

ROYAL BANK OF CANADA  
Form 424B2  
February 08, 2018

---

RBC Capital Markets® Filed Pursuant to Rule 424(b)(2)  
Registration Statement No. 333-208507

This pricing supplement amends and restates the pricing supplement filed on January 28, 2018, solely to correct the security identification (CUSIP) number.

Amendment No. 1  
Dated February 7, 2018  
To the Pricing  
Supplement Dated \$1,538,000  
January 26, 2018, the Direct Investment Notes  
Product Prospectus Linked to 20 Common Equity Securities  
Supplement ERN-ES-1 Selected from the RBC Capital Markets Top 30  
Dated January 14, 2016, Global Ideas for 2018 due February 7, 2019  
Prospectus Supplement Royal Bank of Canada  
Dated January 8, 2016,  
and Prospectus Dated  
January 8, 2016

Royal Bank of Canada is offering the Notes linked 20 common equity securities selected from the RBC Capital Markets Top 30 Global Ideas for 2018 (the “Notes”). These securities will be equally weighted in the basket and are set forth below. The CUSIP number for the Notes is 78013GFR1.

The Notes may pay interest on May 1, 2018, July 31, 2018, October 31, 2018, and the maturity date. The amount of any interest to be paid on the Notes will not be fixed, and will depend upon the total dividends paid on the Reference Stocks during the preceding quarter, as described in more detail below.

On the maturity date, the amount that we will pay to you (the “Redemption Amount”) will depend upon the performance of the Basket over the term of the Notes. As described in more detail below, the Redemption Amount will be less than the price to the public set forth below if the Percentage Amount of the Basket is not at least approximately 102.30%.

We describe in more detail below how the payments on the Notes will be determined.

Issue Date: January 31, 2018

Maturity Date: February 7, 2019

The Notes will not be listed on any securities exchange.

Non-U.S. holders will be subject to withholding on dividend equivalent payments under Section 871(m) of the U.S. Internal Revenue Code. Please see the section below, “Supplemental Discussion of U.S. Federal Income Tax Consequences,” which applies to the Notes.

Investing in the Notes involves a number of risks. See “Risk Factors” beginning on page S-1 of the prospectus supplement dated January 8, 2016, “Risk Factors” beginning on page PS-4 of the product prospectus supplement dated January 14, 2016, and “Selected Risk Considerations” beginning on page P-8 of this pricing supplement.

The Notes will not constitute deposits insured by the Canada Deposit Insurance Corporation, the U.S. Federal Deposit Insurance Corporation or any other Canadian or U.S. government agency or instrumentality.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined that this pricing supplement is truthful or complete. Any representation to the contrary is a criminal offense.

Per Note Total

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Price to public	100.00%	\$1,538,000.00
Underwriting discounts and commissions	1.50%	\$23,070.00
Proceeds to Royal Bank of Canada	98.50%	\$1,514,930.00

The initial estimated value of the Notes as of the date of this pricing supplement is \$977.50 per \$1,000 in principal amount, which is less than the price to public. The actual value of the Notes at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. We describe our determination of the initial estimated value in more detail below.

RBC Capital Markets, LLC, which we refer to as RBCCM, acting as agent for Royal Bank of Canada, received a commission of \$15.00 per \$1,000 in principal amount of the Notes and used a portion of that commission to allow selling concessions to other dealers of up to \$15.00 per \$1,000 in principal amount of the Notes. The other dealers may forgo, in their sole discretion, some or all of their selling concessions. See “Supplemental Plan of Distribution (Conflicts of Interest)” on below.

We may use this pricing supplement in the initial sale of the Notes. In addition, RBCCM or another of our affiliates may use this pricing supplement in a market-making transaction in the Notes after their initial sale. Unless we or our agent informs the purchaser otherwise in the confirmation of sale, this pricing supplement is being used in a market-making transaction.

RBC Capital Markets, LLC

---

Direct Investment Notes

Linked to 20 Common Equity Securities Selected from  
the RBC Capital Markets Top 30 Global Ideas for  
2018 due February 7, 2019

SUMMARY

The information in this “Summary” section is qualified by the more detailed information set forth in this pricing supplement, the product prospectus supplement, the prospectus supplement, and the prospectus.

Issuer: Royal Bank of Canada (“Royal Bank”)

Issue: Senior Global Medium-Term Notes, Series G

Underwriter: RBC Capital Markets, LLC (“RBCCM”)

The Notes are linked to the value of a basket (the “Basket”) consisting of the common equity securities of 20 publicly traded companies indicated on page P-3 (each, a “Reference Stock,” and collectively, the “Reference Stocks”). The Reference Stocks were derived from RBC Capital Markets’ Top 30 Global Ideas for 2018 as indicated on page P-3. A Top 30 Global Idea was identified as of December 20, 2017 as one of the most attractive investment ideas for 2018 and was rated outperform by RBC Capital Markets’ research analysts. The Reference Stocks are the securities included in the 30 Global Ideas for 2018 that have their primary trading market on a U.S. securities exchange. See the section below, “The Basket.”

Currency: U.S. Dollars

Minimum Investment: \$1,000 and minimum denominations of \$1,000 in excess thereof

Pricing Date: January 26, 2018

Issue Date: January 31, 2018

Valuation Date: February 4, 2019

Payment at Maturity (if held to maturity): The amount that you will receive at maturity for each \$1,000 in principal amount of the Notes will depend upon the performance of the Basket and the dividends paid on the Reference Stocks. The Redemption Amount will equal the product of (a) \$977.50 and (b) the Percentage Amount. As discussed in more detail below, the Percentage Amount must exceed approximately 102.30% in order for you to receive a Redemption Amount per \$1,000 in principal amount of the Notes that exceeds the principal amount. In addition, the Redemption Amount could be substantially less than the principal amount of the Notes.

Percentage Amount: The Percentage Amount will equal an amount, expressed as a percentage and rounded to two decimal places, equal to:

Initial Price: The closing price per share of a Reference Stock on the Pricing Date, as determined by the Calculation Agent, as set forth in the table on the next page.

Final Price: The closing price per share of a Reference Stock on the Valuation Date.

P-2 RBC Capital Markets, LLC

---

## Direct Investment Notes

Linked to 20 Common Equity Securities Selected from  
the RBC Capital Markets Top 30 Global Ideas for  
2018 due February 7, 2019

	Reference Stock Issuer	Ticker	Initial Price	Number of Shares
	Air Lease Corporation	AL	\$50.34	0.9932
	Aptiv PLC	APTV	\$94.48	0.5292
	Broadcom Limited	AVGO	\$250.79	0.1994
	Canadian Natural Resources Limited	CNQ	\$36.03	1.3877
Basket:	Celgene Corporation	CELG	\$105.17	0.4754
	Dollar Tree, Inc.	DLTR	\$115.43	0.4332
	DowDuPont Inc.	DWDP	\$77.02	0.6492
	Facebook, Inc.	FB	\$190.00	0.2632
	Gartner, Inc.	IT	\$142.14	0.3518
	GDS Holdings Limited	GDS	\$27.46	1.8208
	Magna International Inc.	MGA	\$58.98	0.8477
	Netflix, Inc.	NFLX	\$274.60	0.1821
	Parsley Energy, Inc.	PE	\$28.73	1.7403
	Raytheon Company	RTN	\$208.91	0.2393
	ServiceNow, Inc.	NOW	\$149.74	0.3339
	Sun Life Financial Inc.	SLF	\$43.85	1.1403
	The Walt Disney Company	DIS	\$112.19	0.4457
	TransCanada Corporation	TRP	\$46.46	1.0762
	Waste Connections, Inc.	WCN	\$73.22	0.6829
	Xylem Inc.	XYL	\$74.41	0.6720

Component Weights: 1/20 for each Reference Stock (subject to adjustment as provided below).  
Initial Basket Level: The initial level of the Basket shall be deemed to be \$1,000.

The Basket shall initially be deemed to consist of a number of shares of each Reference Stock calculated as follows:

Initial  
Composition of  
the Basket:

- Each Reference Stock shall initially constitute 1/20 of the Basket, with an aggregate value of \$50.00 (\$1,000 divided by 20).
  - Accordingly, initially, the number of shares of each Reference Share in the Basket was calculated by dividing \$50.00 by the Initial Price.
  - The number of shares of each Reference Share initially included in the Basket was determined on the Pricing Date, and is set forth in the table above.
- For example, if the Initial Price of a hypothetical Reference Share is \$25, the Basket will initially be deemed to include 2 shares of that Reference Share (\$50.00 divided by \$25).

P-3 RBC Capital Markets, LLC

---

Direct Investment Notes

Linked to 20 Common Equity Securities Selected from the RBC Capital Markets Top 30 Global Ideas for 2018 due February 7, 2019

Final Basket Level:	The value of the shares (and any other assets) in the Basket as of the close of trading on the Valuation Date, as determined by the Calculation Agent, using the Final Price of each Reference Stock.
Adjustments to the Composition of the Basket:	The Calculation Agent will adjust the number of shares of each Reference Stock in the Basket, as may be needed to reflect stock splits, reverse stock splits, stock dividends, and similar transactions, as discussed in the section of the product supplement, “General Terms of the Notes—Anti-Dilution Adjustments Relating to Equity Securities.” See “Other Terms of Your Notes” on page P-11 of this document.
Interest Payment Dates:	May 1, 2018, July 31, 2018, October 31, 2018, and February 7, 2019 (the maturity date).
Interest Calculation Dates:	April 26, 2018, July 26, 2018, October 26, 2018, and February 4, 2019 (the Valuation Date).
Calculation of Interest Payments:	The amount of each interest payment, if any, will depend upon the amount of dividends paid on each Reference Stock during the Interest Calculation Period preceding each interest payment date, and will equal, for each \$1,000 in principal amount, 97.75% of the sum of the Dividend Amounts for each of the Reference Stocks.
Interest Calculation Period:	The first Interest Calculation Period will commence on the trading day after the Pricing Date and end on the first Interest Calculation Date. Each subsequent Interest Calculation Period will begin on the trading day following an Interest Calculation Date and end on the next Interest Calculation Date. The final Interest Calculation Date will occur on the Valuation Date.
Dividend Amount:	For each Reference Stock, an amount in U.S. dollars equal to (a) \$1,000 divided by the Initial Price of the applicable Reference Stock multiplied by (b) the applicable Component Weight multiplied by (c) 100% of the gross cash distributions (including ordinary and extraordinary dividends) per share of Reference Stock declared by the applicable Reference Stock Issuer where the date that the applicable Reference Stock has commenced trading ex-dividend on its primary U.S. securities exchange as to each relevant distribution occurs during the relevant Interest Calculation Period, as described in more detail below.
Maturity Date:	February 7, 2019, subject to extension for market and other disruptions, as described in the product prospectus supplement dated January 14, 2016.
Term:	Approximately 53 weeks.
Principal at Risk:	The Notes are NOT principal protected. You may lose all or a substantial portion of your principal amount at maturity if the value of the Basket decreases, or does not increase by at least 2.30%, from the Pricing Date to the Valuation Date.
Calculation Agent:	RBCCM
U.S. Tax Treatment:	By purchasing a Note, each holder agrees (in the absence of a change in law, an administrative determination or a judicial ruling to the contrary) to treat the Note as a pre-paid cash-settled contingent income-bearing derivative contract linked to the Basket for U.S. federal income tax purposes. However, the U.S. federal income tax consequences of your investment in the Notes are uncertain and the Internal Revenue Service could assert that the Notes should be taxed in a manner that is different from that described in the preceding sentence. Please see the section below, “Supplemental Discussion

of U.S. Federal Income Tax Consequences,” which applies to the Notes.

P-4 RBC Capital Markets, LLC

---

Direct Investment Notes

Linked to 20 Common Equity Securities Selected from  
the RBC Capital Markets Top 30 Global Ideas for  
2018 due February 7, 2019

- Secondary Market: RBCCM (or one of its affiliates), though not obligated to do so, plans to maintain a secondary market in the Notes after the Issue Date. The amount that you may receive upon sale of your Notes prior to maturity may be less than the principal amount of your Notes.
- Listing: The Notes will not be listed on any securities exchange.
- Clearance and Settlement: DTC global (including through its indirect participants Euroclear and Clearstream, Luxembourg as described under “Description of Debt Securities—Ownership and Book-Entry Issuance” in the prospectus dated January 8, 2016).
- Events of Default: In case an event of default with respect to the Notes will have occurred and be continuing, the amount declared due and payable on the Notes upon any acceleration will be determined by the Calculation Agent and will be an amount of cash equal to the amount payable as described above under the caption “—Payment at Maturity,” calculated as if the date of acceleration were the Valuation Date. The Dividend Amount for each Reference Stock will only include dividends declared and paid through that date.

P-5 RBC Capital Markets, LLC

---

Direct Investment Notes

Linked to 20 Common Equity Securities Selected from  
the RBC Capital Markets Top 30 Global Ideas for  
2018 due February 7, 2019

ADDITIONAL TERMS OF YOUR NOTES

You should read this pricing supplement together with the prospectus dated January 8, 2016, as supplemented by the prospectus supplement dated January 8, 2016 and the product prospectus supplement dated January 14, 2016, relating to our Senior Global Medium-Term Notes, Series G, of which these Notes are a part. Capitalized terms used but not defined in this pricing supplement will have the meanings given to them in the product prospectus supplement. In the event of any conflict, this pricing supplement will control. The Notes vary from the terms described in the product prospectus supplement in several important ways. You should read this pricing supplement carefully.

This pricing supplement, together with the documents listed below, contains the terms of the Notes and supersedes all prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in “Risk Factors” in the prospectus supplement dated January 8, 2016 and “Risk Factors” in the product prospectus supplement dated January 14, 2016, as the Notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisors before you invest in the Notes. You may access these documents on the Securities and Exchange Commission (the “SEC”) website at [www.sec.gov](http://www.sec.gov) as follows (or if that address has changed, by reviewing our filings for the relevant date on the SEC website):

Prospectus dated January 8, 2016:

<http://www.sec.gov/Archives/edgar/data/1000275/000121465916008810/j18160424b3.htm>

Prospectus Supplement dated January 8, 2016:

<http://www.sec.gov/Archives/edgar/data/1000275/000121465916008811/p14150424b3.htm>

Product Prospectus Supplement ERN-ES-1 dated January 14, 2016:

<https://www.sec.gov/Archives/edgar/data/1000275/000114036116047764/form424b5.htm>

Our Central Index Key, or CIK, on the SEC website is 1000275. As used in this pricing supplement, “we,” “us,” or “our” refers to Royal Bank of Canada.

P-6 RBC Capital Markets, LLC

---

## Direct Investment Notes

Linked to 20 Common Equity Securities Selected from  
the RBC Capital Markets Top 30 Global Ideas for  
2018 due February 7, 2019

## HYPOTHETICAL RETURNS AT MATURITY

The following hypothetical examples are provided for illustration purposes only and are hypothetical; they do not purport to be representative of every possible scenario concerning increases or decreases in the value of the Basket and the related effect on the Redemption Amount. The following hypothetical examples illustrate the payment you would receive on the maturity date if you purchased \$1,000 in principal amount of the Notes. Numbers appearing in the examples below have been rounded for ease of analysis. This table does not reflect any interest that may be paid on the Notes.

Percentage Amount	Redemption Amount per \$1,000 in Principal Amount	Percentage Gain (or Loss) per \$1,000 in Principal Amount
140.00%	\$1,368.50	36.85%
130.00%	\$1,270.75	27.08%
120.00%	\$1,173.00	17.30%
110.00%	\$1,075.25	7.53%
102.30% <sup>(1)</sup>	\$1,000.00	0.00%
100.00% <sup>(2)</sup>	\$977.50	-2.25%
90.00%	\$879.75	-12.03%
80.00%	\$782.00	-21.80%
70.00%	\$684.25	-31.58%
60.00%	\$586.50	-41.35%
50.00%	\$488.75	-51.13%
40.00%	\$391.00	-60.90%
30.00%	\$293.25	-70.68%
20.00%	\$195.50	-80.45%
10.00%	\$97.75	-90.23%
0.00%	\$0.00	-100.00%

<sup>(1)</sup> Due to the payment formula set forth above, for you to receive a Redemption Amount greater than the principal amount the Notes, the Percentage Amount must be greater than approximately 102.30%.

<sup>(2)</sup> If the Percentage Amount is not at least approximately 102.30%, you will lose some or all of the principal amount of the Notes.

Please see the sections below, “Selected Risk Considerations—Principal at Risk” and “—The Notes Will Not Reflect the Full Performance of the Reference Stocks, Which Will Negatively Impact Your Return on the Notes.”



Direct Investment Notes

Linked to 20 Common Equity Securities Selected from  
the RBC Capital Markets Top 30 Global Ideas for  
2018 due February 7, 2019

**SELECTED RISK CONSIDERATIONS**

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Reference Stocks. These risks are explained in more detail in the section “Risk Factors” beginning on page PS-4 of the product prospectus supplement. In addition to the risks described in the prospectus supplement and the product prospectus supplement, you should consider the following:

**Principal at Risk** – Investors in the Notes could lose all or a substantial portion of their principal amount if there is a decline in the value of the Basket. Investors will also lose a portion of their principal amount if the Percentage Amount is not at least approximately 102.30%.

**The Notes May Not Pay Interest and Your Return May Be Lower than the Return on a Conventional Debt Security of Comparable Maturity** – There may be no periodic interest payments on the Notes, and any such payments may be less than there would be on a conventional fixed-rate or floating-rate debt security having the same maturity. The amount of each interest payment, if any, will depend upon the amount of dividends paid on each Reference Stock during the Interest Calculation Period preceding each interest payment date. The yield that you will receive on your Notes, which could be negative, may be less than the yield you could earn if you purchased a standard senior debt security of ours with the same maturity date. Your investment may not reflect the full opportunity cost to you when you take into account factors that affect the time value of money.

**The Notes Will Not Reflect the Full Performance of the Reference Stocks, Which Will Negatively Impact Your Return on the Notes** – Because the calculation of the Redemption Amount for each \$1,000 in principal amount reflects the product of the Percentage Amount and \$977.50, the return, if any, on the Notes will not reflect the full performance of the Reference Stocks. Therefore, the yield to maturity based on the methodology for calculating the Redemption Amount will be less than the yield that would be produced if the Reference Stocks were purchased and held for a similar period. Similarly, the interest payments you receive on the Notes will be less than the applicable Dividend Amounts.

**Changes in the Price of One Reference Stock May Be Offset by Changes in the Price of the Other Reference Stocks** – A change in the price of one Reference Stock may not correlate with changes in the price of the other Reference Stocks. The price of one Reference Stock may increase, while the price of the other Reference Stocks may not increase as much, or may even decrease. Therefore, in determining the Percentage Change, increases in the price of one Reference Stock may be moderated, or wholly offset, by lesser increases or decreases in the prices of the other Reference Stocks.

**Payments on the Notes Are Subject to Our Credit Risk, and Changes in Our Credit Ratings Are Expected to Affect the Market Value of the Notes** – The Notes are Royal Bank’s senior unsecured debt securities. As a result, your receipt of all required payments on the Notes will be dependent upon Royal Bank’s ability to repay its obligations as of the applicable payment date. This will be the case even if the value of the Basket increases after the Pricing Date, or if substantial payments are made on the Reference Stocks. No assurance can be given as to what our financial condition will be at any time during the term of the Notes.

**There May Not Be an Active Trading Market for the Notes—Sales in the Secondary Market May Result in Significant Losses** – There may be little or no secondary market for the Notes. The Notes will not be listed on any securities exchange. RBCCM and other affiliates of Royal Bank may make a market for the Notes; however, they are not required to do so. RBCCM or any other affiliate of Royal Bank may stop any market-making activities at any time. Even if a secondary market for the Notes develops, it may not provide significant liquidity or trade at prices advantageous to you. We expect that transaction costs in any secondary market would be high. As a result, the difference between bid and asked prices for your Notes in any secondary market could be substantial.

You Will Not Have Any Rights to the Reference Stocks – As a holder of the Notes, you will not have voting rights or other rights that holders of the Reference Stocks would have. You will have no right to receive shares of the Reference Stocks.

The Historical Performance of the Reference Stocks Should Not Be Taken as an Indication of Their Future Performance – The Final Prices of the Reference Stocks will determine the Redemption Amount. The historical

P-8 RBC Capital Markets, LLC

---

Direct Investment Notes

Linked to 20 Common Equity Securities Selected from  
the RBC Capital Markets Top 30 Global Ideas for  
2018 due February 7, 2019

performance of the Reference Stocks does not necessarily give an indication of their future performance. As a result, it is impossible to predict whether the prices of the Reference Stocks will rise or fall during the term of the Notes. The prices of the Reference Stocks will be influenced by complex and interrelated political, economic, financial and other factors.

· Holders of the Reference Stocks Are Only Entitled to Receive Those Dividends as Each Issuer's Board of Directors May Declare out of Funds Legally Available – Although dividends and distributions on one or more of the Reference Stocks may have historically been declared by the applicable board of directors, they are not required to do so and may reduce or eliminate those dividends in the future. The Dividend Amount of one or more of the Reference Stocks during the term of the Notes may be zero. If the dividends paid on the Reference Stocks are not significant, any interest payments that you receive on the Notes may not be sufficient to provide you with your desired return on the Notes.

· The Initial Estimated Value of the Notes Is Less than the Price to the Public – The initial estimated value set forth on the cover page of this pricing supplement does not represent a minimum price at which we, RBCCM or any of our affiliates would be willing to purchase the Notes in any secondary market (if any exists) at any time. If you attempt to sell the Notes prior to maturity, their market value may be lower than the price you paid for them and the initial estimated value. This is due to, among other things, changes in the value of the Basket, the borrowing rate we pay to issue securities of this kind, and the inclusion in the price to the public of the underwriting discount and the estimated costs relating to our hedging of the Notes. These factors, together with various credit, market and economic factors over the term of the Notes, are expected to reduce the price at which you may be able to sell the Notes in any secondary market and will affect the value of the Notes in complex and unpredictable ways. Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your Notes prior to maturity may be less than your original purchase price, as any such sale price would not be expected to include the underwriting discount and the hedging costs relating to the Notes. In addition to bid-ask spreads, the value of the Notes determined for any secondary market price is expected to be based on the secondary rate rather than the internal funding rate used to price the Notes and determine the initial estimated value. As a result, the secondary price will be less than if the internal funding rate was used. The Notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Notes to maturity.

· The Initial Estimated Value of the Notes on the Cover Page Is an Estimate Only, Calculated as of the Time the Terms of the Notes Were Set – The initial estimated value of the Notes is based on the value of our obligation to make the payments on the Notes, together with the mid-market value of the derivative embedded in the terms of the Notes. See “Structuring the Notes” below. Our estimate is based on a variety of assumptions, including our credit spreads, expectations as to dividends, interest rates and volatility, and the expected term of the Notes. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities may value the Notes or similar securities at a price that is significantly different than we do.

The value of the Notes at any time after the Pricing Date will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the Notes in any secondary market, if any, should be expected to differ materially from the initial estimated value of the Notes.

· Our Business Activities May Create Conflicts of Interest – We and our affiliates expect to engage in trading activities related to the Reference Stocks that are not for the account of holders of the Notes or on their behalf. These trading activities may present a conflict between the holders' interests in the Notes and the interests we and our affiliates will have in their proprietary accounts, in facilitating transactions, including options and other derivatives transactions, for their customers and in accounts under their management. These trading activities, if they influence the prices of the

Reference Stocks, could be adverse to the interests of the holders of the Notes. We and one or more of our affiliates may, at present or in the future, engage in business with the issuers of the Reference Stocks, including making loans to or providing advisory services. These services could include investment banking and merger and acquisition advisory services. These activities may present a conflict between our or one or more of our affiliates' obligations and your interests as a holder of the Notes. Any of these activities by us or one or more of our affiliates may affect the value of the Reference Stocks, and, therefore, the market value of the Notes.

You Must Rely on Your Own Evaluation of the Merits of an Investment Linked to the Reference Stocks – In the ordinary course of their business, RBCCM and our other affiliates have expressed views on the value of the Reference Stocks and/or expected movements in their prices, and may do so in the future. These views or reports may be

P-9 RBC Capital Markets, LLC

---

Direct Investment Notes

Linked to 20 Common Equity Securities Selected from the RBC Capital Markets Top 30 Global Ideas for 2018 due February 7, 2019

communicated to clients of our affiliates. However, these views are subject to change from time to time. Moreover, other professionals who transact business in markets relating to any Reference Stock may at any time have significantly different views from those of our affiliates. For these reasons, you are encouraged to derive information concerning the Reference Stocks from multiple sources, and you should not rely solely on views expressed by us or our affiliates.

**Some Reference Stocks Have Limited Historical Information** – Because three of the Reference Stocks have a limited trading history, your investment in the Notes may involve a greater risk than investing in securities linked to one or more equity securities with more established records of performance.

**The Inclusion of the Reference Stocks in the Basket Does Not Guarantee a Positive Return on the Notes** – There can be no assurance that any Reference Stock, or the Basket in its entirety, will increase in value. The performance of the Reference Stocks may be less than the performance of the equities markets generally, and less than the performance of specific sectors of the equity markets, or other securities in which you may choose to invest. As of the date of this document, the Equity Research Department of RBCCM believes that the prices of the Reference Stocks have the potential to increase during the term of the Notes. However, there can be no assurance that they will in fact do so. Although RBCCM has expressed a positive view as to the Reference Stocks prior to the date of this pricing supplement, its views may change significantly during the term of the Notes. In addition, any positive views of RBCCM's research divisions are separate and apart from the offering of the Notes, and do not constitute investment advice. Our offering of the Notes does not constitute our recommendation or the recommendation of RBCCM or our other affiliates to invest in the Notes or in the Reference Stocks.

**The Reference Stocks Represent Do Not Represent All of the Top 30 Global Ideas** — The 20 Reference Stocks were selected from the Top 30 Global Ideas. These 20 Reference Stocks are the Top Global Ideas that have their primary listing on a U.S. stock exchange. These 20 Reference Stocks may or may not perform as well as the Top 30 Global Ideas in the aggregate, and/or the Top 30 Global Ideas that were not selected as Reference Stocks.

**An Investment in the Notes Is Subject to Risks Relating to Foreign Securities Markets** – Eight of the Reference Stocks are organized outside of the U.S. An investment linked to companies of this type involves particular risks. For example, the relevant foreign markets may be more volatile than the U.S. markets, and market developments may affect these markets differently from the U.S. or other securities markets. Direct or indirect government intervention to stabilize the securities markets outside the U.S., as well as cross-shareholdings in certain companies, may affect trading prices and trading volumes in those markets.

**As Calculation Agent, RBCCM Will Have the Authority to Make Determinations that Could Affect the Value of Your Notes and Your Payment at Maturity** – As calculation agent for your Notes, RBCCM will have discretion in making various determinations that affect your Notes, including determining the Final Prices, the Percentage Amount, the Redemption Amount, the amounts of any interest payments on the Notes, and whether any market disruption events have occurred. The Calculation Agent also has discretion in making certain adjustments relating to mergers and certain other corporate transactions that an issuer of a Reference Stock may undertake. The exercise of this discretion by RBCCM could adversely affect the value of your Notes and may present RBCCM, which is our wholly owned subsidiary, with a conflict of interest.

**Market Disruption Events and Adjustments** – The payments on the Notes are subject to adjustment as described in this pricing supplement and the product prospectus supplement. For a description of what constitutes a market disruption event as well as the consequences of that market disruption event, see “General Terms of the Notes—Market Disruption Events” in the product prospectus supplement.



Direct Investment Notes

Linked to 20 Common Equity Securities Selected from  
the RBC Capital Markets Top 30 Global Ideas for  
2018 due February 7, 2019

**OTHER TERMS OF YOUR NOTES**

**Certain Reorganization Events**

If an issuer of a Reference Stock undergoes a Reorganization Event, as described on PS-16 of the product prospectus supplement dated January 14, 2016 (for example, if it merges with another entity and is not the surviving company), that Reference Stock may be removed from the Basket by the Calculation Agent following the effective date of the Reorganization Event, with the Component Weights of the remaining Reference Stocks increasing proportionately to reflect the relevant weightings of those remaining Reference Stocks at the time of the Reorganization Event.

In order to accomplish the foregoing, the Calculation Agent will determine the value of the shares of the Reference Stock in the Basket that is subject to the Reorganization Event, and will add to the Basket a number of shares of each other Reference Stock that is proportionate to the relative weightings of the Reference Stocks at the time of the Reorganization Event.

In the event of a Reorganization Event, The Calculation Agent will have sole discretion in determining the distribution of shares. In order to determine the value of the Reference Stock that is subject to the Reorganization Event, the Calculation Agent may use its closing price on the last trading day on which it trades prior to the effective date of the relevant transaction, the terms of the transaction that is the subject of the Reorganization Event, or such other commercially reasonable method as it may determine to be appropriate at that time. The weightings of the remaining Reference Stocks at that time, and the number of shares of each to be added to the Basket, will be determined by the Calculation Agent based upon the percentage of the Basket value that they constitute, from their respective closing prices.

**Additional Anti-Dilution Adjustments**

The Calculation Agent will adjust the number of shares of each Reference Stock in the Basket, as it determines may be needed to reflect stock splits, reverse stock splits, stock dividends, and other corporate transactions, which are discussed in the section of the product supplement, “General Terms of the Notes—Anti-Dilution Adjustments Relating to Equity Securities.” For example, if a Reference Stock is subject to a 2-for-1 stock split, the Calculation Agent may determine that, upon the applicable effective date, each one share of that Reference Stock in the Basket shall be deemed to thereafter to represent two shares.

P-11 RBC Capital Markets, LLC

---

Direct Investment Notes

Linked to 20 Common Equity Securities Selected from  
the RBC Capital Markets Top 30 Global Ideas for  
2018 due February 7, 2019

INFORMATION REGARDING THE ISSUET>

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
taxes	155,102	158,679	938,374	38,111	139,636	641,177	39,755											
expense <sup>(3)</sup>																		
<b>(loss), net of income taxes, for the period</b>	\$119,288	\$42,565	\$4,981	\$7,427	\$25,214	\$55,082	\$(45,158)											
<b>assets<sup>(5)</sup></b>																		
current taxes	1.01%	1.01%	1.01%	1.04%	0.99%	0.99%	1.01%											
taxes	5.94%	6.74%	6.52%	6.74%	7.12%	6.84%	6.90%											
investments	12.82%	12.81%	14.12%	12.90%	13.80%	12.84%	12.90%											
taxes	1.86%	1.67%	1.90%	1.73%	1.69%	1.62%	1.65%											
taxes	1.80%	1.88%	2.03%	1.87%	2.00%	1.80%	1.86%											
<b>Financial Information</b>																		
Distributions paid on common stock	\$128,749	\$138,298	\$32,299	\$33,604	\$34,474	\$35,089	\$35,131											
per share	2.62	2.62	0.65	0.65	0.65	0.65	0.65											
period <sup>(6)</sup>	2,235,315	2,136,339	2,235,315	2,212,708	2,328,573	2,461,343	2,136,339											
period <sup>(6)</sup>	2,595,980	2,293,998	2,363,776	2,296,522	2,208,894	2,387,915	2,311,256											
as a percent of total assets	30.9%	30.5%	30.9%	30.2%	29.5%	28.3%	30.5%											
period	(418,421)	(338,892)	(418,421)	(311,939)	(239,363)	(170,043)	(338,892)											
period	1,181,528	1,260,300	1,181,528	1,315,850	1,396,104	1,499,967	1,260,300											
period <sup>(9)</sup>	1,406,724	1,388,683	1,259,521	1,383,798	1,298,263	1,455,299	1,417,581											
share	23.93	23.50	23.93	25.59	26.49	27.97	23.50											
Market value per share	25.86	22.59	25.86	27.70	28.67	28.12	22.59											
Shares outstanding	49,379	53,635	49,379	51,416	52,698	53,635	63,635											

(1) Q1 is the period from December through February. Q2 is the period from March through May. Q3 is the period from June through August. Q4 is the period from September through November.

(2) Leverage costs include interest expense, distributions to preferred stockholders, interest rate swap expenses and other recurring leverage expenses.

(3) Includes taxes paid on net investment income and foreign taxes, if any. Taxes related to realized gains are excluded from the calculation of Distributable Cash Flow ("DCF").

(4) "Net investment income (loss), before income taxes" on the Statement of Operations is adjusted as follows to reconcile to DCF: increased by the return of capital on distributions, the dividends paid in stock and increased liquidation value, the premium on dividends paid in kind, the net premiums on options written and amortization of debt issuance costs; and decreased by realized and unrealized gains (losses) on interest rate swap settlements, distributions received that are excluded for DCF purposes and amortization on certain investments.

(5) Annualized for periods less than one full year.

(6) Includes deferred issuance and offering costs on senior notes and preferred stock.

(7) Computed by averaging month-end values within each period.

(8) Leverage consists of senior notes, preferred stock and outstanding borrowings under credit facilities.

(9) Computed by averaging daily net assets within each period.

2018 Annual Report | November 30, 2018

## Tortoise

### MLP Fund, Inc. (NTG)

#### Fund description

NTG seeks to provide stockholders with a high level of total return with an emphasis on current distributions. NTG invests primarily in midstream energy equities that own and operate a network of pipeline and energy-related logistical infrastructure assets with an emphasis on those that transport, gather, process and store natural gas and natural gas liquids (NGLs). NTG targets midstream energy equities, including MLPs benefiting from U.S. natural gas production and consumption expansion, with minimal direct commodity exposure.

#### Fund performance review

The midstream segment pulled back along with broad energy, as well as from near-term uncertainty around simplification transactions and further evolution of the midstream segment. We believe these transactions will benefit the sector, with improved corporate governance and the removal of incentive distribution rights (IDRs). Average coverage ratios for the fund's portfolio companies has increased from 1.25x in 3Q2017 to 1.37x in 3Q2018 while average leverage decreased from 3.96x in 3Q2017 to 3.91x in 3Q2018. The fund's market-based and NAV-based returns for the fiscal year ending Nov. 30, 2018 were -4.1% and 0.8%, respectively (including the reinvestment of distributions). Comparatively, the Tortoise MLP Index<sup>®</sup> was flat for the same period.

#### Fiscal year-end highlights

Distributions paid per share (fiscal year 2018)	\$1.69
Distributions paid per share (4th quarter 2018)	\$0.4225
Distribution rate (as of 11/30/2018)	12.3%
Quarter-over-quarter distribution increase	0.0%
Year-over-year distribution increase	0.0%
Cumulative distributions paid per share to stockholders since inception in July 2010	\$13.7700
Market-based total return	(4.1)%
NAV-based total return	0.8%
Premium (discount) to NAV (as of 11/30/2018)	(5.2)%

**Unlike the fund return, index return is pre-expenses and taxes.**

**Performance data quoted represents past performance; past performance does not guarantee future results. Like any other stock, total return and market value will fluctuate so that an investment, when sold, may be worth more or less than its original cost. Portfolio composition is subject to change due to ongoing management of the fund. References to specific securities or sectors should not be construed as a recommendation by the fund or its adviser. See Schedule of Investments for portfolio weighting at the end of the fiscal year.**

#### Key asset performance drivers

##### Top five contributors

Energy Transfer Partners, L.P.	Midstream natural gas/natural gas liquids pipeline MLP
Williams Partners L.P.	Midstream gathering and processing MLP
Plains All American Pipeline, L.P.	Midstream crude oil pipeline MLP
Enterprise Products Partners L.P.	Midstream natural gas/natural gas liquids pipeline MLP
ONEOK, Inc.	Midstream natural gas/natural gas liquids pipeline company

##### Performance driver

Acquired by its general partner for 11% premium in simplification transaction
Simplification transaction closed in August and was well received by the market
Expected crude oil production growth from Permian Basin
Delivered steady cash flow and healthy project backlog
Natural gas liquid (NGL) volume growth benefitting integrated pipeline network

##### Bottom five contributors

##### Company type

##### Performance driver

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

EQM Midstream Partners, LP	Midstream natural gas/natural gas liquids pipeline company	Regulatory hurdles with Mountain Valley Pipeline build Weaker than expected earnings tied to storage market fundamentals
Buckeye Partners, L.P	Midstream refined product pipeline MLP	Traded down due to ownership consolidation following closing of simplification transaction
Energy Transfer LP	Midstream natural gas/natural gas liquids pipeline company	Acquisition of WPZ closed in August with WMB trading down following the closing of the transaction
The Williams Companies, Inc.	Midstream gathering and processing C-Corp	Parent company activity and equity offering
Dominion Energy Midstream Partners LP	Midstream natural gas/natural gas liquids pipeline MLP	

(unaudited)

**Tortoise**

7

---

## Tortoise

### MLP Fund, Inc. (NTG) (continued)

#### Fund structure and distribution policy

The fund is structured as a corporation and is subject to federal and state income tax on its taxable income. The fund has adopted a distribution policy in which the Board of Directors considers many factors in determining distributions to stockholders. Over the long term, the fund expects to distribute substantially all of its Distributable cash flow ("DCF") to holders of common stock. The fund's Board of Directors reviews the distribution rate quarterly, and may adjust the quarterly distribution throughout the year. Although the level of distributions is independent of the funds' performance in the short term, the fund expects such distributions to correlate with its performance over time.

#### Distributable cash flow and distributions

DCF is distributions received from investments less expenses. The total distributions received from investments include the amount received as cash distributions from MLPs, paid-in-kind distributions, and dividend and interest payments. Income also includes the premiums received from sales of covered call options, net of amounts paid to buy back out-of-the-money options. The total expenses include current or anticipated operating expenses, leverage costs and current income taxes. Current income taxes include taxes paid on net investment income in addition to foreign taxes, if any. Taxes incurred from realized gains on the sale of investments, expected tax benefits and deferred taxes are not included in DCF.

Income from investments increased approximately 3.6% as compared to 3rd quarter 2018 due primarily to increased premiums received on written covered call options. Operating expenses, consisting primarily of fund advisory fees, increased approximately 1.0% during the quarter due to higher asset-based fees. Leverage costs increased approximately 12.2% as compared to 3rd quarter 2018 due to increased leverage utilization as well as higher interest rates during the quarter. As a result of the changes in income and expenses, DCF increased approximately 2.4% as compared to 3rd quarter 2018. The fund paid a quarterly distribution of \$0.4225 per share, which was equal to the distribution paid in the prior quarter and 4th quarter 2017. The fund has paid cumulative distributions to stockholders of \$13.77 per share since its inception in July 2010.

The Key Financial Data table discloses the calculation of DCF and should be read in conjunction with this discussion. The difference between distributions received from investments in the DCF calculation and total investment income as reported in the Statement of Operations, is reconciled as follows: the Statement of Operations, in conformity with U.S. generally accepted accounting principles ("GAAP"), recognizes distribution income from MLPs, common stock and other investments on their ex-dates, whereas the DCF calculation may reflect distribution income on their pay dates; GAAP recognizes that a significant portion of the cash distributions received from MLPs, common stock and other investments are characterized as a return of capital and therefore excluded from investment income, whereas the DCF calculation includes the return of capital; and distributions received from investments in the DCF calculation include the value of dividends paid-in-kind (additional stock or MLP units), whereas such amounts may not be included as income for GAAP purposes, and includes distributions related to direct investments when the purchase price is reduced in lieu of receiving cash distributions. Net premiums on options written (premiums received less amounts paid to buy back out-of-the-money options) with expiration dates during the fiscal quarter are included in the DCF calculation, whereas GAAP recognizes the net effect of options written as realized and unrealized gains (losses). The treatment of expenses in the DCF calculation also differs from what is reported in the Statement of Operations. In addition to the total operating expenses, including fee waiver, as disclosed in the Statement of Operations, the DCF calculation reflects interest expense, distributions to preferred stockholders, other recurring leverage expenses, as well as taxes paid on net investment income.

"Net Investment Income (Loss), before Income Taxes" on the Statement of Operations is adjusted as follows to reconcile to DCF for YTD and 4th quarter 2018 (in thousands):

	YTD 2018	4th Qtr 2018
Net Investment Loss, before Income Taxes	\$ (28,708)	\$ (5,540)
Adjustments to reconcile to DCF:		
Distributions characterized as		
return of capital	113,947	28,991
Net premiums on options written	1,254	1,254
Other	(1,106 )	126
DCF	\$87,599	\$24,831

#### Leverage

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

The fund's leverage utilization increased by \$60.1 million during 4th quarter 2018 and represented 34.3% of total assets at November 30, 2018. The fund has maintained compliance with its applicable coverage ratios. At year-end, approximately 75% of the leverage cost was fixed, the weighted-average maturity was 3.7 years and the weighted-average annual rate on leverage was 3.88%. These rates will vary in the future as a result of changing floating rates, utilization of the fund's credit facility and as leverage matures or is redeemed.

### Income taxes

During 4th quarter 2018, the fund's deferred tax liability decreased by \$42.4 million to \$68.2 million, primarily as a result of the decrease in value of its investment portfolio. The fund had net realized losses of \$4.2 million during the quarter. As of November 30, 2018, the fund had net operating losses of \$55 million for federal income tax purposes. To the extent that the fund has taxable income in the future that is not offset by net operating losses, it will owe federal and state income taxes. Tax payments can be funded from investment earnings, fund assets, or borrowings.

Please see the Financial Statements and Notes to Financial Statements for additional detail regarding critical accounting policies, results of operations, leverage, taxes and other important fund information.

For further information regarding the calculation of distributable cash flow and distributions to stockholders, as well as a discussion of the tax impact on distributions and results and recent tax reform, please visit [www.tortoiseadvisors.com](http://www.tortoiseadvisors.com).

(unaudited)

8

Tortoise

---

2018 Annual Report | November 30, 2018

**NTG Key Financial Data** (supplemental unaudited information)  
(dollar amounts in thousands unless otherwise indicated)

The information presented below regarding Distributable Cash Flow and Selected Financial Information is supplemental non-GAAP financial information, which the fund believes is meaningful to understanding operating performance. The Distributable Cash Flow Ratios include the functional equivalent of EBITDA for non-investment companies, and the fund believes they are an important supplemental measure of performance and promote comparisons from period-to-period. This information is supplemental, is not inclusive of required financial disclosures (e.g. Total Expense Ratio), and should be read in conjunction with the full financial statements.

	Year Ended November 30,		2017	2018		2017	2018	
	2017	2018	Q4 <sup>(1)</sup>	Q1 <sup>(1)</sup>	Q2 <sup>(1)</sup>	Q3 <sup>(1)</sup>	Q4 <sup>(1)</sup>	
<b>Total Income from Investments</b>								
Distributions and dividends from investments	\$ 108,230	\$ 115,952	\$ 26,506	\$ 26,429	\$ 26,236	\$ 31,413	\$ 31,800	
Dividends paid in kind	—	1,879	—	546	621	644	68	
Premiums on options written	571	1,254	32	—	—	—	1,254	
Total from investments	108,801	119,085	26,538	26,975	26,857	32,057	33,196	
<b>Operating Expenses Before Leverage</b>								
<b>Costs and Current Taxes</b>								
Advisory fees, net of fees waived	14,349	12,863	3,279	3,294	3,054	3,251	3,264	
Other operating expenses	1,292	1,319	312	316	321	330	352	
	15,641	14,182	3,591	3,610	3,375	3,581	3,616	
Distributable cash flow before leverage costs and current taxes	93,160	104,903	22,947	23,365	23,482	28,476	29,524	
Leverage costs <sup>(2)</sup>	16,468	17,304	4,147	4,127	4,197	4,231	4,749	
Current income tax expense <sup>(3)</sup>	—	—	—	—	—	—	—	
<b>Distributable Cash Flow<sup>(4)</sup></b>	\$ 76,692	\$ 87,599	\$ 18,800	\$ 19,238	\$ 19,285	\$ 24,245	\$ 24,831	
<b>Net realized gain (loss), net of income taxes, for the period</b>	\$ 29,189	\$ 46,530	\$ (1,122)	\$ (575)	\$ 9,963	\$ 41,385	\$ (4,200)	
<b>As a percent of average total assets<sup>(5)</sup></b>								
Total from investments	7.14 %	8.11 %	7.69 %	8.01 %	8.29 %	8.60 %	8.60 %	
Operating expenses before leverage costs and current taxes	1.03 %	0.99 %	1.04 %	1.07 %	1.04 %	0.96 %	0.91 %	
Distributable cash flow before leverage costs and current taxes	6.11 %	7.12 %	6.65 %	6.94 %	7.25 %	7.64 %	7.69 %	
<b>As a percent of average net assets<sup>(5)</sup></b>								
Total from investments	12.13 %	13.07 %	13.27 %	12.85 %	13.99 %	13.86 %	13.86 %	
Operating expenses before leverage costs and current taxes	1.75 %	1.60 %	1.80 %	1.72 %	1.76 %	1.55 %	1.42 %	
Leverage costs and current taxes	1.85 %	1.95 %	2.07 %	1.97 %	2.19 %	1.83 %	1.87 %	
Distributable cash flow	8.53 %	9.52 %	9.40 %	9.16 %	10.04 %	10.48 %	9.79 %	
<b>Selected Financial Information</b>								
Distributions paid on common stock	\$ 79,670	\$ 86,693	\$ 19,962	\$ 19,962	\$ 19,997	\$ 20,029	\$ 26,700	
Distributions paid on common stock per share	1.69000	1.6900	0.4225	0.4225	0.4225	0.4225	0.4225	
Total assets, end of period <sup>(6)</sup>	1,327,977	1,506,745	1,327,977	1,298,112	1,338,664	1,651,973	1,506,745	
Average total assets during period <sup>(6)(7)</sup>	1,515,484	1,429,518	1,384,718	1,365,793	1,284,852	1,479,365	1,588,100	
Leverage <sup>(8)</sup>	443,800	517,100	443,800	440,400	443,100	457,000	517,100	
Leverage as a percent of total assets	33.4 %	34.3 %	33.4 %	33.9 %	33.1 %	27.7 %	34.3 %	
Net unrealized appreciation, end of period	24,370	23,424	24,370	70,322	114,138	150,762	23,424	
Net assets, end of period	754,085	915,033	754,085	776,371	802,440	1,077,585	915,033	
Average net assets during period <sup>(9)</sup>	892,196	887,014	802,165	851,387	761,577	917,409	1,018,300	
Net asset value per common share	15.96	14.48	15.96	16.40	16.93	17.05	14.48	
Market value per common share	15.90	13.72	15.90	17.54	18.40	16.27	13.72	
Shares outstanding (000's)	47,247	63,208	47,247	47,330	47,406	63,208	63,208	

Q1 is the period from December through February. Q2 is the period from March through May. Q3 is the period from June through August. Q4 is (1) the period from September through November.

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

- (2) Leverage costs include interest expense, distributions to preferred stockholders and other recurring leverage expenses.  
Includes taxes paid on net investment income and foreign taxes, if any. Taxes related to realized gains are excluded from the calculation of
- (3) Distributable Cash Flow ("DCF").  
"Net investment income (loss), before income taxes" on the Statement of Operations is adjusted as follows to reconcile to DCF: increased by the return of capital on distributions, the dividends paid in stock and increased liquidation value, the premium on dividends paid in kind and
- (4) amortization of debt issuance costs.
- (5) Annualized for periods less than one full year.
- (6) Includes deferred issuance and offering costs on senior notes and preferred stock.
- (7) Computed by averaging month-end values within each period.
- (8) Leverage consists of senior notes, preferred stock and outstanding borrowings under the credit facility.
- (9) Computed by averaging daily net assets within each period.

**Tortoise**

9

---

## Tortoise

### Pipeline & Energy Fund, Inc. (TTP)

#### Fund description

TTP seeks a high level of total return with an emphasis on current distributions paid to stockholders. TTP invests primarily in equity securities of North American pipeline companies that transport natural gas, natural gas liquids (NGLs), crude oil and refined products and, to a lesser extent, in other energy infrastructure companies.

#### Fund performance review

The midstream segment pulled back along with broad energy, as well as from near-term uncertainty around simplification transactions and further evolution of the midstream segment. The fund's market-based and NAV-based returns for the fiscal year ending Nov. 30, 2018 were -7.0% and -4.5%, respectively (including the reinvestment of distributions). Comparatively, the Tortoise North American Pipeline Index<sup>SM</sup> returned 0.7% for the same period.

#### Fiscal year-end highlights

Distributions paid per share (fiscal year 2018)	\$1.63
Distributions paid per share (4th quarter 2018)	\$0.4075
Distribution rate (as of 11/30/2018)	11.4%
Quarter-over-quarter distribution increase	0.0%
Year-over-year distribution increase	0.0%
Cumulative distributions paid per share to stockholders since inception in October 2011	\$11.7275
Market-based total return	(7.0)%
NAV-based total return	(4.5)%
Premium (discount) to NAV (as of 11/30/2018)	(12.0)%

**Please refer to the inside front cover of the report for important information about the fund's distribution policy.**

The fund's covered call strategy, which focuses on independent energy companies that are key pipeline transporters, enabled the fund to generate current income. The notional amount of the fund's covered calls averaged approximately 7.5% of total assets, and their out-of-the-money percentage at the time written averaged approximately 5.4% during the fiscal quarter.

#### Key asset performance drivers

ONEOK, Inc.	Midstream natural gas/natural gas liquids pipeline company	Natural gas liquid (NGL) volume growth benefitting integrated pipeline network
Energy Transfer Partners, L.P.	Midstream natural gas/natural gas liquids pipeline MLP	Acquired by its general partner for 11% premium in simplification transaction
Plains GP Holdings, L.P.	Midstream crude oil pipeline company	Expected crude oil production growth from Permian Basin
Targa Resources Corp.	Midstream gathering and processing company	Permian Basin wet gas volume growth
Tallgrass Energy LP	Midstream natural gas/natural gas liquids pipeline company	Completion of simplification transaction
Enlink Midstream, LLC	Midstream gathering and processing company	Increased uncertainty following strategic transaction with GIP
SemGroup Corporation	Midstream crude oil pipeline company	Concerns regarding high relative leverage
TransCanada Corporation	Midstream natural gas/natural gas liquids pipeline company	Higher leverage causing need for asset divestitures to fund capital projects
Inter Pipeline Ltd.	Midstream crude oil pipeline company	Concerns about ability to execute propane dehydrogenation (PDH) project

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Energy Transfer LP      Midstream natural gas/natural gas liquids      Traded down due to ownership consolidation following closing of  
pipeline company      simplification transaction  
**Unlike the fund return, index return is pre-expenses.**

***Performance data quoted represents past performance; past performance does not guarantee future results. Like any other stock, total return and market value will fluctuate so that an investment, when sold, may be worth more or less than its original cost. Portfolio composition is subject to change due to ongoing management of the fund. References to specific securities or sectors should not be construed as a recommendation by the fund or its adviser. See Schedule of Investments for portfolio weighting at the end of the fiscal year.***

(unaudited)

10

Tortoise

---

2018 Annual Report | November 30, 2018

## Fund structure and distribution policy

The fund is structured to qualify as a Regulated Investment Company ("RIC") allowing the fund to pass-through to shareholders the income and capital gains earned by the fund, thus avoiding double-taxation. To qualify as a RIC, the fund must meet specific income, diversification and distribution requirements. Regarding income, at least 90 percent of the fund's gross income must be from dividends, interest and capital gains. The fund must meet quarterly diversification requirements including the requirement that at least 50 percent of the assets be in cash, cash equivalents or other securities with each single issuer of other securities not greater than 5 percent of total assets. No more than 25 percent of total assets can be invested in any one issuer other than government securities or other RIC's. The fund must also distribute at least 90 percent of its investment company income. RIC's are also subject to excise tax rules which require RIC's to distribute approximately 98 percent of net income and net capital gains to avoid a 4 percent excise tax.

The fund has adopted a distribution policy which is included on the inside front cover of this report. To summarize, the fund intends to distribute an amount closely approximating the total taxable income for the year and, if so determined by the Board, distribute all or a portion of the return of capital paid by portfolio companies during the year. The fund may designate a portion of its distributions as capital gains and may also distribute additional capital gains in the last calendar quarter of the year to meet annual excise distribution requirements. The fund distributes a fixed amount per common share, currently \$0.4075, each quarter to its common shareholders. This amount is subject to change from time to time at the discretion of the Board. Although the level of distributions is independent of the funds' performance in the short term, the fund expects such distributions to correlate with its performance over time.

## Distributable cash flow and distributions

Distributable cash flow ("DCF") is income from investments less expenses. Income from investments includes the amount received as cash or paid-in-kind distributions from common stock, master limited partnerships ("MLPs"), affiliates of MLPs, and pipeline and other energy companies in which the fund invests, and dividend payments on short-term investments. Income also includes the premiums received from sales of covered call options, net of amounts paid to buy back out-of-the-money options. The total expenses include current or anticipated operating expenses and leverage costs.

Income from investments decreased approximately 4.1% as compared to 3rd quarter 2018, primarily due to trading and M&A activity within the fund's portfolio as well as lower premiums on written covered call options during the quarter. Operating expenses, consisting primarily of fund advisory fees, decreased approximately 5.6% during the quarter, primarily due to lower asset-based fees. Leverage costs increased 1.5% as compared to 3rd quarter 2018 primarily as a result of increased interest rates during the quarter. As a result of the changes in income and expenses, DCF decreased approximately 4.7% as compared to 3rd quarter 2018. In addition, the fund had net realized losses on investments of \$0.6 million during 4th quarter 2018. The fund paid a quarterly distribution of \$0.4075 per share, which was unchanged over the prior quarter and 4th quarter 2017. The fund has paid cumulative distributions to stockholders of \$11.7275 per share since its inception in October 2011.

The Key Financial Data table discloses the calculation of DCF and should be read in conjunction with this discussion. The difference between income from investments in the DCF calculation and total investment income as reported in the Statement of Operations, is reconciled as follows: (1) the Statement of Operations, in conformity with U.S. generally accepted accounting principles ("GAAP"), recognizes distributions and dividend income from MLPs, common stock and other investments on their ex-dates, whereas the DCF calculation may reflect distributions and dividend income on their pay dates; (2) GAAP recognizes that a significant portion of the cash distributions received from MLPs, common stock and other investments are characterized as a return of capital and therefore excluded from investment income, whereas the DCF calculation includes the return of capital; (3) income from investments in the DCF calculation includes the value of dividends paid-in-kind (additional stock or units), whereas such amounts may not be included as income for GAAP purposes; and (4) net premiums on options written (premiums received less amounts paid to buy back out-of-the-money options) with expiration dates during the fiscal quarter are included in the DCF calculation, whereas GAAP recognizes the net effect of options written as realized and unrealized gains (losses).

"Net Investment Income (Loss)" on the Statement of Operations is adjusted as follows to reconcile to DCF for YTD and 4th quarter 2018 (in thousands):

	YTD 2018	4th Qtr 2018
Net Investment Loss	\$ (1,506)	\$ (340)
Adjustments to reconcile to DCF:		

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Net premiums on options written	4,808	1,154
Distributions characterized as return of capital	10,316	2,465
Dividends paid in stock	1,471	369
Other	221	66
DCF	\$15,310	\$3,714

### Leverage

The fund's leverage utilization decreased by \$1.0 million during 4th quarter 2018 and represented 29.7% of total assets at November 30, 2018. The fund has maintained compliance with its applicable coverage ratios. At year-end, approximately 63% of the leverage cost was fixed, the weighted-average maturity was 1.5 years and the weighted-average annual rate on leverage was 3.79%. These rates will vary in the future as a result of changing floating rates, utilization of the fund's credit facility and as leverage matures or is redeemed.

Please see the Financial Statements and Notes to Financial Statements for additional detail regarding critical accounting policies, results of operations, leverage and other important fund information.

For further information regarding the calculation of distributable cash flow and distributions to stockholders, as well as a discussion of the tax impact on distributions, please visit [www.tortoiseadvisors.com](http://www.tortoiseadvisors.com).

(unaudited)

**Tortoise**

11

**TTP Key Financial Data** (supplemental unaudited information)  
(dollar amounts in thousands unless otherwise indicated)

The information presented below regarding **Distributable Cash Flow** and **Selected Financial Information** is supplemental non-GAAP financial information, which the fund believes is meaningful to understanding operating performance. The **Distributable Cash Flow Ratios** include the functional equivalent of EBITDA for non-investment companies, and the fund believes they are an important supplemental measure of performance and promote comparisons from period-to-period. This information is supplemental, is not inclusive of required financial disclosures (e.g. Total Expense Ratio), and should be read in conjunction with the full financial statements.

	Year Ended November 30,		2017	2018						
	2017	2018	Q4 <sup>(1)</sup>	Q1 <sup>(1)</sup>	Q2 <sup>(1)</sup>	Q3 <sup>(1)</sup>	Q4 <sup>(1)</sup>			
<b>Total Income from Investments</b>										
Dividends and distributions from investments, net of foreign taxes withheld	\$ 14,711	\$ 14,738	\$ 3,559	\$ 3,498	\$ 3,875	\$ 3,716	\$ 3,716			\$ 3,716
Dividends paid in kind	1,194	1,796	329	397	480	497	422			422
Net premiums on options written	4,503	4,808	967	1,125	1,294	1,235	1,154			1,154
Total from investments	20,408	21,342	4,855	5,020	5,649	5,448	5,225			5,225
<b>Operating Expenses Before Leverage Costs</b>										
Advisory fees, net of fees waived	3,131	2,845	729	732	683	734	696			696
Other operating expenses	573	605	132	149	150	159	147			147
	3,704	3,450	861	881	833	893	843			843
Distributable cash flow before leverage costs	16,704	17,892	3,994	4,139	4,816	4,555	4,378			4,378
Leverage costs <sup>(2)</sup>	2,271	2,582	579	620	636	658	668			668
<b>Distributable Cash Flow<sup>(3)</sup></b>	\$ 14,433	\$ 15,310	\$ 3,415	\$ 3,519	\$ 4,180	\$ 3,897	\$ 3,710			\$ 3,710
<b>Net realized gain (loss) on investments and foreign currency translation, for the period</b>	\$ 2,605	\$ (356)	\$ 354	\$ 532	\$ (1,118)	\$ 826	\$ (596)			\$ (596)
<b>As a percent of average total assets<sup>(4)</sup></b>										
Total from investments	7.09 %	8.29 %	7.28 %	7.70 %	9.03 %	8.16 %	8.29 %			8.29 %
Operating expenses before leverage costs	1.29 %	1.34 %	1.29 %	1.35 %	1.33 %	1.34 %	1.34 %			1.34 %
Distributable cash flow before leverage costs	5.80 %	6.95 %	5.99 %	6.35 %	7.70 %	6.82 %	6.95 %			6.95 %
<b>As a percent of average net assets<sup>(4)</sup></b>										
Total from investments	9.30 %	11.32 %	9.79 %	10.24 %	12.65 %	11.09 %	11.43 %			11.43 %
Operating expenses before leverage costs	1.69 %	1.83 %	1.74 %	1.80 %	1.87 %	1.82 %	1.83 %			1.83 %
Leverage costs	1.04 %	1.37 %	1.17 %	1.26 %	1.42 %	1.34 %	1.46 %			1.46 %
Distributable cash flow	6.57 %	8.12 %	6.88 %	7.18 %	9.36 %	7.93 %	8.12 %			8.12 %
<b>Selected Financial Information</b>										
Distributions paid on common stock	\$ 16,327	\$ 16,327	\$ 4,082	\$ 4,082	\$ 4,081	\$ 4,082	\$ 4,082			\$ 4,082
Distributions paid on common stock per share	1.6300	1.6300	0.4075	0.4075	0.4075	0.4075	0.4075			0.4075
Total assets, end of period <sup>(5)</sup>	259,175	235,259	259,175	245,155	258,764	268,532	235,259			235,259
Average total assets during period <sup>(5)(6)</sup>	288,004	257,585	267,349	264,274	248,147	264,986	252,800			252,800
Leverage <sup>(7)</sup>	69,300	69,800	69,300	69,800	70,100	70,800	69,300			69,300
Leverage as a percent of total assets	26.7 %	29.7 %	26.7 %	28.5 %	27.1 %	26.4 %	29.7 %			29.7 %
Net unrealized depreciation, end of period	(27,789)	(34,897)	(27,789)	(38,233)	(17,798)	(6,280)	(34,897)			(34,897)
Net assets, end of period	188,517	163,202	188,517	173,723	187,444	196,073	163,202			163,202
Average net assets during period <sup>(8)</sup>	219,359	188,518	198,953	198,872	177,138	194,846	183,359			183,359
Net asset value per common share	18.82	16.29	18.82	17.34	18.71	19.58	16.29			16.29
Market value per common share	17.01	14.33	17.01	16.93	17.36	17.73	14.33			14.33
Shares outstanding (000's)	10,016	10,016	10,016	10,016	10,016	10,016	10,016			10,016

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Q1 is the period from December through February. Q2 is the period from March through May. Q3 is the period from June through August. Q4 is (1) the period from September through November.

(2) Leverage costs include interest expense, distributions to preferred stockholders and other recurring leverage expenses.

"Net investment income (loss)" on the Statement of Operations is adjusted as follows to reconcile to Distributable Cash Flow ("DCF"): increased by net premiums on options written, the return of capital on distributions, the dividends paid in stock and increased liquidation value, the

(3) premium on dividends paid in kind and amortization of debt issuance costs.

(4) Annualized for periods less than one full year.

(5) Includes deferred issuance and offering costs on senior notes and preferred stock.

(6) Computed by averaging month-end values within each period.

(7) Leverage consists of senior notes, preferred stock and outstanding borrowings under the revolving credit facility.

(8) Computed by averaging daily net assets within each period.

2018 Annual Report | November 30, 2018

## Tortoise

### Energy Independence Fund, Inc. (NDP)

#### Fund description

NDP seeks a high level of total return with an emphasis on current distributions paid to stockholders. NDP invests primarily in equity securities of upstream North American energy companies that engage in the exploration and production of crude oil, condensate, natural gas and natural gas liquids that generally have a significant presence in North American oil and gas fields, including shale reservoirs.

#### Fund performance review

Upstream oil and gas producers experienced a stark reversal in performance as the last fiscal quarter brought volatility with oil prices falling from a fiscal year high of \$76.41 on Oct. 5 to a low of \$50.22 on Nov. 23, 2018 and ending the fiscal year at \$50.93. Weather played a factor in natural gas prices throughout the fiscal year as they opened at \$2.84 per million British thermal units (MMBtu), quickly rose in January to peak at \$6.24 and fell to a fiscal year low of \$2.49 in February and at the fiscal year ending Nov. 30, 2018 the closing price was \$4.61. Natural gas producers performed slightly better than oil producers during the fiscal year. The fund's market-based and NAV-based returns for the fiscal year ending Nov. 30, 2018 were -15.1% and -18.1%, respectively (including the reinvestment of distributions). Comparatively, the Tortoise North American Oil and Gas Producers Index<sup>SM</sup> returned -10.4% for the same period.

#### Fiscal year-end highlights

Distributions paid per share (fiscal year 2018)	\$1.75
Distributions paid per share (4th quarter 2018)	\$0.4375
Distribution rate (as of 11/30/2018)	19.4%
Quarter-over-quarter distribution increase	0.0%
Year-over-year distribution increase	0.0%
Cumulative distributions paid per share to stockholders since inception in July 2012	\$10.9375
Market-based total return	(15.1)%
NAV-based total return	(18.1)%
Premium (discount) to NAV (as of 11/30/2018)	(0.2)%

The fund utilizes a covered call strategy, which seeks to generate income while reducing overall volatility. The premium income generated from this strategy helped to lower NAV volatility during the quarter. The notional amount of the fund's covered calls averaged approximately 72.1% of total assets and their out-of-the-money percentage at the time written averaged approximately 9.4% during the fiscal quarter.

#### Key asset performance drivers

Energy Transfer Partners, L.P.	Midstream natural gas/natural gas liquids pipeline MLP	Acquired by its general partner for 11% premium in simplification transaction
Plains All American Pipeline, L.P.	Midstream crude oil pipeline MLP	Expected crude oil production growth from Permian Basin
DCP Midstream LP	Midstream gathering and processing MLP	Higher realized natural gas liquids prices and new project announcements
RSP Permian, Inc.	Upstream oil and gas producer	Acquired by Concho Resources Inc. at a premium to existing stock price
Royal Dutch Shell PLC	Upstream oil and gas producer	Diversified asset base, growth potential and increased liquefied natural gas (LNG) demand
Pioneer Natural Resources Company	Upstream liquids producer	Wider Permian basis differentials reducing cash flow
Devon Energy Corporation	Upstream oil and gas producer	Weaker than expected SCOOP/STACK shale plays in central Oklahoma
Continental Resources Inc.	Upstream oil and gas producer	

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Newfield Exploration  
Company

Upstream oil and gas producer

Significant exposure to oil prices that dropped sharply during the fourth quarter  
Weaker than expected SCOOP/STACK shale plays in central Oklahoma  
Poor execution of drilling program resulting in overhaul of management

EQT Corporation

Upstream oil and gas producer

**Unlike the fund return, index return is pre-expenses.**

***Performance data quoted represents past performance: past performance does not guarantee future results. Like any other stock, total return and market value will fluctuate so that an investment, when sold, may be worth more or less than its original cost. Portfolio composition is subject to change due to ongoing management of the fund. References to specific securities or sectors should not be construed as a recommendation by the fund or its adviser. See Schedule of Investments for portfolio weighting at the end of the fiscal year.***

(unaudited)

Tortoise

13

## Tortoise

### Energy Independence Fund, Inc. (NDP) (continued)

#### Fund structure and distribution policy

The fund is structured to qualify as a Regulated Investment Company ("RIC") allowing the fund to pass-through to shareholders the income and capital gains earned by the fund, thus avoiding double-taxation. To qualify as a RIC, the fund must meet specific income, diversification and distribution requirements. Regarding income, at least 90 percent of the fund's gross income must be from dividends, interest and capital gains. The fund must meet quarterly diversification requirements including the requirement that at least 50 percent of the assets be in cash, cash equivalents or other securities with each single issuer of other securities not greater than 5 percent of total assets. No more than 25 percent of total assets can be invested in any one issuer other than government securities or other RIC's. The fund must also distribute at least 90 percent of its investment company income. RIC's are also subject to excise tax rules which require RIC's to distribute approximately 98 percent of net income and net capital gains to avoid a 4 percent excise tax.

The fund has adopted a distribution policy which intends to distribute an amount closely approximating the total taxable income for the year and, if so determined by the Board, distribute all or a portion of the return of capital paid by portfolio companies during the year. The fund may designate a portion of its distributions as capital gains and may also distribute additional capital gains in the last calendar quarter of the year to meet annual excise distribution requirements. Distribution amounts are subject to change from time to time at the discretion of the Board. Although the level of distributions is independent of the funds' performance in the short term, the fund expects such distributions to correlate with its performance over time.

#### Distributable cash flow and distributions

Distributable cash flow ("DCF") is income from investments less expenses. Income from investments includes the amount received as cash or paid-in-kind distributions from investments and dividend payments on short-term investments. Income also includes the premiums received from sales of covered call options, net of amounts paid to buy back out-of-the-money options. The total expenses include current or anticipated operating expenses and leverage costs.

Income from investments decreased approximately 6.3% as compared to 3rd quarter 2018, primarily due to lower income on premiums from covered call options. Operating expenses, consisting primarily of fund advisory fees, decreased approximately 8.7% during the quarter due primarily to lower asset-based fees. Total leverage costs increased approximately 5.2% as compared to 3rd quarter 2018, primarily due to an increase in interest rates during the quarter. As a result of the changes in income and expenses, DCF decreased by approximately 6.8% as compared to 3rd quarter 2018. In addition, the fund had net realized losses on investments of \$2.0 million during 4th quarter 2018.

The fund maintained its quarterly distribution of \$0.4375 per share during 4th quarter 2018, which was equal to the distribution paid in the prior quarter and 4th quarter 2018. The fund has paid cumulative distributions to stockholders of \$10.9375 per share since its inception in July 2012.

The Key Financial Data table discloses the calculation of DCF and should be read in conjunction with this discussion. The difference between income from investments in the DCF calculation and total investment income as reported in the Statement of Operations, is reconciled as follows: (1) the Statement of Operations, in conformity with U.S. generally accepted accounting principles ("GAAP"), recognizes distributions and dividend income from MLPs, common stock and other investments on their ex-dates, whereas the DCF calculation may reflect distributions and dividend income on their pay dates; (2) GAAP recognizes that a significant portion of the cash distributions received from MLPs, common stock and other investments are characterized as a return of capital and therefore excluded from investment income, whereas the DCF calculation includes the return of capital; (3) income from investments in the DCF calculation includes the value of dividends paid-in-kind (additional stock or units), whereas such amounts may not be included as income for GAAP purposes; and (4) net premiums on options written (premiums received less amounts paid to buy back out-of-the-money options) with expiration dates during fiscal quarter are included in the DCF calculation, whereas GAAP recognizes the net effect of options written as realized and unrealized gains (losses).

"Net Investment Income (Loss)" on the Statement of Operations is adjusted as follows to reconcile to DCF for YTD and 4th quarter 2018 (in thousands):

	YTD 2018	4th Qtr 2018
Net Investment Loss	\$(4,228 )	\$(917 )
Adjustments to reconcile to DCF:		

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Net premiums on options written	24,820	6,400
Distributions characterized as return of capital	4,527	852
Other	655	151
DCF	\$25,774	\$ 6,486

### Leverage

The fund's leverage utilization decreased \$8.1 million as compared to 3rd quarter 2018. The fund utilizes all floating rate leverage that had an interest rate of 3.15% and represented 29.9% of total assets at year-end. The fund has maintained compliance with its applicable coverage ratios. The interest rate on the fund's leverage will vary in the future along with changing floating rates.

Please see the Financial Statements and Notes to Financial Statements for additional detail regarding critical accounting policies, results of operations, leverage and other important fund information.

For further information regarding the calculation of distributable cash flow and distributions to stockholders, as well as a discussion of the tax impact on distributions, please visit [www.tortoiseadvisors.com](http://www.tortoiseadvisors.com).

(unaudited)

**NDP Key Financial Data** (supplemental unaudited information)  
(dollar amounts in thousands unless otherwise indicated)

The information presented below regarding **Distributable Cash Flow and Selected Financial Information** is supplemental non-GAAP financial information, which the fund believes is meaningful to understanding operating performance. The **Distributable Cash Flow Ratios** include the functional equivalent of EBITDA for non-investment companies, and the fund believes they are an important supplemental measure of performance and promote comparisons from period-to-period. This information is supplemental, is not inclusive of required financial disclosures (e.g. Total Expense Ratio), and should be read in conjunction with the full financial statements.

	Year Ended November 30,		2017	2018			
	2017	2018	Q4 <sup>(1)</sup>	Q1 <sup>(1)</sup>	Q2 <sup>(1)</sup>	Q3 <sup>(1)</sup>	Q4 <sup>(1)</sup>
<b>Total Income from Investments</b>							
Distributions and dividends from investments, net of foreign taxes withheld	\$ 5,977	\$ 5,122	\$ 1,441	\$ 1,453	\$ 1,363	\$ 1,139	\$ 1,167
Dividends paid in stock	695	796	135	194	221	229	152
Net premiums on options written	22,648	24,820	5,720	5,627	5,923	6,870	6,400
Total from investments	29,320	30,738	7,296	7,274	7,507	8,238	7,719
<b>Operating Expenses Before Leverage Costs</b>							
Advisory fees, net of fees waived	2,978	2,639	681	693	662	671	613
Other operating expenses	544	566	125	141	144	147	134
	3,522	3,205	806	834	806	818	747
Distributable cash flow before leverage costs	25,798	27,533	6,490	6,440	6,701	7,420	6,972
Leverage costs <sup>(2)</sup>	1,183	1,759	325	376	435	462	486
<b>Distributable Cash Flow<sup>(3)</sup></b>	<b>\$24,615</b>	<b>\$25,774</b>	<b>\$6,165</b>	<b>\$6,064</b>	<b>\$6,266</b>	<b>\$6,958</b>	<b>\$6,486</b>
<b>Net realized gain (loss) on investments and foreign currency translation, for the period</b>	<b>\$ (21,311)</b>	<b>\$ (6,693)</b>	<b>\$ (18,793)</b>	<b>\$ 5,881</b>	<b>\$ (16,976)</b>	<b>\$ 6,433</b>	<b>\$ (2,031)</b>
<b>As a percent of average total assets<sup>(4)</sup></b>							
Total from investments	10.52 %	12.72 %	11.60 %	11.56 %	12.33 %	13.23 %	13.91 %
Operating expenses before leverage costs	1.26 %	1.33 %	1.28 %	1.32 %	1.32 %	1.31 %	1.35 %
Distributable cash flow before leverage costs	9.26 %	11.39 %	10.32 %	10.24 %	11.01 %	11.92 %	12.56 %
<b>As a percent of average net assets<sup>(4)</sup></b>							
Total from investments	13.97 %	17.42 %	15.77 %	15.42 %	17.01 %	18.25 %	19.29 %
Operating expenses before leverage costs	1.68 %	1.82 %	1.74 %	1.77 %	1.83 %	1.81 %	1.87 %
Leverage costs	0.56 %	1.00 %	0.70 %	0.80 %	0.99 %	1.02 %	1.21 %
Distributable cash flow	11.73 %	14.60 %	13.33 %	12.85 %	14.19 %	15.42 %	16.21 %
<b>Selected Financial Information</b>							
Distributions paid on common stock	\$ 25,460	\$ 25,587	\$ 6,380	\$ 6,380	\$ 6,391	\$ 6,402	\$ 6,414
Distributions paid on common stock per share	1.7500	1.7500	0.4375	0.4375	0.4375	0.4375	0.4375
Total assets, end of period	255,302	191,285	255,302	236,174	245,593	242,150	191,285
Average total assets during period <sup>(5)</sup>	278,827	241,656	252,191	255,282	241,582	246,956	222,541
Leverage <sup>(6)</sup>	64,500	57,100	64,500	68,000	65,800	65,200	57,100
Leverage as a percent of total assets	25.3 %	29.9 %	25.3 %	28.8 %	26.8 %	26.9 %	29.9 %
Net unrealized depreciation, end of period	(19,852)	(50,328)	(19,852)	(41,518)	(4,811)	(15,314)	(50,328)
Net assets, end of period	187,889	132,488	187,889	166,253	176,262	172,423	132,488
Average net assets during period <sup>(7)</sup>	209,940	176,481	185,583	191,359	175,128	179,054	160,534
Net asset value per common share	12.88	9.02	12.88	11.38	12.18	11.76	9.02
Market value per common share	12.39	9.00	12.39	11.80	12.47	12.69	9.00
Shares outstanding (000's)	14,584	14,696	14,584	14,607	14,633	14,660	14,696

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Q1 is the period from December through February. Q2 is the period from March through May. Q3 is the period from June through August. Q4 is (1) the period from September through November.

(2) Leverage costs include interest expense and other recurring leverage expenses.

"Net investment income (loss)" on the Statement of Operations is adjusted as follows to reconcile to Distributable Cash Flow ("DCF"): increased by net premiums on options written, the return of capital on distributions the distributions paid in stock and the premium on dividends paid in (3) kind.

(4) Annualized for periods less than one full year.

(5) Computed by averaging month-end values within each period.

(6) Leverage consists of outstanding borrowings under the revolving credit facility.

(7) Computed by averaging daily net assets within each period.

**Tortoise**

15

---

## Tortoise

### Power and Energy Infrastructure Fund, Inc. (TPZ)

#### Fund description

TPZ seeks to provide a high level of current income to stockholders, with a secondary objective of capital appreciation. TPZ seeks to invest primarily in fixed income and dividend-paying equity securities of power and energy infrastructure companies that provide stable and defensive characteristics throughout economic cycles.

#### Fund performance review

The midstream segment pulled back along with broad energy, as well as from near-term uncertainty around simplification transactions and further evolution of the midstream segment. The fund's market-based and NAV-based returns for the fiscal year ending Nov. 30, 2018 were -6.8% and 0.2%, respectively (including the reinvestment of distributions). Comparatively, the TPZ Benchmark Composite\* returned -1.7% for the same period. The fund's fixed income holdings underperformed its midstream energy equity holdings on a total return basis.

#### Fiscal year-end highlights

Distributions paid per share (fiscal year 2018)	\$1.50
Monthly distributions paid per share (4th quarter 2018)	\$0.1250
Distribution rate (as of 11/30/2018)	8.7%
Quarter-over-quarter distribution increase	0.0%
Year-over-year distribution increase	0.0%
Cumulative distribution to stockholders since inception in July 2009	\$15.2750
Market-based total return	(6.8)%
NAV-based total return	0.2%
Premium (discount) to NAV (as of 11/30/2018)	(13.1)%

\* The TPZ Benchmark Composite includes the BofA Merrill Lynch U.S. Energy Index (CIEN), the BofA Merrill Lynch U.S. Electricity Index (CUEL) and the Tortoise MLP Index® (TMLP). It is comprised of a blend of 70% fixed income and 30% equity securities issued by companies in the power and energy infrastructure sectors.

***Please refer to the inside front cover of the report for important information about the fund's distribution policy.***

#### Key asset performance drivers

Energy Transfer Partners, L.P.	Midstream natural gas/natural gas liquids pipeline MLP	Acquired by its general partner for 11% premium in simplification transaction
ONEOK, Inc.	Midstream natural gas/natural gas liquids pipeline company	Natural gas liquid (NGL) volume growth benefitting integrated pipeline network
Kinder Morgan Inc.	Midstream natural gas/natural gas liquids pipeline company	Reduced leverage to target levels
Enterprise Products Partners L.P.	Midstream natural gas/natural gas liquids pipeline MLP	Delivered steady cash flow and healthy project backlog
Targa Resources Corp	Midstream gathering and processing company	Permian Basin wet gas volume growth
Energy Transfer LP	Midstream natural gas/natural gas liquids pipeline company	Traded down due to ownership consolidation following closing of simplification transaction
Enbridge Energy Management, LLC	Midstream crude oil pipeline company	Pending acquisition by Enbridge Inc.
Enbridge Inc.	Midstream crude oil pipeline company	Higher leverage leading to divestitures and regulation uncertainty on pipeline project

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Shell Midstream Partners LP	Midstream crude oil pipeline MLP	Dropdown timing uncertainty
Buckeye Partners, L.P.	Midstream refined product pipeline MLP	Weaker than expected earnings tied to storage market fundamentals

***Unlike the fund return, index return is pre-expenses.***

***Performance data quoted represents past performance; past performance does not guarantee future results. Like any other stock, total return and market value will fluctuate so that an investment, when sold, may be worth more or less than its original cost. Portfolio composition is subject to change due to ongoing management of the fund. References to specific securities or sectors should not be construed as a recommendation by the fund or its adviser. See Schedule of Investments for portfolio weighting at the end of the fiscal year.***

(unaudited)

16

Tortoise

---

## Fund structure and distribution policy

The fund is structured to qualify as a Regulated Investment Company (“RIC”) allowing the fund to pass-through to shareholders the income and capital gains earned by the fund, thus avoiding double-taxation. To qualify as a RIC, the fund must meet specific income, diversification and distribution requirements. Regarding income, at least 90 percent of the fund gross income must be from dividends, interest and capital gains. The fund must meet quarterly diversification requirements including the requirement that at least 50 percent of the assets be in cash, cash equivalents or other securities with each single issuer of other securities not greater than 5 percent of total assets. No more than 25 percent of total assets can be invested in any one issuer other than government securities or other RIC’s. The fund must also distribute at least 90 percent of its investment company income. RIC’s are also subject to excise tax rules which require RIC’s to distribute approximately 98 percent of net income and net capital gains to avoid a 4 percent excise tax.

The fund has adopted a distribution policy which is included on the inside front cover of this report. To summarize, the fund intends to distribute an amount closely approximating the total taxable income for the year and, if so determined by the Board, distribute all or a portion of the return of capital paid by portfolio companies during the year. The fund may designate a portion of its distributions as capital gains and may also distribute additional capital gains in the last calendar quarter of the year to meet annual excise distribution requirements. The fund distributes a fixed amount per common share, currently \$0.125, each month to its common shareholders. This amount is subject to change from time to time at the discretion of the Board. Although the level of distributions is independent of the funds’ performance in the short term, the fund expects such distributions to correlate with its performance over time.

## Distributable cash flow and distributions

Distributable cash flow (“DCF”) is income from investments less expenses. Income from investments includes the accrued interest from corporate bonds, cash distributions and paid-in-kind distributions from master limited partnerships (“MLPs”) and other equity investments and dividends earned from short-term investments. The total expenses include current or anticipated operating expenses and leverage costs.

Income from investments decreased approximately 2.8% as compared to 3rd quarter 2018. Operating expenses, consisting primarily of fund advisory fees, decreased approximately 2.1% during the quarter due primarily to lower asset-based fees. Total leverage costs increased approximately 4.2% as compared to 3rd quarter 2018, primarily due to an increase in interest rates during the quarter. As a result of the changes in income and expenses, DCF decreased approximately 4.0% as compared to 3rd quarter 2018. In addition, the fund had net realized gains on investments of \$4.0 million during 4th quarter 2018.

The fund paid monthly distributions of \$0.125 per share during 4th quarter 2018, which was unchanged over the prior quarter and 4th quarter 2017. The fund’s Board of Directors has declared monthly distributions of \$0.125 per share to be paid during 1st quarter 2019. The fund has paid cumulative distributions to stockholders of \$15.275 per share since its inception in July 2009.

The Key Financial Data table discloses the calculation of DCF and should be read in conjunction with this discussion. The difference between income from investments in the DCF calculation and total investment income as reported in the Statement of Operations, is reconciled as follows: (1) U.S. generally accepted accounting principles (“GAAP”), recognizes distribution income from MLPs, common stock and other investments on their ex-dates, whereas the DCF calculation may reflect distribution income on their pay dates; (2) GAAP recognizes that a significant portion of the cash distributions received from MLPs, common stock and other investments are characterized as a return of capital and therefore excluded from investment income, whereas the DCF calculation includes the return of capital; (3) income from investments in the DCF calculation includes the value of dividends paid-in-kind (additional stock or units), whereas such amounts may not be included as income for GAAP purposes; and (4) amortization of premium or discount for all securities is calculated using the yield to worst methodology for GAAP purposes while yield to call is used in calculating amortization for long-dated hybrid securities in the DCF calculation. The treatment of expenses in the DCF calculation also differs from what is reported in the Statement of Operations. In addition to the total operating expenses, including fee waiver, as disclosed in the Statement of Operations, the DCF calculation reflects interest expense and realized and unrealized gains (losses) on interest rate swap settlements as leverage costs.

“Net Investment Income (Loss)” on the Statement of Operations is adjusted as follows to reconcile to DCF for YTD and 4th quarter 2018 (in thousands):

	YTD 2018	4th Qtr 2018
Net Investment Income	\$ 1,684	\$ 508

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

### Adjustments to reconcile to DCF:

Distributions characterized as return of capital	6,733	1,493
Dividends paid in stock	986	246
Other	179	77
DCF	\$ 9,582	\$ 2,324

## Leverage

The fund's leverage utilization was substantially unchanged as compared to 3rd quarter 2018 and represented 27.8% of total assets at November 30, 2018. The fund has maintained compliance with its applicable coverage ratios. At year-end, including the impact of interest rate swaps, approximately 17% of the leverage cost was fixed, the weighted-average maturity was 0.6 years and the weighted-average annual rate on leverage was 2.85%. These rates will vary in the future as a result of changing floating rates and as swaps mature or are redeemed.

Please see the Financial Statements and Notes to Financial Statements for additional detail regarding critical accounting policies, results of operations, leverage and other important fund information.

For further information regarding the calculation of distributable cash flow and distributions to stockholders, as well as a discussion of the tax impact on distributions, please visit [www.tortoiseadvisors.com](http://www.tortoiseadvisors.com).

(unaudited)

**Tortoise**

17

---

**TPZ Key Financial Data** (supplemental unaudited information)

(dollar amounts in thousands unless otherwise indicated)

The information presented below regarding **Distributable Cash Flow and Selected Financial Information** is supplemental non-GAAP financial information, which the fund believes is meaningful to understanding operating performance. The **Distributable Cash Flow Ratios** include the functional equivalent of EBITDA for non-investment companies, and the fund believes they are an important supplemental measure of performance and promote comparisons from period-to-period. This information is supplemental, is not inclusive of required financial disclosures (e.g. Total Expense Ratio), and should be read in conjunction with the full financial statements.

	Year Ended November 30,		2017	2018	2017	2018	2017	2018	2017	2018
	2017	2018	Q4 <sup>(1)</sup>	Q1 <sup>(1)</sup>	Q2 <sup>(1)</sup>	Q3 <sup>(1)</sup>	Q4 <sup>(1)</sup>	Q1 <sup>(1)</sup>	Q2 <sup>(1)</sup>	Q3 <sup>(1)</sup>
<b>Total Income from Investments</b>										
Interest earned on corporate bonds	\$ 5,931	\$ 5,440	\$ 1,424	\$ 1,384	\$ 1,345	\$ 1,342	\$ 1,369			
Distributions and dividends from investments, net of foreign taxes withheld	6,672	6,747	1,650	1,653	1,727	1,713	1,654			
Dividends paid in kind	810	1,233	218	268	333	348	284			
Total from investments	13,413	13,420	3,292	3,305	3,405	3,403	3,307			
<b>Operating Expenses Before Leverage Costs</b>										
Advisory fees	2,031	1,898	487	481	463	481	473			
Other operating expenses	508	546	115	130	137	142	137			
	2,539	2,444	602	611	600	623	610			
Distributable cash flow before leverage costs	10,874	10,976	2,690	2,694	2,805	2,780	2,697			
Leverage costs <sup>(2)</sup>	1,089	1,394	287	320	343	358	373			
<b>Distributable Cash Flow<sup>(3)</sup></b>	\$9,785	\$9,582	\$2,403	\$2,374	\$2,462	\$2,422	\$2,324			
<b>Net realized gain (loss) on investments and foreign currency translation, for the period</b>	\$4,325	\$8,973	\$(4,503)	\$1,733	\$2,220	\$1,024	\$3,996			
<b>As a percent of average total assets<sup>(4)</sup></b>										
Total from investments	6.25 %	6.72 %	6.42 %	6.62 %	6.95 %	6.68 %	6.55 %			
Operating expenses before leverage costs	1.18 %	1.22 %	1.17 %	1.22 %	1.23 %	1.22 %	1.21 %			
Distributable cash flow before leverage costs	5.07 %	5.50 %	5.25 %	5.40 %	5.72 %	5.46 %	5.34 %			
<b>As a percent of average net assets<sup>(4)</sup></b>										
Total from investments	8.24 %	9.09 %	8.60 %	8.78 %	9.51 %	9.06 %	8.93 %			
Operating expenses before leverage costs	1.56 %	1.66 %	1.57 %	1.62 %	1.68 %	1.66 %	1.65 %			
Leverage costs	0.67 %	0.94 %	0.75 %	0.85 %	0.96 %	0.95 %	1.01 %			
Distributable cash flow	6.01 %	6.49 %	6.28 %	6.31 %	6.87 %	6.45 %	6.27 %			
<b>Selected Financial Information</b>										
Distributions paid on common stock	\$ 10,427	\$ 10,427	\$ 2,607	\$ 2,607	\$ 2,607	\$ 2,606	\$ 2,607			
Distributions paid on common stock per share	1.5000	1.5000	0.3750	0.3750	0.3750	0.3750	0.3750			
Total assets, end of period	202,291	191,906	202,291	196,676	198,541	206,430	191,906			
Average total assets during period <sup>(5)</sup>	214,463	199,749	205,567	202,425	194,244	201,985	200,269			
Leverage <sup>(6)</sup>	53,400	53,400	53,400	49,200	51,200	53,200	53,400			
Leverage as a percent of total assets	26.4 %	27.8 %	26.4 %	25.0 %	25.8 %	25.8 %	27.8 %			
Net unrealized appreciation, end of period	15,138	3,956	15,138	10,686	14,171	20,917	3,956			
Net assets, end of period	148,243	137,325	148,243	143,808	146,649	152,418	137,325			
Average net assets during period <sup>(7)</sup>	162,708	147,616	153,560	152,650	142,041	149,026	146,848			
Net asset value per common share	21.33	19.76	21.33	20.69	21.10	21.93	19.76			
Market value per common share	19.94	17.17	19.94	19.02	19.04	19.40	17.17			
Shares outstanding (000's)	6,951	6,951	6,951	6,951	6,951	6,951	6,951			

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Q1 is the period from December through February. Q2 is the period from March through May. Q3 is the period from June through August. Q4 is (1) the period from September through November.

(2) Leverage costs include interest expense, interest rate swap expenses and other recurring leverage expenses.

"Net investment income (loss)" on the Statement of Operations is adjusted as follows to reconcile to Distributable Cash Flow ("DCF"): increased by the return of capital on distributions, the dividends paid in stock and increased liquidation value and the premium on dividends paid in kind; (3) and decreased by realized and unrealized gains (losses) on interest rate swap settlements.

(4) Annualized for periods less than one full year.

(5) Computed by averaging month-end values within each period.

(6) Leverage consists of outstanding borrowings under the revolving credit facility.

(7) Computed by averaging daily net assets within each period.

2018 Annual Report | November 30, 2018

**TYG Schedule of Investments**

November 30, 2018

	Shares		Fair Value
<b>Master Limited Partnerships — 138.7%<sup>(1)</sup></b>			
<b>Crude Oil Pipelines — 24.9%<sup>(1)</sup></b>			
<b>United States — 24.9%<sup>(1)</sup></b>			
Andeavor Logistics LP	3,435,751	\$	128,222,227
BP Midstream Partners LP	248,258		4,188,113
Enbridge Energy Partners, L.P.	3,901,220		42,406,261
PBF Logistics LP	546,987		10,983,499
Plains All American Pipeline, L.P. <sup>(2)</sup>	4,541,990		104,602,030
Shell Midstream Partners, L.P.	1,247,042		23,494,271
			313,896,401
<b>Natural Gas/Natural Gas Liquids Pipelines — 41.6%<sup>(1)</sup></b>			
<b>United States — 41.6%<sup>(1)</sup></b>			
Dominion Energy Midstream Partners, LP <sup>(2)</sup>	914,075		16,983,514
Energy Transfer LP <sup>(2)</sup>	14,901,910		217,120,825
Enterprise Products Partners L.P.	5,768,276		151,417,245
EQM Midstream Partners, LP	2,442,717		116,419,892
Spectra Energy Partners, LP <sup>(2)</sup>	612,975		22,220,344
			524,161,820
<b>Natural Gas Gathering/Processing — 27.9%<sup>(1)</sup></b>			
<b>United States — 27.9%<sup>(1)</sup></b>			
Antero Midstream Partners LP	3,245,530		89,771,360
CNX Midstream Partners LP	2,266,153		41,017,369
DCP Midstream, LP <sup>(2)</sup>	810,912		27,635,881
EnLink Midstream Partners, LP <sup>(2)</sup>	4,469,701		59,134,144
Noble Midstream Partners LP	272,732		9,035,611
Western Gas Equity Partners, LP	350,416		10,155,056
Western Gas Partners, LP <sup>(2)</sup>	2,586,431		114,940,994
			351,690,415
<b>Refined Product Pipelines — 44.3%<sup>(1)</sup></b>			
<b>United States — 44.3%<sup>(1)</sup></b>			
Buckeye Partners, L.P.	3,050,605		90,175,884
Holly Energy Partners, L.P.	3,011,130		84,703,087
Magellan Midstream Partners, L.P.	2,463,844		149,013,285
MPLX LP <sup>(2)</sup>	3,901,626		129,260,869
NuStar Energy L.P.	1,397,185		33,769,962
Phillips 66 Partners LP	1,530,570		71,783,733
			558,706,820
Total Master Limited Partnerships (Cost \$1,640,840,246)			1,748,455,456
<b>Common Stock — 18.9%<sup>(1)</sup></b>			
<b>Marine Transportation — 1.4%<sup>(1)</sup></b>			
<b>Monaco — 1.4%<sup>(1)</sup></b>			
GasLog Partners LP	778,588		17,915,310
<b>Natural Gas Gathering/Processing — 6.0%<sup>(1)</sup></b>			
<b>United States — 6.0%<sup>(1)</sup></b>			
Targa Resources Corp. <sup>(2)</sup>	190,400		8,497,552
The Williams Companies, Inc.	2,624,695		66,457,277
			74,954,829
<b>Natural Gas/Natural Gas Liquids Pipelines — 11.5%<sup>(1)</sup></b>			
<b>United States — 11.5%<sup>(1)</sup></b>			
ONEOK, Inc. <sup>(2)</sup>	734,248		45,104,854
Tallgrass Energy, LP	4,655,166		99,434,346

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Total Common Stock	144,539,200
(Cost \$243,511,622)	237,409,339

See accompanying Notes to Financial Statements.

**Tortoise**

19

---

**TYG Schedule of Investments** (continued)

November 30, 2018

	Shares	Fair Value
<b>Preferred Stock — 7.7%</b> <sup>(1)</sup>		
<b>Crude Oil Pipelines — 0.5%</b> <sup>(1)</sup>		
<b>United States — 0.5%</b> <sup>(1)</sup>		
SemGroup Corporation, 7.000% <sup>(3)(4)(5)</sup>	6,277	\$ 5,695,032
<b>Natural Gas/Natural Gas Liquids Pipelines — 5.3%</b> <sup>(1)</sup>		
<b>United States — 5.3%</b> <sup>(1)</sup>		
Crestwood Equity Partners LP, 9.25%	7,126,640	67,703,080
<b>Natural Gas Gathering/Processing — 1.9%</b> <sup>(1)</sup>		
<b>United States — 1.9%</b> <sup>(1)</sup>		
Targa Resources Corp., 9.500% <sup>(3)(4)</sup>	21,758	23,731,399
Total Preferred Stock (Cost \$91,151,523)		97,129,511
<b>Private Investments — 2.9%</b> <sup>(1)</sup>		
<b>Natural Gas/Natural Gas Liquids Pipelines — 1.4%</b> <sup>(1)</sup>		
<b>United States — 1.4%</b> <sup>(1)</sup>		
MTP Energy KMAA LLC <sup>(3)(4)</sup>	N/A	17,762,716
<b>Renewables — 1.5%</b> <sup>(1)</sup>		
<b>United States — 1.5%</b> <sup>(1)</sup>		
Tortoise HoldCo II, LLC <sup>(3)(4)(6)</sup>	N/A	19,073,467
Total Private Investments (Cost \$69,025,995)		36,836,183
<b>Short-Term Investment — 0.0%</b> <sup>(1)</sup>		
<b>United States Investment Company — 0.0%</b> <sup>(1)</sup>		
Invesco Government & Agency Portfolio — Institutional Class, 2.11% <sup>(7)</sup> (Cost \$232,244)	232,244	232,244
<b>Total Investments — 168.2%</b> <sup>(1)</sup> <b>(Cost \$2,044,761,630)</b>		2,120,062,733
<b>Interest Rate Swap Contracts — 0.0%</b> <sup>(1)</sup>		
\$10,000,000 notional — net unrealized appreciation <sup>(8)</sup>		108,883
<b>Total Value of Options Written</b> <b>(Premiums received \$493,575)<sup>(9)</sup> — (0.1)%<sup>(1)</sup></b>		(921,842 )
<b>Other Assets and Liabilities — (1.4)%<sup>(1)</sup></b>		(17,287,543 )
<b>Deferred Tax Liability — (15.0)%<sup>(1)</sup></b>		(189,562,527 )
<b>Credit Facility Borrowings — (8.5)%<sup>(1)</sup></b>		(107,100,000 )
<b>Senior Notes — (30.1)%<sup>(1)</sup></b>		(380,000,000 )
<b>Mandatory Redeemable Preferred Stock at Liquidation Value — (13.1)%<sup>(1)</sup></b>		(165,000,000 )
<b>Total Net Assets Applicable to Common Stockholders — 100.0%</b> <sup>(1)</sup>		\$ 1,260,299,704

(1) Calculated as a percentage of net assets applicable to common stockholders.

(2) All or a portion of the security represents cover for outstanding call option contracts written.

(3) Restricted securities have a total fair value of \$66,262,614, which represents 5.3% of net assets. See Note 6 to the financial statements for further disclosure.

(4) Securities have been valued by using significant unobservable inputs in accordance with fair value procedures and are categorized as level 3

(5) investments, as more fully described in Note 2 to the financial statements.

(6) Security distributions are paid-in-kind. Cash value of the 7.0% coupon is added to the liquidation preference of the preferred stock.

(7) Deemed to be an affiliate of the fund.

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

(7) Rate indicated is the current yield as of November 30, 2018.

(8) See Schedule of Interest Rate Swap Contracts and Note 12 to the financial statements for further disclosure.

(9) See Schedule of Options Written and Note 12 to the financial statements for further disclosure.

See accompanying Notes to Financial Statements.

20

**Tortoise**

---

2018 Annual Report | November 30, 2018

**NTG Schedule of Investments**

November 30, 2018

	Shares	Fair Value
<b>Master Limited Partnerships — 135.5%<sup>(1)</sup></b>		
<b>Crude Oil Pipelines — 26.6%<sup>(1)</sup></b>		
<b>United States — 26.6%<sup>(1)</sup></b>		
Andeavor Logistics LP	2,148,431	\$80,179,445
BP Midstream Partners LP	284,174	4,794,015
Delek Logistics Partners, LP	254,562	7,759,050
Enbridge Energy Partners, L.P.	4,405,772	47,890,742
PBF Logistics LP	541,241	10,868,119
Plains All American Pipeline, L.P. <sup>(2)</sup>	3,133,427	72,162,824
Shell Midstream Partners, L.P.	1,042,335	19,637,591
		243,291,786
<b>Natural Gas/Natural Gas Liquids Pipelines — 45.4%<sup>(1)</sup></b>		
<b>United States — 45.4%<sup>(1)</sup></b>		
Dominion Energy Midstream Partners, LP <sup>(2)</sup>	913,359	16,970,210
Energy Transfer LP <sup>(2)</sup>	9,858,518	143,638,604
Enterprise Products Partners L.P.	4,175,127	109,597,084
EQT Midstream Partners, LP	2,101,827	100,173,075
Spectra Energy Partners, LP <sup>(2)</sup>	1,255,770	45,521,662
		415,900,635
<b>Natural Gas Gathering/Processing — 27.4%<sup>(1)</sup></b>		
<b>United States — 27.4%<sup>(1)</sup></b>		
Antero Midstream Partners LP	1,817,081	50,260,460
CNX Midstream Partners, LP	1,527,376	27,645,506
DCP Midstream, LP <sup>(2)</sup>	921,907	31,418,591
EnLink Midstream Partners, LP <sup>(2)</sup>	3,930,870	52,005,410
Noble Midstream Partners LP	73,915	2,448,804
Western Gas Equity Partners, LP	177,973	5,157,658
Western Gas Partners, LP <sup>(2)</sup>	1,830,761	81,359,019
		250,295,448
<b>Refined Product Pipelines — 36.1%<sup>(1)</sup></b>		
<b>United States — 36.1%<sup>(1)</sup></b>		
Buckeye Partners, L.P.	1,864,308	55,108,944
Holly Energy Partners, L.P.	2,094,748	58,925,261
Magellan Midstream Partners, L.P.	968,285	58,561,877
MPLX LP <sup>(2)</sup>	2,433,963	80,637,194
NuStar Energy L.P.	1,550,921	37,485,761
Phillips 66 Partners LP	848,518	39,795,494
		330,514,531
Total Master Limited Partnerships (Cost \$1,260,672,688)		1,240,002,400
<b>Common Stock — 22.1%<sup>(1)</sup></b>		
<b>Marine Transportation — 1.3%<sup>(1)</sup></b>		
<b>Monaco — 1.3%<sup>(1)</sup></b>		
Gaslog Partners, LP	524,765	12,074,843
<b>Natural Gas Gathering/Processing — 8.5%<sup>(1)</sup></b>		
<b>United States — 8.5%<sup>(1)</sup></b>		
Targa Resources Corp. <sup>(2)</sup>	306,503	13,679,229
The Williams Companies, Inc.	2,520,370	63,815,768
		77,494,997
<b>Natural Gas/Natural Gas Liquids Pipelines — 12.3%<sup>(1)</sup></b>		
<b>United States — 12.3%<sup>(1)</sup></b>		

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

ONEOK, Inc.	692,991	42,570,437
Tallgrass Energy, LP	3,265,236	69,745,441
		112,315,878
Total Common Stock (Cost \$210,981,533)		201,885,718

**Preferred Stock — 6.9%<sup>(1)</sup>**

**Crude Oil Pipelines — 0.4%<sup>(1)</sup>**

**United States — 0.4%<sup>(1)</sup>**

SemGroup Corporation, 7.000% <sup>(3)(4)(5)</sup>	3,763	3,414,116
---	-------	-----------

**Natural Gas Gathering/Processing — 1.4%<sup>(1)</sup>**

**United States — 1.4%<sup>(1)</sup>**

Targa Resources Corp., 9.500% <sup>(3)(4)</sup>	12,252	13,363,227
---	--------	------------

**Natural Gas/Natural Gas Liquids Pipelines — 5.1%<sup>(1)</sup>**

**United States — 5.1%<sup>(1)</sup>**

Crestwood Equity Partners LP, 9.25%	4,898,611	46,536,805
-------------------------------------	-----------	------------

**Total Preferred Stock**

(Cost \$60,657,823)		63,314,148
---------------------	--	------------

**Short-Term Investment — 0.0%<sup>(1)</sup>**

**United States Investment Company — 0.0%<sup>(1)</sup>**

Invesco Government & Agency Portfolio — Institutional Class, 2.11% <sup>(6)</sup> (Cost \$301,054)	301,054	301,054
---	---------	---------

**Total Investments — 164.5%<sup>(1)</sup>**

(Cost \$1,532,613,098)		1,505,503,320
------------------------	--	---------------

**Total Value of Options Written**

(Premiums received \$350,544) <sup>(7)</sup> — (0.1)% <sup>(1)</sup>		(653,462 )
---	--	------------

<b>Other Assets and Liabilities — (0.5)%<sup>(1)</sup></b>		(4,541,451 )
--	--	--------------

<b>Deferred Tax Liability — (7.4)%<sup>(1)</sup></b>		(68,175,433 )
--	--	---------------

<b>Credit Facility Borrowings — (8.0)%<sup>(1)</sup></b>		(73,100,000 )
--	--	---------------

<b>Senior Notes — (34.1)%<sup>(1)</sup></b>		(312,000,000 )
---	--	----------------

<b>Mandatory Redeemable Preferred Stock at Liquidation Value — (14.4)%<sup>(1)</sup></b>		(132,000,000 )
--	--	----------------

<b>Total Net Assets Applicable to Common Stockholders — 100.0%<sup>(1)</sup></b>		\$915,032,974
--	--	---------------

(1) Calculated as a percentage of net assets applicable to common stockholders.

(2) All or a portion of the security represents cover for outstanding call option contracts written.

Restricted securities have a total fair value of \$16,777,343, which represents 1.8% of net assets. See Note 6 to the financial statements for (3) further disclosure.

Securities have been valued by using significant unobservable inputs in accordance with fair value procedures and are categorized as level 3

(4) investments, as more fully described in Note 2 to the financial statements.

(5) Security distributions are paid-in-kind. Cash value of the 7.0% coupon is added to the liquidation preference of the preferred stock.

(6) Rate indicated is the current yield as of November 30, 2018.

(7) See Schedule of Options Written and Note 12 of the financial statements for further disclosure.

See accompanying Notes to Financial Statements.

**Tortoise**

21

**TTP Schedule of Investments**

November 30, 2018

	Shares		Fair Value
<b>Common Stock — 94.6%<sup>(1)</sup></b>			
<b>Marine Transportation — 1.6%<sup>(1)</sup></b>			
<b>Monaco — 1.6%<sup>(1)</sup></b>			
GasLog Partners LP	111,052	\$	2,555,306
<b>Crude Oil Pipelines — 32.4%<sup>(1)</sup></b>			
<b>Canada — 16.7%<sup>(1)</sup></b>			
Gibson Energy Inc	188,122		3,022,922
Enbridge Inc.	331,690		10,856,214
Inter Pipeline Ltd.	434,018		6,977,477
Pembina Pipeline Corporation	187,888		6,335,290
<b>United States — 15.7%<sup>(1)</sup></b>			
Plains GP Holdings, L.P.	878,270		19,436,115
SemGroup Corporation	382,241		6,203,771
			52,831,789
<b>Natural Gas Gathering/Processing — 17.9%<sup>(1)</sup></b>			
<b>United States — 17.9%<sup>(1)</sup></b>			
EnLink Midstream, LLC	530,288		6,061,192
Targa Resources Corp.	280,249		12,507,513
The Williams Companies, Inc.	423,967		10,734,844
			29,303,549
<b>Natural Gas/Natural Gas Liquids Pipelines — 32.7%<sup>(1)</sup></b>			
<b>Canada — 9.1%<sup>(1)</sup></b>			
TransCanada Corporation	365,598		14,960,270
<b>United States — 23.6%<sup>(1)</sup></b>			
Equitrans Midstream Corporation	158,697		3,542,117
ONEOK, Inc.	335,791		20,627,641
Tallgrass Energy LP	670,935		14,331,172
			53,461,200
<b>Oil and Gas Production — 10.0%<sup>(1)</sup></b>			
<b>United States — 10.0%<sup>(1)</sup></b>			
Anadarko Petroleum Corporation <sup>(2)</sup>	18,200		962,780
Antero Resources Corporation <sup>(2)(3)</sup>	55,000		722,150
Cabot Oil & Gas Corporation <sup>(2)</sup>	39,900		1,003,884
Carrizo Oil & Gas, Inc. <sup>(2)(3)</sup>	21,200		362,732
Cimarex Energy Co. <sup>(2)</sup>	16,200		1,328,076
Concho Resources Inc. <sup>(2)(3)</sup>	18,100		2,359,154
Continental Resources, Inc. <sup>(2)(3)</sup>	20,000		914,400
Diamondback Energy, Inc. <sup>(2)</sup>	6,700		739,546
EOG Resources, Inc. <sup>(2)</sup>	19,300		1,993,883
EQT Corporation <sup>(2)</sup>	33,000		617,430
Laredo Petroleum, Inc. <sup>(2)(3)</sup>	70,700		308,959
Newfield Exploration Company <sup>(2)(3)</sup>	36,400		616,980
Noble Energy, Inc. <sup>(2)</sup>	32,200		764,428
Parsley Energy, Inc. <sup>(2)(3)</sup>	27,300		549,549
PDC Energy, Inc. <sup>(2)(3)</sup>	9,400		319,036
Pioneer Natural Resources Company <sup>(2)</sup>	6,500		960,375
Range Resources Corporation <sup>(2)</sup>	68,800		1,001,040
WPX Energy, Inc. <sup>(2)(3)</sup>	55,300		771,435
			16,295,837
Total Common Stock			
(Cost \$179,947,241)			154,447,681
<b>Master Limited Partnerships and Related Companies — 42.0%<sup>(1)</sup></b>			

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

**Crude Oil Pipelines — 11.8%<sup>(1)</sup>**

**United States — 11.8%<sup>(1)</sup>**

Andeavor Logistics LP	58,053	2,166,538
BP Midstream Partners LP	33,891	571,741
Enbridge Energy Management, L.L.C. <sup>(4)</sup>	1,093,321	11,917,198
Genesis Energy L.P.	46,531	1,026,008
PBF Logistics LP	51,049	1,025,064
Shell Midstream Partners, L.P.	132,089	2,488,557
		19,195,106

**Natural Gas/Natural Gas Liquids Pipelines — 12.1%<sup>(1)</sup>**

**United States — 12.1%<sup>(1)</sup>**

Energy Transfer LP	958,092	13,959,406
Enterprise Products Partners L.P.	145,209	3,811,736
EQM Midstream Partners, LP	40,969	1,952,582
		19,723,724

**Natural Gas Gathering/Processing — 2.9%<sup>(1)</sup>**

**United States — 2.9%<sup>(1)</sup>**

CNX Midstream Partners LP	60,605	1,096,950
DCP Midstream, LP	6,327	215,624
EnLink Midstream Partners, LP	92,339	1,221,645
Western Gas Partners, LP	50,531	2,245,598
		4,779,817

**Refined Product Pipelines — 15.2%<sup>(1)</sup>**

**United States — 15.2%<sup>(1)</sup>**

Buckeye Partners, L.P.	130,111	3,846,081
Holly Energy Partners, L.P.	168,476	4,739,230
Magellan Midstream Partners, L.P.	35,211	2,129,561
MPLX LP	245,647	8,138,285
NuStar Energy L.P.	135,021	3,263,458
Phillips 66 Partners LP	56,933	2,670,158
		24,786,773

Total Master Limited Partnerships and Related Companies (Cost \$78,625,459)		68,485,420
--	--	------------

See accompanying Notes to Financial Statements.

2018 Annual Report | November 30, 2018

**TTP Schedule of Investments** (continued)

November 30, 2018

	Shares	Fair Value
<b>Preferred Stock — 7.0%<sup>(1)</sup></b>		
<b>Crude Oil Pipelines — 1.6%<sup>(1)</sup></b>		
<b>United States — 1.6%<sup>(1)</sup></b>		
SemGroup Corporation, 7.000% <sup>(5)(6)(7)</sup>	2,877	\$ 2,610,261
<b>Natural Gas Gathering/Processing — 1.4%<sup>(1)</sup></b>		
<b>United States — 1.4%<sup>(1)</sup></b>		
Targa Resources Corp., 9.500% <sup>(5)(6)</sup>	2,108	2,299,190
<b>Oil and Gas Production — 2.2%<sup>(1)</sup></b>		
<b>United States — 2.2%<sup>(1)</sup></b>		
Hess Corporation, 8.000%, 02/01/2019	60,000	3,599,400
<b>Power — 1.8%<sup>(1)</sup></b>		
<b>United States — 1.8%<sup>(1)</sup></b>		
Sempra Energy, 6.000%, 01/15/2021	28,811	2,922,300
Total Preferred Stock (Cost \$11,000,689)		11,431,151
<b>Short-Term Investment — 0.1%<sup>(1)</sup></b>		
<b>United States Investment Company — 0.1%<sup>(1)</sup></b>		
Invesco Government & Agency Portfolio — Institutional Class, 2.11% <sup>(8)</sup> (Cost \$217,864)	217,864	217,864
<b>Total Investments — 143.7%<sup>(1)</sup></b>		234,582,116
<b>(Cost \$269,791,253)</b>		
<b>Total Value of Options Written</b>		
<b>(Premiums received \$512,777)<sup>(9)</sup> — (0.1)%<sup>(1)</sup></b>		(199,782 )
<b>Other Assets and Liabilities — (0.9)%<sup>(1)</sup></b>		(1,380,643 )
<b>Credit Facility Borrowings — (12.1)%<sup>(1)</sup></b>		(19,800,000 )
<b>Senior Notes — (20.8)%<sup>(1)</sup></b>		(34,000,000 )
<b>Mandatory Redeemable Preferred Stock</b>		
<b>at Liquidation Value — (9.8)%<sup>(1)</sup></b>		(16,000,000 )
<b>Total Net Assets Applicable to</b>		
<b>Common Stockholders — 100.0%<sup>(1)</sup></b>		\$ 163,201,691

(1) Calculated as a percentage of net assets applicable to common stockholders.

(2) All or a portion of the security represents cover for outstanding call option contracts written.

(3) Non-income producing security.

(4) Security distributions are paid-in-kind. Rate determined by dividing the cash value of a distribution declared by Enbridge Energy Partners, L.P. by the average closing price of Enbridge Energy Management, L.L.C. shares for the ten consecutive trading days prior to the ex-dividend date.

(5) Restricted securities have a total fair value of \$4,909,451, which represents 3.0% of net assets. See Note 6 to the financial statements for further disclosure.

(6) Securities have been valued by using significant unobservable inputs in accordance with fair value procedures and are categorized as level 3

(7) investments, as more fully described in Note 2 to the financial statements.

(8) Security distributions are paid-in-kind. Cash value of the 7.0% coupon is added to the liquidation preference of the preferred stock.

(9) Rate indicated is the current yield as of November 30, 2018.

(9) See Schedule of Options Written and Note 12 to financial statements for further disclosure.

See accompanying Notes to Financial Statements.

Tortoise

23

**NDP Schedule of Investments**

November 30, 2018

	Shares	Fair Value
<b>Common Stock — 111.8%<sup>(1)</sup></b>		
<b>Marine Transportation — 2.5%<sup>(1)</sup></b>		
<b>Monaco — 2.5%<sup>(1)</sup></b>		
GasLog Partners LP	145,561	\$ 3,349,359
<b>Natural Gas Gathering/Processing — 0.9%<sup>(1)</sup></b>		
<b>United States — 0.9%<sup>(1)</sup></b>		
Targa Resources Corp.	26,507	1,183,007
<b>Natural Gas/Natural Gas Liquids Pipelines — 3.3%<sup>(1)</sup></b>		
<b>United States — 3.3%<sup>(1)</sup></b>		
Equitrans Midstream Corporation	155,760	3,476,563
Tallgrass Energy LP	40,280	860,381
		4,336,944
<b>Oil and Gas Production — 105.1%<sup>(1)</sup></b>		
<b>United States — 105.1%<sup>(1)</sup></b>		
Anadarko Petroleum Corporation <sup>(2)</sup>	126,800	6,707,720
Antero Resources Corporation <sup>(2)(3)</sup>	342,600	4,498,338
Cabot Oil & Gas Corporation <sup>(2)</sup>	664,200	16,711,272
Carrizo Oil & Gas, Inc. <sup>(2)(3)</sup>	251,800	4,308,298
Centennial Resource Development, Inc. <sup>(3)</sup>	117,239	1,819,549
Cimarex Energy Co. <sup>(2)</sup>	42,500	3,484,150
Concho Resources Inc. <sup>(2)(3)</sup>	78,700	10,257,758
Continental Resources, Inc. <sup>(2)(3)</sup>	225,200	10,296,144
Devon Energy Corporation <sup>(2)</sup>	278,400	7,525,152
Diamondback Energy, Inc. <sup>(2)</sup>	94,800	10,464,024
EOG Resources, Inc. <sup>(2)</sup>	141,800	14,649,358
EQT Corporation <sup>(2)</sup>	194,700	3,642,837
Laredo Petroleum, Inc. <sup>(2)(3)</sup>	261,500	1,142,755
Newfield Exploration Company <sup>(2)(3)</sup>	173,100	2,934,045
Parsley Energy, Inc. <sup>(2)(3)</sup>	219,800	4,424,574
PDC Energy, Inc. <sup>(2)(3)</sup>	49,100	1,666,454
Pioneer Natural Resources Company <sup>(2)</sup>	114,400	16,902,600
Range Resources Corporation <sup>(2)</sup>	400,000	5,820,000
SM Energy Company <sup>(2)</sup>	88,100	1,797,240
Whiting Petroleum Corporation <sup>(2)(3)</sup>	64,400	1,949,388
WPX Energy, Inc. <sup>(2)(3)</sup>	591,200	8,247,240
		139,248,896
Total Common Stock		
(Cost \$193,399,071)		148,118,206
<b>Master Limited Partnerships and Related Companies — 30.7%<sup>(1)</sup></b>		
<b>Crude Oil Pipelines — 10.6%<sup>(1)</sup></b>		
<b>United States — 10.6%<sup>(1)</sup></b>		
Andeavor Logistics LP	57,607	2,149,893
BP Midstream Partners LP	70,583	1,190,735
Enbridge Energy Management, L.L.C. <sup>(4)</sup>	448,729	4,891,146
PBF Logistics LP	28,352	569,308
Plains All American Pipeline, L.P.	145,422	3,349,069
Shell Midstream Partners, L.P.	97,754	1,841,685
		13,991,836
<b>Natural Gas/Natural Gas Liquids Pipelines — 5.8%<sup>(1)</sup></b>		
<b>United States — 5.8%<sup>(1)</sup></b>		
Energy Transfer LP	403,316	5,876,314
EQM Midstream Partners, LP	37,698	1,796,687

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Spectra Energy Partners, LP	134	4,857
		7,677,858
<b>Natural Gas Gathering/Processing — 5.1%<sup>(1)</sup></b>		
<b>United States — 5.1%<sup>(1)</sup></b>		
Antero Midstream Partners LP	75,072	2,076,492
CNX Midstream Partners LP	52,959	958,558
EnLink Midstream Partners, LP	86,700	1,147,041
Noble Midstream Partners LP	25,215	835,373
Western Gas Equity Partners, LP	32,918	953,964
Western Gas Partners, LP	17,480	776,811
		6,748,239
<b>Refined Product Pipelines — 9.2%<sup>(1)</sup></b>		
<b>United States — 9.2%<sup>(1)</sup></b>		
Buckeye Partners, L.P.	95,406	2,820,201
Holly Energy Partners, L.P.	138,681	3,901,097
Magellan Midstream Partners, L.P.	14,016	847,688
NuStar Energy L.P.	59,614	1,440,870
Phillips 66 Partners LP	68,143	3,195,907
		12,205,763
Total Master Limited Partnerships and Related Companies (Cost \$47,825,791)		40,623,696

See accompanying Notes to Financial Statements.

2018 Annual Report | November 30, 2018

**NDP Schedule of Investments** (continued)  
November 30, 2018

	Shares	Fair Value
<b>Preferred Stock — 1.6%</b> <sup>(1)</sup>		
<b>Natural Gas Gathering/Processing — 1.6%</b> <sup>(1)</sup>		
<b>United States — 1.6%</b> <sup>(1)</sup>		
Targa Resources Corp., 9.500% <sup>(5)(6)</sup> (Cost \$1,595,361)	1,997	\$ 2,178,123
<b>Short-Term Investment — 0.2%</b> <sup>(1)</sup>		
<b>United States Investment Company — 0.2%</b> <sup>(1)</sup>		
Invesco Government & Agency Portfolio — Institutional Class, 2.11% <sup>(7)</sup> (Cost \$311,985)	311,985	311,985
<b>Total Investments — 144.3%</b> <sup>(1)</sup> <b>(Cost \$243,132,208)</b>		191,232,010
<b>Total Value of Options Written</b>		
<b>(Premiums received \$2,406,989)<sup>(8)</sup> — (0.6)%<sup>(1)</sup></b>		(835,007)
<b>Other Assets and Liabilities — (0.6)%<sup>(1)</sup></b>		(808,769)
<b>Credit Facility Borrowings — (43.1)%<sup>(1)</sup></b>		(57,100,000 )
<b>Total Net Assets Applicable to Common Stockholders — 100.0%</b> <sup>(1)</sup>		\$ 132,488,234

(1) Calculated as a percentage of net assets applicable to common stockholders.

(2) All or a portion of the security represents cover for outstanding call option contracts written.

(3) Non-income producing security.

Security distributions are paid-in-kind. Rate determined by dividing the cash value of a distribution declared by Enbridge Energy Partners, L.P. by the average closing price of Enbridge Energy Management, L.L.C. shares for the ten consecutive trading days prior to the ex-dividend date.

Restricted securities have a total fair value of \$2,178,123, which represents 1.6% of net assets. See Note 6 to the financial statements for further disclosure.

(5) disclosure. Securities have been valued by using significant unobservable inputs in accordance with fair value procedures and are categorized as level 3

(6) investments, as more fully described in Note 2 to the financial statements.

(7) Rate indicated is the current yield as of November 30, 2018.

(8) See Schedule of Options Written and Note 12 to the financial statements for further disclosure.

See accompanying Notes to Financial Statements.

**Tortoise**

25

**TPZ Schedule of Investments**

November 30, 2018

	Principal	
	Amount	Fair Value
<b>Corporate Bonds — 70.9%<sup>(1)</sup></b>		
<b>Crude Oil Pipelines — 10.8%<sup>(1)</sup></b>		
<b>Canada — 5.3%<sup>(1)</sup></b>		
Enbridge Inc., 5.500%, 07/15/2077	\$ 8,500,000	\$ 7,286,472
<b>United States — 5.5%<sup>(1)</sup></b>		
SemGroup Corp., 6.375%, 03/15/2025	6,000,000	5,670,000
SemGroup Corp., 5.625%, 11/15/2023	2,000,000	1,860,000
		14,816,472
<b>Natural Gas/Natural Gas Liquids Pipelines — 30.0%<sup>(1)</sup></b>		
<b>Canada — 5.4%<sup>(1)</sup></b>		
TransCanada Corporation, 5.625%, 05/20/2075	7,000,000	6,513,500
TransCanada Corporation, 5.300%, 03/15/2077	1,000,000	886,000
<b>United States — 24.6%<sup>(1)</sup></b>		
Cheniere Corp., 7.000%, 06/30/2024	4,000,000	4,310,000
Cheniere Corp., 5.875%, 03/31/2025	2,000,000	2,060,000
Columbia Pipeline Group, Inc., 3.300%, 06/01/2020	2,000,000	1,990,504
Florida Gas Transmission Co., LLC, 5.450%, 07/15/2020 <sup>(2)</sup>	1,500,000	1,537,620
Kinder Morgan, Inc., 6.500%, 09/15/2020	4,000,000	4,173,076
Kinder Morgan, Inc., 4.300%, 03/01/2028	3,000,000	2,884,290
Midcontinent Express Pipeline LLC, 6.700%, 09/15/2019 <sup>(2)</sup>	2,000,000	2,018,518
NGPL PipeCo LLC, 4.875%, 08/15/2027 <sup>(2)</sup>	2,000,000	1,910,000
ONEOK, Inc., 4.250%, 02/01/2022	4,500,000	4,505,607
ONEOK, Inc., 7.500%, 09/01/2023	2,000,000	2,255,896
Ruby Pipeline, LLC, 6.000%, 04/01/2022 <sup>(2)</sup>	1,261,364	1,293,253
Southern Star Central Corp., 5.125%, 07/15/2022 <sup>(2)</sup>	3,000,000	2,947,500
Tallgrass Energy LP, 5.500%, 01/15/2028 <sup>(2)</sup>	2,000,000	1,965,000
		41,250,764
<b>Natural Gas Gathering/Processing — 13.3%<sup>(1)</sup></b>		
<b>United States — 13.3%<sup>(1)</sup></b>		
Blue Racer Midstream, LLC, 6.125%, 11/15/2022 <sup>(2)</sup>	2,000,000	1,980,000
Blue Racer Midstream, LLC, 6.625%, 07/15/2026 <sup>(2)</sup>	3,900,000	3,841,500
Hess Corporation, 5.625%, 02/15/2026 <sup>(2)</sup>	4,160,000	4,035,200
The Williams Companies, Inc.,		

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

7.875%, 09/01/2021	5,000,000	5,473,190
The Williams Companies, Inc., 4.550%, 06/24/2024	3,000,000	3,002,250
		18,332,140
<b>Oil and Gas Production — 3.9%<sup>(1)</sup></b>		
<b>United States — 3.9%<sup>(1)</sup></b>		
Ascent Resources Utica Holdings, LLC, 10.000%, 04/01/2022 <sup>(2)</sup>	1,302,000	1,376,865
Ascent Resources Utica Holdings, LLC, 7.000%, 11/01/2026 <sup>(2)</sup>	2,000,000	1,875,000
EQT Corporation, 8.125%, 06/01/2019	2,000,000	2,046,862
		5,298,727
<b>Power/Utility — 12.9%<sup>(1)</sup></b>		
<b>United States — 12.9%<sup>(1)</sup></b>		
The AES Corporation, 5.500%, 04/15/2025	4,000,000	4,030,000
Dominion Resources, Inc., 5.750%, 10/01/2054	4,000,000	4,025,204
Duquesne Light Holdings, Inc., 6.400%, 09/15/2020 <sup>(2)</sup>	3,000,000	3,133,218
Duquesne Light Holdings, Inc., 5.900%, 12/01/2021 <sup>(2)</sup>	2,000,000	2,101,906
NRG Yield Operating LLC, 5.375%, 08/15/2024	2,500,000	2,368,750
NV Energy Inc., 6.250%, 11/15/2020	1,000,000	1,048,370
Pattern Energy Group Inc., 5.875%, 02/01/2024 <sup>(2)</sup>	1,000,000	972,500
		17,679,948
Total Corporate Bonds (Cost \$99,589,087)		97,378,051

See accompanying Notes to Financial Statements.

2018 Annual Report | November 30, 2018

**TPZ Schedule of Investments** (continued)  
November 30, 2018

	Shares	Fair Value
<b>Master Limited Partnerships and Related Companies — 37.3%<sup>(1)</sup></b>		
<b>Crude Oil Pipelines — 10.0%<sup>(1)</sup></b>		
<b>United States — 10.0%<sup>(1)</sup></b>		
Adeavor Logistics LP	68,526	\$ 2,557,390
BP Midstream Partners LP	25,000	421,750
Enbridge Energy Management, L.L.C. <sup>(3)</sup>	726,524	7,919,111
PBF Logistics LP	54,940	1,103,195
Shell Midstream Partners, L.P.	89,044	1,677,589
		13,679,035
<b>Natural Gas/Natural Gas Liquids Pipelines — 10.4%<sup>(1)</sup></b>		
<b>United States — 10.4%<sup>(1)</sup></b>		
Energy Transfer LP	717,787	10,458,155
Enterprise Products Partners L.P.	98,682	2,590,402
EQM Midstream Partners, LP	26,074	1,242,687
		14,291,244
<b>Natural Gas Gathering/Processing — 3.8%<sup>(1)</sup></b>		
<b>United States — 3.8%<sup>(1)</sup></b>		
CNX Midstream Partners, LP	47,302	856,166
EnLink Midstream Partners, LP	128,687	1,702,529
Western Gas Partners, LP	59,565	2,647,069
		5,205,764
<b>Refined Product Pipelines — 13.1%<sup>(1)</sup></b>		
<b>United States — 13.1%<sup>(1)</sup></b>		
Buckeye Partners, L.P.	88,546	2,617,420
Holly Energy Partners, L.P.	147,585	4,151,566
Magellan Midstream Partners, L.P.	36,250	2,192,400
MPLX LP	140,992	4,671,065
NuStar Energy L.P.	102,338	2,473,509
Phillips 66 Partners LP	41,654	1,953,573
		18,059,533
Total Master Limited Partnerships and Related Companies (Cost \$47,962,695)		51,235,576
<b>Common Stock — 24.0%<sup>(1)</sup></b>		
<b>Crude Oil Pipelines — 4.7%<sup>(1)</sup></b>		
<b>United States — 4.7%<sup>(1)</sup></b>		
Plains GP Holdings, L.P.	292,549	6,474,109
<b>Marine Transportation — 1.4%<sup>(1)</sup></b>		
<b>Monaco — 1.4%<sup>(1)</sup></b>		
GasLog Partners LP	86,675	1,994,392
<b>Natural Gas/Natural Gas Liquids Pipelines — 11.8%<sup>(1)</sup></b>		
<b>United States — 11.8%<sup>(1)</sup></b>		
Equitrans Midstream Corporation	55,724	1,243,760
ONEOK, Inc.	101,008	6,204,921
Tallgrass Energy LP	408,782	8,731,584
		16,180,265
<b>Natural Gas Gathering/Processing — 6.1%<sup>(1)</sup></b>		
<b>United States — 6.1%<sup>(1)</sup></b>		
EnLink Midstream LLC	125,234	1,431,425
Targa Resources Corp.	154,583	6,899,039
		8,330,464
Total Common Stock (Cost \$30,675,964)		32,979,230

See accompanying Notes to Financial Statements.

**Tortoise**

27

---

**TPZ Schedule of Investments** (continued)

November 30, 2018

	Shares	Fair Value
<b>Preferred Stock — 5.9%<sup>(1)</sup></b>		
<b>Crude Oil Pipelines — 1.4%<sup>(1)</sup></b>		
<b>United States — 1.4%<sup>(1)</sup></b>		
SemGroup Corporation, 7.000% <sup>(2)(4)(5)</sup>	2,120	\$ 1,923,446
<b>Natural Gas Gathering/Processing — 1.3%<sup>(1)</sup></b>		
<b>United States — 1.3%<sup>(1)</sup></b>		
Targa Resources Corp., 9.500% <sup>(2)(4)</sup>	1,685	1,837,825
<b>Power/Utility — 3.2%<sup>(1)</sup></b>		
<b>United States — 3.2%<sup>(1)</sup></b>		
DTE Energy, 6.500%, 10/01/2019	39,600	2,170,476
Sempra Energy, 6.000%, 01/15/2021	21,189	2,149,200
		4,319,676
Total Preferred Stock (Cost \$7,619,008)		8,080,947
<b>Short-Term Investment — 0.2%<sup>(1)</sup></b>		
<b>United States Investment Company — 0.2%<sup>(1)</sup></b>		
Invesco Government & Agency Portfolio — Institutional Class, 2.11% <sup>(6)</sup> (Cost \$271,075)	271,075	271,075
<b>Total Investments — 138.3%<sup>(1)</sup></b> <b>(Cost \$186,117,829)</b>		189,944,879
<b>Interest Rate Swap Contracts — 0.1%<sup>(1)</sup></b>		
\$9,000,000 notional — net unrealized appreciation <sup>(7)</sup>		128,630
<b>Other Assets and Liabilities — 0.5%<sup>(1)</sup></b>		650,919
<b>Credit Facility Borrowings — (38.9)%<sup>(1)</sup></b>		(53,400,000 )
<b>Total Net Assets Applicable to Common Stockholders — 100.0%<sup>(1)</sup></b>		\$ 137,324,428

(1) Calculated as a percentage of net assets applicable to common stockholders.

Restricted securities have a total fair value of \$34,749,351 which represents 25.3% of net assets. See Note 6 to the financial statements for

(2) further disclosure.

Security distributions are paid-in-kind. Rate determined by dividing the cash value of a distribution declared by Enbridge Energy Partners, L.P. by

(3) the average closing price of Enbridge Energy Management, L.L.C. shares for the ten consecutive trading days prior to the ex-dividend date.

Securities have been valued by using significant unobservable inputs in accordance with fair value procedures and are categorized as level 3

(4) investments, as more fully described in Note 2 to the financial statements.

(5) Security distributions are paid-in-kind. Cash value of the 7.0% coupon is added to the liquidation preference of the preferred stock.

(6) Rate indicated is the current yield as of November 30, 2018.

(7) See Schedule of Interest Rate Swap Contracts and Note 12 to the financial statements for further disclosure.

See accompanying Notes to Financial Statements.

2018 Annual Report | November 30, 2018

**Schedule of Interest Rate Swap Contracts**

November 30, 2018

<b>TYG</b>					
<b>Counterparty</b>	<b>Maturity Date</b>	<b>Notional Amount</b>	<b>Fixed Rate Paid by TYG</b>	<b>Floating Rate Received by TYG</b>	<b>Unrealized Appreciation</b>
The Bank of Nova Scotia	09/02/2021	\$ 10,000,000	2.381%	1-month U.S. Dollar LIBOR	\$ 108,883
<b>TPZ</b>					
<b>Counterparty</b>	<b>Maturity Date</b>	<b>Notional Amount</b>	<b>Fixed Rate Paid by TPZ</b>	<b>Floating Rate Received by TPZ</b>	<b>Unrealized Appreciation</b>
Wells Fargo Bank, N.A.	11/29/2019	\$ 6,000,000	1.330%	3-month U.S. Dollar LIBOR	\$ 91,612
Wells Fargo Bank, N.A.	08/06/2020	\$ 3,000,000	2.180%	3-month U.S. Dollar LIBOR	\$ 37,018
		\$ 9,000,000			\$ 128,630

See accompanying Notes to Financial Statements.

**Tortoise**

29

**Schedule of Options Written**

November 30, 2018

**TYG**

<b>Call Options Written</b>	<b>Expiration Date</b>	<b>Strike Price</b>	<b>Contracts</b>	<b>Notional Value</b>	<b>Fair Value</b>
DCP Midstream, LP	December 2018	\$ 36.50	2,866	\$ 10,460,900	\$ (100,201)
Dominion Energy Midstream Partners, LP	December 2018	19.00	4,220	8,018,000	(262,278)
Energy Transfer LP	December 2018	16.00	13,100	20,960,000	(117,900)
EnLink Midstream Partners, LP	December 2018	14.75	7,077	10,438,575	(81,440)
MPLX LP	December 2018	35.00	2,990	10,465,000	(67,275)
Plains All American Pipeline, L.P.	December 2018	24.00	4,360	10,464,000	(152,600)
Spectra Energy Partners, LP	December 2018	37.50	1,167	4,376,250	(32,388)
Targa Resources Corp.	December 2018	50.00	1,904	9,520,000	(28,560)
Western Gas Partners, LP	December 2018	47.00	2,200	10,340,000	(79,200)
<b>Total Value of Call Options Written</b> (Premiums received \$493,575)				\$ 95,042,725	\$ (921,842)

**NTG**

<b>Call Options Written</b>	<b>Expiration Date</b>	<b>Strike Price</b>	<b>Contracts</b>	<b>Notional Value</b>	<b>Fair Value</b>
DCP Midstream, LP	December 2018	\$ 36.50	2,034	\$ 7,424,100	\$ (71,112)
Dominion Energy Midstream Partners, LP	December 2018	19.00	2,980	5,662,000	(185,211)
Energy Transfer LP	December 2018	16.00	9,300	14,880,000	(83,700)
Enlink Midstream Partners LP	December 2018	14.75	5,023	7,408,925	(57,803)
MPLX LP	December 2018	35.00	2,121	7,423,500	(47,723)
Plains All American Pipeline, L.P.	December 2018	24.00	3,080	7,392,000	(107,800)
Spectra Energy Partners, LP	December 2018	37.50	833	3,123,750	(23,118)
Targa Resources Corp	December 2018	50.00	1,353	6,765,000	(20,295)
Western Gas Partners LP	December 2018	47.00	1,575	7,402,500	(56,700)
<b>Total Value of Call Options Written</b> (Premiums received \$350,544)				\$ 60,057,675	\$ (653,462)

**TTP**

<b>Call Options Written</b>	<b>Expiration Date</b>	<b>Strike Price</b>	<b>Contracts</b>	<b>Notional Value</b>	<b>Fair Value</b>
Anadarko Petroleum Corporation	December 2018	\$ 59.50	182	\$ 1,082,900	\$ (5,642)
Antero Resources Corporation	December 2018	15.15	550	833,250	(4,352)
Cabot Oil & Gas Corporation	December 2018	27.20	399	1,085,280	(12,828)
Carrizo Oil & Gas, Inc.	December 2018	18.60	212	394,320	(12,588)
Cimarex Energy Co.	December 2018	94.00	162	1,522,800	(6,050)
Concho Resources Inc.	December 2018	146.10	181	2,644,410	(13,576)
Continental Resources, Inc.	December 2018	50.50	200	1,010,000	(20,000)
Diamondback Energy, Inc.	December 2018	120.00	67	804,000	(10,385)
EOG Resources, Inc.	December 2018	110.00	193	2,123,000	(25,090)
EQT Corporation	December 2018	18.55	330	612,150	(34,756)
Laredo Petroleum, Inc.	December 2018	5.45	707	385,315	(3,174)
Newfield Exploration Company	December 2018	20.55	364	748,020	(5,871)
Noble Energy, Inc.	December 2018	26.65	322	858,130	(6,823)
Parsley Energy, Inc.	December 2018	23.15	273	631,995	(5,468)
PDC Energy, Inc.	December 2018	40.75	94	383,050	(3,303)
Pioneer Natural Resources Company	December 2018	165.00	65	1,072,500	(6,890)
Range Resources Corporation	December 2018	17.40	685	1,191,900	(8,005)
WPX Energy, Inc.	December 2018	15.25	553	843,325	(14,981)
<b>Total Value of Call Options Written</b> (Premiums received \$512,777)				\$ 18,226,345	\$ (199,782)

See accompanying Notes to Financial Statements.

2018 Annual Report | November 30, 2018

**Schedule of Options Written** (continued)

November 30, 2018

<b>NDP</b>					<b>Notional</b>	<b>Fair Value</b>
<b>Call Options Written</b>	<b>Expiration Date</b>	<b>Strike Price</b>	<b>Contracts</b>		<b>Value</b>	
Anadarko Petroleum Corporation	December 2018	\$ 61.60	1,268	\$	7,810,880	\$ (16,245)
Antero Resources Corporation	December 2018	16.00	3,426		5,481,600	(11,146)
Cabot Oil & Gas Corporation	December 2018	29.00	4,020		11,658,000	(60,300)
Carrizo Oil & Gas, Inc.	December 2018	19.25	1,648		3,172,400	(68,804)
Carrizo Oil & Gas, Inc.	December 2018	20.00	870		1,740,000	(26,100)
Cimarex Energy Co.	December 2018	100.00	422		4,220,000	(23,210)
Concho Resources Inc.	December 2018	150.00	787		11,805,000	(31,480)
Continental Resources, Inc.	December 2018	52.50	2,252		11,823,000	(96,836)
Devon Energy Corporation	December 2018	33.25	2,784		9,256,800	(13,782)
Diamondback Energy, Inc.	December 2018	126.00	948		11,944,800	(74,993)
EOG Resources, Inc.	December 2018	115.00	1,418		16,307,000	(60,974)
EQT Corporation	December 2018	40.00	1,947		7,788,000	(92,482)
Laredo Petroleum, Inc.	December 2018	6.00	2,615		1,569,000	(13,075)
Newfield Exploration Company	December 2018	22.00	1,731		3,808,200	(17,310)
Parsley Energy, Inc.	December 2018	24.25	2,198		5,330,150	(25,393)
PDC Energy, Inc.	December 2018	44.50	491		2,184,950	(7,440)
Pioneer Natural Resources Company	December 2018	172.50	761		13,127,250	(32,343)
Pioneer Natural Resources Company	December 2018	175.00	383		6,702,500	(10,341)
Range Resources Corporation	December 2018	19.00	4,000		7,600,000	(30,000)
SM Energy Company	December 2018	24.00	881		2,114,400	(23,109)
Whiting Petroleum Corporation	December 2018	35.50	644		2,286,200	(33,488)
WPX Energy, Inc.	December 2018	16.25	5,912		9,607,000	(66,156)
<b>Total Value of Call Options Written</b> (Premiums received \$2,406,989)				\$	157,337,130	\$ (835,007)

See accompanying Notes to Financial Statements.

Tortoise

31

**Statements of Assets & Liabilities**

November 30, 2018

	<b>Tortoise Energy Infrastructure Corp.</b>	<b>Tortoise MLP Fund, Inc.</b>
<b>Assets</b>		
Investments in unaffiliated securities at fair value <sup>(1)</sup>	\$ 2,100,989,266	\$ 1,505,503,320
Investments in affiliated securities at fair value <sup>(2)</sup>	19,073,467	—
Receivable for Adviser fee waiver	83,181	354,243
Receivable for investments sold	—	—
Receivable for premiums on options written	22,133	—
Unrealized appreciation of interest rate swap contracts, net	108,883	—
Dividends, distributions and interest receivable from investments	431,137	245,428
Current tax asset	14,879,579	467,685
Prepaid expenses and other assets	751,169	174,260
Total assets	2,136,338,815	1,506,744,936
<b>Liabilities</b>		
Call options written, at fair value <sup>(3)</sup>	921,842	653,462
Payable to Adviser	3,612,869	2,504,684
Accrued directors' fees and expenses	10,000	10,500
Payable for investments purchased	23,244,183	—
Accrued expenses and other liabilities	8,303,193	4,179,324
Deferred tax liability	189,562,527	68,175,433
Credit facility borrowings	107,100,000	73,100,000
Senior notes, net <sup>(4)</sup>	379,419,108	311,621,135
Mandatory redeemable preferred stock, net <sup>(5)</sup>	163,865,389	131,467,424
Total liabilities	876,039,111	591,711,962
Net assets applicable to common stockholders	\$ 1,260,299,704	\$ 915,032,974
<b>Net Assets Applicable to Common Stockholders Consist of:</b>		
Capital stock, \$0.001 par value per share	\$ 53,635	\$ 63,208
Additional paid-in capital	835,712,017	701,715,239
Total distributable earnings (loss)	424,534,052	213,254,527
Net assets applicable to common stockholders	\$ 1,260,299,704	\$ 915,032,974
<b>Capital shares:</b>		
Authorized	100,000,000	100,000,000
Outstanding	53,635,054	63,208,377
Net Asset Value per common share outstanding (net assets applicable to common stock, divided by common shares outstanding)	\$ 23.50	\$ 14.48
(1) Investments in unaffiliated securities at cost	\$ 1,994,023,225	\$ 1,532,613,098
(2) Investments in affiliated securities at cost	\$ 50,738,405	\$ —
(3) Call options written, premiums received	\$ 493,575	\$ 350,544
(4) Deferred debt issuance and offering costs	\$ 580,892	\$ 378,865
(5) Deferred offering costs	\$ 1,134,611	\$ 532,576

See accompanying Notes to Financial Statements.

2018 Annual Report | November 30, 2018

<b>Tortoise Pipeline &amp; Energy Fund, Inc.</b>	<b>Tortoise Energy Independence Fund, Inc.</b>	<b>Tortoise Power and Energy Infrastructure Fund, Inc.</b>
\$ 234,582,116	\$ 191,232,010	\$ 189,944,879
—	—	—
—	—	—
—	—	196,612
—	—	—
—	—	128,630
587,625	39,651	1,626,983
—	—	—
89,380	12,876	9,078
235,259,121	191,284,537	191,906,182
199,782	835,007	—
456,420	399,195	313,260
10,500	10,500	10,500
937,674	—	447,278
705,352	451,601	410,716
—	—	—
19,800,000	57,100,000	53,400,000
33,948,978	—	—
15,998,724	—	—
72,057,430	58,796,303	54,581,754
\$ 163,201,691	\$ 132,488,234	\$ 137,324,428
\$ 10,016	\$ 14,696	\$ 6,951
205,805,819	239,075,301	128,974,298
(42,614,144)	(106,601,763)	8,343,179
\$ 163,201,691	\$ 132,488,234	\$ 137,324,428
100,000,000	100,000,000	100,000,000
10,016,413	14,696,260	6,951,333
\$ 16.29	\$ 9.02	\$ 19.76
\$ 269,791,253	\$ 243,132,208	\$ 186,117,829
\$ —	\$ —	\$ —
\$ 512,777	\$ 2,406,989	\$ —
\$ 51,022	\$ —	\$ —
\$ 1,276	\$ —	\$ —

See accompanying Notes to Financial Statements.

Tortoise

33

## Statements of Operations

Year Ended November 30, 2018

	<b>Tortoise Energy Infrastructure Corp.</b>	<b>Tortoise MLP Fund, Inc.</b>
<b>Investment Income</b>		
Distributions from master limited partnerships	\$ 165,622,117	\$ 105,955,632
Dividends and distributions from common stock	8,767,508	7,475,853
Dividends and distributions from preferred stock	3,940,886	3,485,432
Dividends and distributions from private investments	4,965,290	—
Less return of capital on distributions <sup>(1)</sup>	(184,611,970)	(113,946,449)
Less foreign taxes withheld	—	—
Net dividends and distributions from investments	(1,316,169)	2,970,468
Interest from corporate bonds	—	—
Dividends from money market mutual funds	9,148	38,016
<b>Total Investment Income (loss)</b>	<b>(1,307,021 )</b>	<b>3,008,484</b>
<b>Operating Expenses</b>		
Advisory fees	21,994,642	13,626,793
Administrator fees	495,880	446,486
Professional fees	380,129	245,864
Directors' fees	207,994	178,855
Stockholder communication expenses	210,021	145,538
Custodian fees and expenses	97,417	62,176
Fund accounting fees	90,952	78,163
Registration fees	51,238	46,984
Stock transfer agent fees	15,826	12,364
Franchise fees	3,865	—
Other operating expenses	188,589	102,615
<b>Total Operating Expenses</b>	<b>23,736,553</b>	<b>14,945,838</b>
<b>Leverage Expenses</b>		
Interest expense	18,279,169	12,663,355
Distributions to mandatory redeemable preferred stockholders	6,919,999	4,540,533
Amortization of debt issuance costs	428,864	231,333
Other leverage expenses	276,113	99,835
<b>Total Leverage Expenses</b>	<b>25,904,145</b>	<b>17,535,056</b>
<b>Total Expenses</b>	<b>49,640,698</b>	<b>32,480,894</b>
Less fees waived by Adviser (Note 4)	(529,050 )	(764,730 )
<b>Net Expenses</b>	<b>49,111,648</b>	<b>31,716,164</b>
<b>Net Investment Income (Loss), before Income Taxes</b>	<b>(50,418,669)</b>	<b>(28,707,680)</b>
Deferred tax benefit	24,679,544	5,964,172
<b>Net Investment Income (Loss)</b>	<b>(25,739,125 )</b>	<b>(22,743,508 )</b>
<b>Realized and Unrealized Gain (Loss) on Investments and Interest Rate Swaps</b>		
Net realized gain (loss) on investments in unaffiliated securities	99,167,112	60,794,841
Net realized gain (loss) on options	1,210,761	1,080,438
Net realized gain (loss) on interest rate swap settlements	(60,499)	—
Net realized loss on foreign currency and translation of other assets and liabilities denominated in foreign currency	—	—
Net realized gain (loss), before income taxes	100,317,374	61,875,279
Current tax (expense) benefit	533,600	(186,036 )
Deferred tax expense	(58,286,262 )	(15,159,081 )
Income tax expense	(57,752,662 )	(15,345,117 )
Net realized gain (loss)	42,564,712	46,530,162
Net unrealized depreciation of investments in unaffiliated securities	(83,798,472 )	(64,036,157 )
Net unrealized depreciation of investments in affiliated securities	(22,634,585)	—
Net unrealized appreciation (depreciation) of options	(428,267 )	(302,918 )
Net unrealized appreciation of interest rate swap contracts	266,585	—
Net unrealized appreciation of other assets and liabilities due to foreign currency translation	—	—

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Net unrealized depreciation, before income taxes	(106,594,739)	(64,339,075)
Deferred tax benefit	186,123,443	63,392,266
Net unrealized appreciation (depreciation)	79,528,704	(946,809 )
<b>Net Realized and Unrealized Gain (Loss)</b>	122,093,416	45,583,353
<b>Net Increase (Decrease) in Net Assets Applicable to Common Stockholders Resulting from Operations</b>	\$ 96,354,291	\$ 22,839,845

Return of Capital may be in excess of current year distributions due to prior year adjustments. See Note 2 to the Financial Statements for further (1) disclosure.

See accompanying Notes to Financial Statements.

2018 Annual Report | November 30, 2018

<b>Tortoise Pipeline &amp; Energy Fund, Inc.</b>	<b>Tortoise Energy Independence Fund, Inc.</b>	<b>Tortoise Power and Energy Infrastructure Fund, Inc.</b>
\$ 5,421,472	\$ 4,015,190	\$ 4,204,223
9,215,367	985,772	2,210,111
682,083	258,903	457,955
—	—	—
(10,315,607)	(4,526,935)	(6,733,321)
(425,888 )	(16,087 )	(3,565 )
4,577,427	716,843	135,403
—	—	5,439,893
5,081	18,632	4,231
4,582,508	735,475	5,579,527
2,844,494	2,638,486	1,898,410
108,436	100,945	84,933
156,879	148,408	151,621
117,673	117,664	112,086
71,445	52,404	91,526
19,943	17,989	10,392
48,843	47,333	28,552
24,758	25,001	24,835
12,350	11,997	13,605
—	—	—
44,834	44,580	28,109
3,449,655	3,204,807	2,444,069
1,876,808	1,758,968	1,451,464
686,401	—	—
57,013	—	—
18,667	—	—
2,638,889	1,758,968	1,451,464
6,088,544	4,963,775	3,895,533
—	—	—
6,088,544	4,963,775	3,895,533
(1,506,036)	(4,228,300)	1,683,994
—	—	—
(1,506,036 )	(4,228,300 )	1,683,994
(346,389)	(6,692,831)	8,976,827
(23,411 )	10,350,058	—
—	—	30,903
(4,510 )	—	(554 )
(374,310)	3,657,227	9,007,176
—	—	—
—	—	—
(374,310 )	3,657,227	9,007,176
(7,392,596 )	(31,965,739 )	(11,268,636 )
—	—	—
281,675	1,489,446	—
—	—	85,846
2,540	—	234

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

(7,108,381)	(30,476,293)	(11,182,556)
<u>      </u>	<u>      </u>	<u>      </u>
(7,108,381 )	(30,476,293 )	(11,182,556 )
(7,482,691 )	(26,819,066 )	(2,175,380 )
\$ (8,988,727 )	\$ (31,047,366 )	\$ (491,386 )

See accompanying Notes to Financial Statements.

**Tortoise**

35

---

## Statements of Changes in Net Assets

	<b>Tortoise Energy Infrastructure Corp.</b>		<b>Tortoise MLP Fund, Inc.</b>	
	<b>Year Ended November 30,</b>	<b>Year Ended November 30,</b>	<b>Year Ended November 30,</b>	<b>Year Ended November 30,</b>
	<b>2018</b>	<b>2017</b>	<b>2018</b>	<b>2017</b>
<b>Operations</b>				
Net investment income (loss)	\$ (25,739,125)	\$ (31,941,053)	\$ (22,743,508)	\$ (19,766,804)
Net realized gain (loss)	42,564,712	119,288,455	46,530,162	29,188,785
Net unrealized appreciation (depreciation)	79,528,704	(200,775,043 )	(946,809 )	(83,536,956 )
Net increase (decrease) in net assets applicable to common stockholders resulting from operations	96,354,291	(113,427,641 )	22,839,845	(74,114,975 )
<b>Distributions to Common Stockholders</b>				
From distributable earnings	—	—	—	—
From tax return of capital	(138,297,758 )	(128,748,918 )	(86,693,300 )	(79,670,471 )
Total distributions to common stockholders	(138,297,758 )	(128,748,918 )	(86,693,300 )	(79,670,471 )
<b>Capital Stock Transactions</b>				
Proceeds from issuance of common shares through offerings	114,529,368	4,639,779	230,973,008	—
Underwriting discounts and offering expenses associated with the issuance of common stock	(349,970)	(91,276)	(8,891,735)	—
Issuance of common shares from reinvestment of distributions to stockholders	6,535,303	6,881,998	2,720,036	3,004,499
Other proceeds	—	180	—	—
Net increase in net assets applicable to common stockholders from capital stock transactions	120,714,701	11,430,681	224,801,309	3,004,499
Total increase (decrease) in net assets applicable to common stockholders	78,771,234	(230,745,878)	160,947,854	(150,780,947)
<b>Net Assets</b>				
Beginning of year	1,181,528,470	1,412,274,348	754,085,120	904,866,067
End of year	\$ 1,260,299,704	\$ 1,181,528,470 *	\$ 915,032,974	\$ 754,085,120 *
<b>Transactions in common shares</b>				
Shares outstanding at beginning of year	49,379,408	48,980,215	47,246,780	47,080,789
Shares issued through offerings	4,013,693	155,743	15,802,094	—
Shares issued through reinvestment of distributions	241,953	243,450	159,503	165,991
Shares outstanding at end of year	53,635,054	49,379,408	63,208,377	47,246,780

Includes undistributed (accumulated) net investment income (loss), net of income taxes of \$(239,156,803), \$(137,388,906), \$990,851, \$(2,914,758) and \$4,655,808 for the Tortoise Energy Infrastructure Corp., Tortoise MLP Fund, Inc., Tortoise Pipeline & Energy Fund, Inc., \* Tortoise Energy Independence Fund, Inc. and Tortoise Power and Energy Infrastructure Fund, Inc., respectively.

See accompanying Notes to Financial Statements.

2018 Annual Report | November 30, 2018

Tortoise Pipeline & Energy Fund, Inc.		Tortoise Energy Independence Fund, Inc.		Tortoise Power and Energy Infrastructure Fund, Inc.	
Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2018	Year Ended November 30, 2017
\$ (1,506,036)	\$ (458,179)	\$ (4,228,300)	\$ (2,930,061)	\$ 1,683,994	\$ 4,089,792
(374,310 )	4,603,749	3,657,227	(9,166,863 )	9,007,176	4,185,820
(7,108,381 )	(33,840,728 )	(30,476,293 )	(21,569,273 )	(11,182,556 )	(15,678,728 )
(8,988,727 )	(29,695,158 )	(31,047,366 )	(33,666,197 )	(491,386 )	(7,403,116 )
(428,639 )	(3,036,473 )	—	—	(10,427,000 )	(9,743,950 )
(15,898,114 )	(13,290,280 )	(25,586,654 )	(25,460,285 )	—	(683,050 )
(16,326,753 )	(16,326,753 )	(25,586,654 )	(25,460,285 )	(10,427,000 )	(10,427,000 )
—	—	—	—	—	—
—	—	—	—	—	—
—	—	1,233,701	927,023	—	—
—	—	—	—	—	—
—	—	1,233,701	927,023	—	—
(25,315,480)	(46,021,911)	(55,400,319)	(58,199,459)	(10,918,386)	(17,830,116)
188,517,171	234,539,082	187,888,553	246,088,012	148,242,814	166,072,930
\$ 163,201,691	\$ 188,517,171 *	\$ 132,488,234	\$ 187,888,553 *	\$ 137,324,428	\$ 148,242,814 *
10,016,413	10,016,413	14,583,662	14,516,071	6,951,333	6,951,333
—	—	—	—	—	—
—	—	112,598	67,591	—	—
10,016,413	10,016,413	14,696,260	14,583,662	6,951,333	6,951,333

See accompanying Notes to Financial Statements.

Tortoise

37

**Statements of Cash Flows**

Year Ended November 30, 2018

	<b>Tortoise Energy Infrastructure Corp.</b>	<b>Tortoise MLP Fund, Inc.</b>
<b>Cash Flows From Operating Activities</b>		
Dividends, distributions and interest received from investments	\$ 183,592,531	\$ 117,093,968
Purchases of long-term investments	(496,715,904)	(495,831,848)
Proceeds from sales of long-term investments	417,237,015	198,382,984
Sales (purchases) of short-term investments, net	(24,116 )	(138,897 )
Call options written, net	1,682,203	1,430,983
Payments on interest rate swap contracts, net	(60,499 )	—
Interest received on securities sold, net	—	—
Interest expense paid	(18,241,605 )	(11,942,756 )
Distributions to mandatory redeemable preferred stockholders	(6,920,000)	(4,470,276)
Other leverage expenses paid	(219,375 )	(64,746 )
Income taxes paid	(1,331,182)	(119,000)
Operating expenses paid	(23,429,677 )	(14,262,633 )
Net cash provided by (used in) operating activities	55,569,391	(209,922,221 )
<b>Cash Flows From Financing Activities</b>		
Advances (payments) on credit facilities, net	(5,600,000)	23,300,000
Issuance of mandatory redeemable preferred stock	—	87,000,000
Redemption of mandatory redeemable preferred stock	—	(65,000,000)
Issuance of senior notes	—	105,000,000
Maturity of senior notes	(32,500,000)	(77,000,000)
Debt issuance costs	(4,366 )	(301,270 )
Issuance of common stock	114,529,368	230,973,008
Common stock issuance costs	(231,922 )	(8,620,911 )
Distributions paid to common stockholders	(131,762,471 )	(85,428,606 )
Net cash provided by (used in) financing activities	(55,569,391 )	209,922,221
Net change in cash	—	—
Cash — beginning of year	—	—
Cash — end of year	\$ —	\$ —

See accompanying Notes to Financial Statements.

2018 Annual Report | November 30, 2018

<b>Tortoise Pipeline &amp; Energy Fund, Inc.</b>	<b>Tortoise Energy Independence Fund, Inc.</b>	<b>Tortoise Power and Energy Infrastructure Fund, Inc.</b>
\$ 14,833,259	\$ 5,421,932	\$ 12,971,081
(35,612,984 )	(346,466,147 )	(61,547,824 )
42,469,533	367,138,147	62,968,992
70,190	945	(144,960 )
135,843	10,861,101	—
—	—	30,903
—	—	(40,853)
(1,814,628 )	(1,641,014 )	(1,350,210 )
(686,400)	—	—
(20,000 )	—	—
(418)	(350)	—
(3,547,642 )	(3,274,084 )	(2,460,129 )
15,826,753	32,040,530	10,427,000
500,000	(7,400,000)	—
—	—	—
—	—	—
—	—	—
—	—	—
(16,326,753)	(24,640,530)	(10,427,000)
(15,826,753 )	(32,040,530 )	(10,427,000 )
—	—	—
—	—	—
\$ —	\$ —	\$ —

See accompanying Notes to Financial Statements.

**Tortoise**

39

**Statements of Cash Flows** (continued)

Year Ended November 30, 2018

	<b>Tortoise Energy Infrastructure Corp.</b>	<b>Tortoise MLP Fund, Inc.</b>
<b>Reconciliation of net increase in net assets applicable to common stockholders resulting from operations to net cash provided by (used in) operating activities</b>		
Net increase in net assets applicable to common stockholders resulting from operations	\$ 96,354,291	\$ 22,839,845
Adjustments to reconcile net increase in net assets applicable to common stockholders resulting from operations to net cash provided by (used in) operating activities:		
Purchases of long-term investments	(508,462,886)	(494,308,370)
Proceeds from sales of long-term investments	408,626,699	194,635,931
Sales (purchases) of short-term investments, net	(24,116)	(138,897)
Call options written, net	1,704,336	1,430,983
Return of capital on distributions received	184,611,970	113,946,449
Deferred tax benefit	(152,516,725)	(54,197,357)
Net unrealized appreciation	106,594,739	64,339,075
Amortization of market premium, net	—	—
Net realized (gain) loss	(100,377,873)	(61,875,279)
Amortization of debt issuance costs	428,864	231,333
Changes in operating assets and liabilities:		
(Increase) decrease in dividends, distributions and interest receivable from investments	287,582	139,035
(Increase) decrease in current tax asset	(1,864,782)	67,036
(Increase) decrease in receivable for investments sold	8,610,316	3,747,053
Increase in receivable for premiums on options written	(22,133)	—
(Increase) decrease in prepaid expenses and other assets	132,206	256,914
Increase (decrease) in payable for investments purchased	11,746,982	(1,523,478)
Decrease in payable to Adviser, net of fees waived	(123,864)	(18,991)
Increase (decrease) in accrued expenses and other liabilities	(136,215 )	506,497
Total adjustments	(40,784,900 )	(232,762,066 )
Net cash provided by (used in) operating activities	\$55,569,391	\$ (209,922,221 )
<b>Non-Cash Financing Activities</b>		
Reinvestment of distributions by common stockholders in additional common shares	\$6,535,303	\$2,720,036

See accompanying Notes to Financial Statements.

2018 Annual Report | November 30, 2018

Tortoise Pipeline & Energy Fund, Inc.	Tortoise Energy Independence Fund, Inc.	Tortoise Power and Energy Infrastructure Fund, Inc.
\$ (8,988,727)	\$ (31,047,366)	\$ (491,386)
(36,550,658)	(346,466,147)	(61,995,102)
42,469,533	367,138,147	63,165,604
70,190	945	(144,960)
135,843	10,861,101	—
10,315,607	4,526,935	6,733,321
—	—	—
7,108,381	30,476,293	11,182,556
—	—	438,556
374,310	(3,657,227)	(8,976,273)
57,013	—	—
(64,856 )	159,522	178,824
—	—	—
—	—	(196,612 )
(65,188 )	(604 )	(674 )
937,674	—	447,278
(28,609 )	(61,273 )	(12,141 )
56,240	110,204	98,009
24,815,480	63,087,896	10,918,386
\$ 15,826,753	\$ 32,040,530	\$ 10,427,000
\$ —	\$ 1,233,701	\$ —

See accompanying Notes to Financial Statements.

Tortoise

41

**TYG Financial Highlights**

	Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2016	Year Ended November 30, 2015	Year Ended November 30, 2014
<b>Per Common Share Data<sup>(1)</sup></b>					
Net Asset Value, beginning of year	\$ 23.93	\$ 28.83	\$ 29.28	\$ 49.34	\$ 43.36
Income (Loss) from Investment Operations					
Net investment loss <sup>(2)</sup>	(0.49 )	(0.65 )	(0.78 )	(0.62 )	(0.66 )
Net realized and unrealized gain (loss) on investments and interest rate swap contracts <sup>(2)</sup>	2.59	(1.64 )	2.94	(16.85 )	9.01
Total income (loss) from investment operations	2.10	(2.29 )	2.16	(17.47 )	8.35
Distributions to Common Stockholders					
From return of capital	(2.62 )	(2.62 )	(2.62 )	(2.59 )	(2.38 )
Capital Stock Transactions					
Premiums less underwriting discounts and offering costs on issuance of common stock <sup>(3)</sup>	0.09	0.01	0.01	(0.00 )	0.01
Net Asset Value, end of year	\$ 23.50	\$ 23.93	\$ 28.83	\$ 29.28	\$ 49.34
Per common share market value, end of year	\$ 22.59	\$ 25.86	\$ 30.63	\$ 26.57	\$ 46.10
Total investment return based on market value <sup>(4)</sup>	(3.42 ) %	(7.49 ) %	26.21 %	(37.86 ) %	(2.54 ) %
<b>Supplemental Data and Ratios</b>					
Net assets applicable to common stockholders,					
end of year (000's)	\$ 1,260,300	\$ 1,181,528	\$ 1,412,274	\$ 1,405,733	\$ 2,369,068
Average net assets (000's)	\$ 1,388,683	\$ 1,406,724	\$ 1,345,764	\$ 1,974,038	\$ 1,837,590
Ratio of Expenses to Average Net Assets					
Advisory fees	1.58 %	1.74 %	1.74 %	1.76 %	1.65 %
Other operating expenses	0.13	0.12	0.12	0.10	0.13
Total operating expenses, before fee waiver	1.71	1.86	1.86	1.86	1.78
Fee waiver <sup>(5)</sup>	(0.04 )	(0.00 )	(0.01 )	—	(0.00 )
Total operating expenses	1.67	1.86	1.85	1.86	1.78
Leverage expenses	1.87	1.78	2.29	1.75	1.38
Income tax expense (benefit) <sup>(6)</sup>	(11.02 )	(5.28 )	4.64	(24.50 )	7.81
Total expenses	(7.48 ) %	(1.64 ) %	8.78 %	(20.89 ) %	10.97 %

See accompanying Notes to Financial Statements.

2018 Annual Report | November 30, 2018

	Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2016	Year Ended November 30, 2015	Year Ended November 30, 2014
Ratio of net investment loss to average net assets before fee waiver	(1.89) %	(2.27) %	(2.83) %	(1.50) %	(1.33) %
Ratio of net investment loss to average net assets after fee waiver	(1.85) %	(2.27) %	(2.82) %	(1.50) %	(1.33) %
Portfolio turnover rate	17.96 %	20.38 %	24.23 %	12.94 %	15.33 %
Credit facility borrowings, end of year (000's)	\$ 107,100	\$ 112,700	\$ 109,300	\$ 66,000	\$ 162,800
Senior notes, end of year (000's)	\$380,000	\$412,500	\$442,500	\$545,000	\$544,400
Preferred stock, end of year (000's)	\$165,000	\$165,000	\$165,000	\$295,000	\$224,000
Per common share amount of senior notes outstanding, end of year	\$7.08	\$8.35	\$9.03	\$11.35	\$11.34
Per common share amount of net assets, excluding senior notes, end of year	\$30.58	\$32.28	\$37.86	\$40.63	\$60.68
Asset coverage, per \$1,000 of principal amount of senior notes and credit facility borrowings <sup>(7)</sup>	\$3,926	\$3,564	\$3,858	\$3,784	\$4,667
Asset coverage ratio of senior notes and credit facility borrowings <sup>(7)</sup>	393 %	356 %	386 %	378 %	467 %
Asset coverage, per \$10 liquidation value per share of mandatory redeemable preferred stock <sup>(8)</sup>	\$29	\$27	\$30	\$26	\$35
Asset coverage ratio of preferred stock <sup>(8)</sup>	293 %	271 %	297 %	255 %	354 %

(1) Information presented relates to a share of common stock outstanding for the entire year.

The per common share data for the years ended November 30, 2017, 2016, 2015 and 2014 do not reflect the change in estimate of investment

(2) income and return of capital, for the respective year. See Note 2C to the financial statements for further disclosure.

Represents premium on shelf offerings of \$0.10 per share, less the underwriting and offering costs of \$0.01 per share, for the year ended November 30, 2018. Represents the premium on the shelf offerings of \$0.01 per share, less the underwriting and offering costs of less than \$0.01 per share for the year ended November 30, 2017. Represents the premium on the shelf offerings of \$0.02 per share, less the underwriting and offering costs of less than \$0.01 per share for the year ended November 30, 2016. Represents underwriting and offering costs of less than \$0.01 per share for the year ended November 30, 2015. Represents the premium on the shelf offerings of \$0.02 per share, less the underwriting

(3) and offering costs of \$0.01 per share for the year ended November 30, 2014.

Total investment return is calculated assuming a purchase of common stock at the beginning of the year and a sale at the closing price on the last day of the period reported (excluding brokerage commissions). The calculation also assumes reinvestment of distributions at actual prices

(4) pursuant to TYG's dividend reinvestment plan.

(5) Less than 0.01% for the years ended November 30, 2017 and 2014.

For the year ended November 30, 2018, TYG accrued \$152,516,725 for net deferred income tax benefit. Included in the current period accrual is a deferred tax benefit of \$125,271,378 which is the impact from the federal tax rate reduction related to the Tax Cuts and Jobs Act. For the year ended November 30, 2017, TYG accrued \$35,365,364 for current income tax expense and \$109,662,030 for net deferred income tax benefit.

For the year ended November 30, 2016, TYG accrued \$57,075,786 for current income tax expense and \$ 5,303,392 for net deferred income tax expense. For the year ended November 30, 2015, TYG accrued \$66,785,732 for net current income tax expense and \$550,449,662 for net deferred income tax benefit. For the year ended November 30, 2014, TYG accrued \$52,981,532 for current income tax expense and

(6) \$90,477,388 for net deferred income tax expense.

Represents value of total assets less all liabilities and indebtedness not represented by senior notes, credit facility borrowings and preferred

(7) stock at the end of the year divided by senior notes and credit facility borrowings outstanding at the end of the year.

Represents value of total assets less all liabilities and indebtedness not represented by senior notes, credit facility borrowings and preferred

(8) stock at the end of the year divided by senior notes, credit facility borrowings and preferred stock outstanding at the end of the year.

See accompanying Notes to Financial Statements.



## NTG Financial Highlights

	Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2016	Year Ended November 30, 2015	Year E Novemb 201
<b>Per Common Share Data<sup>(1)</sup></b>					
Net Asset Value, beginning of year	\$ 15.96	\$ 19.22	\$ 18.65	\$ 29.83	\$ 2
Income (Loss) from Investment Operations					
Net investment loss <sup>(2)</sup>	(0.43)	(0.42)	(0.46)	(0.32)	
Net realized and unrealized gain (loss) on investments <sup>(2)</sup>	1.36	(1.15)	2.72	(9.17)	
Total income (loss) from investment operations	0.93	(1.57)	2.26	(9.49)	
Distributions to Common Stockholders					
From return of capital	(1.69)	(1.69)	(1.69)	(1.69)	
Capital stock transactions					
Premiums less underwriting discounts and offering costs on issuance of common stock <sup>(3)</sup>	(0.72)	—	(0.00)	(0.00)	
Net Asset Value, end of year	\$ 14.48	\$ 15.96	\$ 19.22	\$ 18.65	\$ 2
Per common share market value, end of year	\$ 13.72	\$ 15.90	\$ 18.90	\$ 16.18	\$ 2
Total investment return based on market value <sup>(4)</sup>	(4.10)%	(7.67)%	27.99 %	(37.08)%	
<b>Supplemental Data and Ratios</b>					
Net assets applicable to common stockholders, end of year (000's)	\$ 915,033	\$ 754,085	\$ 904,866	\$ 876,409	\$ 1,40
Average net assets (000's)	\$ 887,014	\$ 892,196	\$ 862,527	\$ 1,174,085	\$ 1,40
Ratio of Expenses to Average Net Assets					
Advisory fees	1.54 %	1.61 %	1.56 %	1.56 %	
Other operating expenses	0.15	0.14	0.16	0.12	
Total operating expenses, before fee waiver	1.69	1.75	1.72	1.68	
Fee waiver	(0.09)	—	(0.01)	(0.09)	
Total operating expenses	1.60	1.75	1.71	1.59	
Leverage expenses	1.98	1.89	1.95	1.42	
Income tax expense (benefit) <sup>(5)</sup>	(6.09)	(4.33)	7.25	(21.92)	
Total expenses	(2.51)%	(0.69)%	10.91 %	(18.91)%	

See accompanying Notes to Financial Statements.

## 2018 Annual Report | November 30, 2018

	Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2016	Year Ended November 30, 2015	Year Ended November 30, 2014
Ratio of net investment loss to average net assets before fee waiver	(2.65)%	(2.22)%	(2.53)%	(1.36)%	(1.97)%
Ratio of net investment loss to average net assets after fee waiver	(2.56)%	(2.22)%	(2.52)%	(1.27)%	(1.81)%
Portfolio turnover rate	13.67 %	20.94 %	35.47 %	17.54 %	18.09 %
Credit facility borrowings, end of year (000's)	\$ 73,100	\$ 49,800	\$ 46,800	\$ 62,800	\$ 68,900
Senior notes, end of year (000's)	\$ 312,000	\$ 284,000	\$ 284,000	\$ 348,000	\$ 348,000
Preferred stock, end of year (000's)	\$ 132,000	\$ 110,000	\$ 110,000	\$ 90,000	\$ 90,000
Per common share amount of senior notes outstanding, end of year	\$ 4.94	\$ 6.01	\$ 6.03	\$ 7.40	\$ 7.40
Per common share amount of net assets, excluding senior notes, end of year	\$ 19.42	\$ 21.97	\$ 25.25	\$ 26.05	\$ 37.23
Asset coverage, per \$1,000 of principal amount of senior notes and credit facility borrowings <sup>(6)</sup>	\$ 3,719	\$ 3,589	\$ 4,068	\$ 3,353	\$ 4,579
Asset coverage ratio of senior notes and credit facility borrowings <sup>(6)</sup>	372 %	359 %	407 %	335 %	458 %
Asset coverage, per \$25 liquidation value per share of mandatory redeemable preferred stock <sup>(7)</sup>	\$ 69	\$ 67	\$ 76	\$ 69	\$ 94
Asset coverage ratio of preferred stock <sup>(7)</sup>	277 %	270 %	305 %	275 %	377 %

(1) Information presented relates to a share of common stock outstanding for the entire year.

(2) The per common share data for the years ended November 30, 2017, 2016, 2015, and 2014 do not reflect the change in estimate of investment income and return of capital, for the respective year. See Note 2C to the financial statements for further disclosure.

(3) Represents the discounts on shares issued through rights offerings of \$0.55, plus the underwriting and offering costs of \$0.17 per share for the year ended November 30, 2018. Represents less than \$0.01 per share for the years ended November 30, 2016 and 2015.

(4) Total investment return is calculated assuming a purchase of common stock at the beginning of the year and a sale at the closing price on the last day of the year reported (excluding brokerage commissions). This calculation also assumes reinvestment of distributions at actual prices pursuant to NTG's dividend reinvestment plan.

For the year ended November 30, 2018, NTG accrued \$54,197,357 for net deferred income tax benefit. Included in the current period accrual is a deferred tax benefit of \$47,436,124 which is the impact from the federal tax rate reduction related to the Tax Cuts and Jobs Act. For the year ended November 30, 2017, NTG accrued \$440,504 for current income tax expense and \$39,035,257 for net deferred income tax benefit. For the

(5) year ended November 30, 2016, NTG accrued \$1,891,670 for current income tax expense and \$60,652,872 for net deferred income tax expense. For the year ended November 30, 2015, NTG accrued \$200,550 for current income tax expense and \$257,585,058 for net deferred income tax benefit. For the year ended November 30, 2014, NTG accrued \$581,000 for current income tax expense and \$98,329,597 for net deferred income tax expense.

(6) Represents value of total assets less all liabilities and indebtedness not represented by senior notes, credit facility borrowings and preferred stock at the end of the period divided by senior notes and credit facility borrowings outstanding at the end of the period.

(7) Represents value of total assets less all liabilities and indebtedness not represented by senior notes, credit facility borrowings and preferred stock at the end of the period divided by senior notes, credit facility borrowings and preferred stock outstanding at the end of the period.

See accompanying Notes to Financial Statements.

Tortoise

45

## TTP Financial Highlights

	Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2016	Year Ended November 30, 2015	Year End November 2014
<b>Per Common Share Data<sup>(1)</sup></b>					
Net Asset Value, beginning of year	\$ 18.82	\$ 23.42	\$ 19.71	\$ 35.04	\$ 30.3
Income (Loss) from Investment Operations					
Net investment income (loss) <sup>(2)</sup>	(0.15)	(0.05)	0.04	0.22	0.0
Net realized and unrealized gain (loss) <sup>(2)</sup>	(0.75)	(2.92)	5.30	(13.60)	6.2
Total income (loss) from investment operations	(0.90)	(2.97)	5.34	(13.38)	6.3
Distributions to Common Stockholders					
From net investment income	(0.04)	(0.05)	(0.38)	(0.34)	(0.0)
From net realized gains from investment transactions	—	(0.25)	(1.25)	(1.61)	(1.6)
From return of capital	(1.59)	(1.33)	—	—	—
Total distributions to common stockholders	(1.63)	(1.63)	(1.63)	(1.95)	(1.6)
Net Asset Value, end of year	\$ 16.29	\$ 18.82	\$ 23.42	\$ 19.71	\$ 35.0
Per common share market value, end of year	\$ 14.33	\$ 17.01	\$ 21.55	\$ 17.47	\$ 32.5
Total investment return based on market value <sup>(3)</sup>	(7.03)%	(14.18)%	34.89 %	(41.19)%	21.6
<b>Supplemental Data and Ratios</b>					
Net assets applicable to common stockholders, end of year (000's)	\$ 163,202	\$ 188,517	\$ 234,539	\$ 197,443	\$ 350,97
Average net assets (000's)	\$ 188,518	\$ 219,359	\$ 192,888	\$ 292,473	\$ 357,48
Ratio of Expenses to Average Net Assets					
Advisory fees	1.51 %	1.43 %	1.48 %	1.44 %	1.3
Other operating expenses	0.32	0.26	0.29	0.22	0.1
Total operating expenses, before fee waiver	1.83	1.69	1.77	1.66	1.5
Fee waiver	—	(0.00)	(0.07)	(0.14)	(0.1)
Total operating expenses	1.83	1.69	1.70	1.52	1.3
Leverage expenses	1.40	1.06	1.23	0.93	0.7
Total expenses	3.23 %	2.75 %	2.93 %	2.45 %	2.1

See accompanying Notes to Financial Statements.

## 2018 Annual Report | November 30, 2018

	Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2016	Year Ended November 30, 2015	Year Ended November 30, 2014
Ratio of net investment income (loss) to average net assets before fee waiver	(0.80)%	(0.21)%	0.12 %	0.60 %	0.02 %
Ratio of net investment income (loss) to average net assets after fee waiver	(0.80)%	(0.21)%	0.19 %	0.74 %	0.21 %
Portfolio turnover rate	14.27 %	24.23 %	90.22 %	18.84 %	18.45 %
Credit facility borrowings, end of year (000's)	\$ 19,800	\$ 19,300	\$ 16,600	\$ 16,900	\$ 26,000
Senior notes, end of year (000's)	\$ 34,000	\$ 34,000	\$ 34,000	\$ 54,000	\$ 49,000
Preferred stock, end of year (000's)	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000	\$ 16,000
Per common share amount of senior notes outstanding, end of year	\$ 3.39	\$ 3.39	\$ 3.39	\$ 5.39	\$ 4.89
Per common share amount of net assets, excluding senior notes, end of year	\$ 19.68	\$ 22.21	\$ 26.81	\$ 25.10	\$ 39.93
Asset coverage, per \$1,000 of principal amount of senior notes and credit facility borrowings <sup>(4)</sup>	\$ 4,331	\$ 4,837	\$ 5,951	\$ 4,010	\$ 5,893
Asset coverage ratio of senior notes and credit facility borrowings <sup>(4)</sup>	433 %	484 %	595 %	401 %	589 %
Asset coverage, per \$25 liquidation value per share of mandatory redeemable preferred stock <sup>(5)</sup>	\$ 83	\$ 93	\$ 113	\$ 82	\$ 121
Asset coverage ratio of preferred stock <sup>(5)</sup>	334 %	372 %	452 %	327 %	486 %

(1) Information presented relates to a share of common stock outstanding for the entire year.

(2) The per common share data for the years ended November 30, 2017, 2016, 2015, and 2014 do not reflect the change in estimate of investment income and return of capital, for the respective year. See Note 2C to the financial statements for further disclosure.

(3) Total investment return is calculated assuming a purchase of common stock at the beginning of the year and a sale at the closing price on the last day of the year reported (excluding brokerage commissions). The calculation also assumes reinvestment of distributions at actual prices pursuant to TTP's dividend reinvestment plan.

(4) Represents value of total assets less all liabilities and indebtedness not represented by senior notes, credit facility borrowings and preferred stock at the end of the year divided by senior notes and credit facility borrowings outstanding at the end of the year.

(5) Represents value of total assets less all liabilities and indebtedness not represented by senior notes, credit facility borrowings and preferred stock at the end of the year divided by senior notes, credit facility borrowings and preferred stock outstanding at the end of the year.

See accompanying Notes to Financial Statements.

**Tortoise**

47

## NDP Financial Highlights

	Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2016	Year Ended November 30, 2015	Year End November 2014
<b>Per Common Share Data<sup>(1)</sup></b>					
Net Asset Value, beginning of year	\$ 12.88	\$ 16.95	\$ 15.53	\$ 22.76	\$ 26.4
Income (Loss) from Investment Operations					
Net investment loss <sup>(2)</sup>	(0.29)	(0.20)	(0.12)	(0.10)	(0.1)
Net realized and unrealized gain (loss) <sup>(2)</sup>	(1.82)	(2.12)	3.29	(5.38)	(1.8)
Total income (loss) from investment operations	(2.11)	(2.32)	3.17	(5.48)	(1.9)
Distributions to Common Stockholders					
From net investment income <sup>(3)</sup>	—	—	—	(0.00)	(0.0)
From net realized gains from investment transactions	—	—	—	—	(1.6)
From return of capital	(1.75)	(1.75)	(1.75)	(1.75)	(0.0)
Total distributions to common stockholders	(1.75)	(1.75)	(1.75)	(1.75)	(1.7)
Net Asset Value, end of year	\$ 9.02	\$ 12.88	\$ 16.95	\$ 15.53	\$ 22.7
Per common share market value, end of year	\$ 9.00	\$ 12.39	\$ 15.85	\$ 13.18	\$ 21.2
Total investment return based on market value <sup>(4)</sup>	(15.10)%	(11.04)%	36.27 %	(31.05)%	(5.1)
<b>Supplemental Data and Ratios</b>					
Net assets applicable to common stockholders, end of year (000's)	\$ 132,488	\$ 187,889	\$ 246,088	\$ 225,410	\$ 330,45
Average net assets (000's)	\$ 176,481	\$ 209,940	\$ 212,528	\$ 288,672	\$ 413,38
Ratio of Expenses to Average Net Assets					
Advisory fees	1.50 %	1.43 %	1.42 %	1.33 %	1.2
Other operating expenses	0.32	0.26	0.29	0.21	0.1
Total operating expenses, before fee waiver	1.82	1.69	1.71	1.54	1.4
Fee waiver	—	(0.01)	(0.13)	(0.13)	(0.1)
Total operating expenses	1.82	1.68	1.58	1.41	1.2
Leverage expenses	0.99	0.56	0.37	0.21	0.1
Total expenses	2.81 %	2.24 %	1.95 %	1.62 %	1.3

See accompanying Notes to Financial Statements.

## 2018 Annual Report | November 30, 2018

	Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2016	Year Ended November 30, 2015	Year Ended November 30, 2014
Ratio of net investment loss to average net assets before fee waiver	(2.40)%	(1.41)%	(0.98)%	(0.61)%	(0.61)%
Ratio of net investment loss to average net assets after fee waiver	(2.40)%	(1.40)%	(0.85)%	(0.48)%	(0.44)%
Portfolio turnover rate	143.77 %	64.88 %	47.03 %	15.63 %	43.21 %
Credit facility borrowings, end of year (000's)	\$ 57,100	\$ 64,500	\$ 63,800	\$ 61,800	\$ 56,200
Asset coverage, per \$1,000 of principal amount of credit facility borrowings <sup>(5)</sup>	\$ 3,320	\$ 3,913	\$ 4,857	\$ 4,647	\$ 6,880
Asset coverage ratio of credit facility borrowings <sup>(5)</sup>	332 %	391 %	486 %	465 %	688 %

(1) Information presented relates to a share of common stock outstanding for the entire year.

(2) The per common share data for the years ended November 30, 2017, 2016, 2015, 2014 and 2013 do not reflect the change in estimate of investment income and return of capital, for the respective year. See Note 2C to the financial statements for further disclosure.

(3) Less than \$0.01 for the years ended November 30, 2015 and 2014.

(4) Total investment return is calculated assuming a purchase of common stock at the beginning of the year and a sale at the closing price on the last day of the year reported (excluding brokerage commissions). The calculation also assumes reinvestment of distributions at actual prices pursuant to NDP's dividend reinvestment plan.

(5) Represents value of total assets less all liabilities and indebtedness not represented by credit facility borrowings at the end of the year divided by credit facility borrowings outstanding at the end of the year.

See accompanying Notes to Financial Statements.

**Tortoise**

49

## TPZ Financial Highlights

	Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2016	Year Ended November 30, 2015	Year Ended November 30, 2014
<b>Per Common Share Data<sup>(1)</sup></b>					
Net Asset Value, beginning of year	\$ 21.33	\$ 23.89	\$ 21.23	\$ 31.08	\$ 28.12
Income (loss) from Investment Operations					
Net investment income <sup>(2)</sup>	0.24	0.59	0.71	0.88	0.81
Net realized and unrealized gain (loss) <sup>(2)</sup>	(0.31 )	(1.65 )	3.49	(7.87 )	3.65
Total income (loss) from investment operations	(0.07 )	(1.06 )	4.20	(6.99 )	4.46
Distributions to Common Stockholders					
From net investment income	(0.57)	(1.04)	(1.29)	(0.91)	(0.90)
From net realized gains from investment transactions	(0.93 )	(0.36 )	(0.25 )	(1.95 )	(0.60 )
From return of capital	—	(0.10 )	—	—	—
Total distributions to common stockholders	(1.50 )	(1.50 )	(1.54 )	(2.86 )	(1.50 )
Net Asset Value, end of year	\$ 19.76	\$ 21.33	\$ 23.89	\$ 21.23	\$ 31.08
Per common share market value, end of year	\$ 17.17	\$ 19.94	\$ 21.43	\$ 18.53	\$ 26.90
Total investment return based on market value <sup>(3)</sup>	(6.82 )%	(0.27 )%	25.57 %	(22.54 )%	14.94 %
Total investment return based on net asset value <sup>(4)</sup>	0.24 %	(4.31 )%	22.18 %	(23.19 )%	16.84 %

**Supplemental Data and Ratios**

Net assets applicable to common stockholders, end of year (000's)	\$ 137,324	\$ 148,243	\$ 166,073	\$ 147,563	\$ 216,048
Average net assets (000's)	\$ 147,616	\$ 162,708	\$ 146,274	\$ 187,752	\$ 208,698
Ratio of Expenses to Average Net Assets <sup>(6)</sup>					
Advisory fees	1.29 %	1.25 %	1.27 %	1.20 %	1.12 %
Other operating expenses	0.37	0.31	0.39	0.31	0.26
Total operating expenses, before fee waiver	1.66	1.56	1.66	1.51	1.38
Fee waiver	—	—	—	(0.01 )	(0.07 )
Total operating expenses	1.66	1.56	1.66	1.50	1.31
Leverage expenses	0.98	0.59	0.44	0.26	0.19
Current foreign tax expense <sup>(7)</sup>	—	—	—	—	—
Total expenses	2.64 %	2.15 %	2.10 %	1.76 %	1.50 %

See accompanying Notes to Financial Statements.

## 2018 Annual Report | November 30, 2018

	Year Ended November 30, 2018	Year Ended November 30, 2017	Year Ended November 30, 2016	Year Ended November 30, 2015	Year Ended November 30, 2014
Ratio of net investment income to average net assets before fee waiver	1.14 %	2.51 %	3.39 %	3.25 %	2.62 %
Ratio of net investment income to average net assets after fee waiver	1.14 %	2.51 %	3.39 %	3.26 %	2.69 %
Portfolio turnover rate <sup>(3)</sup>	31.41 %	30.86 %	40.61 %	30.99 %	18.39 %
Credit facility borrowings, end of year (000's)	\$ 53,400	\$ 53,400	\$ 50,600	\$ 49,900	\$ 42,400
Asset coverage, per \$1,000 of principal amount of senior notes and credit facility borrowings <sup>(5)</sup>	\$ 3,572	\$ 3,776	\$ 4,282	\$ 3,957	\$ 6,095
Asset coverage ratio of senior notes and credit facility borrowings <sup>(5)</sup>	357 %	378 %	428 %	396 %	610 %

(1) Information presented relates to a share of common stock outstanding for the entire year.

(2) The per common share data for the years ended November 30, 2017, 2016, 2015 and 2014 do not reflect the change in estimate of investment income and return of capital, for the respective year. See Note 2C to the financial statements for further disclosure.

(3) Total investment return is calculated assuming a purchase of common stock at the beginning of the year and a sale at the closing price on the last day of the period reported (excluding brokerage commissions). The calculation also assumes reinvestment of distributions at actual prices pursuant to TPZ's dividend reinvestment plan.

(4) Total investment return is calculated assuming a purchase of common stock at the beginning of the year and a sale at net asset value on the last day of the year reported. The calculation also assumes reinvestment of distributions at actual prices pursuant to TPZ's dividend reinvestment plan.

(5) Represents value of total assets less all liabilities and indebtedness not represented by credit facility borrowings at the end of the year divided by credit facility borrowings outstanding at the end of the year.

See accompanying Notes to Financial Statements.

**Tortoise**

51

## Notes to Financial Statements

November 30, 2018

### 1. General Organization

This report covers the following companies, each of which is listed on the New York Stock Exchange ("NYSE"): Tortoise Energy Infrastructure Corp. ("TYG"), Tortoise MLP Fund, Inc. ("NTG"), Tortoise Pipeline & Energy Fund, Inc. ("TTP"), Tortoise Energy Independence Fund, Inc. ("NDP"), and Tortoise Power and Energy Infrastructure Fund, Inc. ("TPZ"). These companies are individually referred to as a "Fund" or by their respective NYSE symbols, or collectively as the "Funds", and each is a non-diversified, closed-end management investment company under the Investment Company Act of 1940, as amended (the "1940 Act"). Each of TYG, NTG, TTP and NDP has a primary investment objective to seek a high level of total return with an emphasis on current distributions. TPZ has a primary investment objective to provide a high level of current income, with a secondary objective of capital appreciation.

### 2. Significant Accounting Policies

The Funds follow accounting and reporting guidance applicable to investment companies under U.S. generally accepted accounting principles ("GAAP").

#### A. Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements, and the amount of income and expenses during the period reported. Actual results could differ from those estimates.

#### B. Security Valuation

In general, and where applicable, the Funds use readily available market quotations based upon the last updated sales price from the principal market to determine fair value. The Funds primarily own securities that are listed on a securities exchange or are traded in the over-the-counter market. The Funds value those securities at their last sale price on that exchange or over-the-counter market on the valuation date. If the security is listed on more than one exchange, the Funds use the price from the exchange that it considers to be the principal exchange on which the security is traded. Securities listed on the NASDAQ are valued at the NASDAQ Official Closing Price, which may not necessarily represent the last sale price. These securities are categorized as Level 1 in the fair value hierarchy. If there has been no sale on such exchange or over-the-counter market on such day, the security is valued at the mean between the last bid price and last ask price on such day.

Restricted securities are subject to statutory or contractual restrictions on their public resale, which may make it more difficult to obtain a valuation and may limit a Fund's ability to dispose of them. Investments in private placement securities and other securities for which market quotations are not readily available are valued in good faith by using fair value procedures. Such fair value procedures consider factors such as discounts to publicly traded issues, time until conversion date, securities with similar yields, quality, type of issue, coupon, duration and rating. If events occur that affect the value of a Fund's portfolio securities before the net asset value has been calculated (a "significant event"), the portfolio securities so affected are generally priced using fair value procedures.

An equity security of a publicly traded company acquired in a private placement transaction without registration under the Securities Act of 1933, as amended (the "1933 Act"), is subject to restrictions on resale that can affect the security's liquidity and fair value. If such a security is convertible into publicly traded common shares, the security generally will be valued at the common share market price adjusted by a percentage discount due to the restrictions and categorized as Level 2 in the fair value hierarchy. To the extent that such securities are convertible or otherwise become freely tradable within a time frame that may be reasonably determined, an amortization schedule may be used to determine the discount. If the security has characteristics that are dissimilar to the class of security that trades on the open market, the security will generally be valued and categorized as Level 3 in the fair value hierarchy.

Unobservable inputs are used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity. Unobservable inputs reflect the Funds' own beliefs about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk). Unobservable inputs are developed based on the best information available in the circumstances, which might include the Fund's own data. The Fund's own data are adjusted if information is reasonably available without undue cost and effort that indicates that market participants would use different assumptions. Due to the inherent uncertainty of valuations of such investments, the fair values may differ significantly from the values that would have been used had an active market existed.

Exchange-traded options are valued at the last reported sale price on any exchange on which they trade. If no sales are reported on any exchange on the measurement date, exchange-traded options are valued at the mean between the most recent high bid and most recent low ask prices obtained as of the closing of the exchanges on which the option is traded. The value of Flexible Exchange Options (FLEX Options) are determined (i) by an evaluated price as determined by a third-party valuation service; or (ii) by using a quotation provided by a broker-dealer.

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

The Funds generally value debt securities at evaluated bid prices obtained from an independent third-party valuation service that utilizes a pricing matrix based upon yield data for securities with similar characteristics, or based on a direct written broker-dealer quotation from a dealer who has made a market in the security. Debt securities with 60 days or less to maturity at time of purchase are valued on the basis of amortized cost, which approximates fair value. The securities are categorized as Level 2 in the fair value hierarchy.

2018 Annual Report | November 30, 2018

## Notes to Financial Statements (continued)

Interest rate swap contracts are valued by using industry-accepted models, which discount the estimated future cash flows based on a forward rate curve and the stated terms of the interest rate swap agreement by using interest rates currently available in the market, or based on dealer quotations, if available, and are categorized as Level 2 in the fair value hierarchy.

Various inputs are used in determining the fair value of the Funds' investments and financial instruments. These inputs are summarized in the three broad levels listed below:

Level 1 — quoted prices in active markets for identical investments

Level 2 — other significant observable inputs (including quoted prices for similar investments, market corroborated inputs, etc.)

Level 3 — significant unobservable inputs (including a Fund's own assumptions in determining the fair value of investments)

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

The following tables provide the fair value measurements of applicable assets and liabilities by level within the fair value hierarchy as of November 30, 2018. These assets and liabilities are measured on a recurring basis.

<b>TYG:</b>				
<b>Description</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets</b>				
Investments:				
Master Limited Partnerships <sup>(a)</sup>	\$ 1,748,455,456	\$ —	\$ —	\$ 1,748,455,456
Common Stock <sup>(a)</sup>	237,409,339	—	—	237,409,339
Preferred Stock <sup>(a)</sup>	67,703,080	—	29,426,431	97,129,511
Private Investments <sup>(a)</sup>	—	—	36,836,183	36,836,183
Short-Term Investment <sup>(b)</sup>	232,244	—	—	232,244
Total Investments	\$ 2,053,800,119	\$ —	\$ 66,262,614	\$ 2,120,062,733
Interest Rate Swap Contracts	—	108,883	—	108,883
Total Assets	\$ 2,053,800,119	\$ 108,883	\$ 66,262,614	\$ 2,120,171,616
<b>Liabilities</b>				
Written Call Options	\$ 445,535	\$ 476,307	\$ —	\$ 921,842
<b>NTG:</b>				
<b>Description</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets</b>				
Investments:				
Master Limited Partnerships <sup>(a)</sup>	\$ 1,240,002,400	\$ —	\$ —	\$ 1,240,002,400
Common Stock <sup>(a)</sup>	201,885,718	—	—	201,885,718
Preferred Stock <sup>(a)</sup>	46,536,805	—	16,777,343	63,314,148
Short-Term Investment <sup>(b)</sup>	301,054	—	—	301,054
Total Assets	\$ 1,488,725,977	\$ —	\$ 16,777,343	\$ 1,505,503,320
<b>Liabilities</b>				
Written Call Options	\$ 410,448	\$ 243,014	\$ —	\$ 653,462
<b>TTP:</b>				
<b>Description</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets</b>				
Investments:				
Common Stock <sup>(a)</sup>	\$ 154,447,681	\$ —	\$ —	\$ 154,447,681
Master Limited Partnerships and Related Companies <sup>(a)</sup>	68,485,420	—	—	68,485,420
Preferred Stock <sup>(a)</sup>	6,521,700	—	4,909,451	11,431,151
Short-Term Investment <sup>(b)</sup>	217,864	—	—	217,864

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Total Assets	\$ 229,672,665	\$ —	\$ 4,909,451	\$ 234,582,116
<b>Liabilities</b>				
Written Call Options	\$ 68,007	\$ 131,775	\$ —	\$ 199,782

**Tortoise**

53

---

## Notes to Financial Statements (continued)

<b>NDP:</b>				
<b>Description</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets</b>				
Investments:				
Common Stock <sup>(a)</sup>	\$ 148,118,206	\$ —	\$ —	\$ 148,118,206
Master Limited Partnerships and Related Companies <sup>(a)</sup>	40,623,696	—	—	40,623,696
Preferred Stock <sup>(a)</sup>	—	—	2,178,123	2,178,123
Short-Term Investment <sup>(b)</sup>	311,985	—	—	311,985
<b>Total Assets</b>	<b>\$ 189,053,887</b>	<b>\$ —</b>	<b>\$ 2,178,123</b>	<b>\$ 191,232,010</b>
<b>Liabilities</b>				
Written Call Options	\$ 527,939	\$ 307,068	\$ —	\$ 835,007
<b>TPZ:</b>				
<b>Description</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets</b>				
Investments:				
Corporate Bonds <sup>(a)</sup>	\$ —	\$ 97,378,051	\$ —	\$ 97,378,051
Master Limited Partnerships and Related Companies <sup>(a)</sup>	51,235,576	—	—	51,235,576
Common Stock <sup>(a)</sup>	32,979,230	—	—	32,979,230
Preferred Stock <sup>(a)</sup>	4,319,676	—	3,761,271	8,080,947
Short-Term Investment <sup>(b)</sup>	271,075	—	—	271,075
Total Investments	88,805,557	97,378,051	3,761,271	189,944,879
Interest Rate Swap Contracts	—	128,630	—	128,630
<b>Total Assets</b>	<b>\$ 88,805,557</b>	<b>\$ 97,506,681</b>	<b>\$ 3,761,271</b>	<b>\$ 190,073,509</b>

(a) All other industry classifications are identified in the Schedule of Investments.

(b) Short-term investment is a sweep investment for cash balances.

The Funds utilize the beginning of reporting period method for determining transfers between levels. During the year ended November 30, 2018, Phillips 66 Partners LP common units held by TYG, NTG, TTP, NDP, and TPZ in the amount of \$27,160,073, \$25,020,763, \$1,728,636, \$1,507,572, and \$1,333,876, respectively, were transferred from Level 2 to Level 1 when they converted into registered and unrestricted common units of Phillips 66 Partners LP. There were no other transfers between levels for the Funds during the year ended November 30, 2018.

The following tables present each Fund's assets measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the year ended November 30, 2018:

<b>Preferred Stock</b>	<b>TYG</b>	<b>NTG</b>	<b>TTP</b>	<b>NDP</b>	<b>TPZ</b>
Balance — beginning of year	\$ 23,396,034	\$ 13,174,382	\$ 2,266,699	\$ 2,147,342	\$ 1,811,854
Purchases	6,277,000	3,763,000	2,877,000	—	2,120,000
Return of capital	(1,883,391 )	(1,060,543 )	(182,470 )	(172,862 )	(145,855 )
Sales	—	—	—	—	—
Total realized gain/loss	—	—	—	—	—
Change in unrealized gain/loss	1,636,788	900,504	(51,778 )	203,643	(24,728 )
Balance — end of year	\$ 29,426,431	\$ 16,777,343	\$ 4,909,451	\$ 2,178,123	\$ 3,761,271
<b>Private Investments</b>					
Balance — beginning of year	\$ 25,886,172	\$ —	\$ —	\$ —	\$ —
Purchases	38,877,659	—	—	—	—
Return of capital	(4,768,190 )	—	—	—	—
Sales	—	—	—	—	—

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Total realized gain/loss	—	—	—	—	—
Change in unrealized gain/loss	(23,159,458 )	—	—	—	—
Balance — end of year	\$ 36,836,183	\$ —	\$ —	\$ —	\$ —

	<b>TYG</b>	<b>NTG</b>	<b>TTP</b>	<b>NDP</b>	<b>TPZ</b>
Change in unrealized gain/loss on investments still held at November 30, 2018	\$ (21,522,670)	\$ 900,504	\$ (51,778 )	\$ 203,643	\$ (24,728 )

54

**Tortoise**

2018 Annual Report | November 30, 2018

Notes to Financial Statements (continued)

The Funds own units of preferred stock of Targa Resources Corp. (“TRGP Pfd”) that were issued in a private placement transaction that closed on March 16, 2016. The preferred stock provides the purchaser an option to convert into common stock after 12 years. In addition, the preferred stock can be repurchased by the issuer at a price of \$1,100 per share after five years and \$1,050 per share after six years.

TYG, NTG, TTP, and TPZ own units of preferred stock of SemGroup Corporation (“SEMG Pfd”) that were issued in a private placement transaction that closed on January 19, 2018. The preferred stock provides the purchaser an option to convert into common stock after 18 months at a price of \$33.00 per share. In addition, the issuer can force conversion to common stock after 3 years at a price of \$47.85 per share.

A lattice model is being utilized to determine fair value of the level 3 preferred stock. The Funds estimate future volatility of the underlying common stock price and the discount rate to apply to expected future cash flows. Unobservable inputs used to determine the discount rate include an illiquidity spread due to the shares being issued in the private market and a seniority spread due to the purchased private preferred units being lower in the capital structure than the issuer’s public preferred stock. An increase (decrease) in the illiquidity spread or seniority spread would lead to a corresponding decrease (increase) in fair value of the preferred stock. An increase (decrease) in estimated future volatility would lead to a corresponding increase (decrease) in fair value of the preferred stock.

TYG is a minority owner of a private investment, MTP Energy KMAA, LLC, which represents an indirect interest in Tallgrass Energy, LP. An illiquidity discount is being applied to publicly traded Tallgrass Energy, LP units to determine the fair value of the private investment.

TYG owns units of Tortoise HoldCo II, LLC, a wholly-owned investment of TYG, which acquired an approximately 40 megawatt commercial and industrial solar portfolio between August 2017 and November 2018. As of November 30, 2018, TYG has committed a total of \$50,738,405 of equity funding to Tortoise HoldCo II, LLC. Fair value of Tortoise HoldCo II, LLC is net of tax benefits.

The following tables summarize the fair value and significant unobservable inputs that each Fund used to value its portfolio investments categorized as Level 3 as of November 30, 2018:

Assets at Fair Value	TYG	NTG	TTP	NDP	TPZ
Preferred Stock	\$ 29,426,431	\$ 16,777,343	\$ 4,909,451	\$ 2,178,123	\$ 3,761,271
Private Investments	\$ 36,836,183	\$ —	\$ —	\$ —	\$ —

Assets at Fair Value	Valuation Technique	Unobservable Inputs	Input
Preferred Stock (TRGP Pfd)	Lattice model	Illiquidity spread	1.25%
Preferred Stock (TRGP Pfd)	Lattice model	Seniority spread	0.25%
Preferred Stock (SEMG Pfd)	Lattice model	Illiquidity spread	0.90%
Preferred Stock (SEMG Pfd)	Lattice model	Seniority spread	0.25%
Private Investment (MTP Energy)	Discount to publicly traded units	Illiquidity discount	8.00%
Private Investment (HoldCo II, LLC)	Discounted cash flows model	Contracted weighted average cost of capital	6.50%
		Post-contracted weighted average cost of capital	8.50%
	Recent transaction	Purchase price	\$ 8,390,637

C. Securities Transactions and Investment Income

Securities transactions are accounted for on the date the securities are purchased or sold (trade date). Realized gains and losses are reported on an identified cost basis. Interest income is recognized on the accrual basis, including amortization of premiums and accretion of discounts. Dividend income and distributions are recorded on the ex-dividend date. Distributions received from investments generally are comprised of ordinary income and return of capital. The Funds estimate the allocation of distributions between investment income and return of capital at the time such distributions are received based on historical information or regulatory filings. These estimates may subsequently be revised based on actual allocations received from the portfolio companies after their tax reporting periods are concluded, as the actual character of these distributions is not known until after the fiscal year-end of the Funds.

Tortoise

55

**Notes to Financial Statements** (continued)

During the year ended November 30, 2018, the Funds reallocated the amount of 2017 investment income and return of capital they recognized based on the 2017 tax reporting information received. These reclassifications amounted to:

	Decrease in Net Investment Income		Increase in Unrealized Appreciation		Increase (Decrease) in Realized Gains	
	Amount	Per Share	Amount	Per Share	Amount	Per Share
TYG						
Pre-tax	\$(11,725,829)	\$ (0.207)	\$ 11,124,478	\$ 0.196	\$ 601,351	\$ 0.011
After-tax	\$(8,980,813 )	\$ (0.159 )	\$8,520,238	\$ 0.150	\$460,575	\$ 0.009
NTG						
Pre-tax	\$(2,579,159 )	\$ (0.041 )	\$2,622,975	\$ 0.041	\$(43,816 )	\$ (0.000 )
After-tax	\$( 1,984,405)	\$ (0.031)	\$ 2,018,117	\$ 0.032	\$( 33,712)	\$ (0.001)
TTP	\$(223,121 )	\$ (0.022 )	\$385,455	\$ 0.038	\$(162,334 )	\$ (0.016 )
NDP	\$( 456,680)	\$ (0.031)	\$ 462,183	\$ 0.031	\$( 5,503)	\$ (0.000)
TPZ	\$(623,363 )	\$ (0.090 )	\$625,653	\$ 0.090	\$(2,290 )	\$ (0.000 )

In addition, the Funds may be subject to withholding taxes on foreign-sourced income. The Funds accrue such taxes when the related income is earned.

**D. Foreign Currency Translation**

For foreign currency, investments in foreign securities, and other assets and liabilities denominated in a foreign currency, the Funds translate these amounts into U.S. dollars on the following basis: (i) market value of investment securities, assets and liabilities at the current rate of exchange on the valuation date, and (ii) purchases and sales of investment securities, income and expenses at the relevant rates of exchange on the respective dates of such transactions. The Funds do not isolate the portion of gains and losses on investments that is due to changes in the foreign exchange rates from that which is due to changes in market prices of securities.

**E. Federal and State Income Taxation**

Each of TYG and NTG, as corporations, are obligated to pay federal and state income tax on its taxable income. For fiscal year ending November 30, 2018, TYG and NTG are required to use a blended Federal rate of approximately 22%. For subsequent years, TYG and NTG will use the marginal corporate federal income tax rate of 21%.

TTP, NDP and TPZ each qualify as a regulated investment company ("RIC") under the Internal Revenue Code ("IRC"). As a result, TTP, NDP and TPZ generally will not be subject to U.S. federal income tax on income and gains that they distribute each taxable year to stockholders if they meet certain minimum distribution requirements. RICs are required to distribute substantially all of their income, in addition to meeting certain asset diversification requirements, and are subject to a 4% non-deductible U.S. federal excise tax on certain undistributed income unless the fund makes sufficient distributions to satisfy the excise tax avoidance requirement.

The Funds invest in master limited partnerships ("MLPs"), which generally are treated as partnerships for federal income tax purposes. As a limited partner in the MLPs, each Fund reports its allocable share of the MLP's taxable income in computing its own taxable income. The Funds' tax expense or benefit, if applicable, is included in the Statements of Operations based on the component of income or gains (losses) to which such expense or benefit relates. For TYG and NTG, deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. A valuation allowance is recognized if, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred income tax asset will not be realized.

The Funds recognize the tax benefits of uncertain tax positions only when the position is "more likely than not" to be sustained upon examination by the tax authorities based on the technical merits of the tax position. The Funds' policy is to record interest and penalties on uncertain tax positions as part of tax expense. As of November 30, 2018, the Funds had no uncertain tax positions and no penalties or interest was accrued. The Funds do not expect any change in their unrecognized tax positions in the next twelve months. The tax years ended on the following dates remain open to examination by federal and state tax authorities:

TYG — November 30, 2015 through 2018

NTG — November 30, 2012 through 2018

TTP, NDP and TPZ — November 30, 2015 through 2018

**F. Distributions to Stockholders**

Distributions to common stockholders are recorded on the ex-dividend date. The Funds may not declare or pay distributions to its common stockholders if it does not meet asset coverage ratios required under the 1940 Act or the rating agency guidelines for its debt and preferred stock following such distribution. The amount of any distributions will be determined by the Board of Directors. The character of distributions to common stockholders made during the year may differ from their ultimate characterization for federal income tax purposes.

As RICs, TTP, NDP and TPZ each intend to make cash distributions of its investment company taxable income and capital gains to common stockholders. In addition, on an annual basis, TTP, NDP and TPZ each may distribute additional capital gains in the last calendar quarter if necessary to meet minimum distribution requirements and thus avoid being subject to excise taxes. Distributions paid to stockholders in excess of investment company taxable income and net realized gains will be treated as return of capital to stockholders.

2018 Annual Report | November 30, 2018

**Notes to Financial Statements** (continued)

Distributions to mandatory redeemable preferred ("MRP") stockholders are accrued daily based on applicable distribution rates for each series and paid periodically according to the terms of the agreements. The Funds may not declare or pay distributions to its preferred stockholders if it does not meet a 200% asset coverage ratio for its debt or the rating agency basic maintenance amount for the debt following such distribution. The character of distributions to preferred stockholders made during the year may differ from their ultimate characterization for federal income tax purposes. For tax purposes, distributions to stockholders for the year ended November 30, 2018 were characterized as follows:

	TYG		NTG		TTP		NDP	TPZ*
	Common	Preferred	Common	Preferred	Common	Preferred	Common	Common
Qualified dividend income	84%	100 %	47%	100 %	3 %	100 %	—	5 %
Ordinary dividend income	—	—	—	—	—	—	—	39%
Return of capital	16%	—	53%	—	97%	—	100 %	—
Long-term capital gain	—	—	—	—	—	—	—	56%

\* For Federal income tax purposes, distributions of short-term capital gains are included in qualified dividend income.

**G. Offering and Debt Issuance Costs**

Offering costs related to the issuance of common stock are charged to additional paid-in capital when the stock is issued. Debt issuance costs related to senior notes and MRP Stock are deferred and amortized over the period the debt or MRP Stock is outstanding.

**TYG:**

Offering costs (excluding underwriter discounts and commissions) of \$349,970 related to the issuance of common stock were recorded to additional paid-in capital during the year ended November 30, 2018. Deferred costs (excluding underwriter commissions) were reflected during the year ended November 30, 2018 for Series PP Notes (\$4,366) that were issued in September 2017.

**NTG:**

Offering costs (excluding underwriter discounts and commissions) of \$1,039,977 related to the issuance of common stock were recorded to additional paid-in capital during the year ended November 30, 2018. Deferred costs (excluding underwriter commissions) were reflected during the year ended November 30, 2018 for Series N Notes (\$56,187) and Series O Notes (\$43,896) that were issued in December 2017 and for Series P Notes (\$43,934), Series Q Notes (\$32,950) and Series R Notes (\$28,557) issued in October 2018 and for MRP E Shares (\$67,925) and MRP F Shares (\$42,453) that were issued in December 2017 and for MRP G Shares (\$66,955) that were issued in October 2018.

There were no offering or debt issuance costs recorded during the year ended November 30, 2018, for TTP, NDP or TPZ.

**H. Derivative Financial Instruments**

The Funds have established policies and procedures for risk assessment and the approval, reporting and monitoring of derivative financial instrument activities. The Funds do not hold or issue derivative financial instruments for speculative purposes. All derivative financial instruments are recorded at fair value with changes in fair value during the reporting period, and amounts accrued under the agreements, included as unrealized gains or losses in the accompanying Statements of Operations. Derivative instruments that are subject to an enforceable master netting arrangement allow a Fund and the counterparty to the instrument to offset any exposure to the other party with amounts owed to the other party. The fair value of derivative financial instruments in a loss position are offset against the fair value of derivative financial instruments in a gain position, with the net fair value appropriately reflected as an asset or liability within the accompanying Statements of Assets & Liabilities.

TYG and TPZ use interest rate swap contracts in an attempt to manage interest rate risk. Cash settlements under the terms of the interest rate swap contracts and the termination of such contracts are recorded as realized gains or losses in the accompanying Statements of Operations.

TYG, NTG, TTP and NDP seek to provide current income from gains earned through an option strategy that normally consists of writing (selling) call options on selected equity securities held in the portfolio ("covered calls"). The premium received on a written call option is initially recorded as a liability and subsequently adjusted to the then current fair value of the option written. Premiums received from writing call options that expire unexercised are recorded as a realized gain on the expiration date. Premiums received from writing call options that are exercised are added to the proceeds from the sale of the underlying security to calculate the realized gain (loss). If a written call option is repurchased prior to its exercise, the realized gain (loss) is the difference between the premium received and the amount paid to repurchase the option.

**I. Indemnifications**

Under each of the Funds' organizational documents, its officers and directors are indemnified against certain liabilities arising out of the performance of their duties to the Funds. In addition, in the normal course of business, the Funds may enter into contracts that provide general

indemnification to other parties. A Fund's maximum exposure under these arrangements is unknown, as this would involve future claims that may be made against the Funds that have not yet occurred, and may not occur. However, the Funds have not had prior claims or losses pursuant to these contracts and expect the risk of loss to be remote.

**J. Cash and Cash Equivalents**

Cash and cash equivalents include short-term, liquid investments with an original maturity of three months or less and money market fund accounts.

**Tortoise**

57

---

**Notes to Financial Statements** (continued)**K. Recent Accounting and Regulatory Updates**

On December 22, 2017 The Tax Cuts and Jobs Act was signed into law thus reducing the U.S. corporate tax rate from 35% to 21%. For the fiscal year ending November 30, 2018, TYG and NTG will use an effective tax rate of 24.54% and 24.20% respectively, to calculate the current tax liability (if any). Additionally, an effective rate of 23.41% and 23.06% will be used to calculate the deferred tax liability.

In August 2018, the Securities and Exchange Commission ("SEC") adopted SEC Final Rule Release No. 33-10532, which eliminates or modifies certain disclosure requirements that have become duplicative, overlapping or outdated in light of other SEC disclosure requirements, GAAP or "changes in the information environment." The amendments are effective for all filings submitted on or after November 8, 2018. The Fund has adopted the amendments, which have not had a material impact on the financial statements.

In August 2018, the FASB issued ASU No. 2018-13 ("ASU 2018-13"), Fair Value Measurement (Topic 820): Disclosure Framework which modifies the disclosure requirements on fair value measurements. ASU 2018-13 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019, early adoption is permitted. Management is currently evaluating this guidance to determine the impact on the financial statements.

**3. Concentration Risk**

Each of the Funds concentrates its investments in the energy sector. Funds that primarily invest in a particular sector may experience greater volatility than companies investing in a broad range of industry sectors. A Fund may, for defensive purposes, temporarily invest all or a significant portion of its assets in investment grade securities, short-term debt securities and cash or cash equivalents. To the extent a Fund uses this strategy, it may not achieve its investment objective.

**4. Agreements**

The Funds have each entered into an Investment Advisory Agreement with Tortoise Capital Advisors, L.L.C. (the "Adviser"). The Funds each pay the Adviser a fee based on the Fund's average monthly total assets (including any assets attributable to leverage and excluding any net deferred tax asset) minus accrued liabilities (other than net deferred tax liability, debt entered into for purposes of leverage and the aggregate liquidation preference of outstanding preferred stock) ("Managed Assets"), in exchange for the investment advisory services provided. Average monthly Managed Assets is the sum of the daily Managed Assets for the month divided by the number of days in the month. Accrued liabilities are expenses incurred in the normal course of each Fund's operations. Waived fees are not subject to recapture by the Adviser. The annual fee rates paid to the Adviser as of November 30, 2018 are as follows:

TYG — 0.95% up to \$2,500,000,000, 0.90% between \$2,500,000,000 and \$3,500,000,000, and 0.85% above \$3,500,000,000.

NTG — 0.95%.

TTP — 1.10%.

NDP — 1.10%.

TPZ — 0.95%.

In addition, the Adviser has contractually agreed to waive all fees due under the Investment Advisory Agreements for TYG and NTG related to the net proceeds received from the issuance of additional common stock under at-the-market equity programs for a six-month period following the date of issuance, as well as agreed to similarly waive fees related to the proceeds received from the issuance of common stock from private placement transactions in TYG and from a rights offering in NTG that occurred during the year.

U.S. Bancorp Fund Services, LLC serves as each Fund's administrator. Each Fund pays the administrator a monthly fee computed at an annual rate of 0.04% of the first \$1,000,000,000 of the Fund's Managed Assets, 0.01% on the next \$500,000,000 of Managed Assets and 0.005% on the balance of the Fund's Managed Assets.

U.S. Bank, N.A. serves as the Funds' custodian. Each Fund pays the custodian a monthly fee computed at an annual rate of 0.004% of the Fund's U.S. Dollar-denominated assets and 0.015% of the Fund's Canadian Dollar-denominated assets, plus portfolio transaction fees.

2018 Annual Report | November 30, 2018

## Notes to Financial Statements (continued)

## 5. Income Taxes

## TYG and NTG:

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting and tax purposes. Components of TYG's and NTG's deferred tax assets and liabilities as of November 30, 2018 are as follows:

	TYG	NTG
Deferred tax assets:		
Net operating loss carryforwards	\$ 226,193	\$ 12,982,069
AMT credit	—	2,826,344
Investment tax credit	4,691,703	—
Net unrealized loss on investment securities	—	6,321,368
	4,917,896	22,129,781
Deferred tax liabilities:		
Basis reduction of investments	176,927,062	90,305,214
Net unrealized gains on investment securities	17,553,361	—
	194,480,423	90,305,214
Total net deferred tax liability	\$ 189,562,527	\$ 68,175,433

At November 30, 2018, a valuation allowance on deferred tax assets was not deemed necessary because each of TYG and NTG believe it is more likely than not that there is an ability to realize its deferred tax assets through future taxable income. Any adjustments to TYG's or NTG's estimates of future taxable income will be made in the period such determination is made.

During the year ending November 30, 2018, TYG received \$13,901,688 in Investment Tax Credits through its investment in Tortoise Holdco II, LLC. The fund expects to use a portion of the tax credits in the current year against its federal tax liability. All unused credits will be carried forward and available to use against a future tax liability.

Total income tax expense (benefit) for each of TYG and NTG differs from the amount computed by applying the federal statutory income tax rate of 22.17% to net investment loss and net realized and unrealized gains (losses) on investments for the year ended November 30, 2018, as follows:

	TYG	NTG
Application of statutory income tax rate	\$ (12,569,511)	\$ (6,910,716)
State income taxes, net of federal tax effect	(1,343,696)	(632,781)
Permanent differences	785,627	494,345
Change in deferred tax liability due to change in overall tax rate	(125,271,378)	(47,436,124)
Investment Tax Credit	(13,901,688)	—
Other	(749,679)	473,955
Total income tax (benefit)	\$ (153,050,325)	\$ (54,011,321)

Total income taxes are being calculated by applying the federal rate plus a blended state income tax rate. Pursuant to the passing of the Tax Cuts and Jobs Act, TYG and NTG revalued their deferred tax assets and liabilities. As such, TYG and NTG recorded a deferred tax benefit as a result of the reduction in the federal rate from 35% to 21%. For the period from December 1, 2017 through November 30, 2018, TYG and NTG decreased its current rate from 37.00% to 24.54% and from 36.76% to 24.20%, respectively. TYG and NTG also decreased its deferred rate from 37.00% to 23.41% and from 36.76% to 23.06%, respectively.

For the year ended November 30, 2018, the components of income tax expense for TYG and NTG include the following:

	TYG	NTG
Current tax expense (benefit)		
Federal	\$ (1,678,397)	\$ —
State	1,144,797	141,889
AMT	—	44,147
Total current tax expense (benefit)	(533,600)	186,036
Deferred tax benefit		
Federal	(136,815,516)	(49,355,790)
State (net of federal tax effect)	(15,701,209)	(4,841,567)
Total deferred tax (benefit)	(152,516,725)	(54,197,357)

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Total income tax (benefit), net

\$ (153,050,325)

\$ (54,011,321)

**Tortoise**

59

---

**Notes to Financial Statements** (continued)

TYG acquired all of the net assets of Tortoise Energy Capital Corporation ("TYE") and Tortoise North American Energy Corporation ("TYN") on June 23, 2014 in a tax-free reorganization under Section 368(a)(1)(C) of the IRC. As of November 30, 2018, TYG and NTG had net operating losses for federal income tax purposes of approximately \$1,153,000 (from TYN) and \$55,487,000, respectively. The net operating losses may be carried forward for 20 years. If not utilized, these net operating losses will expire in the year ending November 30, 2027 for TYG and in the years ending November 30, 2033 through 2037 for NTG. Utilization of TYG's net operating losses from TYN is further subject to Section 382 limitations of the IRC, which limit tax attributes subsequent to ownership changes.

As of November 30, 2018, NTG had \$2,826,344 of AMT credits available, which may be utilized against future tax liabilities. AMT credit carryovers may be eligible for a partial refund in 2018, 2019, or 2020 and any remaining unused credit will be fully refundable in 2021.

**TTP, NDP and TPZ:**

It is the intention of TTP, NDP and TPZ to each continue to qualify as a RIC under Subchapter M of the IRC and distribute all of its taxable income. Accordingly, no provision for federal income taxes is required in the financial statements.

The amount and character of income and capital gain distributions to be paid, if any, are determined in accordance with federal income tax regulations, which may differ from U.S. generally accepted accounting principles. These differences are primarily due to return of capital distributions from underlying investments, wash sales, straddles, swaps, differences in the timing of recognition of gains or losses on investments and distributions in excess of current earnings. These reclassifications have no impact on net assets or results of operations. Permanent book and tax basis differences resulted in the following reclassifications:

	TTP <sup>(1)</sup>	NDP <sup>(1)</sup>	TPZ <sup>(1)</sup>
Distributable earnings (loss)	\$ (52,535)	\$ 1,947,265	\$ (174,878)
Additional paid-in capital	52,535	(1,947,265)	174,878

(1) Primarily related to character differences of realized gains (losses) on investments.

The tax character of distributions paid to stockholders for the years ending November 30, 2018 and November 30, 2017 was as follows:

	Year Ended November 30, 2018				
	TTP		NDP		TPZ
	Common	Preferred	Common	Common	
Ordinary income <sup>(1)</sup>	\$ 428,639	\$ 686,401	\$ —	\$ 4,643,278	
Long-term capital gain	—	—	—	5,783,722	
Return of capital	15,898,114	—	25,568,654	—	
Total distributions	\$ 16,326,753	\$ 686,401	\$ 25,568,654	\$ 10,427,000	

	Year Ended November 30, 2017				
	TTP		NDP		TPZ
	Common	Preferred	Common	Common	
Ordinary income <sup>(1)</sup>	\$ 2,702,194	\$ 610,837	\$ —	\$ 7,224,707	
Long-term capital gain	334,279	75,564	—	2,519,243	
Return of capital	13,290,280	—	—	683,050	
Total distributions	\$ 16,326,753	\$ 686,401	\$ 25,460,285	\$ 10,427,000	

(1) For Federal income tax purposes, distributions of short-term capital gains are treated as ordinary income distributions. As of November 30, 2018, the components of accumulated earnings (deficit) on a tax basis were as follows:

	TTP	NDP	TPZ
Unrealized appreciation (depreciation)	\$ (37,410,381)	\$ (80,367,382)	\$ 8,280,508
Capital loss carryforwards	(4,899,906)	(26,234,383)	—
Undistributed ordinary income	—	—	76,300
Other temporary differences	(303,857) <sup>(1)</sup>	2	(13,629)
Accumulated earnings (deficit)	\$ (42,614,144)	\$ (106,601,763)	\$ 8,343,179

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

(1) Primarily related to losses deferred under straddle regulations per IRC Sec. 1092 and dividends payable.

60

**Tortoise**

---

2018 Annual Report | November 30, 2018

Notes to Financial Statements (continued)

As of November 30, 2018, TTP and NDP had long-term capital loss carryforwards of approximately \$4,900,000 and \$26,234,000 respectively, which may be carried forward for an unlimited period under the Regulated Investment Company Modernization Act of 2010. To the extent future net capital gains are realized, those gains will be offset by any unused capital loss carryforwards. Capital loss carryforwards will retain their character as either short-term or long-term capital losses. Thus, such losses must be used first to offset gains of the same character; for example, long-term loss carryforwards will first offset long-term gains, before they can be used to offset short-term gains.

As of November 30, 2018, the aggregate cost of investments, aggregate gross unrealized appreciation and aggregate gross unrealized depreciation on a federal income tax basis were as follows:

	TYG	NTG	TTP	NDP	TPZ
Cost of investments	\$ 1,300,787,361	\$ 1,141,003,337	\$ 263,377,420	\$ 265,204,064	\$ 176,708,406
Gross unrealized appreciation of investments	\$ 863,899,455	\$ 415,344,819	\$ 16,759,705	\$ 9,600,961	\$ 20,019,367
Gross unrealized depreciation of investments	(44,943,467)	(51,147,754)	(45,242,014)	(82,001,033)	(6,654,264)
Net unrealized appreciation (depreciation) of investments	\$ 818,955,988	\$ 364,197,065	\$ (28,482,309)	\$ (72,400,072)	\$ 13,365,103

6. Restricted Securities

Certain of the Funds' investments are restricted and are valued as determined in accordance with fair value procedures, as more fully described in Note 2. The following table shows the principal amount or shares, acquisition date(s), acquisition cost, fair value and the percent of net assets which the securities comprise at November 30, 2018.

**TYG:**

Investment Security	Investment Type	Shares	Acquisition Date(s)	Acquisition Cost	Fair Value	Fair Value as Percent of Net Assets
SemGroup Corporation, 7.000%	Preferred Stock	6,277	01/19/18	\$ 6,277,000	\$ 5,695,032	0.5%
Targa Resources Corp., 9.500%	Preferred Stock	21,758	03/16/16	19,265,393	23,731,399	1.9
MTP Energy KMAA LLC	Private Investment	N/A	06/29/18	18,287,590	17,762,716	1.4
Tortoise HoldCo II, LLC	Private Investment	N/A	08/18/17-11/30/18	50,738,405	19,073,467	1.5
				\$ 94,568,388	\$ 66,262,614	5.3%

**NTG:**

Investment Security	Investment Type	Shares	Acquisition Date	Acquisition Cost	Fair Value	Fair Value as Percent of Net Assets
SemGroup Corporation, 7.000%	Preferred Stock	3,763	01/19/18	\$ 3,763,000	\$ 3,414,116	0.4%
Targa Resources Corp., 9.500%	Preferred Stock	12,252	03/16/16	10,848,405	13,363,227	1.4
				\$ 14,611,405	\$ 16,777,343	1.8%

**TTP:**

Investment Security	Investment Type	Shares	Acquisition Date	Acquisition Cost	Fair Value	Fair Value as Percent of Net Assets
SemGroup Corporation, 7.000%	Preferred Stock	2,877	01/19/18	\$ 2,877,000	\$ 2,610,261	1.6%
Targa Resources Corp., 9.500%	Preferred Stock	2,108	03/16/16	1,866,506	2,299,190	1.4
				\$ 4,743,506	\$ 4,909,451	3.0%

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

**NDP:**

<b>Investment Security</b>	<b>Investment Type</b>	<b>Shares</b>	<b>Acquisition Date</b>	<b>Acquisition Cost</b>	<b>Fair Value</b>	<b>Fair Value as Percent of Net Assets</b>
Targa Resources Corp., 9.500%	Preferred Stock	1,997	03/16/16	\$ 1,768,223	\$ 2,178,123	1.6%

**Tortoise**

61

---

## Notes to Financial Statements (continued)

TPZ:							Fair Value as Percent of Net Assets
Investment Security	Investment Type	Principal Amount/Shares	Acquisition Date(s)	Acquisition Cost	Fair Value		
Ascent Resources Utica Holdings, LLC, 10.000%, 04/01/2022*	Corporate Bond	\$ 1,302,000	08/27/18	\$ 1,445,220	\$ 1,376,865	1.0%	
Ascent Resources Utica Holdings, LLC, 7.000%, 11/01/2026*	Corporate Bond	\$ 2,000,000	09/27/18	2,000,278	1,875,000	1.4	
Blue Racer Midstream, LLC, 6.125%, 11/15/2022*	Corporate Bond	\$ 2,000,000	06/23/16-07/29/16	1,900,000	1,980,000	1.5	
Blue Racer Midstream, LLC, 6.625%, 07/15/2026*	Corporate Bond	\$ 3,900,000	06/18/18-11/02/18	3,946,250	3,841,500	2.8	
Duquesne Light Holdings, Inc., 6.400%, 09/15/2020*	Corporate Bond	\$ 3,000,000	11/30/11	3,180,330	3,133,218	2.3	
Duquesne Light Holdings, Inc., 5.900%, 12/01/2021*	Corporate Bond	\$ 2,000,000	11/18/11-12/05/11	2,074,420	2,101,906	1.5	
Florida Gas Transmission Co., LLC, 5.450%, 07/15/2020*	Corporate Bond	\$ 1,500,000	07/08/10-01/04/11	1,551,220	1,537,620	1.1	
Hess Corporation, 5.625%, 02/15/2026*	Corporate Bond	\$ 4,160,000	07/19/18-08/06/18	4,196,600	4,035,200	2.9	
Midcontinent Express Pipeline, LLC, 6.700%, 09/15/2019*	Corporate Bond	\$ 2,000,000	09/09/09-03/02/10	2,061,010	2,018,518	1.5	
NGPL PipeCo LLC, 4.875%, 08/15/2027*	Corporate Bond	\$ 2,000,000	07/30/18	2,030,000	1,910,000	1.4	
Pattern Energy Group Inc., 5.875%, 02/01/2024*	Corporate Bond	\$ 1,000,000	01/20/17-01/23/17	1,011,875	972,500	0.7	
Ruby Pipeline, LLC, 6.000%, 04/01/2022*	Corporate Bond	\$ 1,261,364	09/17/12	1,444,830	1,293,253	1.0	
Southern Star Central Corp., 5.125%, 07/15/2022*	Corporate Bond	\$ 3,000,000	06/17/14	3,041,250	2,947,500	2.1	
Tallgrass Energy LP, 5.125%, 07/15/2022*	Corporate Bond	\$ 2,000,000	09/24/18	2,030,000	1,965,000	1.4	

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

5.500%, 01/15/2028* SemGroup Corporation, 7.000%	Preferred Stock	2,120	01/19/18	2,120,000	1,923,446	1.4
Targa Resources Corp., 9.500%	Preferred Stock	1,685	03/16/16	1,491,965	1,837,825	1.3
				\$ 35,525,248	\$ 34,749,351	25.3%

\* Security is eligible for resale under Rule 144A under the 1933 Act.

**7. Affiliated Company Transactions**

A summary of the transactions in affiliated companies during the year ended November 30, 2018 is as follows:

**TYG:**

Investment Security	11/30/17 Share Balance	Gross Additions	Gross Reductions	Realized Gain/(Loss)	Distributions Received	11/30/18 Share Balance	11/30/18 Value	Net Change in Unrealized Depreciation
Tortoise HoldCo II, LLC	N/A	\$ 16,321,880	\$ —	—	\$500,000	N/A	\$19,073,467	\$22,634,585

**8. Investment Transactions**

For the year ended November 30, 2018, the amount of security transactions (other than U.S. government securities and short-term investments), is as follows:

	TYG	NTG	TTP	NDP	TPZ
Purchases	\$ 508,462,886	\$ 494,308,370	\$ 36,550,658	\$ 346,466,147	\$ 61,995,102
Sales	\$ 408,626,699	\$ 194,635,931	\$ 42,469,533	\$ 367,138,147	\$ 63,165,604

2018 Annual Report | November 30, 2018

Notes to Financial Statements (continued)

9. Senior Notes

TYG, NTG and TTP each have issued private senior notes (collectively, the “Notes”), which are unsecured obligations and, upon liquidation, dissolution or winding up of a Fund, will rank: (1) senior to all of the Fund’s outstanding preferred shares, if any; (2) senior to all of the Fund’s outstanding common shares; (3) on parity with any unsecured creditors of the Fund and any unsecured senior securities representing indebtedness of the Fund and (4) junior to any secured creditors of the Fund. Holders of the Notes are entitled to receive periodic cash interest payments until maturity. The Notes are not listed on any exchange or automated quotation system.

The Notes are redeemable in certain circumstances at the option of a Fund, subject to payment of any applicable make-whole amounts or early redemption premiums. The Notes for a Fund are also subject to a mandatory redemption if the Fund fails to meet asset coverage ratios required under the 1940 Act or the rating agency guidelines if such failure is not waived or cured. At November 30, 2018, each of TYG, NTG and TTP were in compliance with asset coverage covenants and basic maintenance covenants for its senior notes.

Details of each Fund’s outstanding Notes, including estimated fair value, as of November 30, 2018 are included below. The estimated fair value of each series of fixed-rate Notes was calculated, for disclosure purposes, by discounting future cash flows by a rate equal to the current U.S. Treasury rate with an equivalent maturity date, plus either 1) the spread between the interest rate on recently issued debt and the U.S. Treasury rate with a similar maturity date or 2) if there has not been a recent debt issuance, the spread between the AAA corporate finance debt rate and the U.S. Treasury rate with an equivalent maturity date plus the spread between the fixed rates of the Notes and the AAA corporate finance debt rate. The estimated fair value of floating rate Notes approximates the carrying amount because the interest rate fluctuates with changes in interest rates available in the current market. The estimated fair values in the following tables are Level 2 valuations within the fair value hierarchy.

**TYG:**

Series	Maturity Date	Interest Rate	Payment Frequency	Notional Amount	Estimated Fair Value
Series CC	September 27, 2019	3.48%	Semi-Annual	\$ 15,000,000	\$ 15,094,944
Series J	December 19, 2019	3.30%	Semi-Annual	15,000,000	15,190,726
Series Y	June 14, 2020	2.77%	Semi-Annual	12,500,000	12,515,249
Series LL	June 14, 2020	3.53% <sup>(1)</sup>	Quarterly	20,000,000	20,000,000
Series O	September 27, 2020	3.78%	Semi-Annual	15,000,000	15,152,471
Series Z	June 14, 2021	2.98%	Semi-Annual	12,500,000	12,484,709
Series R	January 22, 2022	3.77%	Semi-Annual	25,000,000	25,450,891
Series DD	September 27, 2022	4.21%	Semi-Annual	13,000,000	13,370,579
Series II	December 18, 2022	3.22%	Semi-Annual	10,000,000	9,998,229
Series K	December 19, 2022	3.87%	Semi-Annual	10,000,000	10,268,659
Series S	January 22, 2023	3.99%	Semi-Annual	10,000,000	10,283,910
Series P	September 27, 2023	4.39%	Semi-Annual	12,000,000	12,498,406
Series FF	November 20, 2023	4.16%	Semi-Annual	10,000,000	10,254,468
Series JJ	December 18, 2023	3.34%	Semi-Annual	20,000,000	20,042,291
Series T	January 22, 2024	4.16%	Semi-Annual	25,000,000	25,988,841
Series L	December 19, 2024	3.99%	Semi-Annual	20,000,000	20,711,163
Series AA	June 14, 2025	3.48%	Semi-Annual	10,000,000	10,044,962
Series MM	June 14, 2025	3.59% <sup>(2)</sup>	Quarterly	30,000,000	30,000,000
Series NN	June 14, 2025	3.20%	Semi-Annual	30,000,000	29,614,876
Series KK	December 18, 2025	3.53%	Semi-Annual	10,000,000	10,054,561
Series OO	April 9, 2026	3.27%	Semi-Annual	30,000,000	29,294,749
Series PP	September 25, 2027	3.33%	Semi-Annual	25,000,000	24,366,480
				\$ 380,000,000	\$ 382,681,164

Floating rate resets each quarter based on 3-month LIBOR plus 1.20%. The current rate is effective for the period from September 14, 2018 (1) through December 13, 2018. The weighted-average interest rate for the year ended November 30, 2018 was 3.25%.

Floating rate resets each quarter based on 3-month LIBOR plus 1.25%. The current rate is effective for the period from September 14, 2018 (2) through December 13, 2018. The weighted-average interest rate for the year ended November 30, 2018 was 3.30%.

TYG’s Series I Notes with a notional amount of \$10,000,000 and a fixed interest rate of 4.35% were paid in full upon maturity on May 12, 2018.

TYG’s Series X Notes with a notional amount of \$12,500,000 and a fixed interest rate of 4.55% were paid in full upon maturity on June 15, 2018.

TYG’s Series N Notes with a notional amount of \$10,000,000 and a fixed interest rate of 3.15% were paid in full upon maturity on September 27, 2018.



Notes to Financial Statements (continued)

**NTG:**

Series	Maturity Date	Interest Rate	Payment Frequency	Notional	Estimated
				Amount	Fair Value
Series K	September 9, 2019	3.63% <sup>(1)</sup>	Quarterly	\$ 35,000,000	\$ 35,000,000
Series D	December 15, 2020	4.29%	Quarterly	112,000,000	114,530,651
Series J	April 17, 2021	3.72%	Semi-Annual	30,000,000	30,217,474
Series L	April 17, 2021	3.90% <sup>(2)</sup>	Quarterly	20,000,000	20,000,000
Series M	April 17, 2021	3.06%	Semi-Annual	10,000,000	9,914,932
Series N	December 13, 2024	3.18%	Semi-Annual	32,000,000	31,648,926
Series O	December 13, 2027	3.47%	Semi-Annual	25,000,000	24,865,158
Series P	October 16, 2023	3.79%	Semi-Annual	20,000,000	20,241,857
Series Q	October 16, 2025	3.97%	Semi-Annual	15,000,000	15,321,938
Series R	October 16, 2026	4.02%	Semi-Annual	13,000,000	13,325,238
				\$ 312,000,000	\$ 315,066,174

(1) Floating rate resets each quarter based on 3-month LIBOR plus 1.30%. The current rate is effective for the period from September 10, 2018 through December 9, 2018. The weighted-average rate for the year ended November 30, 2018 was 3.34%.

(2) Floating rate resets each quarter based on 3-month LIBOR plus 1.45%. The current rate is effective for the period from October 17, 2018 through January 16, 2018. The weighted-average rate for the year ended November 30, 2018 was 3.53%.

On December 13, 2017, NTG issued \$32,000,000 Series N Senior Notes which carry a fixed interest rate of 3.18% and mature on December 13, 2024 and \$25,000,000 Series O Senior Notes which carry a fixed interest rate of 3.47% and mature on December 13, 2027.

On October 16, 2018, NTG issued \$20,000,000 Series P Senior Notes which carry a fixed interest rate of 3.79% and mature on October 16, 2023, \$15,000,000 Series Q Senior Notes which carry a fixed interest rate of 3.97% and mature on October 16, 2025 and \$13,000,000 Series R Senior Notes which carry a fixed interest rate of 4.02% and mature on October 16, 2026.

NTG's Series C Notes, with a notional amount of \$57,000,000 and a fixed interest rate of 3.73%, were paid in full upon maturity on December 15, 2017. NTG's Series I Notes with a notional amount of \$10,000,000 and a fixed interest rate of 2.77% were paid in full upon maturity on April 17, 2018. NTG's Series G Notes with a notional amount of \$10,000,000 and a fixed interest rate of 4.35% were paid in full upon maturity on May 12, 2018.

**TTP:**

Series	Maturity Date	Interest Rate	Payment Frequency	Notional	Estimated
				Amount	Fair Value
Series C	December 15, 2018	3.49%	Quarterly	\$ 6,000,000	\$ 6,044,530
Series F	December 12, 2020	3.01%	Semi-Annual	6,000,000	6,017,029
Series D	December 15, 2021	4.08%	Quarterly	16,000,000	16,352,771
Series G	December 12, 2022	3.38% <sup>(1)</sup>	Quarterly	6,000,000	6,000,000
				\$ 34,000,000	\$ 34,414,330

(1) Floating rate resets each quarter based on 3-month LIBOR plus 1.05%. The current rate is effective for the period from September 12, 2018 to December 11, 2018. The weighted-average interest rate for the year ended November 30, 2018 was 3.09%.

**10. Mandatory Redeemable Preferred Stock**

TYG, NTG and TTP each have issued and outstanding MRP Stock at November 30, 2018. The MRP Stock has rights determined by the Board of Directors. Except as otherwise indicated in the Funds' Charter or Bylaws, or as otherwise required by law, the holders of MRP Stock have voting rights equal to the holders of common stock (one vote per MRP share) and will vote together with the holders of shares of common stock as a single class except on matters affecting only the holders of preferred stock or the holders of common stock. The 1940 Act requires that the holders of any preferred stock (including MRP Stock), voting separately as a single class, have the right to elect at least two directors at all times.

Under the Investment Company Act of 1940, a fund may not declare dividends or make other distributions on shares of common stock or purchases of such shares if, at the time of the declaration, distribution or purchase, asset coverage with respect to the outstanding MRP Stock would be less than 200%. The MRP Stock is also subject to a mandatory redemption if a Fund fails to meet an asset coverage ratio of at least 225% as

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

determined in accordance with the 1940 Act or a rating agency basic maintenance amount if such failure is not waived or cured. At November 30, 2018, each of TYG, NTG and TTP were in compliance with asset coverage covenants and basic maintenance covenants for its MRP Stock.

2018 Annual Report | November 30, 2018

## Notes to Financial Statements (continued)

Details of each Fund's outstanding MRP Stock, including estimated fair value, as of November 30, 2018 is included below. The estimated fair value of each series of TYG, NTG and TTP MRP Stock was calculated for disclosure purposes by discounting future cash flows at a rate equal to the current U.S. Treasury rate with an equivalent maturity date, plus either 1) the spread between the interest rate on recently issued preferred stock and the U.S. Treasury rate with a similar maturity date or 2) if there has not been a recent preferred stock issuance, the spread between the AA corporate finance debt rate and the U.S. Treasury rate with an equivalent maturity date plus the spread between the fixed rates of the MRP Stock and the AA corporate finance debt rate. The estimated fair values of each series of the TYG, NTG and TTP MRP Stock are Level 2 valuations within the fair value hierarchy.

**TYG:**  
TYG has 65,000,000 shares of preferred stock authorized and 16,500,000 shares of MRP Stock outstanding at November 30, 2018. TYG's MRP Stock has a liquidation value of \$10.00 per share plus any accumulated but unpaid distributions, whether or not declared. Holders of the MRP D Stock and MRP E Stock are entitled to receive cash interest payments semi-annually at a fixed rate until maturity. The TYG MRP Stock is not listed on any exchange or automated quotation system.

Series	Mandatory Redemption Date	Fixed Rate	Shares Outstanding	Aggregate Liquidation	Estimated Fair
				Preference	Value
Series D	December 17, 2021	4.01%	8,500,000	\$ 85,000,000	\$ 86,037,939
Series E	December 17, 2024	4.34%	8,000,000	80,000,000	82,184,383
			16,500,000	\$ 165,000,000	\$ 168,222,322

TYG's MRP Stock is redeemable in certain circumstances at the option of TYG, subject to payment of any applicable make-whole amounts.

**NTG:**  
NTG has 10,000,000 shares of preferred stock authorized and 5,280,000 shares of MRP Stock outstanding at November 30, 2018. On December 13, 2017, NTG issued 1,600,000 shares of MRP E Stock (aggregate liquidation preference \$40,000,000) and 1,000,000 shares of MRP F Stock (aggregate liquidation preference \$25,000,000). On October 16, 2018, NTG issued 880,000 Series G Mandatory Redeemable Preferred Shares (aggregate liquidation preference \$22,000,000). On December 15, 2017, NTG redeemed 2,600,000 shares (aggregate liquidation preference \$65,000,000) of MRP B Stock. NTG's MRP Stock has a liquidation value of \$25.00 per share plus any accumulated but unpaid distributions, whether or not declared. Holders of NTG MRP Stock are entitled to receive cash interest payments each quarter at a fixed rate until maturity. The NTG MRP Stock is not listed on any exchange or automated quotation system.

Series	Mandatory Redemption Date	Fixed Rate	Shares Outstanding	Aggregate Liquidation	Estimated Fair
				Preference	Value
Series C	December 8, 2020	3.73%	200,000	\$ 5,000,000	\$ 4,983,339
Series D	December 8, 2022	4.19%	1,600,000	40,000,000	40,229,902
Series G	October 16, 2023	4.39%	880,000	22,000,000	22,239,259
Series E	December 13, 2024	3.78%	1,600,000	40,000,000	39,213,159
Series F	December 13, 2027	4.07%	1,000,000	25,000,000	24,634,424
			5,280,000	\$ 132,000,000	\$ 131,300,083

NTG's MRP Stock is redeemable in certain circumstances at the option of NTG, subject to payment of any applicable make-whole amounts.

**TTP:**  
TTP has 10,000,000 shares of preferred stock authorized and 640,000 shares of MRP Stock outstanding at November 30, 2018. TTP's MRP Stock has a liquidation value of \$25.00 per share plus any accumulated but unpaid distributions, whether or not declared. Holders of TTP MRP Stock are entitled to receive cash interest payments each quarter at a fixed rate until maturity. The TTP MRP Stock is not listed on any exchange or automated quotation system.

Series	Mandatory Redemption Date	Fixed Rate	Shares Outstanding	Aggregate Liquidation	Estimated Fair
				Preference	Value
Series A	December 15, 2018	4.29%	640,000	\$ 16,000,000	\$ 16,146,702

TTP's MRP Stock is redeemable in certain circumstances at the option of TTP, subject to payment of any applicable make-whole amounts.

Tortoise

65

## Notes to Financial Statements (continued)

**11. Credit Facilities**

The following table shows key terms, average borrowing activity and interest rates for the period during which the facility was utilized during the year ended November 30, 2018, as well as the principal balance and interest rate in effect at November 30, 2018 for each of the Funds' credit facilities:

	<b>TYG</b>	<b>TYG</b>	<b>NTG</b>	<b>TTP</b>	<b>NDP</b>	<b>TPZ</b>
Lending syndicate agent	U.S. Bank, N.A.	The Bank of Nova Scotia	Bank of America, N.A.	The Bank of Nova Scotia	The Bank of Nova Scotia	The Bank of Nova Scotia
Type of facility	Unsecured, revolving credit facility	Unsecured, revolving credit facility	Unsecured, revolving credit facility	Unsecured, revolving credit facility	Secured, revolving credit facility	Secured, revolving credit facility
Borrowing capacity	\$130,000,000	\$90,000,000	\$120,000,000	\$35,000,000	\$80,000,000	\$60,000,000
Maturity date	June 12, 2019	June 22, 2020	June 12, 2019	364-day rolling evergreen	179-day rolling evergreen	179-day rolling evergreen
Interest rate	1-month LIBOR plus 1.20%	1-month LIBOR plus 1.20%	1-month LIBOR plus 1.20%	1-month LIBOR plus 1.125%	1-month LIBOR plus 0.80%	1-month LIBOR plus 0.80%
Non-usage fee	0.15%-0.25% <sup>(1)</sup>	0.15% <sup>(2)</sup>	0.15%-0.25% <sup>(3)</sup>	0.15%	0.20% <sup>(4)</sup>	0.20% <sup>(5)</sup>
<b>For the year ended November 30, 2018:</b>						
Average principal balance	\$59,200,000	\$62,600,000	\$63,700,000	\$20,100,000	\$63,300,000	\$52,200,000
Average interest rate	3.15%	3.14%	3.14%	3.07%	2.74%	2.74%
<b>As of November 30, 2018:</b>						
Principal balance outstanding	\$44,100,000	\$63,000,000	\$73,100,000	\$19,800,000	\$57,100,000	\$53,400,000
Interest rate	3.55%	3.55%	3.55%	3.47%	3.15%	3.15%

Non-use fees are equal to a rate of 0.25% when the outstanding balance is below \$65,000,000 and 0.15% when the outstanding balance is at least \$65,000,000, but below \$91,000,000. The outstanding balance will not be subject to the non-use fee when the amount outstanding is at least \$91,000,000.

(2) Non-usage fee is waived if the outstanding balance on the facility is at least \$63,000,000.

Non-use fees are equal to a rate of 0.25% when the outstanding balance is below \$48,500,000 and 0.15% when the outstanding balance is at least \$48,500,000, but below \$67,900,000. The outstanding balance will not be subject to the non-use fee when the amount outstanding is at least \$67,900,000.

(4) Non-usage fee is waived if the outstanding balance on the facility is at least \$56,000,000.

(5) Non-usage fee is waived if the outstanding balance on the facility is at least \$42,000,000.

On June 22, 2018, TYG entered into an amendment to its credit facility with The Bank of Nova Scotia that extends the credit facility through June 22, 2020. The terms of the amendment provide for an unsecured revolving credit facility of \$90,000,000. During the extension, outstanding balances generally will accrue interest at a variable annual rate equal to one-month LIBOR plus 1.20 percent and unused portions of the credit facility will accrue a non-usage fee equal to an annual rate of 0.15 percent. The non-usage fee is waived if the outstanding balance on the facility is at least \$63,000,000.

On September 4, 2018, NTG entered into an amendment to its credit facility with Bank of America, N.A. that increased the capacity of the credit facility. The terms of the amendment provide for an unsecured revolving credit facility of \$120,000,000, an increase of the previous capacity of \$97,000,000. Other terms of the agreement were unchanged.

Under the terms of the credit facilities, the Funds must maintain asset coverage required under the 1940 Act. If a Fund fails to maintain the required coverage, it may be required to repay a portion of an outstanding balance until the coverage requirement has been met. At November 30, 2018, each Fund was in compliance with credit facility terms.

2018 Annual Report | November 30, 2018

Notes to Financial Statements (continued)

**12. Derivative Financial Instruments**

The Funds have adopted the disclosure provisions of FASB Accounting Standard Codification 815, Derivatives and Hedging ("ASC 815"). ASC 815 requires enhanced disclosures about the Funds' use of and accounting for derivative instruments and the effect of derivative instruments on the Funds' results of operations and financial position. Tabular disclosure regarding derivative fair value and gain/loss by contract type (e.g., interest rate contracts, foreign exchange contracts, credit contracts, etc.) is required and derivatives accounted for as hedging instruments under ASC 815 must be disclosed separately from those that do not qualify for hedge accounting. Even though the Funds may use derivatives in an attempt to achieve an economic hedge, the Funds' derivatives are not accounted for as hedging instruments under ASC 815 because investment companies account for their derivatives at fair value and record any changes in fair value in current period earnings.

**Interest Rate Swap Contracts**

TYG and TPZ have each entered into interest rate swap contracts in an attempt to protect it from increasing interest expense on its leverage resulting from increasing interest rates. A decline in interest rates may result in a decline in the value of the swap contracts, which may result in a decline in the net assets of TYG and TPZ. At the time the interest rate swap contracts reach their scheduled termination, there is a risk that TYG and TPZ will not be able to obtain a replacement transaction, or that the terms of the replacement would not be as favorable as on the expiring transaction. In addition, if TYG or TPZ is required to terminate any swap contract early due to a decline in net assets below a threshold amount (\$450,000,000 for TYG and \$60,000,000 for TPZ) or failing to maintain a required 300% asset coverage of the liquidation value of the outstanding debt, then TYG or TPZ could be required to make a payment to the extent of any net unrealized depreciation of the terminated swaps, in addition to redeeming all or some of its outstanding debt. TYG and TPZ each segregate a portion of its assets as collateral for the amount of any net liability of its interest rate swap contracts.

TYG and TPZ are exposed to credit risk on the interest rate swap contracts if the counterparty should fail to perform under the terms of the interest rate swap contracts. The amount of credit risk is limited to the net appreciation of the interest rate swap contracts, if any, as no collateral is pledged by the counterparty. In addition, if the counterparty to the interest rate swap contracts defaults, the Fund would incur a loss in the amount of the receivable and would not receive amounts due from the counterparty to offset the interest payments on the Fund's leverage.

The average notional amount of all open swap agreements for TYG and TPZ for the year ended November 30, 2018 was \$13,800,000 and \$13,100,000, respectively.

The following table presents TYG's and TPZ's interest rate swap contracts, each of which is subject to a netting agreement, on a gross and a net basis at November 30, 2018:

Description	Gross Amounts of Recognized Assets	Gross Amounts Offset in the Statements of Assets & Liabilities	Net Amounts of Assets Presented in the Statements of Assets & Liabilities	Gross Amounts Not Offset in the Statement of Assets & Liabilities		Net Amount
				Financial Instruments	Cash Collateral Received	
TYG: Interest Rate Swap Contracts	\$ 108,883	\$ —	\$ 108,883	\$ —	\$ —	\$ 108,883
TPZ: Interest Rate Swap Contracts	\$ 128,630	\$ —	\$ 128,630	\$ —	\$ —	\$ 128,630

**Written Call Options**

Transactions in written option contracts for TYG, NTG, TTP and NDP for the year ended November 30, 2018, are as follows:

	TYG		NTG	
	Number of Contracts	Premium	Number of Contracts	Premium
Options outstanding at November 30, 2017	—	\$ —	—	\$ —
Options written	98,376	1,772,441	89,769	1,608,940
Options closed*	(2,274)	(30,894)	(2,274)	(30,894)
Options exercised	(1,898)	(63,479)	(7,160)	(173,332)
Options expired	(54,320)	(1,184,493)	(52,036)	(1,054,170)

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Options outstanding at November 30, 2018	39,884	\$	493,575	28,299	\$	350,544
			<b>TTP</b>			<b>NDP</b>
	<b>Number of</b>		<b>Premium</b>	<b>Number of</b>		<b>Premium</b>
	<b>Contracts</b>			<b>Contracts</b>		
Options outstanding at November 30, 2017	7,113	\$	353,524	50,578	\$	1,895,945
Options written	73,197		5,094,141	562,625		26,521,492
Options closed*	(72,024)		(4,728,447)	(453,398)		(21,506,054)
Options exercised	(2,408)		(174,517)	(82,109)		(3,249,181)
Options expired	(339)		(31,924)	(36,290)		(1,255,213)
Options outstanding at November 30, 2018	5,539	\$	512,777	41,406	\$	2,406,989

\* The aggregate cost of closing written option contracts was \$4,626 for TYG, \$4,626 for NTG, \$4,783,187 for TTP and \$12,411,209 for NDP, resulting in net realized gain (loss) of \$26,267, \$26,267, \$(54,740) and \$9,094,845 for TYG, NTG, TTP and NDP, respectively.

**Tortoise**

67

**Notes to Financial Statements** (continued)

The following table presents the types and fair value of derivatives by location as presented on the Statements of Assets & Liabilities at November 30, 2018:

Derivatives not accounted for as hedging instruments under ASC 815	Assets/(Liabilities)	
	Location	Fair Value
TYG: Interest rate swap contracts	Interest rate swap contracts	\$ 108,883
TYG: Written equity call options	Options written, at fair value	\$ (921,842)
NTG: Written equity call options	Options written, at fair value	\$ (653,462)
TTP: Written equity call options	Options written, at fair value	\$ (199,782)
NDP: Written equity call options	Options written, at fair value	\$ (835,007)
TPZ: Interest rate swap contracts	Interest rate swap contracts	\$ 128,630

The following table presents the effect of derivatives on the Statements of Operations for the year ended November 30, 2018:

Derivatives not accounted for as hedging instruments under ASC 815	Location of Gains (Losses) on Derivatives	Net Realized Gain (Loss) on Derivatives	Net Unrealized Appreciation (Depreciation) of Derivatives
TYG: Interest rate swap contracts	Interest rate swaps	\$ (60,499)	\$ 266,585
TYG: Written equity call options	Options	\$ 1,210,761	\$ (428,267)
NTG: Written equity call options	Options	\$ 1,080,438	\$ (302,918)
TTP: Written equity call options	Options	\$ (23,411)	\$ 281,675
NDP: Written equity call options	Options	\$ 10,350,058	\$ 1,489,446
TPZ: Interest rate swap contracts	Interest rate swaps	\$ 30,903	\$ 85,846

**13. Subsequent Events****TYG:**

TYG has performed an evaluation of subsequent events through the date the financial statements were issued and has determined that no items require recognition or disclosure.

**NTG:**

On January 7, 2019, NTG changed the name of the fund from Tortoise MLP Fund, Inc. to Tortoise Midstream Energy Fund, Inc. No changes were made to the fund ticker symbol or CUSIP.

NTG has performed an evaluation of subsequent events through the date the financial statements were issued and has determined that no additional items require recognition or disclosure.

**TTP:**

On December 13, 2018, TTP issued \$6,000,000 Series H Senior Notes which carry a fixed interest rate of 3.97% and mature on December 13, 2024.

On December 13, 2018, TTP issued 640,000 Series B Mandatory Redeemable Preferred Shares (aggregate liquidation preference \$16,000,000) which carry a fixed interest rate of 4.57% and a mandatory redemption date of December 13, 2024.

TTP has performed an evaluation of subsequent events through the date the financial statements were issued and has determined that no additional items require recognition or disclosure.

**NDP:**

NDP has performed an evaluation of subsequent events through the date the financial statements were issued and has determined that no items require recognition or disclosure.

**TPZ:**

On December 31, 2018, TPZ paid a distribution in the amount of \$0.125 per common share, for a total of \$868,917. Of this total, the dividend reinvestment amounted to \$12,453.

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

TPZ has performed an evaluation of subsequent events through the date the financial statements were issued and has determined that no additional items require recognition or disclosure.

2018 Annual Report | November 30, 2018

## Report of Independent Registered Public Accounting Firm

**To the Shareholders and Board of Directors  
Tortoise Energy Infrastructure Corporation  
Tortoise MLP Fund, Inc.  
Tortoise Pipeline & Energy Fund, Inc.  
Tortoise Energy Independence Fund, Inc.  
Tortoise Power and Energy Infrastructure Fund, Inc.  
Opinion on the Financial Statements**

We have audited the accompanying statements of assets and liabilities of Tortoise Energy Infrastructure Corporation, Tortoise MLP Fund, Inc., Tortoise Pipeline & Energy Fund, Inc., Tortoise Energy Independence Fund, Inc., and Tortoise Power and Energy Infrastructure Fund, Inc., (the "Funds"), including the schedules of investments, as of November 30, 2018, and the related statements of operations and cash flows for the year then ended, the statements of changes in net assets for each of the two years in the period then ended, and the financial highlights for each of the five years in the period then ended and related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Funds at November 30, 2018, the results of their operations and their cash flows for the year then ended, the changes in their net assets for each of the two years in the period then ended and their financial highlights for each of the five years in the period then ended, in conformity with U.S. generally accepted accounting principles.

### Basis for Opinion

These financial statements are the responsibility of the Funds' management. Our responsibility is to express an opinion on the Funds' financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Funds in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Funds are not required to have, nor were we engaged to perform an audit of the Funds' internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Funds' internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our procedures included confirmation of securities owned as of November 30, 2018, by correspondence with the custodians and brokers. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Minneapolis, Minnesota

January 24, 2019

We have served as the auditor of one or more Tortoise investment companies since 2004.

**Tortoise**

69

**Company Officers and Directors** (unaudited)

November 30, 2018

Name and Age <sup>(1)</sup> Independent Directors	Position(s) Held With Company, Term of Office and Length of Time Served <sup>(2)</sup>	Principal Occupation During Past Five Years	Number of Portfolios in Fund Complex Overseen by Director <sup>(3)</sup>	Other Public Company Directorships Held
Conrad S. Ciccotello (Born 1960)	Class I Director of TYG since 2003 and of NTG since 2010; Class II Director of NDP since 2012 and of TPZ since 2007; Class III Director of TTP since 2011.	Professor and Director, Reiman School of Finance, University of Denver (faculty member since 2017); Professor and Chairman of the Department of Risk Management and Insurance, Robinson College of Business, Georgia State University (1999-2017); Director of Personal Financial Planning Program; Investment Consultant to the University System of Georgia for its defined contribution retirement plan; Formerly Faculty Member, Pennsylvania State University (1997-1999); Published a number of academic and professional journal articles on investment company performance and structure, with a focus on MLPs.	6	CorEnergy Infrastructure Trust, Inc.; Peachtree Alternative Strategies Fund; Tortoise Tax-Advantaged Social Infrastructure Fund, Inc.
Rand C. Berney (Born 1955)	Class I Director of TTP since January 1, 2014; Class II Director of each of TYG and NTG since January 1, 2014; Class III Director of each of NDP and TPZ since January 1, 2014.	Executive-in-Residence and Professor for Professional Financial Planning Course and Professional Ethics Course, College of Business Administration, Kansas State University since 2012; Formerly Senior Vice President of Corporate Shared Services of ConocoPhillips from 2009 to 2012, Vice President and Controller of ConocoPhillips from 2002 to 2009, and Vice President and Controller of Phillips Petroleum Company from 1997 to 2002; Member of the Oklahoma Society of CPAs, the Financial Executive Institute, American Institute of Certified Public Accountants, the Institute of Internal Auditors and the Institute of Management Accountants.	5	None
Jennifer Paquette (Born 1962)	Class I Director of TTP since March 18, 2018; Class II Director of each of TYG and NTG since March 18, 2018; Class III Director of each of NDP and TPZ since March 18, 2018.	Retired in 2017; Previously Chief Investment Officer of the Public Employees' Retirement Association of Colorado ("Colorado PERA") from 2003 to 2017; Held various positions within Colorado PERA from 1999 to 2003 and 1995 to 1996; Formerly Vice-President Institutional Account Executive at Merrill Lynch, Pierce, Fenner & Smith from 1991 to 1994; Vice-President, Portfolio Manager and Analyst at Alliance Capital Management from 1987 to 1991; Portfolio Assistant and Assistant at Mitchell Hutchins Asset Management from 1985 to 1987. Chartered Financial Analyst ("CFA") charterholder.	5	None
Alexandra Herger (Born 1957)	Class I Director of each of NDP and TPZ since January 1, 2015; Class II Director of TTP since January 1, 2015; Class III Director of each of TYG and NTG since January 1, 2015.	Retired in 2014; Previously interim vice president of exploration for Marathon Oil in 2014 prior to her retirement; Director of international exploration and new ventures for Marathon Oil from 2008 to 2014; Held various positions with Shell Exploration and Production Co. between 2002 and 2008; Member of the Society of Exploration Geophysicists, the American Association of Petroleum Geologists, the Houston Geological Society and the Southeast Asia Petroleum Exploration Society; Member of the 2010 Leadership Texas/Foundation for Women's Resources since 2010; Director of Panoro Energy ASA, an international independent oil and gas company listed on the Oslo Stock Exchange.	5	None

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

**Interested  
Directors** <sup>(4)</sup>

H. Kevin Birzer (Born 1959)	Class I Director and Chairman of the Board of NDP since 2012 and of TPZ since 2007; Class II Director and Chairman of the Board of TTP since 2011; Class III Director and Chairman of the Board of TYG since 2003 and of NTG since 2010.	Chief Executive Officer of the Adviser; Managing Director of the Adviser and member of the Investment Committee of the Adviser since 2002; Director and Chairman of the Board of each of Tortoise Energy Capital Corporation ("TYE") and Tortoise North American Energy Corporation ("TYN") from its inception until its merger into TYG effective June 23, 2014; Director and Chairman of the Board of Tortoise Capital Resources Corporation ("TTC"), which changed its name to CorEnergy Infrastructure Trust, Inc. on December 3, 2012 ("CORR"), from its inception through November 30, 2011. CFA designation since 1988.	5	None
--------------------------------	--	--	---	------

- (1) The address of each director and officer is 11550 Ash Street, Suite 300, Leawood, Kansas 66211.  
 (2) Ending year of Director terms by Class are as follows:

Class I	TYG 2020	NTG 2020	TTP 2021	NDP 2019	TPZ 2019	
Class II	2021	2021	2019	2020	2020	2020
Class III	2019	2019	2020	2021	2021	

- This number includes TYG, NTG, TTP, NDP and TPZ. The Adviser serves as the investment adviser to TYG, NTG, TTP, NDP and TPZ. For Mr. Ciccotello, this number also includes the Tortoise Tax-Advantage Social Infrastructure Fund, Inc., whose investment adviser is an affiliate of the Adviser.  
 (4) As a result of their respective positions held with the Adviser or its affiliates, these individuals are considered "interested persons" within the meaning of the 1940 Act.

2018 Annual Report | November 30, 2018

## Company Officers and Directors (unaudited) (continued)

November 30, 2018

Name and Age <sup>(1)</sup> Interested Officers <sup>(3)</sup>	Position(s) Held	Principal Occupation During Past Five Years	Number of	Other Public
	With Company, Term of Office and Length of Time Served <sup>(2)</sup>		Portfolios in Fund Complex Overseen by Director	Company Directorships Held
P. Bradley Adams (Born 1960)	Chief Executive Officer of each of TYG, NTG, TTP, NDP and TPZ since June 30, 2015. Principal Financial Officer and Treasurer of each of TYG, NTG, TTP, NDP and TPZ since May 18, 2017.	Managing Director of the Adviser since January 2013; Director of Financial Operations of the Adviser from 2005 to January 2013; Chief Financial Officer of NTG from 2010 to June 30, 2015, of each of TYG and TPZ from May 2011 to June 30, 2015, of each of TTP and NDP from its inception to June 30, 2015, and of each of TYY and TYN from May 2011 to June 23, 2014; Assistant Treasurer of each of the TYG, TYY and TYN from November 2005 to May 2011, of TPZ from its inception to May 2011, and of TTO from its inception to June 2012.	N/A	None
Matthew G.P. Sallee (Born 1978)	President of TYG and NTG since June 30, 2015.	Managing Director of the Adviser since January 2014 and member of the Investment Committee of the Adviser since June 30, 2015; Portfolio Manager of the Adviser since July 2013; Senior Investment Analyst of the Adviser from June 2012 to July 2013; Investment Analyst of the Adviser from 2009 to June 2012; Research Analyst of the Adviser from 2005 to 2009. CFA designation since 2009.	N/A	None
Brian A. Kessens (Born 1975)	President of TTP and TPZ since June 30, 2015.	Managing Director of the Adviser since January 2015 and a member of the Investment Committee of the Adviser since June 30, 2015; Portfolio Manager of the Adviser since July 2013; Senior Investment Analyst of the Adviser from June 2012 to July 2013; Investment Analyst of the Adviser from 2008 to June 2012. CFA designation since 2006.	N/A	None
Robert J. Thummel (Born 1972)	President of NDP since June 30, 2015.	Managing Director of the Adviser since January 2014 and a member of the Investment Committee of the Adviser since June 30, 2015; Portfolio Manager of the Adviser since July 2013; Senior Investment Analyst of the Adviser from June 2012 to July 2013; Investment Analyst of the Adviser from 2004 to June 2012. Previously, the President of TYN from 2008 until its merger into TYG in June 2014.	N/A	None
Nicholas S. Holmes (Born 1985)	Vice President of each of TYG and NTG since June 30, 2015.	Director and Portfolio Manager of the Adviser since January 2019; Investment Analyst of the Adviser from January 2015 to December 2018; Research Analyst of the Adviser from January 2012 through December 2014 and Assistant Research Analyst from January 2010 through December 2011. CFA designation since 2013.	N/A	None
Stephen Pang (Born 1981)	Vice President of TTP since May 18, 2017.	Director of the Adviser since January 2017; Investment Analyst of the Adviser from January 2015 to January 2017; CFA designation since 2016.	N/A	None
Adam Peltzer (Born 1975)	Vice President of TPZ since May 18, 2017.	Director and Investment Analyst of the Adviser since March 2015. CFA designation since 2009.	N/A	None
Brett Jergens (Born 1978)	Vice President of NDP since June 30, 2015.	Investment Analyst of the Adviser since December 2010; Research Analyst of the Adviser from June 2007 to December 2010. CFA designation since 2011.	N/A	None
Shobana Gopal (Born 1962)	Vice President of each of TYG, NTG, TTP, NDP and TPZ since June 30, 2015.	Director, Tax of the Adviser since January 2013; Tax Analyst of the Adviser from September 2006 through December 2012.	N/A	None
	Secretary of each of TYG, NTG, TTP, NDP and TPZ	Chief Compliance Officer of the Adviser since June 2006; Chief Compliance Officer of TYG since June 2006 and of each	N/A	None

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Diane Bono since May 2013.  
(Born 1958)

of NTG, TTP, NDP and TPZ since its inception, and of each of  
TYY and TYN from June 2006 to June 23, 2014; Secretary of  
each of TYY and TYN from May 2013 to June 23, 2014.

(1) The address of each director and officer is 11550 Ash Street, Suite 300, Leawood, Kansas 66211.

(2) Officers are elected annually.

(3) As a result of their respective positions held with the Adviser or its affiliates, these individuals are considered "interested persons" within the meaning of the 1940 Act.

**Tortoise**

71

---

**Additional Information** (unaudited)**Notice to Shareholders**

For stockholders that do not have a November 30, 2018 tax year end, this notice is for information purposes only. For stockholders with a November 30, 2018 tax year end, please consult your tax advisor as to the pertinence of this notice. For the fiscal year ended November 30, 2018, each Fund is designating the following items with regard to distributions paid during the year.

**Common Distributions**

	Return		Long-Term Capital Gain Distributions <sup>(1)</sup>	Ordinary Income Distributions	Total Distributions	Qualifying Dividends <sup>(2)</sup>	Qualifying For Corporate Dividends Rec. Deduction <sup>(3)</sup>
	of Capital						
	Distributions						
TTP	97.37	%	0.00	2.63	100.00	100.00	100.00
NDP	100.00	%	0.00	0.00	100.00	0.00	0.00
TPZ	0.00	%	55.47	44.53	100.00	11.71	11.20

**Common Distributions**

	Return		Long-Term Capital Gain Distributions <sup>(1)</sup>	Ordinary Income Distributions	Total Distributions	Qualifying Dividends <sup>(2)</sup>	Qualifying For Corporate Dividends Rec. Deduction <sup>(3)</sup>
	of Capital						
	Distributions						
TTP	0.00	%	0.00	100.00	100.00	100.00	100.00

(1) The Fund designates long-term capital gain distributions per IRC Code Sec. 852(b)(3)(C). The long-term capital gain tax rate is variable based on the taxpayer's taxable income.

(2) Represents the portion of Ordinary Income Distributions taxable at the capital gain tax rates if the stockholder meets holding period requirements.

(3) Represents the portion of Ordinary Income Distributions which qualify for the "Corporate Dividends Received Deduction."

**Director and Officer Compensation**

The Funds do not compensate any of its directors who are "interested persons," as defined in Section 2(a)(19) of the 1940 Act, nor any of its officers. For the period from December 1, 2017 through November 30, 2018, the aggregate compensation paid by the Funds to the independent directors was as follows:

TYG	NTG	TTP	NDP	TPZ
\$ 186,400	\$ 165,000	\$ 115,000	\$ 115,000	\$ 110,000

The Funds did not pay any special compensation to any of its directors or officers.

**Forward-Looking Statements**

This report contains "forward-looking statements" within the meaning of the Securities Act of 1933 and the Securities Exchange Act of 1934. By their nature, all forward-looking statements involve risks and uncertainties, and actual results could differ materially from those contemplated by the forward-looking statements. Several factors that could materially affect each Fund's actual results are the performance of the portfolio of investments held by it, the conditions in the U.S. and international financial, petroleum and other markets, the price at which shares of each Fund will trade in the public markets and other factors discussed in filings with the SEC.

**Proxy Voting Policies**

A description of the policies and procedures that each Fund uses to determine how to vote proxies relating to portfolio securities owned by the Fund and information regarding how each Fund voted proxies relating to the portfolio of securities during the 12-month period ended June 30, 2018 are available to stockholders (i) without charge, upon request by calling the Adviser at (913) 981-1020 or toll-free at (866) 362-9331 and on or through the Adviser's Web site at [www.tortoiseadvisors.com](http://www.tortoiseadvisors.com); and (ii) on the SEC's Web site at [www.sec.gov](http://www.sec.gov).

**Form N-Q**

Each Fund files its complete schedule of portfolio holdings for the first and third quarters of each fiscal year with the SEC on Form N-Q. Each Fund's Form N-Q is available without charge upon request by calling the Adviser at (866) 362-9331 or by visiting the SEC's Web site at [www.sec.gov](http://www.sec.gov).

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Each Fund's Form N-Qs are also available through the Adviser's Web site at [www.tortoiseadvisors.com](http://www.tortoiseadvisors.com).

### **Statement of Additional Information**

The Statement of Additional Information ("SAI") includes additional information about each Fund's directors and is available upon request without charge by calling the Adviser at (866) 362-9331 or by visiting the SEC's Web site at [www.sec.gov](http://www.sec.gov).

### **Certifications**

Each Fund's Chief Executive Officer has submitted to the New York Stock Exchange the annual CEO certification as required by Section 303A.12(a) of the NYSE Listed Company Manual.

Each Fund has filed with the SEC, as an exhibit to its most recently filed Form N-CSR, the certification of its Chief Executive Officer and Principal Financial Officer required by Section 302 of the Sarbanes-Oxley Act.

2018 Annual Report | November 30, 2018

**Additional Information** (unaudited) (continued)

**Privacy Policy**

In order to conduct its business, each Fund collects and maintains certain nonpublic personal information about its stockholders of record with respect to their transactions in shares of each Fund's securities. This information includes the stockholder's address, tax identification or Social Security number, share balances, and distribution elections. We do not collect or maintain personal information about stockholders whose share balances of our securities are held in "street name" by a financial institution such as a bank or broker.

We do not disclose any nonpublic personal information about you, the Funds' other stockholders or the Funds' former stockholders to third parties unless necessary to process a transaction, service an account, or as otherwise permitted by law.

To protect your personal information internally, we restrict access to nonpublic personal information about the Funds' stockholders to those employees who need to know that information to provide services to our stockholders. We also maintain certain other safeguards to protect your nonpublic personal information.

**Repurchase Disclosure**

Notice is hereby given in accordance with Section 23(c) of the 1940 Act, that each Fund may from time to time purchase shares of its common stock in the open market.

**Automatic Dividend Reinvestment**

Each of NTG, TTP, NDP and TPZ have an Automatic Dividend Reinvestment Plan and TYG has an Automatic Dividend Reinvestment and Cash Purchase Plan (each, a "Plan"). Each Plan allows participating common stockholders to reinvest distributions, including dividends, capital gains and return of capital in additional shares of the Fund's common stock and TYG's Plan also allows registered holders of the TYG's common stock to make optional cash investments, in accordance with TYG's Plan, on a monthly basis.

If a stockholder's shares are registered directly with the Fund or with a brokerage firm that participates in the Fund's Plan, all distributions are automatically reinvested for stockholders by the Agent in additional shares of common stock of the Fund (unless a stockholder is ineligible or elects otherwise). Stockholders holding shares that participate in the Plan in a brokerage account may not be able to transfer the shares to another broker and continue to participate in the Plan. Stockholders who elect not to participate in the Plan will receive all distributions payable in cash paid by check mailed directly to the stockholder of record (or, if the shares are held in street or other nominee name, then to such nominee) by Computershare, as dividend paying agent. Distributions subject to tax (if any) are taxable whether or not shares are reinvested.

Any single investment pursuant to the cash purchase option under TYG's Plan must be in an amount of at least \$100 and may not exceed \$5,000 per month unless a request for waiver has been granted. A request for waiver should be directed to TYG at 1-866-362-9331 and TYG has the sole discretion to grant any requested waiver. Optional cash investments may be delivered to the Agent by personal check, by automatic or electronic bank account transfer or by online access at [www.computershare.com](http://www.computershare.com). TYG reserves the right to reject any purchase order. Stockholders who hold shares in street or other nominee name who want to participate in optional cash investments should contact their broker, bank or other nominee and follow their instructions. There is no obligation to make an optional cash investment at any time, and the amount of such investments may vary from time to time. Optional cash investments must be received by the Agent no later than two business days prior to the monthly investment date (the "payment date") for purchase of common shares on the next succeeding purchase date under TYG's Plan. Scheduled optional cash purchases may be cancelled or refunded upon a participant's written request received by the Agent at least two business days prior to the purchase date. Participants will not be able to instruct the Agent to purchase common shares at a specific time or at a specific price.

If on the distribution payment date or, for TYG, the purchase date for optional cash investments, the net asset value per share of the common stock is equal to or less than the market price per share of common stock plus estimated brokerage commissions, the Fund will issue additional shares of common stock to participants. The number of shares will be determined by the greater of the net asset value per share or 95 percent of the market price. Otherwise, shares generally will be purchased on the open market by the Agent as soon as possible following the payment date or purchase date, but in no event later than 30 days after such date except as necessary to comply with applicable law. There are no brokerage charges with respect to shares issued directly by the Fund as a result of distributions payable either in shares or in cash or, for TYG, as a result of optional cash investments. However, each participant will pay a pro rata share of brokerage commissions incurred with respect to the Agent's open-market purchases in connection with the reinvestment of distributions or optional cash investments. If a participant elects to have the Agent sell part or all of his or her common stock and remit the proceeds, such participant will be charged a transaction fee of \$15.00 plus his or her pro rata share of brokerage commissions on the shares sold.

Participation is completely voluntary. Stockholders may elect not to participate in the Plan, and participation may be terminated or resumed at any time without penalty, by giving notice in writing, by telephone or Internet to Computershare, the Plan Agent, at the address set forth below. Such termination will be effective with respect to a particular distribution if notice is received prior to such record date.

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Additional information about the Plan may be obtained by writing to Computershare Trust Company, N.A, P.O. Box 30170, College Station, TX 77842-3170. You may also contact Computershare by phone at (800) 426-5523 or visit their Web site at [www.computershare.com](http://www.computershare.com).

### **Investment Advisory Agreement Update**

A new investment advisory agreement (the "Advisory Agreement") between the Company and the Adviser was unanimously approved by the Board of Directors, including the Independent Directors, on October 16, 2017, and was subsequently approved by stockholders at a special meeting on December 21, 2017. This new agreement became effective upon the closing of the change in ownership of the parent company of the Adviser on January 31, 2018 and has a term ending on December 31, 2019. The Advisory Agreement will be submitted to the Board of Directors for renewal each year after the initial term. A discussion regarding the basis of the Board of Directors' decision to approve the new Advisory Agreement is available in our Annual Report to stockholders for the fiscal year ended November 30, 2017.

**Tortoise**

73

---

**Office of the Company  
and of the Investment Adviser**

Tortoise Capital Advisors, L.L.C.  
11550 Ash Street, Suite 300  
Leawood, Kan. 66211  
(913) 981-1020  
(913) 981-1021 (fax)  
www.tortoiseadvisors.com

**Board of Directors of  
Tortoise Energy Infrastructure Corp.  
Tortoise MLP Fund, Inc.  
Tortoise Pipeline & Energy Fund, Inc.  
Tortoise Energy Independence Fund, Inc.  
Tortoise Power and Energy Infrastructure Fund, Inc.**

H. Kevin Birzer, Chairman  
Tortoise Capital Advisors, L.L.C.

Rand C. Berney  
Independent

Conrad S. Ciccotello  
Independent

Alexandra Herger  
Independent

Jennifer Paquette  
Independent

11550 Ash Street, Suite 300  
Leawood, KS 66211

[www.tortoiseadvisors.com](http://www.tortoiseadvisors.com)

---

**Administrator**

U.S. Bancorp Fund Services, LLC  
615 East Michigan St.  
Milwaukee, Wis. 53202

**Custodian**

U.S. Bank, N.A.  
1555 North Rivercenter Drive, Suite 302  
Milwaukee, Wis. 53212

**Transfer, Dividend Disbursing  
and Reinvestment Agent**

Computershare Trust Company, N.A. /  
Computershare Inc.  
P.O. Box 30170  
College Station, Tex. 77842-3170  
(800) 426-5523  
www.computershare.com

**Legal Counsel**

Husch Blackwell LLP  
4801 Main St.  
Kansas City, Mo. 64112

**Investor Relations**

(866) 362-9331  
info@tortoiseadvisors.com

**Stock Symbols**

Listed NYSE Symbols: TYG, NTG, TTP, NDP, TPZ

This report is for stockholder information. This is not a prospectus intended for use in the purchase or sale of fund shares. **Past performance is no guarantee of future results and your investment may be worth more or less at the time you sell.**

**Item 2. Code of Ethics.**

The Registrant has adopted a code of ethics that applies to the Registrant's Principal Executive Officer and its Principal Financial Officer. The Registrant has not made any amendments to this code of ethics during the period covered by this report. The Registrant has not granted any waivers from any provisions of this code of ethics during the period covered by this report.

**Item 3. Audit Committee Financial Expert.**

The Registrant's Board of Directors has determined that there is at least one "audit committee financial expert" serving on its audit committee. Mr. Conrad Ciccotello is the "audit committee financial expert" and is considered to be "independent" as each term is defined in Item 3 of Form N-CSR. In addition to his experience overseeing or assessing the performance of companies or public accountants with respect to the preparation, auditing or evaluation of financial statements, Mr. Ciccotello has a Ph.D. in Finance.

**Item 4. Principal Accountant Fees and Services.**

The Registrant has engaged its principal accountant to perform audit services, audit-related services and tax services during the past two fiscal years. "Audit services" refer to performing an audit of the Registrant's annual financial statements or services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements for those fiscal years. "Audit-related services" refer to the assurance and related services by the principal accountant that are reasonably related to the performance of the audit. "Tax services" refer to professional services rendered by the principal accountant for tax compliance (including preparation of tax returns), tax advice, and tax planning. The following table details the approximate amounts of aggregate fees billed to the Registrant for the last two fiscal years for audit fees, audit-related fees, tax fees and other fees by the principal accountant.

	FYE 11/30/2018	FYE 11/30/2017
Audit Fees	\$ 111,000	\$ 116,000
Audit-Related Fees	—	—
Tax Fees	\$ 21,000	\$ 20,000
All Other Fees	—	—
Aggregate Non-Audit Fees	\$ 21,000	\$ 20,000

The audit committee has adopted pre-approval policies and procedures that require the audit committee to pre-approve (i) the selection of the Registrant's independent registered public accounting firm, (ii) the engagement of the independent registered public accounting firm to provide any non-audit services to the Registrant, (iii) the engagement of the independent registered public accounting firm to provide any non-audit services to the Adviser or any entity controlling, controlled by, or under common control with the Adviser that provides ongoing services to the Registrant, if the engagement relates directly to the operations and financial reporting of the Registrant, and (iv) the fees and other compensation to be paid to the independent registered public accounting firm. The Chairman of the audit committee may grant the pre-approval of any engagement of the independent registered public accounting firm for non-audit services of less than \$10,000, and such delegated pre-approvals will be presented to the full audit committee at its next meeting. Under certain limited circumstances, pre-approvals are not required under securities law regulations for certain non-audit services below certain de minimus thresholds. Since the adoption of these policies and procedures, the audit committee has pre-approved all audit and non-audit services provided to the Registrant by the principal accountant. None of these services provided by the principal accountant were approved by the audit committee pursuant to the de minimus exception under Rule 2.01(c)(7)(i)(C) or Rule 2.01(c)(7)(ii) of Regulation S-X. All of the principal accountant's hours spent on auditing the Registrant's financial statements were attributed to work performed by full-time permanent employees of the principal accountant.

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

In the Registrant's fiscal years ended November 30, 2018 and 2017, the Adviser was billed approximately \$136,500 and \$457,900 in fees, respectively, for tax and other non-audit services provided to the Adviser. These non-audit services were not required to be preapproved by the Registrant's audit committee. No entity controlling, controlled by, or under common control with the Adviser that provides ongoing services to the Registrant, has paid to, or been billed for fees by, the principal accountant for non-audit services rendered to the Adviser or such entity during the Registrant's last two fiscal years. The audit committee has considered whether the principal accountant's provision of services (other than audit services) to the Registrant, the Adviser or any entity controlling, controlled by, or under common control with the Adviser that provides services to the Registrant is compatible with maintaining the principal accountant's independence in performing audit services.

### **Item 5. Audit Committee of Listed Registrants.**

The Registrant has a separately-designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, and is comprised of Mr. Conrad S. Ciccotello, Mr. Rand C. Berney, Ms. Jennifer Paquette and Ms. Alexandra A. Herger.

### **Item 6. Investments.**

- (a) Schedule of Investments is included as part of the report to shareholders filed under Item 1.
- (b) Not applicable.

### **Item 7. Disclosure of Proxy Voting Policies and Procedures for Closed-End Management Investment Companies.**

Copies of the proxy voting policies and procedures of the Registrant and the Adviser are attached hereto as Exhibit 99.VOTEREG and Exhibit 99.VOTEADV, respectively.

### **Item 8. Portfolio Managers of Closed-End Management Investment Companies.**

Unless otherwise indicated, information is presented as of November 30, 2018.

#### Portfolio Managers

As of the date of this filing, primary responsibility for the day-to-day management of the Registrant's portfolio is the joint responsibility of a team of portfolio managers consisting of Brian A. Kessens, James R. Mick, Matthew G.P. Sallee, Robert J. Thummel, Jr., Stephen Pang, Brett Jergens and Nicholas S. Holmes. The investment committee of the Adviser, comprised of certain of these portfolio managers and other employees of the Adviser, provides investment strategy oversight to the portfolio management team who implements the strategy. Biographical information about each portfolio manager named above as of the date of this filing is set forth below.

---

Name and Age*	Position(s) Held with Company and Length of Time Served	Principal Occupation During Past Five Years
Brian A. Kessens (Born 1975)	N/A	Investment Analyst of the Adviser from 2008 to June 2012; Senior Investment Analyst of the Adviser from June 2012 to July 2013; Portfolio Manager of the Adviser since July 2013; Managing Director of the Adviser since January 2015; Member of the Investment Committee of the Adviser and President of each of TTP and TPZ since June 30, 2015. CFA designation since 2006.
James R. Mick (Born 1975)	N/A	Research Analyst of the Adviser from 2006 to 2011; Investment Analyst of the Adviser from 2011 to June 2012; Senior Investment Analyst of the Adviser from June 2012 to July 2013; Portfolio Manager of the Adviser since July 2013; Managing Director of the Adviser since January 2014; Member of the Investment Committee of the Adviser since June 30, 2015. CFA designation since 2010.
Matthew G.P. Sallee (Born 1978)	N/A	Research Analyst of the Adviser from 2005 to 2009; Investment Analyst of the Adviser from 2009 to June 2012; Senior Investment Analyst of the Adviser from June 2012 to July 2013; Portfolio Manager of the Adviser since July 2013; Managing Director of the Adviser since January 2014; Member of the Investment Committee of the Adviser and President of each of TYG and NTG since June 30, 2015. CFA designation since 2009.
Robert J. Thummel, Jr. (Born 1972)	President since June 30, 2015	Investment Analyst of the Adviser from 2004 to June 2012; Senior Investment Analyst of the Adviser from June 2012 to July 2013; Portfolio Manager of the Adviser since July 2013; Managing Director of the Adviser since January 2014; President of TYN from 2008 until its merger into TYG effective June 23, 2014; Member of the Investment Committee of the Adviser.
Stephen Pang (Born 1981)	N/A	Investment Analyst of the Adviser from January 2015 to January 2017; Director of the Adviser since January 2017; Portfolio Manager of the Adviser since January 2018; Vice President of TTP since May 2017. CFA designation since 2016.
Brett Jergens (Born 1978)	Vice President since June 30, 2015	Research Analyst of the Adviser from June 2007 to December 2010; Investment Analyst of the Adviser from December 2010 to January 2018. Portfolio Manager of the Adviser since January 2018. CFA designation since 2011.
Nicholas S. Holmes (Born 1985)	N/A	Assistant Research Analyst from January 2010 through December 2011; Research Analyst of the Adviser from January 2012 through December 2014; Investment Analyst of the Adviser from January 2015 to December 2018; Director and Portfolio Manager of the Adviser since January 2019; Vice President of each of TYG and NTG since June 30, 2015. CFA designation since 2013.

\*The address of each portfolio manager is 11550 Ash Street, Suite 300, Leawood, Kansas 66211.

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

The Adviser also serves as the investment adviser to TYG, TPZ, NTG and TTP.

The following table provides information about the other accounts managed on a day-to-day basis by each of the portfolio managers as of November 30, 2018:

<b>Name of Manager</b>	<b>Number of Accounts</b>	<b>Total Assets of Accounts</b>	<b>Number of Accounts Paying a Performance Fee</b>	<b>Total Assets of Accounts Paying a Performance Fee</b>
<b>Brian A. Kessens</b>				
Registered investment companies	9	\$8,448,922,878	0	—
Other pooled investment vehicles	15	\$ 856,630,585	2	\$113,079,761
Other accounts	951	\$6,992,554,006	0	—
<b>James R. Mick</b>				
Registered investment companies	9	\$8,448,922,878	0	—
Other pooled investment vehicles	15	\$ 856,630,585	2	\$113,079,761
Other accounts	951	\$6,992,554,006	0	—
<b>Matthew G.P. Sallee</b>				
Registered investment companies	9	\$8,448,922,878	0	—
Other pooled investment vehicles	15	\$ 856,630,585	2	\$113,079,761
Other accounts	951	\$6,992,554,006	0	—
<b>Robert J. Thummel, Jr.</b>				
Registered investment companies	9	\$8,448,922,878	0	—
Other pooled investment vehicles	15	\$ 856,630,585	2	\$113,079,761
Other accounts	951	\$6,992,554,006	0	—
<b>Stephen Pang</b>				
Registered investment companies	9	\$8,448,922,878	0	—
Other pooled investment vehicles	15	\$ 856,630,585	2	\$113,079,761
Other accounts	951	\$6,992,554,006	0	—
<b>Brett Jergens</b>				
Registered investment companies	9	\$8,448,922,878	0	—
Other pooled investment vehicles	15	\$ 856,630,585	2	\$113,079,761
Other accounts	951	\$6,992,554,006	0	—
<b>Nicholas S. Holmes</b>				
Registered investment companies	9	\$8,448,922,878	0	—
Other pooled investment vehicles	15	\$ 856,630,585	2	\$113,079,761
Other accounts	951	\$6,992,554,006	0	—

**Material Conflicts of Interest**

Conflicts of interest may arise from the fact that the Adviser and its affiliates carry on substantial investment activities for other clients, in which the Registrant has no interest, some of which may have investment strategies similar to the Registrant. In addition, conflicts of interest may arise from the fact that a related person of the Adviser has an interest in a limited liability company client, similar to a general partner interest in a partnership, for which the Adviser also serves as manager. The Adviser or its affiliates may have financial incentives to favor certain of these accounts over the Registrant. For example, the Adviser may have an incentive to allocate potentially more favorable investment opportunities to other funds and clients that pay the Adviser an incentive or performance fee. Performance and incentive fees also create the incentive to allocate potentially riskier, but potentially better performing, investments to such funds and other clients in an effort to increase the incentive fee. The Adviser also may have an incentive to make investments in one fund, having the effect of increasing the value of a security in the same issuer held by another fund or client, which in turn, may result in an incentive fee being paid to the Adviser by that other fund or client. Any of the Adviser's or its affiliates' proprietary accounts or other customer accounts may compete with the Registrant for specific trades. The Adviser or its affiliates may give advice and recommend securities to, or buy or sell securities for, other accounts and customers, which advice or securities recommended may differ from advice given to, or securities recommended or bought or sold for, the Registrant, even though their investment objectives may be the same as, or similar to, the Registrant's objectives. The Adviser has written allocation policies and procedures designed to address potential conflicts of interest. For instance, when two or more clients advised by the Adviser or its affiliates seek to purchase or sell the same publicly traded securities, the securities actually purchased or sold will be allocated among the clients on a good faith equitable basis by the Adviser in its discretion and in accordance with the clients' various investment objectives and the Adviser's procedures. In some cases, this system may adversely affect the price or size of the position the Registrant may obtain or sell. In other cases, the Registrant's ability to participate in volume transactions may produce better execution for it. When possible, the Adviser combines all of the trade orders into one or more block orders, and each account participates at the average unit or share price obtained in a block order. When block orders are only partially filled,

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

the Adviser considers a number of factors in determining how allocations are made, with the overall goal to allocate in a manner so that accounts are not preferred or disadvantaged over time. The Adviser also has allocation policies for transactions involving private placement securities, which are designed to result in a fair and equitable participation in offerings or sales for each participating client.

---

The Adviser also serves as investment adviser for four other publicly traded management investment companies, all of which invest in the energy sector.

The Adviser will evaluate a variety of factors in determining whether a particular investment opportunity or strategy is appropriate and feasible for the relevant account at a particular time, including, but not limited to, the following: (1) the nature of the investment opportunity taken in the context of the other investments at the time; (2) the liquidity of the investment relative to the needs of the particular entity or account; (3) the availability of the opportunity (i.e., size of obtainable position); (4) the transaction costs involved; and (5) the investment or regulatory limitations applicable to the particular entity or account. Because these considerations may differ when applied to the Registrant and relevant accounts under management in the context of any particular investment opportunity, the Registrant's investment activities, on the one hand, and other managed accounts, on the other hand, may differ considerably from time to time. In addition, the Registrant's fees and expenses will differ from those of the other managed accounts. Accordingly, stockholders should be aware that the Registrant's future performance and the future performance of the other accounts of the Adviser may vary.

From time to time, the Adviser may seed proprietary accounts for the purpose of evaluating a new investment strategy that eventually may be available to clients through one or more product structures. Such accounts also may serve the purpose of establishing a performance record for the strategy. The Adviser's management of accounts with proprietary interests and nonproprietary client accounts may create an incentive to favor the proprietary accounts in the allocation of investment opportunities, and the timing and aggregation of investments. The Adviser's proprietary seed accounts may include long-short strategies, and certain client strategies may permit short sales. A conflict of interest arises if a security is sold short at the same time as a long position, and continuously short selling in a security may adversely affect the stock price of the same security held long in client accounts. The Adviser has adopted various policies to mitigate these conflicts, including policies that require the Adviser to avoid favoring any account, and that prohibit client and proprietary accounts from engaging in short sales with respect to individual stocks held long in client accounts. The Adviser's policies also require transactions in proprietary accounts to be placed after client transactions.

---

## Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

Situations may occur when the Registrant could be disadvantaged because of the investment activities conducted by the Adviser and its affiliates for their other accounts. Such situations may be based on, among other things, the following: (1) legal or internal restrictions on the combined size of positions that may be taken for the Registrant or the other accounts, thereby limiting the size of the Registrant's position; (2) the difficulty of liquidating an investment for the Registrant or the other accounts where the market cannot absorb the sale of the combined position; or (3) limits on co-investing in negotiated transactions under the Investment Company Act of 1940.

The 1940 Act limits our ability to co-invest in negotiated private placements of securities with our affiliates, including other funds managed by the Adviser. We and our Adviser have received exemptive relief from the SEC that permits certain co-investment transactions. In this regard, our Adviser has the ability to allocate investment opportunities of certain negotiated transactions between us, other funds registered under the 1940 Act and other accounts managed by our Adviser pro rata based on available capital, up to the amount proposed to be invested by each. All accounts generally are required to participate on the same terms. Pursuant to the exemptive order, our Adviser will be required to provide the board of directors of each participating registered fund with certain information concerning the relevant investment. A majority (as defined in section 57(o) of the 1940 Act) of the directors eligible to consider the co-investment transaction of each participating registered fund must approve such registered fund's participation in the co-investment transaction.

To the extent that the Adviser sources and structures private investments, certain employees of the Adviser may become aware of actions planned, such as acquisitions, which may not be announced to the public. It is possible that the Registrant could be precluded from investing in or selling securities of companies about which the Adviser has material, non-public information; however, it is the Adviser's intention to ensure that any material, non-public information available to certain employees of the Adviser is not shared with the employees responsible for the purchase and sale of publicly traded securities or to confirm prior to receipt of any material non-public information that the information will shortly be made public. The Registrant's investment opportunities also may be limited by affiliations of the Adviser or its affiliates with energy companies.

The Adviser and its principals, officers, employees, and affiliates may buy and sell securities or other investments for their own accounts and may have actual or potential conflicts of interest with respect to investments made on the Registrant's behalf. As a result of differing trading and investment strategies or constraints, positions may be taken by principals, officers, employees, and affiliates of the Adviser that are the same as, different from, or made at a different time than positions taken for the Registrant. Further, the Adviser may at some time in the future, manage additional investment funds with the same investment objective as the Registrant's.

### **Compensation**

None of Messrs. Kessens, Mick, Sallee, Thummel, Pang, Jergens or Holmes receives any direct compensation from the Registrant or any other of the managed accounts reflected in the table above. All such accounts are managed by the Adviser. Each of Messrs. Kessens, Mick, Sallee, Thummel, Pang, Jergens and Holmes has a services agreement with the Adviser and receives a base guaranteed payment from the Adviser for the services he provides. They are also eligible for an annual cash bonus based on the Adviser's earnings and the satisfaction of certain other conditions. Additional benefits received by Messrs. Kessens, Mick, Sallee, Thummel, Pang, Jergens and Holmes are normal and customary employee benefits generally available to all salaried employees. Each of Messrs. Kessens, Mick, Sallee, Thummel, Pang, Jergens and Holmes owns an equity interest in Tortoise Investments, LLC that is a minority owner of the Adviser, and each thus benefits from increases in the net income of the Adviser.

---

**Securities Owned in the Registrant by Portfolio Managers**

The following table provides information about the dollar range of equity securities in the Registrant beneficially owned by each of the portfolio managers as of November 30, 2018:

<b>Portfolio Manager</b>	<b>Aggregate Dollar Range of Holdings in the Registrant</b>
Brian A. Kessens	\$1 - \$10,000
James R. Mick	None
Matthew G.P. Sallee	\$1 - \$10,000
Robert J. Thummel, Jr.	\$10,001 - \$50,000
Stephen Pang	None
Brett Jergens	None
Nicholas S. Holmes	None

**Item 9. Purchases of Equity Securities by Closed-End Management Investment Company and Affiliated Purchasers.**

<b>Period</b>	<b>(a) Total Number of Shares (or Units) Purchased</b>	<b>(b) Average Price Paid per Share (or Unit)</b>	<b>(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs</b>	<b>(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs</b>
Month #1 6/1/18-6/30/18	0	0	0	0
Month #2 7/1/18-7/31/18	0	0	0	0
Month #3 8/1/18-8/31/18	0	0	0	0
Month #4 9/1/18-9/30/18	0	0	0	0
Month #5 10/1/18-10/31/18	0	0	0	0
Month #6 11/1/18-11/30/18	0	0	0	0
Total	0	0	0	0

**Item 10. Submission of Matters to a Vote of Security Holders.**

None.

**Item 11. Controls and Procedures.**

(a) The Registrant's Chief Executive Officer, Principal Financial Officer and Treasurer has concluded that the Registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940 (the "1940 Act")) are effective as of a date within 90 days of the filing date of this report, based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rules 13a-15(b) or 15d-15(b) under the Securities Exchange Act of 1934, as amended.

(b) There were no changes in the Registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the Registrant's second fiscal quarter of the period covered by this report that have materially affected, or are reasonably likely to materially affect, the Registrant's internal control over financial reporting.

**Item 12. Disclosure of Securities Lending Activities For Closed-End Management Investment Companies.**

The Registrant does not participate in securities lending activities.

**Item 13. Exhibits.**

(a)(1) *Any code of ethics or amendment thereto, that is the subject of the disclosure required by Item 2, to the extent that the Registrant intends to satisfy Item 2 requirements through filing of an exhibit.* Filed herewith.

(2) *Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.* Filed herewith.

(3) *Any written solicitation to purchase securities under Rule 23c-1 under the Act sent or given during the period covered by the report by or on behalf of the Registrant to 10 or more persons.* None.

(b) *Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.* Furnished herewith.

---

**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) Tortoise Energy Independence Fund, Inc.

By (Signature and Title) /s/ P. Bradley Adams  
P. Bradley Adams, Chief Executive Officer, Principal Financial Officer and Treasurer

Date January 30, 2019

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/ P. Bradley Adams  
P. Bradley Adams, Chief Executive Officer, Principal Financial Officer and Treasurer

Date January 30, 2019

---