SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer

Pursuant to Rule 13a-16 or 15d-16 of the Securities Exchange Act of 1934

For the month of May 2017 Commission File No. 1-31690

TransCanada Corporation

(Translation of Registrant's Name into English)

450 - 1 Street S.W., Calgary, Alberta, T2P 5H1, Canada (Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:
Form 20-F □ Form 40-F ☑
indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Pule 101(b)(1).

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Exhibit 99.1 to this report, furnished on Form 6-K, is furnished, not filed, and will not be incorporated by reference into any registration statement filed by the registrant under the Securities Act of 1933, as amended.

SIGNATURES

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

Date: May 5, 2017

TRANSCANADA CORPORATION

By: /s/ Christine R. Johnston

Christine R. Johnston

Vice-President, Law and Corporate Secretary

EXHIBIT INDEX

99.1 A copy of the registrant's News Release dated May 5, 2017.

NewsRelease



TransCanada Declares Quarterly Dividends

CALGARY, Alberta - May 5, 2017 - News Release - TransCanada Corporation (TSX, NYSE: TRP) (TransCanada or the Company) today announced that the Board of Directors (Board) of TransCanada declared a quarterly dividend of \$0.625 per common share for the quarter ending June 30, 2017, on the Company's outstanding common shares. The common share dividend is payable on July 31, 2017 to shareholders of record at the close of business on June 30, 2017.

The Board also declared quarterly dividends on the outstanding Cumulative First Preferred Shares as follows:

- For the period up to but excluding June 30, 2017, payable on June 30, 2017, to shareholders of record at the close of business on May 31, 2017:
 - Series 1 \$0.204125 per share
 - Series 2 \$0.14958904 per share
 - Series 3 \$0.1345 per share
 - Series 4 \$0.10969863 per share
- For the period up to but excluding July 30, 2017, payable on July 31, 2017, to shareholders of record at the close of business on June 30, 2017:
 - Series 5 \$0.14143750 per share
 - Series 6 \$0.12796096 per share
 - Series 7 \$0.25 per share
 - Series 9 \$0.265625 per share
- For the period up to but excluding May 31, 2017, payable on May 31, 2017, to shareholders of record at the close of business on May 16, 2017:
 - Series 11 \$0.2375 per share
 - Series 13 \$0.34375 per share
 - Series 15 \$0.30625 per share

These dividends are designated by TransCanada to be eligible dividends for purposes of the *Income Tax Act* (Canada) and any similar provincial or territorial legislation. An enhanced dividend tax credit applies to eligible dividends paid to Canadian residents.

The Board also approved the issuance of common shares from treasury at a two per cent discount under TransCanada's Dividend Reinvestment Plan (DRP). Under the DRP, investors holding TransCanada common or preferred shares can receive common shares instead of cash dividend payments. For further details, including how to enroll in the program, please refer to http://www.transcanada.com/drip.html.

With more than 65 years' experience, TransCanada is a <u>leader</u> in the <u>responsible development</u> and reliable operation of North American energy infrastructure including natural gas and liquids pipelines, power generation and gas storage facilities. TransCanada operates a network of natural gas pipelines that extends more than 91,500 kilometres (56,900 miles), tapping into virtually all major gas supply basins in North America. TransCanada is the continent's leading provider of gas storage and related services with 653 billion cubic feet of storage capacity. A large independent power producer, TransCanada currently owns or has interests in over 10,100 megawatts of power generation in Canada and the United States. TransCanada is also the developer and operator of one of North America's leading liquids pipeline systems that extends over 4,300 kilometres (2,700 miles), connecting growing continental oil supplies to

key markets and refineries. TransCanada's common shares trade on the Toronto and New York stock exchanges under the symbol TRP. Visit TransCanada.com and our blog to learn more, or connect with us on social media and 3BL Media.

FORWARD LOOKING INFORMATION

This publication contains certain information that is forward-looking and is subject to important risks and uncertainties (such statements are usually accompanied by words such as "anticipate", "expect", "believe", "may", "will", "should", "estimate", "intend" or other similar words). Forward-looking statements in this document are intended to provide TransCanada security holders and potential investors with information regarding TransCanada and its subsidiaries, including management's assessment of TransCanada's and its subsidiaries' future plans and financial outlook. All forward-looking statements reflect TransCanada's beliefs and assumptions based on information available at the time the statements were made and as such are not guarantees of future performance. Readers are cautioned not to place undue reliance on this forward-looking information, which is given as of the date it is expressed in this news release, and not to use future-oriented information or financial outlooks for anything other than their intended purpose. TransCanada undertakes no obligation to update or revise any forward-looking information except as required by law. For additional information on the assumptions made, and the risks and uncertainties which could cause actual results to differ from the anticipated results, refer to the Quarterly Report to Shareholders dated May 4, 2017 and 2016 Annual Report filed under TransCanada's profile on SEDAR at www.secagov.

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