

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 July 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: July 28, 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 July 28, 2017.

TransCanada to expand Canadian Mainline capacity through new investment

TORONTO, Ontario - July 28, 2017 - News Release - TransCanada Corporation (TSX:TRP) (NYSE:TRP) (TransCanada) today announced that it will apply to the National Energy Board (NEB) to expand the capacity of the Canadian Mainline System through its Maple Compressor Station near Vaughan, Ontario. The approximately \$160 million project is underpinned by 15-year contracts and will increase capacity to the southern Ontario market plus delivery to Atlantic Canada via the Trans Québec & Maritimes Pipeline (TQM) and Portland Natural Gas Transmission (PNGTS) Systems.

"This expansion will help ensure Ontario customers receive the natural gas they need over the long-term and meet growing market demand in Atlantic Canada," said Karl Johannson, TransCanada's executive vice president and president, Canada and Mexico natural gas pipelines and energy. "This investment further affirms our commitment to build key natural gas infrastructure in Canada and shows the importance of the Canadian Mainline to efficiently and competitively meet the transportation needs of our customers."

The proposed project will add incremental compression and associated facilities on the Canadian Mainline to move an additional approximately 80 million cubic feet of clean-burning natural gas per day - enough to supply more than 300,000 homes on an annual basis.

Once TransCanada has completed its tariff process for capacity additions, an application to approve the associated facilities is expected to be filed with the NEB in early 2018, to meet a November 1, 2019 in-service. This new investment is part of an approximately \$500 million program that TransCanada is undertaking to support additional transportation of Canadian and U.S. gas along the company's Canadian Mainline System.

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 approximately 6,200 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 to learn more, or [connect with us on social media](#) and [3BL Media](#).

-30-

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