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

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

TRANSCANADA CORPORATION

(Exact name of registrant as specified in its charter)

Canada

Not Applicable

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

450 – 1st Street S.W. Calgary, Alberta, T2P 5H1, Canada

(Address of Principal Executive Offices) (Zip Code)

TransCanada 401(k) and Savings Plan

(Full title of the plans)

TransCanada USA Services Inc. 700 Louisiana Street, Suite 700 Houston, Texas 77002 (832) 320-5201

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer		Accelerated filer			
Non-accelerated filer	\square (Do not check if a smaller reporting company)	Smaller reporting company			
		Emerging growth company			
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition \square period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.					

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered ⁽¹⁾	Proposed maximum offering price per share ⁽²⁾	Proposed maximum aggregate offering price ⁽²⁾	Amount of registration fee ⁽²⁾
Common Shares, no par value \$0.001 per share	500,000	\$44.39	\$22,195,000.00	\$2,763.28

- This registration statement on Form S-8 (this "Registration Statement") relates to common shares ("Common Stock") of TransCanada Corporation ("TransCanada") to be offered under the TransCanada 401(k) and Savings Plan, as amended and restated effective January 1, 2018 (the "401(k) Plan), of its wholly-owned subsidiary, TransCanada USA Services Inc. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers an indeterminate number of additional shares of Common Stock with respect to the shares registered hereunder in the event of a stock split, stock dividend or similar transaction. In addition, pursuant to Rule 416(c) under the Securities Act, this Registration Statement also covers an indeterminate amount of interests to be offered pursuant to the 401(k) Plan.
- (2) Estimated solely for the purpose of computing the registration fee pursuant to Rule 457(h) under the Securities Act based on the average of the high (\$44.70) and low (\$44.08) sales prices of the Common Stock of TransCanada on August 28, 2018, as reported on the New York Stock Exchange, in accordance with Rule 457(c).

EXPLANATORY NOTE

TransCanada is filing this Registration Statement pursuant to General Instruction E of Form S-8 to register an additional 500,000 shares of Common Stock under the 401(k) Plan, together with an indeterminate amount of interests in the 401(k) Plan. The Common Stock being registered pursuant to this Registration Statement are additional securities of the same class as the securities for which previously filed registration statements on Form S-8 relating to the 401(k) Plan are effective. This Registration Statement hereby incorporates by reference the contents of the earlier registration statements on Form S-8 filed with the Securities and Exchange Commission (the "Commission") on June 18, 2008 (Registration No. 333-151736, as amended by Post-Effective Amendment No. 1 to Registration No. 333-151736 filed on December 22, 2008) and September 25, 2012 (Registration No. 333-184074) as modified or superseded pursuant to Rule 412 under the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

The exhibits listed on the Exhibit Index immediately preceding such exhibits are filed as part of this Registration Statement, and the contents of the Exhibit Index are incorporated herein by reference.

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 S-8 and has duly caused this 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 August 30, 2018.

TRANSCANADA CORPORATION

By: /s/ Russell K. Girling

Name: Russell K. Girling

Title: President and Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints each of Russell K. Girling, Donald R. Marchand and Christine R. Johnston his or her true and lawful attorney-in-fact and agent, each acting alone, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) to this Registration Statement, and any additional registration statements pursuant to Rule 462(b), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing appropriate or necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

This Power of Attorney may be executed in multiple counterparts, each of which shall be deemed an original, but which taken together shall constitute one instrument.

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

ies and on the dates indicated.		
Signature	Title	Date
/s/ Russell K. Girling	Director, President and Chief Executive Officer	August 30, 2018
Russell K. Girling	(Principal Executive Officer)	
G	,	
/s/ Donald R. Marchand	Executive Vice-President	August 30, 2018
Donald R. Marchand	and Chief Financial Officer	<i>5</i>
	(Principal Financial Officer)	
	(Timespus Timuseus Ossiees)	
/s/ G. Glenn Menuz	Vice-President and Controller	August 30, 2018
G. Glenn Menuz	(Principal Accounting Officer)	
G. Gleim Wichaz	(Timelput Accounting Officer)	
/s/ Siim A. Vanaselja	Director, Chair	August 30, 2018
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/s/ Kevin E. Benson	Director	August 30, 2018
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/s/ Stephan Cretier	Director	August 30, 2018
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Stephan Great		
/s/ S. Barry Jackson	Director	August 30, 2018
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S. Barry vacason		
/s/ Randy Limbacher	Director	August 30, 2018
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/s/ John E. Lowe	Director	August 30, 2018
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/s/ Paula Rosput Reynolds	Director	August 30, 2018
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/s/ Mary Pat Salomone	Director	August 30, 2018
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/s/ Indira V. Samarasekera	Director	August 30, 2018
Indira V. Samarasekera		
/s/ D. Michael G. Stewart	Director	August 30, 2018
D. Michael G. Stewart		
/s/ Thierry Vandal	Director	August 30, 2018
Thierry Vandal		

The Plan. Pursuant to the requirements of the Securities Act of 1933, the trustees (or other persons who administer the employee benefit plan) have duly
caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Houston, State of Texas, on August
30, 2018.

TransCanada 401(k) and Savings Plan

By: <u>/s/ Jon Dobson</u> Jon A. Dobson, on behalf of the TransCanada USA Investment Committee

EXHIBIT INDEX

Exhibit Number	Description	Manner of Filing
5*	Opinion Letter dated [March 31, 2014] from the Internal Revenue Service to Fidelity Management & Research Company, the sponsor of the volume submitter defined contribution plan, the form of plan document used for the TransCanada 401(k) and Savings Plan, as amended and restated effective January 1, 2018	Filed electronically herewith
23.1	Consent of KPMG LLP	Filed electronically herewith
23.2	Consent of Caron & Bletzer, PLLC	Filed electronically herewith
24	Powers of Attorney	Included on signature page

^{*} The TransCanada 401(k) and Savings Plan, as amended and restated effective January 1, 2018 (the "401(k) Plan") is a volume submitter defined contribution plan. The Registrant is permitted to rely on the opinion letter issued by the Internal Revenue Service to Fidelity Management & Research Company, the sponsor of the volume submitter defined contribution plan upon which the 401(k) Plan is based, as to the 401(k) Plan's compliance, in form, with the qualification requirements of Section 401 of the Internal Revenue Code, and such opinion letter is supplied in lieu of a determination letter.



DEPARTMENT OF THE TREASURY INTERNAL REVENUE SERVICE WASHINGTON. D.C. 20224

Plan Description: Volume Submitter Profit Sharing Plan With CODA FFN: 31518740017-001 Case: 201200381 EIN: 04-2033129

Letter Serial No: J593715a Date of Submission: 04/02/2012

FIDELITY MANAGEMENT & RESEARCH CO 82 DEVONSHIRE STREET BOSTON, MA 02109 Contact Person: Janell Hayes Telephone Number: 513-263-3602 In Reference To: TEGE:EP:7521

Date: 03/31/2014

Dear Applicant:

In our opinion, the form of the plan identified above is acceptable under section 401 of the Internal Revenue Code for use by employers for the benefit of their employees. This opinion relates only to the acceptability of the form of the plan under the Internal Revenue Code. It is not an opinion of the effect of other Federal or local statutes.

You must furnish a copy of this letter, a copy of the approved plan, and copies of any subsequent amendments to adopting employers if the practitioner is authorized to amend the plan on their behalf, to each employer who adopts this plan. Effective on or after 10/31/2011, interim amendments adopted by the practitioner on behalf of employers must provide the date of adoption by the practitioner.

This letter considers the changes in qualification requirements contained in the 2010 Cumulative List of Notice 2010-90, 2010-52 I.R.B. 909.

Our opinion on the acceptability of the form of the plan is not a ruling or determination as to whether an employer's plan qualifies under Code section 401(a). However, an employer that adopts this plan may rely on this letter with respect to the qualification of its plan under Code section 401(a), as provided for in Rev. Proc. 2011-49, 2011-44 I.R.B. 608, and outlined below. The terms of the plan must be followed in operation.

Except as provided below, our opinion does not apply with respect to the requirements of Code sections 401(a)(4), 401(l), 410(b), and 414(s). Our opinion does not apply for purposes of Code section 401(a)(10)(B) and section 401(a)(16) if an employer ever maintained another qualified plan for one or more employees who are covered by this plan. For this purpose, the employer will not be considered to have maintained another plan merely because the employer has maintained another defined contribution plan(s), provided such other plan(s) has been terminated prior to the effective date of this plan and no annual additions have been credited to the account of any participant under such other plan(s) as of any date within the limitation year of this plan. Also, for this purpose, an employer is considered as maintaining another plan, to the extent that the employer maintains a welfare benefit fund defined in Code section 419(e), which provides postretirement medical benefits allocated to separate accounts for key employees as defined in Code section 419A(d)(3), or an individual medical account as defined in Code section 415(l)(2), which is part of a pension or annuity plan maintained by the employer, or a simplified employee pension plan.

Our opinion does not apply for purposes of the requirement of section 1.401(a)-1(b)(2) of the regulations applicable to a money purchase plan or target benefit plan where the normal retirement age under the employer's plan is lower than age 62.

Letter 4335

FIDELITY MANAGEMENT & RESEARCH CO

FFN: 31518740017-001

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This is not a ruling or determination with respect to any language in the plan that reflects Section 3 of the Defense of Marriage Act, Pub. L. 104-199, 110 Stat. 2419 (DOMA) or U.S. v. Windsor, 133 S. Ct. 2675 (2013), which invalidated that section.

This letter is not a ruling with respect to the tax treatment to be accorded contributions which are picked up by the governmental employing unit within the meaning of section 414(h)(2) of the Internal Revenue Code.

Our opinion applies with respect to the requirements of Code section 410(b) if 100 percent of all nonexcludable employees benefit under the plan. Employers that elect a safe harbor allocation formula and a safe harbor compensation definition can also rely on an advisory letter with respect to the nondiscriminatory amounts requirement under section 401(a)(4). If this plan includes a CODA or otherwise provides for contributions subject to sections 401(k) and/or 401(m), the advisory letter can be relied on with respect to the form of the nondiscrimination tests of 401(k)(3) and 401(m)(2) if the employer uses a safe harbor compensation definition. In the case of plans described in section 401(k)(12) or (13) and/or 401(m)(11) or (12), employers may also rely on the advisory letter with respect to whether the form of the plan satisfies the requirements of those sections unless the plan provides for the safe harbor contribution to be made under another plan.

The employer may request a determination (1) as to whether the plan, considered with all related qualified plans and, if appropriate, welfare benefit funds, individual medical benefit accounts, and simplified employee pension plans, satisfies the requirements of Code section 401(a)(16) as to limitations on benefits and contributions in Code section 415 and the requirements of Code section 401(a)(10)(B) as to the top-heavy plan requirements in Code section 416; (2) with respect to whether a money purchase or target benefit plan's normal retirement age which is earlier than age 62 satisfies the requirements of section 401(a)-1(b)(2) of the Income Tax Regulations; (3) that the plan is a multiple employer plan; (4) whether there has been a partial termination; and (5) to comply with published procedures of the Service (e.g. minimum funding waiver request). The employer may request a determination letter by filing an application with Employee Plans Determinations on Form 5307, with regard to item (1) above, and Form 5300, for items (2), (3), (4) and (5), without restating for the Cumulative List in effect when the application is filed.

If you, the volume submitter practitioner, have any questions concerning the IRS processing of this case, please call the above telephone number. This number is only for use of the practitioner. Individual participants and/or adopting employers with questions concerning the plan should contact the volume submitter practitioner. The plan's adoption agreement, if applicable, must include the practitioner's address and telephone number for inquiries by adopting employers.

If you write to the IRS regarding this plan, please provide your telephone number and the most convenient time for us to call in case we need more information. Whether you call or write, please refer to the Letter Serial Number and File Folder Number shown in the heading of this letter.

You should keep this letter as a permanent record. Please notify us if you modify or discontinue sponsorship of this plan.

Sincerely Yours.

Andrew E. Zuckerman

Director, Employee Plans Rulings and Agreements

Letter 4335

Consent of Independent Registered Public Accounting Firm

The Board of Directors of TransCanada Corporation

We consent to the incorporation by reference in the registration statement on Form S-8 of TransCanada Corporation of our reports dated February 14, 2018, with respect to the consolidated balance sheets of TransCanada Corporation as of December 31, 2017 and 2016, and the related consolidated statements of income, comprehensive income, cash flows, and equity for each of the years in the three-year period ended December 31, 2017, and the related notes (collectively, the "consolidated financial statements"), and the effectiveness of internal control over financial reporting as of December 31, 2017, which reports appear in the December 31, 2017 annual report on Form 40-F of TransCanada Corporation.

/s/KPMG LLP Chartered Professional Accountants

August 30, 2018 Calgary, Canada

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated June 18, 2018 relating to the financial statements and financial statement schedule of the TransCanada 401(k) and Savings Plan appearing in the Annual Report on Form 11-K of the TransCanada 401(k) and Savings Plan for the year ended December 31, 2017.

/s/ Caron & Bletzer, PLLC

Kingston, NH August 30, 2018