

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 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 4, 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 4, 2017.

TransCanada Announces Agreements to Sell Interests in Iroquois and PNGTS to TC PipeLines, LP

CALGARY, Alberta - **May 4, 2017** - News Release - TransCanada Corporation (TSX, NYSE: TRP) (TransCanada) today announced it has entered into agreements to sell a 49.3 per cent interest in Iroquois Gas Transmission System, LP (Iroquois), together with its remaining 11.8 per cent interest in Portland Natural Gas Transmission System (PNGTS), to its master limited partnership, TC PipeLines, LP (NYSE: TCP) (the Partnership).

The US\$765 million transaction, comprised of US\$597 million in cash and the assumption of US\$168 million in proportionate debt at Iroquois and PNGTS, is expected to close mid-2017, subject to customary conditions precedent.

"This agreement demonstrates the meaningful role that our MLP can play in funding a portion of our \$23 billion near-term growth portfolio," said Russ Girling, TransCanada's president and chief executive officer. "Successfully executing our capital program through the end of the decade positions TransCanada to deliver significant sustainable growth in earnings, cash flow and dividends."

The Iroquois pipeline transports natural gas under long-term contracts and extends from the TransCanada Mainline system at the U.S. border near Waddington, New York to markets in the U.S. northeast, including New York City, Long Island and Connecticut. Iroquois is currently jointly owned by affiliates of TransCanada and Dominion Resources, Inc. through a joint venture. The pipeline is operated by a stand-alone company that is also jointly owned and based in Connecticut.

PNGTS is an interstate natural gas pipeline which began serving New England's energy needs in March 1999. The pipeline connects with the Trans Québec & Maritimes Pipeline at the Canadian border and shares facilities with the Maritimes and Northeast Pipeline from Westbrook, Maine to a connection with the Tennessee Gas Pipeline System near Boston, Massachusetts. In January 2016, TransCanada sold a 49.9 per cent interest in PNGTS to the Partnership.

TransCanada, through its subsidiaries, currently holds an approximate 26 per cent interest in TC PipeLines, LP, a United States master limited partnership, which was formed to acquire, own and actively participate in the management of U.S. natural gas pipelines and related assets.

With more than 65 years' experience, TransCanada is a [leader](#) in the [responsible development](#) 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 February 16, 2017 and 2016 Annual Report filed under TransCanada's profile on SEDAR at www.sedar.com and with the U.S. Securities and Exchange Commission at www.sec.gov.

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