. The transactions subject to offsetting disclosures are derivative instruments, repurchase agreements and reverse repurchase agreements, and securities borrowing and securities lending transactions.

For financial reporting purposes, the Fund does not offset financial assets and financial liabilities that are subject to master netting arrangements ("MNAs") or similar agreements on the Statement of Assets and Liabilities. MNAs provide the right, in the event of default (including bankruptcy and insolvency), for the non-defaulting counterparty to liquidate the collateral and calculate the net exposure to the defaulting party or request additional collateral.

At May 31, 2017, derivative assets and liabilities (by type) on a gross basis are as follows:

	GROSS AMOUNTS OF RECOGNIZED LIABILITIES	GROSS AMOUNTS OFFSET IN THE STATEMENT OF ASSETS AND LIABILITIES	NET AMOUNTS OF LIABILITIES PRESENTED IN THE STATEMENT OF ASSETS AND LIABILITIES	GROSS AMOUNTS IN THE STATEMENT OF ASSETS AND LIABILITIES
				----- FINANCIAL INSTRUMENTS
Interest Rate Swap Contracts	\$(1,899,353)	\$ --	\$ (1,899,353)	\$ --

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
MAY 31, 2017 (UNAUDITED)

J. NEW AND AMENDED FINANCIAL REPORTING RULES AND FORMS

On October 13, 2016, the SEC adopted new rules and forms, and amended existing rules and forms. The new and amended rules and forms are intended to modernize the reporting of information provided by funds and to improve the quality and type of information that funds provide to the SEC and investors. The new and amended rules and forms will be effective for the First Trust funds, including the Fund, for reporting periods beginning on and after June 1, 2018. Management is evaluating the new and amended rules and forms to determine the impact to the Fund.

K. NEW ACCOUNTING PRONOUNCEMENT

In December 2016, FASB released Accounting Standards Update ("ASU") 2016-19 that makes technical changes to various sections of the ASC, including Topic 820, Fair Value Measurement. The changes to Topic 820 are intended to clarify the difference between a valuation approach and a valuation technique. The changes to ASC 820-10-50-2 require a reporting entity to disclose, for Level 2 and Level 3 fair value measurements, a change in either or both a valuation approach and a valuation technique and the reason(s) for the change. The changes to Topic 820 are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016. At this time, management is evaluating the implications of the ASU and has not yet determined its impact on the financial statements and disclosures.

4. INVESTMENT ADVISORY FEE, AFFILIATED TRANSACTIONS AND OTHER FEE ARRANGEMENTS

First Trust, the investment advisor to the Fund, is a limited partnership with one limited partner, Grace Partners of DuPage L.P., and one general partner, The Charger Corporation. The Charger Corporation is an Illinois corporation controlled by James A. Bowen, Chief Executive Officer of First Trust. First Trust is responsible for the ongoing monitoring of the Fund's investment portfolio, managing the Fund's business affairs and providing certain administrative services necessary for the management of the Fund. For these investment management services, First Trust is entitled to a monthly fee calculated at an annual rate of 1.00% of the Fund's Managed Assets (the average daily total asset value of the Fund minus the sum of the Fund's liabilities other than the principal amount of borrowings). First Trust also provides fund reporting services to the Fund for a flat annual fee in the amount of \$9,250.

EIP serves as the Fund's sub-advisor and manages the Fund's portfolio subject to First Trust's supervision. The Sub-Advisor receives a monthly sub-advisory fee calculated at an annual rate of 0.50% of the Fund's Managed Assets that is paid by First Trust out of its investment advisory fee.

During the year ended November 30, 2016, the Fund received a payment from the sub-advisor of \$1,600 in connection with a trade error.

First Trust Capital Partners, LLC, an affiliate of First Trust, owns, through a wholly-owned subsidiary, a 15% ownership interest in each of EIP and EIP

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

Partners, LLC, an affiliate of the EIP.

BNY Mellon Investment Servicing (US) Inc. ("BNYM IS") serves as the Fund's transfer agent in accordance with certain fee arrangements. As transfer agent, BNYM IS is responsible for maintaining shareholder records for the Fund. The Bank of New York Mellon ("BNYM") serves as the Fund's administrator, fund accountant, and custodian in accordance with certain fee arrangements. As administrator and fund accountant, BNYM is responsible for providing certain administrative and accounting services to the Fund, including maintaining the Fund's books of account, records of the Fund's securities transactions, and certain other books and records. As custodian, BNYM is responsible for custody of the Fund's assets. BNYM IS and BNYM are subsidiaries of The Bank of New York Mellon Corporation, a financial holding company.

Each Trustee who is not an officer or employee of First Trust, any sub-advisor or any of their affiliates ("Independent Trustees") is paid a fixed annual retainer that is allocated equally among each fund in the First Trust Fund Complex. Each Independent Trustee is also paid an annual per fund fee that varies based on whether the fund is a closed-end or other actively managed fund, or is an index fund.

Additionally, the Lead Independent Trustee and the Chairmen of the Audit Committee, Nominating and Governance Committee and Valuation Committee are paid annual fees to serve in such capacities, with such compensation allocated pro rata among each fund in the First Trust Fund Complex based on net assets. Independent Trustees are reimbursed for travel and out-of-pocket expenses in connection with all meetings. The Lead Independent Trustee and Committee Chairmen rotate every three years. The officers and "Interested" Trustee receive no compensation from the Fund for acting in such capacities.

5. PURCHASES AND SALES OF SECURITIES

The cost of purchases and proceeds from sales of investments, excluding short-term investments, for the six months ended May 31, 2017, were \$94,771,629 and \$112,531,396, respectively.

Page 20

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF) MAY 31, 2017 (UNAUDITED)

6. DERIVATIVE TRANSACTIONS

Written option activity for the Fund was as follows:

WRITTEN OPTIONS	NUMBER OF CONTRACTS	PREMIUMS
Options outstanding at November 30, 2016.....	23,800	\$ 1,367,185
Options Written.....	78,110	4,223,762
Options Expired.....	(52,760)	(3,130,184)
Options Exercised.....	(9,882)	(676,732)
Options Closed.....	(3,650)	(200,077)

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

Options outstanding at May 31, 2017.....	35,618	\$ 1,583,954
	=====	=====

The following table presents the types of derivatives held by the Fund at May 31, 2017, the primary underlying risk exposure and the location of these instruments as presented on the Statement of Assets and Liabilities.

DERIVATIVE INSTRUMENTS	RISK EXPOSURE	ASSET DERIVATIVES		LIABILITIES
		STATEMENT OF ASSETS AND LIABILITIES LOCATION	VALUE	STATEMENT OF ASSETS AND LIABILITIES LOCATION
Written Options	Equity Risk	--	--	Options written,
Interest Rate Swap Agreement	Interest Rate Risk	--	--	Swap contracts,

The following table presents the amount of net realized gain (loss) and change in net unrealized appreciation (depreciation) recognized for the six months ended May 31, 2017, on derivative instruments, as well as the primary underlying risk exposure associated with each instrument.

STATEMENT OF OPERATIONS LOCATION

EQUITY RISK EXPOSURE

Net realized gain (loss) on written options \$ 2,692,946

Net change in unrealized appreciation
(depreciation) on written options 433,809

INTEREST RATE RISK EXPOSURE

Net realized gain (loss) on swap contracts (542,071)

Net change in unrealized appreciation
(depreciation) on swap contracts 251,530

The average volume of interest rate swaps was \$72,950,000 for the six months ended May 31, 2017.

The Fund does not have the right to offset financial assets and financial liabilities related to option contracts on the Statement of Assets and Liabilities.

7. BORROWINGS

The Fund has a committed facility agreement with The Bank of Nova Scotia ("Scotia"). The maximum commitment amount is \$130,000,000. The borrowing rate is the 1-month LIBOR plus 85 basis points. Under the facility, the Fund pays a commitment fee of 0.15% when the undrawn amount of such facility is greater than 50% of the maximum commitment. The average amount outstanding under the facility for the six months ended May 31, 2017 was \$123,576,923, with a weighted average interest rate of 1.72%. As of May 31, 2017, the Fund had outstanding borrowings of \$124,500,000 under this committed facility agreement. The high and low annual interest rates for the six months ended May 31, 2017, were 1.91% and 1.48%, respectively. The interest rate at May 31, 2017 was 1.91%.

8. INDEMNIFICATION

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

The Fund has a variety of indemnification obligations under contracts with its service providers. The Fund's maximum exposure under these arrangements is unknown. However, the Fund has not had prior claims or losses pursuant to these contracts and expects the risk of loss to be remote.

Page 21

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF) MAY 31, 2017 (UNAUDITED)

9. INDUSTRY CONCENTRATION RISK

The Fund invests at least 80% of its Managed Assets in securities issued by Energy Infrastructure Companies. Given this industry concentration, the Fund is more susceptible to adverse economic or regulatory occurrences affecting that industry than an investment company that is not concentrated in a single industry. Energy Infrastructure Company issuers may be subject to a variety of factors that may adversely affect their business or operations, including high interest costs in connection with capital construction programs, high leverage costs associated with environmental and other regulations, the effects of economic slowdown, surplus capacity, increased competition from other providers of services, uncertainties concerning the availability of fuel at reasonable prices, the effects of energy conservation policies and other factors.

10. SUBSEQUENT EVENTS

Management has evaluated the impact of all subsequent events to the Fund through the date the financial statements were issued and has determined that there was the following subsequent event:

On June 20, 2017, the Fund declared a distribution of \$0.11 per share to Common Shareholders of record on July 6, 2017, payable July 17, 2017.

Effective June 26, 2017, the Fund transferred its committed facility agreement with Scotia to a credit agreement with Scotia. The credit agreement provides for a secured line of credit for the Fund where Fund assets are pledged against advances made to the Fund. Under the requirements of the 1940 Act, the Fund, immediately after any such borrowings, must have an "asset coverage" of at least 300% (33-1/3% of the Fund's total assets after borrowings). Under the credit agreement, the maximum commitment amount remains \$130,000,000, and the borrowing rate remains at the 1-month LIBOR plus 85 basis points. Under the credit agreement, the Fund pays a commitment fee of 0.25% when the loan balance is less than 75% of the maximum commitment. As of June 26, 2017, the Fund's loan balance was \$118,500,000.

Page 22

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

ADDITIONAL INFORMATION

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF) MAY 31, 2017 (UNAUDITED)

DIVIDEND REINVESTMENT PLAN

If your Common Shares are registered directly with the Fund or if you hold your Common Shares with a brokerage firm that participates in the Fund's Dividend Reinvestment Plan (the "Plan"), unless you elect, by written notice to the Fund, to receive cash distributions, all dividends, including any capital gain distributions, on your Common Shares will be automatically reinvested by BNY Mellon Investment Servicing (US) Inc. (the "Plan Agent"), in additional Common Shares under the Plan. If you elect to receive cash distributions, you will receive all distributions in cash paid by check mailed directly to you by the Plan Agent, as the dividend paying agent.

If you decide to participate in the Plan, the number of Common Shares you will receive will be determined as follows:

- (1) If Common Shares are trading at or above net asset value ("NAV") at the time of valuation, the Fund will issue new shares at a price equal to the greater of (i) NAV per Common Share on that date or (ii) 95% of the market price on that date.
- (2) If Common Shares are trading below NAV at the time of valuation, the Plan Agent will receive the dividend or distribution in cash and will purchase Common Shares in the open market, on the NYSE or elsewhere, for the participants' accounts. It is possible that the market price for the Common Shares may increase before the Plan Agent has completed its purchases. Therefore, the average purchase price per share paid by the Plan Agent may exceed the market price at the time of valuation, resulting in the purchase of fewer shares than if the dividend or distribution had been paid in Common Shares issued by the Fund. The Plan Agent will use all dividends and distributions received in cash to purchase Common Shares in the open market within 30 days of the valuation date except where temporary curtailment or suspension of purchases is necessary to comply with federal securities laws. Interest will not be paid on any uninvested cash payments.

You may elect to opt-out of or withdraw from the Plan at any time by giving written notice to the Plan Agent, or by telephone at (866) 340-1104, in accordance with such reasonable requirements as the Plan Agent and the Fund may agree upon. If you withdraw or the Plan is terminated, you will receive a certificate for each whole share in your account under the Plan, and you will receive a cash payment for any fraction of a share in your account. If you wish, the Plan Agent will sell your shares and send you the proceeds, minus brokerage commissions.

The Plan Agent maintains all Common Shareholders' accounts in the Plan and gives written confirmation of all transactions in the accounts, including information you may need for tax records. Common Shares in your account will be held by the Plan Agent in non-certificated form. The Plan Agent will forward to each participant any proxy solicitation material and will vote any shares so held only in accordance with proxies returned to the Fund. Any proxy you receive will include all Common Shares you have received under the Plan.

There is no brokerage charge for reinvestment of your dividends or distributions in Common Shares. However, all participants will pay a pro rata share of

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

brokerage commissions incurred by the Plan Agent when it makes open market purchases.

Automatically reinvesting dividends and distributions does not mean that you do not have to pay income taxes due upon receiving dividends and distributions. Capital gains and income are realized although cash is not received by you. Consult your financial advisor for more information.

If you hold your Common Shares with a brokerage firm that does not participate in the Plan, you will not be able to participate in the Plan and any dividend reinvestment may be effected on different terms than those described above.

The Fund reserves the right to amend or terminate the Plan if in the judgment of the Board of Trustees the change is warranted. There is no direct service charge to participants in the Plan; however, the Fund reserves the right to amend the Plan to include a service charge payable by the participants. Additional information about the Plan may be obtained by writing BNY Mellon Investment Servicing (US) Inc., 301 Bellevue Parkway, Wilmington, Delaware 19809.

PROXY VOTING POLICIES AND PROCEDURES

A description of the policies and procedures that the Fund uses to determine how to vote proxies and information on how the Fund voted proxies relating to portfolio investments during the most recent 12-month period ended June 30 is available (1) without charge, upon request, by calling (800) 988-5891; (2) on the Fund's website located at <http://www.ftportfolios.com>; and (3) on the Securities and Exchange Commission's ("SEC") website located at <http://www.sec.gov>.

Page 23

ADDITIONAL INFORMATION (CONTINUED)

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
MAY 31, 2017 (UNAUDITED)

PORTFOLIO HOLDINGS

The Fund files its complete schedule of portfolio holdings with the SEC for the first and third quarters of each fiscal year on Form N-Q. The Fund's Form N-Qs are available (1) by calling (800) 988-5891; (2) on the Fund's website located at <http://www.ftportfolios.com>; (3) on the SEC's website at <http://www.sec.gov>; and (4) for review and copying at the SEC's Public Reference Room ("PRR") in Washington, DC. Information regarding the operation of the PRR may be obtained by calling (800) SEC-0330.

SUBMISSION OF MATTERS TO A VOTE OF SHAREHOLDERS

The Fund held its Annual Meeting of Shareholders (the "Annual Meeting") on April 24, 2017. At the Annual Meeting, Robert F. Keith was elected by the Common Shareholders of the First Trust Energy Infrastructure Fund as a Class I Trustee for a three-year term expiring at the Fund's Annual Meeting of Shareholders in

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

2020. The number of votes cast for Mr. Keith was 15,503,908, the number of votes against was 282,146 and the number of broker non-votes was 1,764,182. James A. Bowen, Richard E. Erickson, Thomas R. Kadlec, and Niel B. Nielson are the other current and continuing Trustees.

RISK CONSIDERATIONS

Risks are inherent in all investing. The following summarizes some, but not all, of the risks that should be considered for the Fund. For additional information about the risks associated with investing in the Fund, please see the Fund's prospectus and statement of additional information, as well as other Fund regulatory filings.

CURRENCY RISK: The value of securities denominated or quoted in foreign currencies may be adversely affected by fluctuations in the relative currency exchange rates and by exchange control regulations. The Fund's investment performance may be negatively affected by a devaluation of a currency in which the Fund's investments are denominated or quoted. Further, the Fund's investment performance may be significantly affected, either positively or negatively, by currency exchange rates because the U.S. dollar value of securities denominated or quoted in another currency will increase or decrease in response to changes in the value of such currency in relation to the U.S. dollar. While certain of the Fund's non-U.S. dollar-denominated securities may be hedged into U.S. dollars, hedging may not alleviate all currency risks.

DERIVATIVES RISK: The Fund may enter into total return swaps, credit default swaps or other types of swaps, options, forwards and combinations thereof and related derivatives. These transactions generally provide for the transfer from one counterparty to another of certain risks inherent in the ownership of a financial asset such as a common stock or debt instrument. Such risks include, among other things, the risk of default and insolvency of the obligor of such asset, the risk that the credit of the obligor or the underlying collateral will decline or the risk that the common stock of the underlying issuer will decline in value. The Fund's ability to successfully use hedging and interest rate derivative transactions depends on the Sub-Advisor's ability to predict pertinent market movements, which cannot be assured. Thus, the use of derivatives for hedging and interest rate management purposes may result in losses greater than if they had not been used, may require the Fund to sell or purchase portfolio securities at inopportune times or for prices other than current market values, may limit the amount of appreciation the Fund can realize on an investment, or may cause the Fund to hold a security that it might otherwise sell. Additionally, amounts paid by the Fund as premiums and cash or other assets held in margin accounts with respect to hedging and strategic transactions are not otherwise available to the Fund for investment purposes. As the writer (seller) of a covered call option, the Fund forgoes, during the option's life, the opportunity to profit from increases in the market value of the security covering the call option above the sum of the premium and the strike price of the call, but has retained the risk of loss should the price of the underlying security decline. The writer (seller) of an option has no control over the time when it may be required to fulfill its obligation as a writer (seller) of the option. Once an option writer (seller) has received an exercise notice, it cannot effect a closing purchase transaction in order to terminate its obligation under the option and must deliver the underlying security at the exercise price.

ENERGY INFRASTRUCTURE COMPANIES RISK: The Fund invests in Energy Infrastructure Companies and is subject to certain risks inherent in investing in these types of securities. Energy Infrastructure Companies may be directly affected by energy commodity prices, especially those Energy Infrastructure Companies which own the underlying energy commodity. A decrease in the production or availability of natural gas, natural gas liquids ("NGLs"), crude oil, coal or other energy commodities or a decrease in the volume of such commodities

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

available for transportation, processing, storage or distribution may adversely impact the financial performance of Energy Infrastructure Companies. Energy Infrastructure Companies are subject to significant federal, state and local government regulation in virtually every aspect of their operations, including how facilities are constructed, maintained and operated, environmental and safety controls, and the prices they may charge for products and services. Various governmental authorities have the power to enforce compliance with these regulations and the permits issued under them and violators are subject to administrative, civil and criminal penalties, including civil fines, injunctions or both. Stricter laws, regulations or enforcement policies could be enacted in the future which would likely increase compliance costs and may adversely affect the financial performance of Energy Infrastructure Companies. Natural disasters, such as hurricanes in the Gulf of Mexico, also may impact Energy Infrastructure Companies.

Page 24

ADDITIONAL INFORMATION (CONTINUED)

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF) MAY 31, 2017 (UNAUDITED)

Certain Energy Infrastructure Companies are subject to the imposition of rate caps, increased competition due to deregulation, the difficulty in obtaining an adequate return on invested capital or in financing large construction projects, the limitations on operations and increased costs and delays attributable to environmental considerations, and the capital market's ability to absorb utility debt. In addition, taxes, government regulation, international politics, price and supply fluctuations, volatile interest rates and energy conservation may cause difficulties for these companies. Such issuers have been experiencing certain of these problems to varying degrees.

EQUITY SECURITIES RISK: Because the Fund invests in equity securities, the value of the Fund's shares will fluctuate with changes in the value of these equity securities. Equity securities prices fluctuate for several reasons, including changes in investors' perceptions of the financial condition of an issuer or the general condition of the relevant stock market, such as market volatility, or when political or economic events affecting the issuers occur. In addition, common stock prices may be particularly sensitive to rising interest rates, as the cost of the capital rises and borrowing costs increase.

INDUSTRY CONCENTRATION RISK: The Fund invests at least 80% of its Managed Assets in securities issued by Energy Infrastructure Companies. Given this industry concentration, the Fund is more susceptible to adverse economic or regulatory occurrences affecting that industry than an investment company that is not concentrated in a single industry. Energy Infrastructure Company issuers may be subject to a variety of factors that may adversely affect their business or operations, including high interest costs in connection with capital construction programs, high leverage costs associated with environmental and other regulations, the effects of economic slowdown, surplus capacity, increased competition from other providers of services, uncertainties concerning the availability of fuel at reasonable prices, the effects of energy conservation policies and other factors.

INVESTMENT AND MARKET RISK: An investment in the Fund's Common Shares is subject

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

to investment risk, including the possible loss of the entire principal invested. An investment in Common Shares represents an indirect investment in the securities owned by the Fund. The value of these securities, like other market investments, may move up or down, sometimes rapidly and unpredictably. Common Shares at any point in time may be worth less than the original investment, even after taking into account the reinvestment of Fund dividends and distributions. Security prices can fluctuate for several reasons including the general condition of the securities markets, or when political or economic events affecting the issuers occur. When the Advisor or Sub-Advisor determines that it is temporarily unable to follow the Fund's investment strategy or that it is impractical to do so (such as when a market disruption event has occurred and trading in the securities is extremely limited or absent), the Fund may take temporary defensive positions.

LEVERAGE RISK: The use of leverage results in additional risks and can magnify the effect of any losses. The funds borrowed pursuant to a leverage borrowing program constitute a substantial lien and burden by reason of their prior claim against the income of the Fund and against the net assets of the Fund in liquidation. If the Fund is not in compliance with certain credit facility provisions, the Fund may not be permitted to declare dividends or other distributions.

MLP RISK: An investment in MLP units involves risks which differ from an investment in common stock of a corporation. Holders of MLP units have limited control and voting rights on matters affecting the partnership. In addition, there are certain tax risks associated with an investment in MLP units and conflicts of interest exist between common unit holders and the general partner, including those arising from incentive distribution payments.

NON-U.S. RISK: The Fund may invest a portion of its assets in the equity securities of issuers domiciled in jurisdictions other than the U.S. Investments in the securities and instruments of non-U.S. issuers involve certain considerations and risks not ordinarily associated with investments in securities and instruments of U.S. issuers. Non-U.S. companies are not generally subject to uniform accounting, auditing and financial standards and requirements comparable to those applicable to U.S. companies. Non-U.S. securities exchanges, brokers and listed companies may be subject to less government supervision and regulation than exists in the United States. Dividend and interest income may be subject to withholding and other non-U.S. taxes, which may adversely affect the net return on such investments. A related risk is that there may be difficulty in obtaining or enforcing a court judgment abroad.

QUALIFIED DIVIDEND INCOME TAX RISK: There can be no assurance as to what portion of the distributions paid to the Fund's Common Shareholders will consist of tax-advantaged qualified dividend income. Certain distributions designated by the Fund as derived from qualified dividend income will be taxed in the hands of non-corporate Common Shareholders at the rates applicable to long-term capital gains, provided certain holding period and other requirements are satisfied by both the Fund and the Common Shareholders. Additional requirements apply in determining whether distributions by foreign issuers should be regarded as qualified dividend income. Certain investment strategies of the Fund will limit the Fund's ability to meet these requirements and consequently will limit the amount of qualified dividend income received and distributed by the Fund. A change in the favorable provisions of the federal tax laws with respect to qualified dividends may result in a widespread reduction in announced dividends and may adversely impact the valuation of the shares of dividend-paying companies.

ADDITIONAL INFORMATION (CONTINUED)

FIRST TRUST ENERGY INFRASTRUCTURE FUND (FIF)
MAY 31, 2017 (UNAUDITED)

RESTRICTED SECURITIES RISK: The Fund may invest in unregistered or otherwise restricted securities. The term "restricted securities" refers to securities that are unregistered or are held by control persons of the issuer and securities that are subject to contractual restrictions on their resale. As a result, restricted securities may be more difficult to value and the Fund may have difficulty disposing of such assets either in a timely manner or for a reasonable price. In order to dispose of an unregistered security, the Fund, where it has contractual rights to do so, may have to cause such security to be registered. A considerable period may elapse between the time the decision is made to sell the security and the time the security is registered so that the Fund could sell it. Contractual restrictions on the resale of securities vary in length and scope and are generally the result of a negotiation between the issuer and acquirer of the securities. The Fund would, in either case, bear market risks during that period.

Page 26

This Page Left Blank Intentionally.

This Page Left Blank Intentionally.

FIRST TRUST

INVESTMENT ADVISOR

First Trust Advisors L.P.
120 E. Liberty Drive, Suite 400
Wheaton, IL 60187

INVESTMENT SUB-ADVISOR

Energy Income Partners, LLC
10 Wright Street
Westport, CT 06880

TRANSFER AGENT

BNY Mellon Investment Servicing (US) Inc.
301 Bellevue Parkway
Wilmington, DE 19809

ADMINISTRATOR,

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

FUND ACCOUNTANT,
AND CUSTODIAN
The Bank of New York Mellon
101 Barclay Street, 20th Floor
New York, NY 10286

INDEPENDENT REGISTERED
PUBLIC ACCOUNTING FIRM
Deloitte & Touche LLP
111 S. Wacker Drive
Chicago, IL 60606

LEGAL COUNSEL
Chapman and Cutler LLP
111 W. Monroe Street
Chicago, IL 60603

[BLANK BACK COVER]

ITEM 2. CODE OF ETHICS.

Not applicable.

ITEM 3. AUDIT COMMITTEE FINANCIAL EXPERT.

Not applicable.

ITEM 4. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

Not applicable.

ITEM 5. AUDIT COMMITTEE OF LISTED REGISTRANTS.

Not applicable.

ITEM 6. INVESTMENTS.

(a) Schedule of Investments in securities of unaffiliated issuers as of the close of the reporting period is included as part of the report to shareholders filed under Item 1 of this form.

(b) Not applicable.

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

Not applicable.

ITEM 8. PORTFOLIO MANAGERS OF CLOSED-END MANAGEMENT INVESTMENT COMPANIES.

(a) Not applicable.

(b) Not applicable.

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

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

Not applicable.

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

There have been no material changes to the procedures by which the shareholders may recommend nominees to the Registrant's board of trustees, where those changes were implemented after the Registrant last provided disclosure in response to the requirements of Item 407(c)(2)(iv) of Regulation S-K (17 CFR 229.407) (as required by Item 22(b)(15) of Schedule 14A (17 CFR 240.14a-101)), or this Item.

ITEM 11. CONTROLS AND PROCEDURES.

- (a) The Registrant's principal executive and principal financial officers, or persons performing similar functions, have concluded that the Registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the "1940 Act") (17 CFR 270.30a-3(c))) are effective, as of a date within 90 days of the filing date of the report that includes the disclosure required by this paragraph, based on their evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act (17 CFR 270.30a-3(b)) and Rules 13a-15(b) or 15d-15(b) under the Securities Exchange Act of 1934, as amended (17 CFR 240.13a-15(b) or 240.15d-15(b)).
- (b) There were no changes in the Registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act (17 CFR 270.30a-3(d))) that occurred during the Registrant's second fiscal quarter of the period covered by this report that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting.

ITEM 12. EXHIBITS.

- (a)(1) Not applicable.
- (a)(2) Certifications pursuant to Rule 30a-2(a) under the 1940 Act and Section 302 of the Sarbanes-Oxley Act of 2002 are attached hereto.
- (a)(3) Not applicable.
- (b) Certifications pursuant to Rule 30a-2(b) under the 1940 Act and Section 906 of the Sarbanes-Oxley Act of 2002 are attached hereto.
- (c) Notices to the registrant's common shareholders in accordance with the order under Section 6(c) of the 1940 Act granting an exemption from Section 19(b) of the 1940 Act and Rule 19a-1 under the 1940 Act, dated March 24, 2010. (1)
 - (1) The Fund received exemptive relief from the Securities and Exchange Commission which permits the Fund to make periodic distributions of long-term capital gains as frequently as monthly each taxable year. The relief is conditioned, in part, on an undertaking by the Fund to make the disclosures to the holders of the Fund's common shares, in addition to the information required by Section 19(a) of the 1940 Act and Rule 19a-1 thereunder. The Fund is likewise obligated to file with the SEC the information contained in any such notice to shareholders. In that regard, attached as an exhibit to this filing is a copy of such notice made during the period.

Edgar Filing: FIRST TRUST ENERGY INFRASTRUCTURE FUND - Form N-CSRS

SIGNATURES

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

(registrant) First Trust Energy Infrastructure Fund

By (Signature and Title)* /s/ James M. Dykas

James M. Dykas, President and
Chief Executive Officer
(principal executive officer)

Date: July 11, 2017

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

By (Signature and Title)* /s/ James M. Dykas

James M. Dykas, President and
Chief Executive Officer
(principal executive officer)

Date: July 11, 2017

By (Signature and Title)* /s/ Donald P. Swade

Donald P. Swade, Treasurer,
Chief Financial Officer and
Chief Accounting Officer
(principal financial officer)

Date: July 11, 2017

* Print the name and title of each signing officer under his or her signature.