

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1

to

FORM F-10

REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

TRANSCANADA CORPORATION

(Exact name of Registrant as specified in its charter)

Canada(Province or other jurisdiction of
incorporation or organization)

4922; 4923; 4924; 5172

(Primary Standard Industrial
Classification Code Number)**Not Applicable**

(I.R.S. Employer Identification Number)

TransCanada Tower, 450 First Street S.W., Calgary, Alberta, Canada, T2P 5H1, (403) 920-2000

(Address and telephone number of Registrant's principal executive offices)

TransCanada PipeLine USA Ltd., 717 Texas St., Houston, Texas 77002-2761, (832) 320-5201

(Name, address, and telephone number of agent for service in the United States)

Copies to:

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TransCanada Tower
450 First Street S.W.
Calgary, Alberta, Canada
T2P 5H1
(403) 920-2000

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Calgary, Alberta, Canada
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Approximate date of commencement of proposed sale of the securities to the public:
As soon as practicable after this Registration Statement is declared effective.

Province of Alberta, Canada

(Principal jurisdiction regulating this offering)

It is proposed that this filing shall become effective (check appropriate box):

A. upon filing with the Commission, pursuant to Rule 467(a) (if in connection with an offering being made contemporaneously in the United States and Canada).B. at some future date (check appropriate box below):

1. pursuant to Rule 467(b) on _____ at _____ (designate a time not sooner than seven calendar days after filing).
2. pursuant to Rule 467(b) on _____ at _____ (designate a time seven calendar days or sooner after filing) because the securities regulatory authority in the review jurisdiction has issued a receipt or notification of clearance on _____.
3. pursuant to Rule 467(b) as soon as practicable after notification of the Commission by the Registrant or the Canadian securities regulatory authority of the review jurisdiction that a receipt or notification of clearance has been issued with respect hereto.
4. after the filing of the next amendment to this Form (if preliminary material is being filed).

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to the home jurisdiction's shelf prospectus offering procedures, check the following box:

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Amount to be registered (1) (2) (3) | Proposed maximum offering price per Security | Proposed maximum aggregate offering price (2) | Amount of registration fee |
|--|-------------------------------------|--|---|----------------------------|
| Common Shares (4) | | | | |
| Total | U.S.\$740,576,168 | 100% | U.S.\$740,576,168 | U.S.\$85,833 (5) |

(1) In U.S. dollars or the equivalent thereof in foreign denominated currencies or currency units.

(2) Estimated solely for the purposes of calculating the filing fee.

(3) Based upon a proposed maximum offering price of CDN \$1,000,000,000 at an exchange rate of CDN \$1.3503 per US \$1.00, the Bank of Canada daily exchange rate on June 8, 2017.

(4) Includes associated common share purchase rights. The value, if any, attributable to the rights is reflected in the market price of the common shares.

(5) Previously paid.

INFORMATION REQUIRED TO BE
DELIVERED TO OFFEREES OR PURCHASERS

TRANSCANADA CORPORATION

\$1,000,000,000

Common Shares

TransCanada Corporation (“TCC” or the “Corporation”) may from time to time offer common shares (“Common Shares”), having an aggregate sale price of up to \$1,000,000,000 (or the equivalent in U.S. dollars determined using the daily exchange rate posted by the Bank of Canada on the date the Common Shares are sold) during the 25 month period that this short form base shelf prospectus, including any amendments hereto, remains valid.

The specific terms of any offering of Common Shares will be set forth in one or more shelf prospectus supplements (each, a “Prospectus Supplement”). A Prospectus Supplement may include other terms pertaining to the Common Shares that are not prohibited by the parameters set forth in this prospectus.

All shelf information permitted under applicable laws to be omitted from this prospectus will be contained in one or more Prospectus Supplements that will be delivered to purchasers together with this prospectus, except in cases where an exemption from such delivery requirement has been obtained. Each Prospectus Supplement will be incorporated by reference into this prospectus for the purposes of securities legislation as of the date of the Prospectus Supplement and only for the purposes of the distribution of the Common Shares to which the Prospectus Supplement pertains.

The issued and outstanding Common Shares are listed on the Toronto Stock Exchange (“TSX”) and the New York Stock Exchange (“NYSE”) under the symbol “TRP”.

The Corporation may sell the Common Shares to or through underwriters purchasing as principals and may also sell the Common Shares to one or more purchasers through agents. The Prospectus Supplement relating to a particular offering of Common Shares will identify each underwriter or agent, as the case may be, engaged by TCC in connection with the offering and sale of Common Shares, and will set forth the terms of the offering of such Common Shares, including the method of distribution of such Common Shares, the proceeds to TCC, any fees, discounts or other compensation payable to underwriters or agents, and any other material terms of the plan of distribution. The sale of Common Shares may be effected from time to time in one or more transactions at non-fixed prices pursuant to transactions that are deemed to be “at-the-market distributions” as defined in *National Instrument 44-*

102 — Shelf Distributions (“NI 44-102”), including sales made directly on the TSX or NYSE or other existing trading markets for the Common Shares, and as set forth in a Prospectus Supplement for such purpose. See “Plan of Distribution”.

TCC’s head office and registered office is located at 450 - 1st Street S.W., Calgary, Alberta, Canada, T2P 5H1.

We are permitted, as a Canadian issuer, under the multi-jurisdictional disclosure system adopted by the United States (“U.S.”), to prepare this prospectus in accordance with Canadian disclosure requirements. You should be aware that such requirements are different from those of the U.S.

You should be aware that the acquisition of the Common Shares described herein may have tax consequences both in the U.S. and in Canada. Such tax consequences for investors who are residents in, or citizens of, the U.S. may not be described fully herein or in any applicable Prospectus Supplement. You should read the tax discussion in any applicable Prospectus Supplement, however, this prospectus or any applicable Prospectus Supplement may not fully describe these tax consequences.

Your ability to enforce civil liabilities under U.S. federal securities laws may be affected adversely by the fact that we are incorporated under the laws of Canada, that some or all of our officers and directors may be residents of Canada, that some or all of the experts named in the registration statement may be residents of Canada and that all or a substantial portion of our assets and the assets of said persons are located outside the of U.S.

Stéphan Crétier, John E. Lowe, Paula R. Reynolds and Mary Pat Salomone are directors of the Corporation who reside outside of Canada and each of these directors has appointed the Corporation as agent for service of process at 450 - 1st Street, S.W., Calgary, AB T2P 5H1. Purchasers are advised that it may not be possible for investors to enforce judgments obtained in Canada against any person who resides outside of Canada, even if the party has appointed an agent for service of process.

These Common Shares have not been approved or disapproved by the United States Securities and Exchange Commission (the “SEC”) or any state securities commission nor has the SEC or any state securities commission passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offence.

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FORWARD-LOOKING INFORMATION

This prospectus and the documents incorporated by reference in this prospectus include “forward-looking information” and “forward-looking statements” (collectively, “forward-looking information”) within the meaning of securities laws, including the “safe harbour” provisions of the *Securities Act* (Ontario), the *Securities Act* (Alberta), the *United States Private Securities Litigation Reform Act of 1995*, Section 21E of the *United States Securities Exchange Act of 1934*, as amended (the “*Exchange Act*”), and Section 27A of the *United States Securities Act of 1933*, as amended (the “*Securities Act*”). The words “anticipate”, “expect”, “believe”, “may”, “will”, “should”, “estimate”, “project”, “outlook”, “forecast”, “intend”, “target”, “plan” or similar words are used to identify such forward-looking information. Forward-looking information in this prospectus and in the documents incorporated by reference herein is intended to provide you with information regarding us, including management’s assessment of our future plans and financial outlook. Forward-looking information in this prospectus includes statements under the headings “Use of Proceeds” and “Plan of Distribution”. Forward-looking information in this prospectus and the documents incorporated by reference herein may include, but is not limited to, statements regarding:

- planned changes in our business including the divestiture of certain assets;
- our financial and operational performance, including the performance of our subsidiaries;
- expectations or projections about strategies and goals for growth and expansion;
- expected cash flows and future financing options available to us;
- expected dividend growth;
- expected costs for planned projects, including projects under construction, permitting and development;
- expected schedules for planned projects (including anticipated construction and completion dates);
- expected regulatory processes and outcomes;
- expected impact of regulatory outcomes;
- expected outcomes with respect to legal proceedings, including arbitration and insurance claims;
- expected capital expenditures and contractual obligations;
- expected operating and financial results;
- the expected impact of future accounting changes, commitments and contingent liabilities; and
- expected industry, market and economic conditions.

This forward-looking information reflects our beliefs and assumptions based on information available at the time the information was stated and, as such, is not a guarantee of future performance. By its nature, forward looking information is subject to various assumptions, risks and uncertainties which could cause our actual results and achievements to differ materially from the anticipated results or expectations expressed or implied in such information.

Key assumptions on which our forward-looking information is based include, but are not limited to, assumptions about:

- planned monetization of our U.S. Northeast power business;
- inflation rates, commodity prices and capacity prices;
- nature and scope of hedging;
- regulatory decisions and outcomes;
- the Canadian dollar to U.S. dollar exchange rate remains at or near current levels;
- interest rates;

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- tax rates;
- planned and unplanned outages and the use of our pipeline and energy assets;
- integrity and reliability of our assets;
- access to capital markets; and
- anticipated construction costs, schedules and completion dates.

The risks and uncertainties that could cause actual results or events to differ materially from current expectations include, but are not limited to:

- our ability to realize the anticipated benefits of the acquisition of Columbia Pipeline Group, Inc. (“Columbia”);
- timing and execution of our planned asset sales;
- our ability to successfully implement our strategic initiatives;
- whether our strategic initiatives will yield the expected benefits;
- the operating performance of our pipeline and energy assets;
- amount of capacity sold and rates achieved in our pipeline businesses;
- the availability and price of energy commodities;
- the amount of capacity payments and revenues we receive from our energy business;
- regulatory decisions and outcomes;
- outcomes of legal proceedings, including arbitration and insurance claims;
- performance and credit risk of our counterparties;
- changes in market commodity prices;
- changes in the political environment;
- changes in environmental and other laws and regulations;
- competitive factors in the pipeline and energy sectors;
- construction and completion of capital projects;
- costs for labor, equipment and materials;
- access to capital markets;
- interest, tax and foreign exchange rates;
- weather;
- cyber security;
- technological developments; and
- economic conditions in North America as well as globally.

Additional information on these and other factors is discussed in this prospectus and the documents incorporated by reference herein including in the 2016 MD&A (as defined herein) under the headings “Natural Gas Pipelines — Business Risks”, “Liquids Pipelines — Business Risks”, “Energy — Business Risks” and “Other Information — Risks and Risk Management”, in the Interim MD&A (as defined herein) under the heading “Financial Risks and Financial Instruments” and in Schedule A to the Business Acquisition Report (as defined herein), as may be modified or superseded by other subsequently filed documents that are also incorporated or deemed to be incorporated by reference in this prospectus.

Readers are cautioned against placing undue reliance on forward-looking information, which is given as of the date it is expressed in this prospectus or otherwise, and not to use future-oriented information or financial outlooks for anything other than their intended purpose. We undertake no obligation to publicly update or revise any forward-looking information in this prospectus or otherwise, whether as a result of new information, future events or otherwise, except as required by law.

DOCUMENTS INCORPORATED BY REFERENCE

Information has been incorporated by reference in this prospectus from documents filed with the securities commissions or similar authorities in Canada and with the SEC in the U.S.

The following documents which were filed by us with the various securities commissions or similar authorities in each of the provinces and territories of Canada and the SEC are incorporated by reference in this prospectus:

- (a) annual information form for the year ended December 31, 2016 dated February 15, 2017 (the “Annual Information Form”);
- (b) audited comparative consolidated financial statements as at December 31, 2016 and 2015 and for each of the years in the three-year period ended December 31, 2016, the notes thereto, and the auditors’ report thereon;
- (c) management’s discussion and analysis of financial condition and results of operations as at and for the year ended December 31, 2016 (the “2016 MD&A”);
- (d) management information circular dated February 28, 2017 for the annual meeting of shareholders held on May 5, 2017;
- (e) unaudited interim comparative condensed consolidated financial statements as at March 31, 2017 and for the three-month periods ended March 31, 2017 and 2016 and the notes thereto; and
- (f) management’s discussion and analysis of financial condition and results of operations as at and for the three months ended March 31, 2017 (the “Interim MD&A”); and
- (g) the business acquisition report dated July 22, 2016 relating to the acquisition of Columbia (the “Business Acquisition Report”).

Any documents of the type referred to above, including all annual information forms, all information circulars, all annual and interim financial statements and management’s discussion and analysis relating thereto, all material change reports (excluding confidential material change reports), press releases containing financial information for financial periods more recent than the most recent annual or interim financial statements, and any business acquisition reports, as well as all Prospectus Supplements disclosing additional or updated information subsequently filed by us with securities regulatory authorities in Canada after the date of this prospectus and prior to the date on which this prospectus ceases to be effective shall be deemed to be incorporated by reference into this prospectus. These documents will be available through the internet on the System for Electronic Document Analysis and Retrieval (“SEDAR”), which can be accessed at www.sedar.com. In addition, any similar documents filed by us with the SEC in our periodic reports on Form 6-K or annual reports on Form 40-F, and any other documents filed with or furnished to the SEC pursuant to Section 13(a), 13(c) or 15(d) of the *Exchange Act*, in each case after the date of this prospectus, shall be deemed to be incorporated by reference into the registration statement of which this prospectus forms a part, if and to the extent expressly provided in such reports. Our periodic reports on Form 6-K and our annual reports on Form 40-F are available on the SEC’s Electronic Data Gathering and Retrieval (“EDGAR”) system web site at www.sec.gov.

Any statement contained in this prospectus or in a document incorporated, or deemed to be incorporated, by reference herein shall be deemed to be modified or superseded for the purposes of this prospectus to the extent that a statement contained in this prospectus or in any subsequently filed document that also is, or is deemed to be, incorporated by reference herein modifies or supersedes such statement. The modifying or superseding statement need not state that it has modified or superseded a prior statement or include any other information set forth in the document that it modifies or supersedes. The making of a modifying or superseding statement shall not be deemed an admission for any purpose that the modified or superseded statement, when made, constituted a misrepresentation, an untrue statement of a material fact or an omission to state a material fact that is required to be stated or that is necessary to make a statement not misleading in light of

the circumstances in which it was made. Any statement so modified or superseded shall not constitute a part of this prospectus, except as so modified or superseded.

Upon a new annual information form and related annual audited comparative consolidated financial statements and accompanying management’s discussion and analysis being filed by us with the applicable securities regulatory authorities during the term of this prospectus, the previous annual information form, the previous annual audited comparative consolidated financial statements and accompanying management’s discussion and analysis, all interim comparative consolidated financial statements and accompanying management’s discussion and analysis, all material change reports and all business acquisition reports filed by us prior to the commencement of the financial year of the Corporation in which the new annual information form and the related annual audited comparative consolidated financial statements and accompanying management’s discussion and analysis are filed shall be deemed no longer to be incorporated by reference into this prospectus for purposes of future offers and sales of Common Shares hereunder. Upon interim comparative consolidated financial statements and the accompanying management’s discussion

and analysis being filed by us with the applicable securities regulatory authorities during the term of this prospectus, all interim comparative consolidated financial statements and accompanying management's discussion and analysis filed prior to the filing of the new interim comparative consolidated financial statements shall be deemed no longer to be incorporated by reference into this prospectus for purposes of future offers and sales of Common Shares hereunder.

Any "template version" of any "marketing materials" (as such terms are defined under applicable Canadian securities laws) pertaining to a distribution of Common Shares will be filed on SEDAR. In the event that such "marketing materials" are filed subsequent to the date of the filing of the applicable Prospectus Supplement(s) pertaining to the distribution of the Common Shares that such "marketing materials" relate to and prior to the termination of such distribution, such filed versions of the "marketing materials" will be deemed to be incorporated by reference into the applicable Prospectus Supplement(s) for the purposes of the distribution of the Common Shares to which the Prospectus Supplement(s) pertain.

We will provide without charge to each person to whom this prospectus is delivered, including any beneficial owner, upon written or oral request of such person, a copy of any or all of the documents incorporated herein by reference (other than exhibits to such documents, unless such exhibits are specifically incorporated by reference in such documents). Requests should be directed to TransCanada Corporation, 450 - 1st Street S.W., Calgary, Alberta, Canada, T2P 5H1, Attention: Corporate Secretary, telephone number (403) 920-2000.

You should rely only on the information contained in or incorporated by reference in this prospectus or any applicable Prospectus Supplement and on the other information included in the registration statement of which this prospectus forms a part. We have not authorized anyone to provide you with different or additional information. We are not making an offer of these Common Shares in any jurisdiction where the offer is not permitted by law.

ABOUT THIS PROSPECTUS

In this prospectus and in any Prospectus Supplement, unless otherwise specified or the context otherwise requires, all dollar amounts are expressed in Canadian dollars. References to "dollars" or "\$" are to lawful currency of Canada, and references to "U.S. dollars" or "U.S.\$" are to lawful currency of the U.S.

Unless otherwise indicated, all financial information included and incorporated by reference in this prospectus has been prepared in accordance with U.S. generally accepted accounting principles.

One or more Prospectus Supplements containing the specific variable terms of an offering of Common Shares will, except in cases where an exemption from such delivery requirements has been obtained, be delivered to purchasers of such Common Shares together with this prospectus and will be deemed to be incorporated by reference into this prospectus as of the date of such Prospectus Supplement solely for the purposes of the offering of the Common Shares offered thereunder.

Except on the cover page and under "Description of the Common Shares Being Distributed", and unless the context otherwise requires, all references in this prospectus and any Prospectus Supplement to "we", "us", "our", "TCC" or the "Corporation" mean TransCanada Corporation and its subsidiaries, partnership interests and joint venture investments.

WHERE TO FIND MORE INFORMATION

We have filed with the SEC, under the *Securities Act*, a registration statement on Form F-10 relating to the Common Shares. This prospectus, which constitutes a part of the registration statement, does not contain all of the information contained in the registration statement, certain items of which are contained in the exhibits to the registration statement as permitted by the rules and regulations of the SEC. Statements included or incorporated by reference in this prospectus about the contents of any contract, agreement or other documents referred to are not necessarily complete, and in each instance, you should refer to the exhibits for a complete description of the matter involved. In connection with any offering of Common Shares, we will prepare and, except in cases where an exemption from such delivery requirement has been obtained, deliver a Prospectus Supplement that will contain specific information about the terms of such offering. The Prospectus Supplement may also add, update or change information contained in this prospectus.

We file annual and quarterly financial information and material change reports, business acquisition reports and other material with the securities commission or similar regulatory authority in each of the provinces and territories of Canada and with the SEC. Under the multi-jurisdictional disclosure system adopted by the U.S., documents and other information that we file with the SEC may be prepared in accordance with the disclosure requirements of Canada, which are different from those of the U.S. You may read and download any public document that TCC has filed with the securities commission or similar regulatory authority in each of the provinces and territories of Canada on SEDAR at www.sedar.com. You may read and copy any document TCC has filed with the SEC at the SEC's public reference room in Washington D.C. and may also obtain copies of those documents from the public reference room of the SEC at 100 F Street, N.E., Washington, D.C. 20549 by paying a fee. Additionally, you may read and download some of the documents that we have filed on EDGAR at www.sec.gov. Reports and other information about us may also be inspected at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005.

THE CORPORATION

TCC was incorporated pursuant to the provisions of the Canada Business Corporations Act on February 25, 2003 in connection with a plan of arrangement which established TCC as the parent company of TransCanada PipeLines Limited ("TCPL"). All of the outstanding common shares of TCPL are owned by TCC.

We operate in three core businesses - Natural Gas Pipelines, Liquids Pipelines and Energy. Under this structure, we operate under five operating segments, Canadian Natural Gas Pipelines, U.S. Natural Gas Pipelines, Mexico Natural Gas Pipelines, Liquids Pipelines and Energy, which provides information that is aligned with how decisions about business segments are made and performance is assessed. We also have a non-operational Corporate segment consisting of corporate and administrative functions that provide governance and other support to our operational business segments.

Our principal subsidiaries as of December 31, 2016 are indicated in the diagram under the heading "TransCanada Corporation — Intercorporate Relationships" in the Annual Information Form.

CONSOLIDATED CAPITALIZATION

Other than (i) the repayment by TransCanada PipeLine USA Ltd on April 21, 2017, of approximately U.S.\$1.070 billion and on June 5, 2017, the remaining approximately U.S.\$630 million, on the U.S. acquisition bridge facility used to partially finance the Columbia acquisition, (ii) the repayment by TransCanada PipeLines Limited on June 7, 2017 of the remaining balance of approximately U.S.\$1.5 billion Canadian acquisition bridge facility used to partially finance the Columbia acquisition, (iii) the issuance of an aggregate of \$1.5 billion principal amount of unsecured, subordinated trust notes by TransCanada Trust, guaranteed on a subordinated basis by TransCanada PipeLines Limited on May 18, 2017, (iv) a U.S.\$500 million debt offering by TC PipeLines, LP on May 25, 2017, (v) the issuance of 395,591 Common Shares pursuant to the exercise of options granted pursuant to the Corporation's stock option plans for aggregate gross proceeds of \$17.3 million, and (vi) the issuance of 3,462,403 Common Shares under the Corporation's Dividend Reinvestment and Share Purchase Plan ("DRIP") for aggregate gross proceeds of \$216 million, there have been no material changes in the share and loan capital of the Corporation, on a consolidated basis, since March 31, 2017.

USE OF PROCEEDS

Unless otherwise indicated in a Prospectus Supplement relating to a particular offering of Common Shares, we intend to use the net proceeds from the sale of Common Shares to reduce or repay indebtedness and/or to, directly or indirectly, finance our long-term investment program. Specific information about the use of net proceeds will be set forth in the applicable Prospectus Supplement. We may invest funds which we do not immediately require in short-term marketable investment grade securities. We may, from time to time, issue Common Shares other than pursuant to this prospectus.

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DESCRIPTION OF THE COMMON SHARES

We are authorized to issue an unlimited number of Common Shares, of which approximately 871,088,413 were issued and outstanding as of June 22, 2017. The following description of the Common Shares is a summary of certain of their material attributes and characteristics.

The Common Shares entitle the holders thereof to one vote per share at all meetings of shareholders, except meetings at which only holders of another specified class of shares are entitled to vote, and, subject to the rights, privileges, restrictions and conditions attaching to the first preferred shares ("First Preferred Shares") and second preferred shares of the Corporation, whether as a class or a series, and to any other class or series of shares of TCC which rank prior to the Common Shares, entitle the holders thereof to receive: (i) dividends if, as and when declared by the board of directors of TCC out of the assets of TCC properly applicable to the payment of the dividends in such amount and payable at such times and at such place or places as the board of directors of TCC may from time to time determine; and (ii) the remaining property of TCC upon a dissolution.

The Corporation has a shareholders' rights plan (the "Rights Plan") that is designed to encourage the fair treatment of shareholders in connection with any takeover bid for the Corporation. Rights issued under the Rights Plan become exercisable when a person (subject to certain exceptions), and any related parties, acquires or announces the intention to acquire 20% or more of the Corporation's outstanding Common Shares without complying with certain provisions set out in the Rights Plan or without approval of the board of directors of the Corporation. Should such an acquisition occur, each rights holder, other than the acquiring person and related parties, will have the right to purchase Common Shares essentially at a 50% discount to the market price at that time. For further particulars, reference should be made to the Rights Plan, a copy of which may be obtained on request without charge from the Corporate Secretary of TCC, 450 - 1st Street S.W., Calgary, Alberta, Canada, T2P 5H1 (telephone (403) 920-2000).

PLAN OF DISTRIBUTION

We may offer and sell the Common Shares: (i) through underwriters purchasing as principals; or (ii) through agents. The sale of Common Shares may be effected from time to time in one or more transactions at non-fixed prices pursuant to transactions that are deemed to be "at-the-market distributions", including sales made directly on the TSX or NYSE or other existing trading markets for the Common Shares, and as set forth in a Prospectus Supplement for such purpose.

The Prospectus Supplement relating to each offering of Common Shares will identify each underwriter or agent, as the case may be, and will also set forth the terms of that offering, the proceeds to the Corporation, any underwriters' or agents' fees, commissions or other items constituting underwriters' or agents' compensation, and any concessions or discounts allowed or re-allowed or paid by any underwriters to others. Only underwriters or agents so named in the Prospectus Supplement are deemed to be underwriters or agents, as the case may be, in connection with the Common Shares offered thereby.

If underwriters purchase Common Shares as principal, the Common Shares will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, as described in the applicable Prospectus Supplement. The obligations of the underwriters to purchase those Common Shares will be subject to certain conditions precedent, and the underwriters will be obligated to purchase all the Common Shares offered by the Prospectus Supplement if any of such Common Shares are purchased. Any public offering price and any discounts or concessions allowed or re-allowed or paid may be changed from time to time.

Any agent involved in the offering and sale of the Common Shares pursuant to a particular Prospectus Supplement will be named, and any commissions payable by us to that agent will be set forth, in such Prospectus Supplement. Unless otherwise indicated in the Prospectus Supplement, any agent would be acting on a best efforts basis for the period of its appointment.

In connection with the sale of the Common Shares, underwriters or agents may receive compensation from us in the form of commissions, concessions or discounts. Any such commissions may be paid out of our general funds or the proceeds of the sale of the Common Shares. Under agreements which may be entered into by us, underwriters and agents who participate in the distribution of Common Shares may be entitled to indemnification by us against certain liabilities, including liabilities under securities legislation, or to contribution with respect to payments which such underwriters or agents may be required to make in respect thereof. Those underwriters and agents may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

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PRIOR SALES

The following table summarizes the issuances of Common Shares and securities convertible or exchangeable into Common Shares from June 1, 2016 to the date of this Prospectus.

| Description of Transaction | Number of Common Shares | Price per Common Share |
|--------------------------------------|--------------------------|---------------------------|
| Stock Options Exercised | 2,035,066 | \$ 40.82 ⁽¹⁾ |
| Stock Options Granted | 2,065,653 | \$ 62.22 ⁽¹⁾ |
| Subscription Receipts ⁽²⁾ | 96,600,000 | \$ 0 |
| Common Shares ⁽³⁾ | 60,225,000 | \$ 58.50 |
| DRIP — Common Shares | 9,386,554 ⁽⁴⁾ | \$ 61.6589 ⁽⁶⁾ |
| DRIP — First Preferred Shares | 68,458 ⁽⁵⁾ | \$ 61.0509 ⁽⁶⁾ |

- (1) Weighted average exercise price.
- (2) Issued pursuant to the automatic exchange of subscription receipts issued by the Corporation pursuant to a final short form prospectus dated March 28, 2016 for no additional consideration.
- (3) Issued pursuant to a final short form prospectus dated November 9, 2016.
- (4) 20,040 Common Shares were issued pursuant to the optional cash payment feature of the DRIP at a non-discounted price.
- (5) Includes Common Shares issued under the DRIP for Series 1, 2, 3, 4, 5, 6, 7, 9, 11, 13 and 15 First Preferred Shares.
- (6) Average of the 2% discount to the daily average of the weighted average price of all common shares of the Corporation traded on the TSX during each of the five trading days preceding the applicable dividend payment date, other than the 20,040 Common Shares which were purchased pursuant to the optional cash payment feature of the DRIP at a non-discounted price.

TRADING PRICE AND VOLUME

The Common Shares are listed for trading on the TSX and the NYSE under the symbol “TRP”. The following table sets forth the reported monthly high, low and closing trading prices and monthly trading volumes of the Common Shares on the TSX for the period from June 1, 2016 to June 22, 2017.

| | Share Price Trading Range | | | Volume |
|-------------|---------------------------|-------|-------|------------|
| | High | Low | Close | |
| | (\$ per share) | | | |
| 2016 | | | | |
| June | 58.83 | 54.11 | 58.46 | 36,501,700 |
| July | 61.44 | 58.15 | 60.54 | 43,506,816 |
| August | 62.44 | 58.76 | 59.47 | 30,263,105 |
| September | 63.41 | 58.98 | 62.31 | 30,764,941 |
| October | 63.00 | 60.11 | 60.72 | 21,743,805 |
| November | 61.73 | 57.36 | 60.33 | 58,022,527 |
| December | 62.84 | 58.12 | 60.54 | 35,638,977 |
| 2017 | | | | |
| January | 65.24 | 60.28 | 61.39 | 30,801,086 |
| February | 62.88 | 60.35 | 61.06 | 34,410,621 |
| March | 62.80 | 60.54 | 61.37 | 43,585,590 |
| April | 64.40 | 60.78 | 63.38 | 28,179,483 |
| May | 64.69 | 61.33 | 62.71 | 31,563,490 |
| June 1-22 | 64.35 | 62.04 | 62.09 | 28,795,790 |

ENFORCEABILITY OF CIVIL LIABILITIES

We are a corporation incorporated under and governed by the *Canada Business Corporations Act*. Some of our directors and officers, and some of the experts named in this prospectus, are residents of Canada or otherwise reside outside the U.S., and all or a substantial portion of their assets, and a substantial portion of the Corporation’s assets which are held through subsidiaries, are located outside the U.S. We have appointed an agent for service of process in the U.S., but it may be difficult for holders of Common Shares who reside in the U.S. to effect service within the U.S. upon those directors, officers and experts who are not residents of the U.S. It may also be difficult for holders of Common Shares who reside in the U.S. to realize in the U.S. upon judgments of courts of the U.S. predicated upon the Corporation’s civil liability and the civil liability of the directors and officers of the Corporation and experts under U.S. federal securities laws.

We have been advised by our Canadian counsel, Blake, Cassels & Graydon LLP, that a judgment of a U.S. court predicated solely upon civil liability under U.S. federal securities laws would probably be enforceable in Canada if the U.S. court in which the judgment was obtained has a basis for jurisdiction in the matter that would be recognized by a Canadian court for the same purposes. We have also been advised by Blake, Cassels & Graydon LLP, however, that there is real doubt whether an action could be brought in Canada in the first instance on the basis of liability predicated solely upon U.S. federal securities laws.

We have filed with the SEC, concurrently with our registration statement on Form F-10, an appointment of agent for service of process on Form F-X. Under the Form F-X, we appointed TransCanada PipeLine USA Ltd. as our agent for service of process in the U.S. in connection with any investigation or administrative proceeding conducted by the SEC, and any civil suit or action brought against or involving us in a U.S. court arising out of or related to or concerning the offering of Common Shares under this prospectus.

CERTAIN INCOME TAX CONSIDERATIONS

The applicable Prospectus Supplement may describe certain material Canadian federal income tax consequences to an investor who is a resident of Canada or who is a non-resident of Canada of the acquisition, ownership and disposition of any Common Shares offered thereunder, including whether the payment of dividends will be subject to Canadian non-resident withholding tax.

The applicable Prospectus Supplement may also describe certain material U.S. federal income tax consequences of the acquisition, ownership and disposition of any Common Shares offered thereunder by an initial investor who is a U.S. person (within the meaning of the United States Internal Revenue Code).

RISK FACTORS

Investment in the Common Shares is subject to various risks including risks inherent in the pipeline, energy and natural gas storage industries. You should consider carefully the risk factors contained in and incorporated by reference in this prospectus (including subsequently filed documents incorporated by reference) and those described in a Prospectus Supplement relating to a specific offering of Common Shares.

Discussions of certain risks affecting us in connection with our business are provided in our annual and interim disclosure documents filed with the various securities regulatory authorities which are incorporated by reference in this prospectus.

LEGAL MATTERS

Certain matters relating to the issue and sale of the Common Shares will be passed upon on behalf of the Corporation by Blake, Cassels & Graydon LLP, as to matters of Canadian law, and Mayer Brown LLP, as to matters of U.S. law. As to matters of Canadian law, Mayer Brown LLP will rely upon the opinion of Blake, Cassels & Graydon LLP.

EXPERTS

The consolidated financial statements of the Corporation as at December 31, 2016 and 2015 and for each of the years in the three-year period ended December 31, 2016, have been incorporated by reference herein and in the registration statement in reliance upon the report of KPMG LLP, Chartered Professional Accountants, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

The consolidated and combined financial statements of Columbia as of December 31, 2015 and 2014, and for each of the three years in the period ended December 31, 2015, included in Schedule B to the Business Acquisition Report have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, who was independent with respect to Columbia within the meaning of the Securities Act, and the applicable rules and regulations thereunder adopted by the SEC and the Public Company Accounting Oversight Board (United States) as of the date of their report, which is included in Schedule B to the Business Acquisition Report (which report expresses an unqualified opinion and includes an explanatory paragraph relating to Columbia's initial public offering of limited partner interests of Columbia Pipeline Partners LP which was completed on February 11, 2015 and Columbia's spin-off from NiSource on July 1, 2015). Such consolidated and combined financial statements have been so incorporated by reference herein in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

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INTEREST OF EXPERTS

As at the date of this prospectus, the partners and associates of Blake, Cassels & Graydon LLP, as a group, beneficially own, directly or indirectly, less than 1% of any class of securities of the Corporation. In connection with the audit of the Corporation's annual financial statements for the year ended December 31, 2016, KPMG LLP confirmed that they are independent with respect to the Corporation within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulations and also that they are independent accountants with respect to the Corporation under all relevant U.S. professional and regulatory standards.

Deloitte & Touche LLP, an independent registered public accounting firm, was independent with respect to Columbia within the meaning of the Securities Act, and the applicable rules and regulations thereunder adopted by the SEC and the Public Company Accounting Oversight Board (United States) as of the date of their report on the consolidated and combined financial statements of Columbia as of December 31, 2015 and 2014, and for each of the three years in the period ended December 31, 2015, included in Schedule B to the Business Acquisition Report.

DOCUMENTS FILED AS PART OF THE REGISTRATION STATEMENT

The following documents have been or will be filed with the SEC as part of the registration statement of which this prospectus forms a part: the documents referred to under "Documents Incorporated by Reference"; consent of KPMG LLP; consent of Deloitte & Touche LLP; consent of Blake, Cassels & Graydon LLP; and powers of attorney from directors and officers of the Corporation.

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PART II

INFORMATION NOT REQUIRED TO BE DELIVERED TO OFFEREES OR PURCHASERS

Indemnification of Certain Persons

Section 124 of the *Canada Business Corporations Act* ("CBCA") and Section 6 of By-Law No. 1 of TransCanada Corporation ("TransCanada" or the "Registrant") provide for the indemnification of directors and officers of TransCanada. Under these provisions, TransCanada shall indemnify a director or

officer of TransCanada, a former director or officer, and may indemnify an individual who acts or acted at TransCanada's request as a director or officer or in a similar capacity of another entity (collectively, an "Indemnified Person") against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by the Indemnified Person in respect of any civil, criminal, administrative, investigative or other proceeding (other than in respect to an action by or on behalf of TransCanada to procure a judgment in its favor) in which the individual is involved because of that association with TransCanada or other entity, if the Indemnified Person fulfills the following two conditions: (a) he or she acted honestly and in good faith with a view to the best interests of TransCanada or in the best interests of such other entity as applicable and (b) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, he or she had reasonable grounds for believing that his or her conduct was lawful. In respect of an action by or on behalf of TransCanada or such other entity to procure a judgment in its favor, TransCanada, with the approval of a court, may indemnify an Indemnified Person against all costs, charges and expenses reasonably incurred by him or her in connection with such action if he or she fulfills the conditions set out in clauses (a) and (b) of the previous sentence. Notwithstanding the foregoing, an Indemnified Person is entitled to indemnification from TransCanada in respect of all costs, charges and expenses reasonably incurred by him or her in connection with the defense of any civil, criminal, administrative, investigative or other proceeding to which he or she is made a party by reason of his or her association with TransCanada or such other entity if he or she fulfills the conditions in clauses (a) and (b) of this paragraph and was not judged by the court or other competent authority to have committed any fault or omitted to do anything that the individual ought to have done.

Insofar as indemnification for liabilities arising under the United States Securities Act of 1933, as amended (the "Securities Act") may be permitted to directors, officers or controlling persons of the Registrant pursuant to the provisions described above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

TransCanada maintains directors' and officers' liability insurance with policy limits of U.S.\$200,000,000 in the aggregate, subject to a deductible in respect of corporate reimbursement of U.S.\$5,000,000 for each loss and a separate policy with a limit of U.S.\$50,000,000 for non-indemnifiable losses only. Generally, under this insurance TransCanada is reimbursed for payments in excess of the deductible made under corporate indemnity provisions on behalf of its directors and officers, and individual directors and officers (or their heirs and legal representatives) are covered for losses arising during the performance of their duties for which they are not indemnified by TransCanada. Noteworthy exclusions from coverage are: claims arising from illegal acts, those acts which result in illegal personal profit, violation of any fiduciary duty under the United States of America Employee Retirement Income Security Act of 1974, pollution damage (except for resultant shareholder actions), bodily injury, property damage or engineering professional services and claims brought by a director or officer against another director or officer or by TransCanada against a director or officer except for shareholder derivative actions not assisted in by a director or officer of TransCanada.

The foregoing is a description of the provisions of Section 124 of the CBCA and TransCanada's By-Law No. 1 regarding indemnification of directors and officers of TransCanada and TransCanada's directors' and officers' liability insurance in effect as of June 13, 2017.

Additionally, directors and officers of TransCanada are party to indemnity agreements with TransCanada pursuant to which TransCanada has agreed to indemnify such directors and officers from liability arising in

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connection with the performance of their duties. Such indemnity agreements conform with the provisions of the CBCA.

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EXHIBITS

| Exhibit Number | Description |
|----------------|--|
| 4.1 | Audited comparative consolidated financial statements of TransCanada as at December 31, 2016 and 2015 and for each of the years in the three-year period ended December 31, 2016, the notes thereto, and the auditors' report thereon (included as part of the Form 40-F filed with the Securities and Exchange Commission on February 16, 2017 and incorporated by reference herein). |
| 4.2 | Management's Discussion and Analysis of Financial Condition and Results of Operations of TransCanada as at and for the year ended December 31, 2016 (included as part of the Form 40-F filed with the Securities and Exchange Commission on February 16, 2017 and incorporated by reference herein). |
| 4.3 | Annual Information Form of TransCanada for the year ended December 31, 2016, dated February 15, 2017 (included as part of the Form 40-F filed with the Securities and Exchange Commission on February 16, 2017 and incorporated by reference herein). |
| 4.4 | Management Information Circular dated February 28, 2017 (filed with the Securities and Exchange Commission as part of a Form 6-K report on March 20, 2017 and incorporated by reference herein). |
| 4.5 | Unaudited interim comparative condensed consolidated financial statements of TransCanada as at March 31, 2017 and for the three-month periods ended March 31, 2017 and 2016, and the notes thereto (filed with the Securities and Exchange Commission as part of a Form 6-K report on May 5, 2017 and incorporated by reference herein). |
| 4.6 | Management's Discussion and Analysis of Financial Condition and Results of Operations of TransCanada as at and for the three months ended March 31, 2017 (filed with the Securities and Exchange Commission as part of a Form 6-K report on May 5, 2017 and incorporated by reference herein). |
| 4.7 | Business Acquisition report dated July 22, 2016 (filed with the Securities and Exchange Commission as part of a Form 6-K report on July 25, 2016 and incorporated by reference herein). |
| *5.1 | Consent of KPMG LLP. |

- *5.2 Consent of Deloitte & Touche LLP.
- *5.3 Consent of Blake, Cassels & Graydon LLP.
- *5.4 Consent of Mayer Brown LLP.
- **6.1 Power of attorney (included in Part III of the initial Registration Statement).

* Filed herewith.
 ** Previously filed.

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PART III

UNDERTAKING AND CONSENT TO SERVICE OF PROCESS

Item 1. Undertaking

The Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the Commission staff, and to furnish promptly, when requested to do so by the Commission staff, information relating to the securities registered pursuant to Form F-10 or to transactions in said securities.

Item 2. Consent to Service of Process

- (a) Concurrently with the initial filing of this Registration Statement, the Registrant filed with the Commission a written irrevocable consent and power of attorney on Form F-X.
- (b) Any change to the name or address of the agent for service of the Registrant shall be communicated promptly to the Commission by amendment to Form F-X referencing the file number of the relevant registration statement.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-10 and has duly caused this amendment to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Calgary, Province of Alberta, Country of Canada, on the 23rd day of June, 2017.

TRANSCANADA CORPORATION

By: /s/ Russell K. Girling
 Name: Russell K. Girling
 Title: President and Chief Executive Officer

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Pursuant to the requirements of the Securities Act of 1933, this amendment to the Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|-------------------------|--|---------------|
| * Russell K. Girling | Director, President and Chief Executive Officer (Principal Executive Officer) | June 23, 2017 |
| * Donald R. Marchand | Executive Vice-President and Chief Financial Officer (Principal Financial Officer) | June 23, 2017 |
| * G. Glenn Menuz | Vice-President and Controller (Principal Accounting Officer) | June 23, 2017 |
| * Siim A. Vanaselja | Director, Chair | June 23, 2017 |
| * _____ | Director | June 23, 2017 |

- 4.6 Management's Discussion and Analysis of Financial Condition and Results of Operations of TransCanada as at and for the three months ended March 31, 2017 (filed with the Securities and Exchange Commission as part of a Form 6-K report on May 5, 2017 and incorporated by reference herein).
- 4.7 Business Acquisition report dated July 22, 2016 (filed with the Securities and Exchange Commission as part of a Form 6-K report on July 25, 2016 and incorporated by reference herein).
- *5.1 Consent of KPMG LLP.
- *5.2 Consent of Deloitte & Touche LLP.
- *5.3 Consent of Blake, Cassels & Graydon LLP.
- *5.4 Consent of Mayer Brown LLP.
- **6.1 Power of attorney (included in Part III of the initial Registration Statement).

* Filed herewith.

** Previously filed.

Consent of Independent Registered Public Accounting Firm

The Board of Directors of TransCanada Corporation

We consent to the use of our audit report dated February 15, 2017, on the consolidated financial statements of TransCanada Corporation, which comprise the Consolidated balance sheets as at December 31, 2016 and December 31, 2015, the Consolidated statements of income, comprehensive income, cash flows and equity for each of the years in the three year period ended December 31, 2016, and notes, comprising a summary of significant accounting policies and other explanatory information, which is incorporated by reference herein and to the reference to our firm under the heading “Experts” in the prospectus.

/s/ KPMG LLP
Chartered Professional Accountants

June 23, 2017
Calgary, Canada

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the use in this Amendment No. 1 to Registration Statement on Form F-10 of TransCanada Corporation of our report dated February 18, 2016 (February 22, 2016 as to Note 27) relating to the consolidated and combined financial statements of Columbia Pipeline Group, Inc. and subsidiaries (the “Company”) (which report on the consolidated and combined financial statements expresses an unqualified opinion and includes an explanatory paragraph relating to the Company’s February 11, 2015 initial public offering of limited partner interests of Columbia Pipeline Partners LP and its spin-off from NiSource Inc. on July 1, 2015) appearing in the Prospectus, which is part of this Registration Statement.

We also consent to the reference to us under the heading “Experts” in such Prospectus.

/s/ Deloitte & Touche LLP

Columbus, Ohio
June 23, 2017



Blake, Cassels & Graydon LLP
Barristers & Solicitors
Patent & Trade-mark Agents
855 - 2nd Street S.W.
Suite 3500, Bankers Hall East Tower
Calgary AB T2P 4J8 Canada
Tel: 403-260-9600 Fax: 403-260-9700

June 23, 2017

Reference: 88902/37

TransCanada Corporation
450 — 1st Street S.W.
Calgary, Alberta, Canada
T2P 5H1

Re: TransCanada Corporation (the “Corporation”)

Dear Ladies and Gentlemen:

We hereby consent to the references to this firm under the captions “Enforceability of Civil Liabilities”, “Legal Matters”, “Interest of Experts” and “Documents Filed as Part of the Registration Statement” in the prospectus included as part of the registration statement on Form F-10 (Registration No. 333-218711) of the Corporation.

In giving this consent, we do not thereby admit that we come within the category of persons whose consent is required by the Securities Act of 1933 or the rules and regulations promulgated thereunder.

Yours very truly,

(signed) “*Blake, Cassels & Graydon LLP*”

Blake, Cassels & Graydon LLP

MAYER • BROWN

Mayer Brown LLP
71 South Wacker Drive
Chicago, Illinois 60606-4637

Main Tel (312) 782-0600
Main Fax (312) 701-7711
www.mayerbrown.com

June 23, 2017

TransCanada Corporation
450 - 1st Street S.W.
Calgary, Alberta, Canada, T2P 5H1

Ladies and Gentlemen:

We hereby consent to the references to this firm under the caption "Legal Matters" in the prospectus included as part of the registration statement on Form F-10 (Registration No. 333-218711) of TransCanada Corporation.

Very truly yours,

/s/ Mayer Brown LLP

Mayer Brown LLP

Mayer Brown LLP operates in combination with other Mayer Brown entities (the "Mayer Brown Practices"), which have offices in North America, Europe and Asia and are associated with Tauli & Chequer Advogados, a Brazilian law partnership.
