

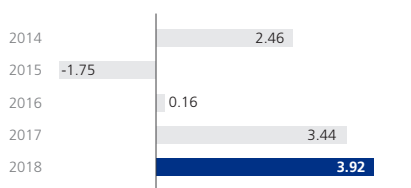
POSITIONED FOR THE FUTURE

2018 Letter to Shareholders

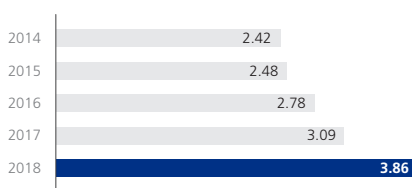


Financial Highlights

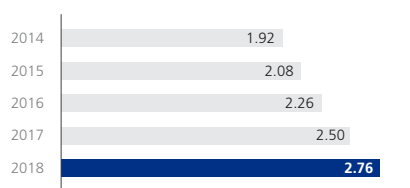
↑ NET INCOME/(LOSS) PER COMMON SHARE (dollars)



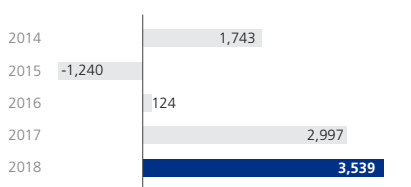
↑ COMPARABLE EARNINGS PER COMMON SHARE¹ (dollars)



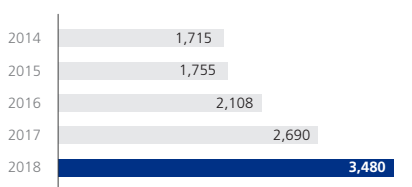
↑ DIVIDENDS DECLARED PER COMMON SHARE (dollars)



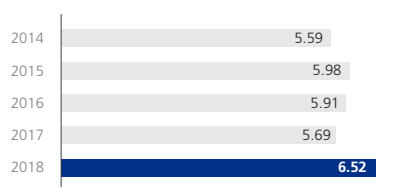
↑ NET INCOME/(LOSS) ATTRIBUTABLE TO COMMON SHARES (millions of dollars)



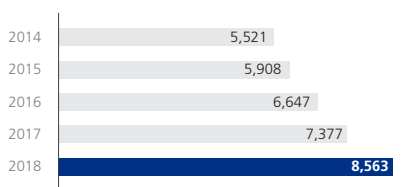
↑ COMPARABLE EARNINGS¹ (millions of dollars)



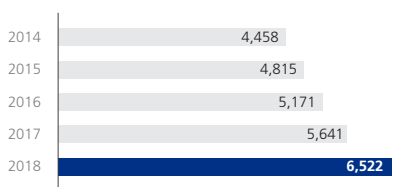
↑ COMPARABLE DISTRIBUTABLE CASH FLOW PER COMMON SHARE^{1,2} (dollars)



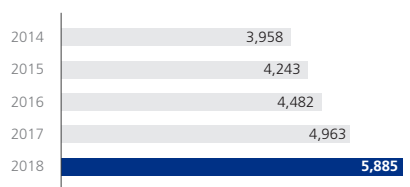
↑ COMPARABLE EBITDA¹ (millions of dollars)



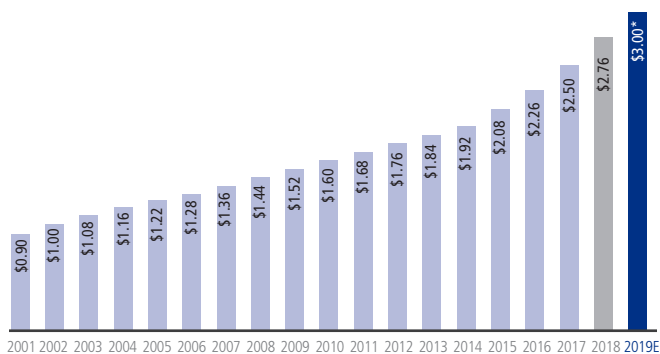
↑ COMPARABLE FUNDS GENERATED FROM OPERATIONS¹ (millions of dollars)



↑ COMPARABLE DISTRIBUTABLE CASH FLOW^{1,2} (millions of dollars)

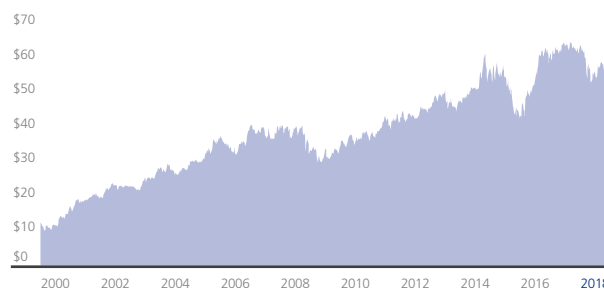


↑ TRACK RECORD OF DIVIDEND GROWTH



* Annualized based on first quarter declaration

↑ COMMON SHARE PRICE – TORONTO STOCK EXCHANGE



↑ TransCanada's shareholders have benefited from a 12 per cent average annual total return since 2000.

(1) Non-GAAP measures which do not have any standardized meanings prescribed by U.S. generally accepted accounting principles (GAAP). For more information, see non-GAAP measures in the Management Discussion and Analysis of the 2018 Annual Report.
 (2) Reflecting only non-recoverable maintenance capital expenditures.

Forward-Looking Information and Non-GAAP Measures

These pages contain certain forward-looking information and also contain references to certain non-GAAP measures that do not have any standardized meaning as prescribed by GAAP and therefore may not be comparable to similar measures presented by other entities. For more information on forward-looking information, the assumptions made, and the risks and uncertainties which could cause actual results to differ from the anticipated results, and reconciliations of non-GAAP measures to directly comparable GAAP measures, refer to TransCanada's 2018 Annual Report filed with Canadian securities regulators and the U.S. Securities and Exchange Commission and available at TransCanada.com.

About TransCanada

For over 65 years, TransCanada has proudly delivered the energy that millions of North Americans rely on to power their lives and fuel industry. Guided by our values of safety, responsibility, collaboration and integrity, our more than 7,000 people are deeply rooted in their communities and ensure that we develop and operate our facilities safely, reliably and with minimal impact on the environment. We are committed to listening to our neighbours and we work with all our stakeholders to develop better project plans and create long-term opportunities and economic benefits in the communities where we operate across Canada, the United States and Mexico.

Three Complementary Energy Infrastructure Businesses



Natural Gas Pipelines

Our 92,600-kilometre (57,500-mile) network of natural gas pipelines supplies more than 25 per cent of the clean-burning natural gas consumed daily across North America. This pipeline network strategically connects growing supply in the most prolific basins on the continent to key markets across Canada, the U.S. and Mexico. We also operate one of the continent's largest natural gas storage businesses, with 653 billion cubic feet of regulated and unregulated storage capacity.



Liquids Pipelines

Our 4,900-kilometre (3,000-mile) liquids pipeline system connects growing continental oil supplies to key markets and refineries. The Keystone Pipeline System delivers approximately 20 per cent of western Canadian exports to key refinery markets in the U.S. Midwest and Gulf Coast, where it is converted into fuel and other useful petroleum products.



Energy

TransCanada owns or has interests in 11 power generation facilities with combined capacity of approximately 6,600 megawatts (MW) – enough to power more than 6 million homes. Nearly half of the power we provide is generated from an emission-less nuclear power facility and we are leaders in the development and operation of high efficiency, natural gas-fired generating stations.



Our Purpose

Delivering the energy people need,
every day. Safely. Responsibly.
Collaboratively. With integrity.

Our Vision

To be the leading energy
infrastructure company in North
America, focusing on pipeline and
power generation opportunities
where we have, or can develop, a
significant competitive advantage.



Russ Girling,
President and Chief Executive Officer

Siim Vanaselja,
Chair of the Board

Positioned for the Future

Dear Fellow Shareholders,

Our purpose is to deliver the energy people need, every day – safely, responsibly, collaboratively, with integrity. Citizens, businesses and institutions rely on the energy we deliver to go about their daily routines and to provide the products and essential services that are core to our modern society.

We are proud to say that in 2018 we met that challenge. The utilization of many of our systems hit new highs as we delivered natural gas to keep people warm in winter, we transported the crude oil needed by U.S. refineries, and we provided electricity for millions of homes and industries.

Looking forward, the demand for our services has never been greater as the world's appetite for safe, reliable and affordable energy continues to grow. Through the dedication and commitment of our employees and contractors, we are well-positioned to continue being leaders in the safe and environmentally responsible delivery of that energy for decades to come.

A New Name

The exceptional growth of our business has led us to embrace an opportunity to reinforce our position as a truly North American company. Earlier this year, we announced our intention to change our name to TC Energy to reflect our growth into an enterprise with assets and employees across the continent. TC Energy acknowledges TransCanada's proud history of developing the energy infrastructure that millions of North Americans rely on every day, while it more clearly articulates the geography and diversity of our complete business – pipelines, power generation, and natural gas storage operations in Canada, the U.S. and Mexico.

While our strategy and priorities remain the same, we believe the new name will help to further unite our employees and enable us to better connect with our diverse stakeholders. Whether they know us as TC Energy in English, TC Énergie in French, or TC Energía in Spanish, our neighbours, partners and

investors can continue to count on us to follow through on our commitments and live up to our values in everything we do.

Our shareholders will be asked to approve a special resolution to change the name at our Annual and Special Meeting this spring. We encourage you to support this exciting step forward for our company.

Delivering Results

Since 2000, we have invested approximately \$90 billion in high-quality, low-risk pipeline and power generation opportunities and have maintained a disciplined and consistent approach to capital allocation. Today, our \$100 billion portfolio generates approximately \$8.5 billion in comparable earnings before interest, taxes, depreciation and amortization (EBITDA), with approximately 95 per cent of that EBITDA coming from rate-regulated businesses or long-term contracted assets. This stable and predictable business model has provided consistent and growing returns for our shareholders. Underpinned by the steady growth of our earnings and cash flow per share, we increased our common share dividend 18 years in a row, at an average annual rate of seven per cent per year, contributing to an average annual total shareholder return of 12 per cent over that timeframe.

The strong performance of our base businesses – including contributions from our new facilities that entered service over the course of the year – led to record financial performance again in 2018. Comparable earnings of \$3.86 per common share increased 25 per cent compared to 2017, and comparable funds generated from operations were \$6.5 billion, a 16 per cent increase. Based on these strong financial results and our promising outlook for the future, the Board of Directors in February increased our quarterly common share dividend for the nineteenth consecutive year to \$0.75 per share, equivalent to \$3.00 per share on an annualized basis, an increase of approximately nine per cent.

*Learn more about our proposed name change at
[TransCanada.com/TC-Energy](https://www.transcanada.com/TC-Energy)*

Strong Foundations Provide Platforms for Growth

Our diversified portfolio of high-quality, long-life assets spans five operating businesses in three core geographies. Each of these businesses provides a platform for future growth.

Natural Gas Pipelines

Our extensive natural gas pipeline network is positioned in two of the most prolific and lowest cost basins in North America – the Western Canadian Sedimentary Basin (WCSB) and the Appalachian Basin. Our systems are well placed to meet the continent's growing demand for clean-burning natural gas by connecting the supply in these basins to important and growing markets across the continent.

For the Canadian natural gas pipelines business, this has meant expanding our system and increasing pipeline utilizations. Since 2013, our flows on the NGTL System have increased by more than 20 per cent, from 10 billion cubic feet per day (Bcf/d) to 12 Bcf/d. We are working to increase our receipt and delivery capability within Alberta by 2022 through our \$8.6 billion capital program, which is supported by a rate-regulated business model and long-term firm receipt and delivery contracts.

Meanwhile, the Canadian Mainline continues to be a critical conduit to eastern markets as we continue to find innovative solutions to help Western Canadian producers remain competitive and attract new customers in the east. Since 2013, firm Empress receipts have increased more than 70 per cent and firm contracts on the overall system have increased more than 40 per cent to more than 8 Bcf/d.

On the West Coast, the \$6.2-billion Coastal GasLink project will provide WCSB production with direct access to world markets through the LNG Canada liquefaction facility in Kitimat, B.C. *We have signed long-term agreements with all 20 elected First Nations along the pipeline right-of-way and we plan to provide in excess of \$1 billion in direct funding and contract work opportunities for these communities over the life of the project.* We have begun construction on this fully permitted project for a planned in-service date of 2023.

It was a transformative year for our U.S. natural gas pipelines business, with approximately US\$2.8 billion in new pipelines entering service, contributing to record EBITDA and reaching a peak day delivery record of over 30 Bcf. The Leach XPress, WB XPress and Cameron Access projects all began generating cash flow, while the US\$3.2-billion Mountaineer XPress project began partial service in January 2019 and is expected to be fully operational by the end of the first quarter. We are pursuing numerous organic growth opportunities arising from our footprint in the Appalachian Basin, increased demand for LNG exports, and through synergies with our Canadian natural gas business.

Our natural gas pipelines business in Mexico continues to generate solid results and provides us with a strong platform for future growth. Our four operating pipelines and three projects under development in Mexico – all underpinned by long-term contracts with the Comisión Federal de Electricidad – position us to connect low-cost U.S. natural gas supply to growing power generation and industrial markets in central Mexico and to new markets in northwest Mexico.

Liquids Pipelines

Our liquids pipelines business generated record earnings in 2018 as we continued to operate our Keystone Pipeline System at full capacity and saw increased demand on the Marketlink portion of the system to move growing supplies of U.S. light oil production to market. We continue to expand our network both upstream to reach new supply, as well as downstream to extend our market reach.

In 2018, we began construction on the White Spruce pipeline in Alberta and expect the pipeline to begin service in the second quarter of 2019. We are also now in the final stages of commissioning an additional one million barrels of storage in Cushing, Oklahoma and we have started the development of additional storage at our Houston Terminal.

Keystone XL continues to be a very important project for both Canada and the U.S. from an economic perspective, as well enhancing the energy security and national security of both countries. Demand for the project remains strong, with customers having fully subscribed for the available pipeline capacity through multi-decade contracts. We remain committed to building this project and we continue to carefully and methodically obtain the regulatory and legal approvals necessary before we advance the project to construction.

Energy

Our power generation business continues to generate strong results, with 95 per cent of our generating capacity underpinned by long-term contracts with solid counterparties.

The \$1.7 billion Napanee Generating Station in Ontario is expected to be in-service in the second quarter of 2019 and will add to stable, predictable, contracted EBITDA. We are also committed to the long-term success of the Bruce Power nuclear power facility, which provides 30 per cent of Ontario's electricity. The life extension program for Bruce Power is now underway, representing an \$8 billion investment (in 2018 dollars) for our company through 2055. Power sales from the facility are contracted with the Ontario Independent Electricity System Operator through 2064.

We continue to be one of Canada's largest privately-owned power companies and our extensive experience building and operating high-efficiency gas-fired generation, renewable

Visit us at TransCanada.com and connect with us on our social media channels for news, videos, stats and other important updates.

installations and nuclear generation ensures we are well-positioned to pursue further growth opportunities as North America transitions to less carbon-intense sources of electricity.

Significant Growth Underway

We will continue to advance \$36 billion in commercially secured projects through 2023, more than \$9 billion of which are expected to enter service during the early part of 2019. These new assets are critical improvements to North America's energy infrastructure system and add to our foundation for future growth. Completing these projects will result in significant additional cash flow and earnings per share and support expected annual dividend growth of eight to 10 per cent through 2021.

Funding Our Growth

We made significant progress in funding our secured near-term capital growth program in a prudent and sustainable manner through our strong internally generated cash flow, access to capital markets and portfolio management activities. Throughout 2018, we placed approximately \$6.2 billion in long-term debt on compelling terms, augmented by \$2 billion through our dividend reinvestment plan and at-the-market equity program. We raised a further \$1.1 billion through the sale of the Cartier Wind facility in Quebec and the reimbursement of pre-development costs on Coastal GasLink.

Going forward, we are well-positioned to fund the remainder of our secured growth program in a manner that is consistent with achieving targeted leverage metrics in 2019. We view the issuance of common shares under our at-the-market equity program as being complete and will continue to evaluate the use of our dividend reinvestment program on a quarterly basis. We also continue to progress various portfolio management activities, including the announced sale of our Coolidge Generating Station, which is expected to close by mid-year.

Future Growth

In addition to our secured projects, we continue to methodically advance more than \$20 billion of projects under development. They include Keystone XL and Bruce Power life extensions as well as numerous other organic growth opportunities that are expected to emanate from our footprint across North America.

It is clear our disciplined strategy to invest in high-quality, low-risk opportunities is working. We have a solid foundation of complementary energy infrastructure assets and our industry leading growth plan is aligned with long-term energy supply and demand fundamentals.

A Leader in Sustainability

While we are well-positioned to meet the continent's growing energy demands, we know from experience that how well we do as a company is inextricably linked to the sustainability of our business practices. We operate in an economically, socially and environmentally sustainable manner and follow through on the commitments we make to our neighbours, partners and communities.

We are proud to receive recognition from highly regarded third-party agencies for our achievements. For the fifth consecutive year, we earned a place on the Dow Jones Sustainability North American Index. For the eighth consecutive year, we are listed among Canada's Best 50 Corporate Citizens by Corporate Knights magazine, and we have been included in the Bloomberg Gender Equality Index for our leadership in enhancing gender equality and inclusion throughout our organization. We have also been recognized by CDP (formerly the Carbon Disclosure Project) for our disclosure of carbon emissions and our focus on the long-term sustainability of our business.

Promising Future

Finally, we continue to be guided in our decision-making by our values and a strong Board of Directors whose members draw on their diverse expertise to foster the company's success and must be thanked.

We were pleased to welcome a new independent director, Randy Limbacher, to the board in 2018. Mr. Limbacher's extensive experience in the oil and gas industry, along with his leadership skills and strategic planning expertise, are valuable additions to our board.

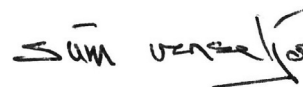
To conclude, 2018 was a record setting year in many ways as our footprint continued to expand. We are one step closer to realizing our vision to be the leading energy infrastructure company in North America. As we enter 2019, we remain committed to this vision and we are excited about the future as we begin a new chapter of our history as TC Energy.

We would like to thank all our employees and contractors for their continued commitment to our success. With their dedication, we are confident in our ability to sustainably deliver the energy people need and grow shareholder value for many decades to come.

Sincerely,



Russ Girling
President and
Chief Executive Officer



Siim A. Vanaselja
Chair of the Board

TransCanada


As at December 31, 2018


Natural Gas Pipeline 

Liquids Pipeline 

In Development/Construction 


Regulated Natural Gas Storage 

Liquids Tank Terminal 

 Natural Gas Power Generation

 Under Construction

 Nuclear Power Generation

 Unregulated Natural Gas Storage



Shareholder Information

TransCanada welcomes questions from shareholders and investors. Please contact:

David Moneta

Vice President, Investor Relations

telephone: **1.403.920.7911**

toll free: **1.800.361.6522**

email: investor_relations@transcanada.com

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Listing Information

Common Shares (TSX, NYSE): TRP

Preferred Shares (TSX):

Series 1: TRP.PR.A

Series 2: TRP.PR.F

Series 3: TRP.PR.B

Series 4: TRP.PR.H

Series 5: TRP.PR.C

Series 6: TRP.PR.I

Series 7: TRP.PR.D

Series 9: TRP.PR.E

Series 11: TRP.PR.G

Series 13: TRP.PR.J

Series 15: TRP.PR.K

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View our Annual Report:

AnnualReport.TransCanada.com

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Corporate Responsibility Report

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