

2015 Annual and Special Meeting

A worker in an orange safety suit and yellow hard hat is working on a large industrial pipe. The worker is positioned in the center-left of the frame, leaning over the pipe. The pipe is large and metallic, with a red flange visible on the left. The background shows more industrial equipment and a concrete structure.

Delivering
Results
Positioned for
Growth

Forward Looking Information and Non-GAAP Measures

This presentation includes certain forward looking information to help current and potential investors understand management's assessment of our future plans and financial outlook, dividend prospects and our future prospects overall. Statements that are forward-looking are based on certain assumptions and on what we know and expect today and generally include words like anticipate, expect, believe, may, will, should, estimate or other similar words. Forward-looking statements do not guarantee future performance. Actual events and results could be significantly different because of assumptions, risks or uncertainties related to our business or events that happen after the date of this presentation. Our forward-looking information is based on the following key assumptions: inflation rates, commodity prices and capacity prices, timing of financings and hedging, regulatory decisions and outcomes, foreign exchange rates, interest rates, tax rates, planned and unplanned outages and the use of our pipeline and energy assets, integrity and reliability of our assets, access to capital markets, anticipated construction costs, schedules and completion dates, acquisitions and divestitures.

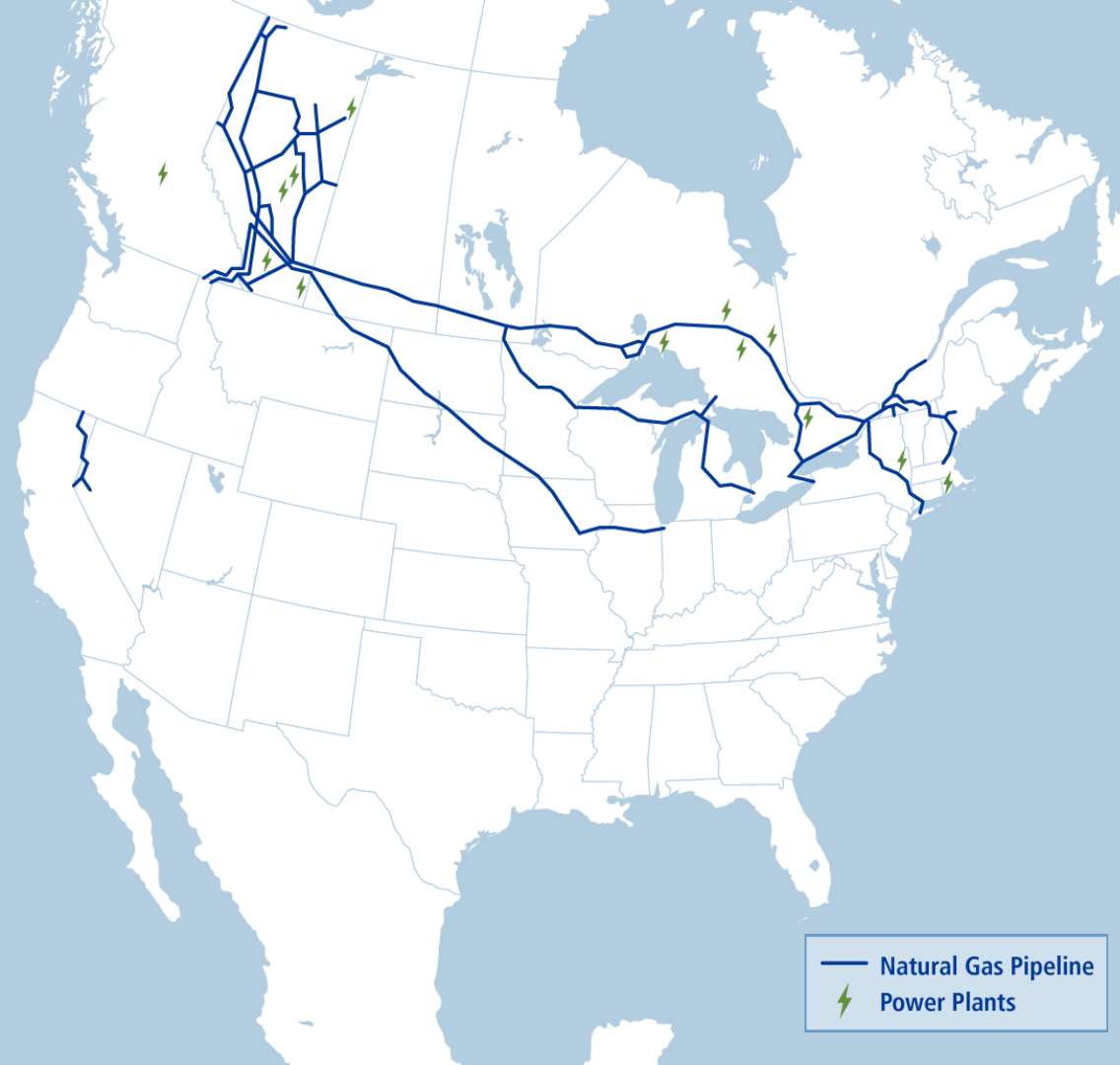
Our forward looking information is subject to risks and uncertainties, including but not limited to: our ability to successfully implement our strategic initiatives and whether they will yield the expected benefits, the operating performance of our pipeline and energy assets, economic and competitive conditions in North America and globally, the availability and price of energy commodities and changes in market commodity prices, the amount of capacity sold and rates achieved in our pipeline businesses, the amount of capacity payments and revenues we receive from our energy business, regulatory decisions and outcomes, outcomes of legal proceedings, including arbitration and insurance claims, performance of our counterparties, changes in the political environment, changes in environmental and other laws and regulations, construction and completion of capital projects, labour, equipment and material costs, access to capital markets, interest and foreign exchange rates, weather, cyber security and technological developments. You can read more about these risks and others in our most recent Quarterly Report to Shareholders and 2014 Annual Report filed with Canadian securities regulators and the U.S. Securities and Exchange Commission (SEC) and available at www.transcanada.com.

As actual results could vary significantly from the forward-looking information, you should not put undue reliance on forward-looking information and should not use future-oriented information or financial outlooks for anything other than their intended purpose. We do not update our forward-looking statements due to new information or future events, unless we are required to by law.

This presentation contains reference to certain financial measures (non-GAAP measures) that do not have any standardized meaning as prescribed by U.S. generally accepted accounting principles (GAAP) and therefore may not be comparable to similar measures presented by other entities. These non-GAAP measures may include Comparable Earnings, Comparable Earnings per Share, Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA), Comparable EBITDA, and Funds Generated from Operations. Reconciliations to the most closely related GAAP measures are included in our most recent Quarterly Report to Shareholders filed with Canadian securities regulators and the SEC and available at www.transcanada.com.

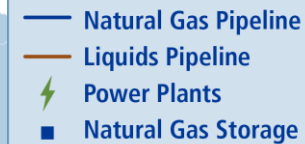
TransCanada in 2000

- Asset Base: \$26 billion
- Comparable EBITDA: \$2.5 billion



TransCanada Today

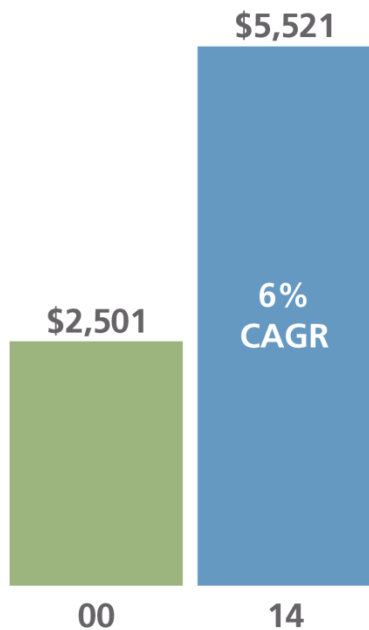
- One of North America's Largest Natural Gas Pipeline Networks
 - 68,000 km (42,000 mi) of pipeline
 - 368 Bcf of storage capacity
 - 14 Bcf/d or 20% of continental demand
- Premier Liquids Pipeline System
 - 4,250 km (2,600 mi) of pipeline
 - 530,000 bbl/d or 18% of Western Canadian production
- Largest Private Sector Power Generator in Canada
 - 19 power plants, 10,900 MW
- Enterprise Value ~ \$73 billion



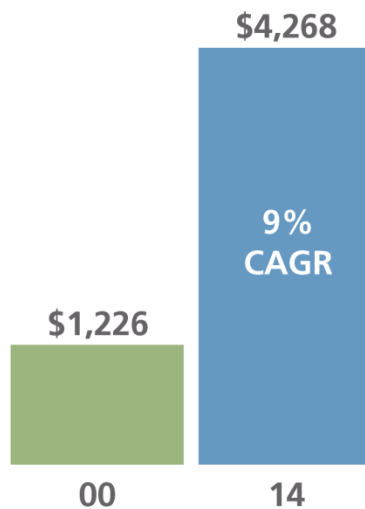
➔ **Unparalleled Portfolio of
Complementary Energy
Infrastructure Assets**

Realizing Our Vision

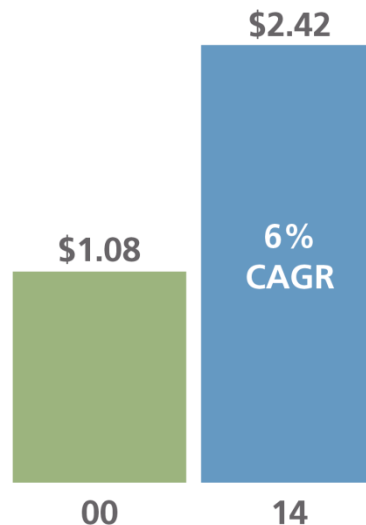
Comparable EBITDA
(\$Millions)



Funds Generated from Operations
(\$Millions)



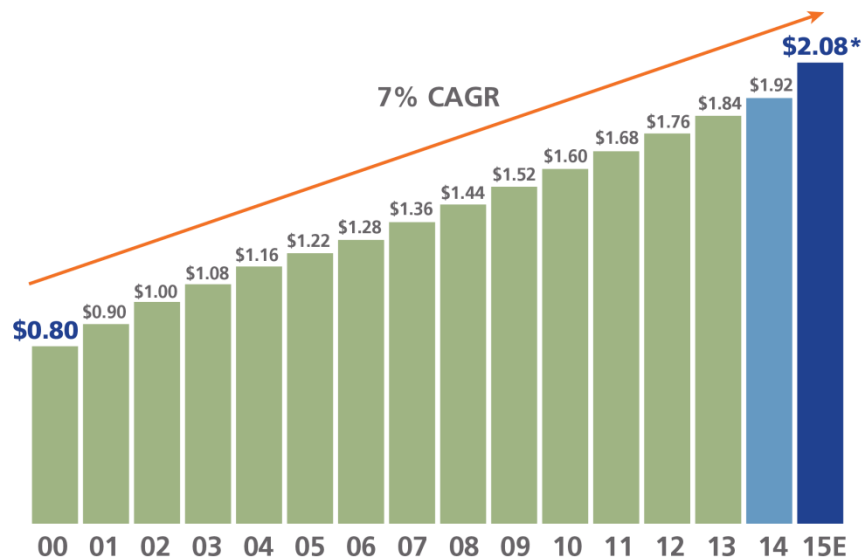
Earnings per Share
(Comparable)



Compound Annual Growth Rate (CAGR)

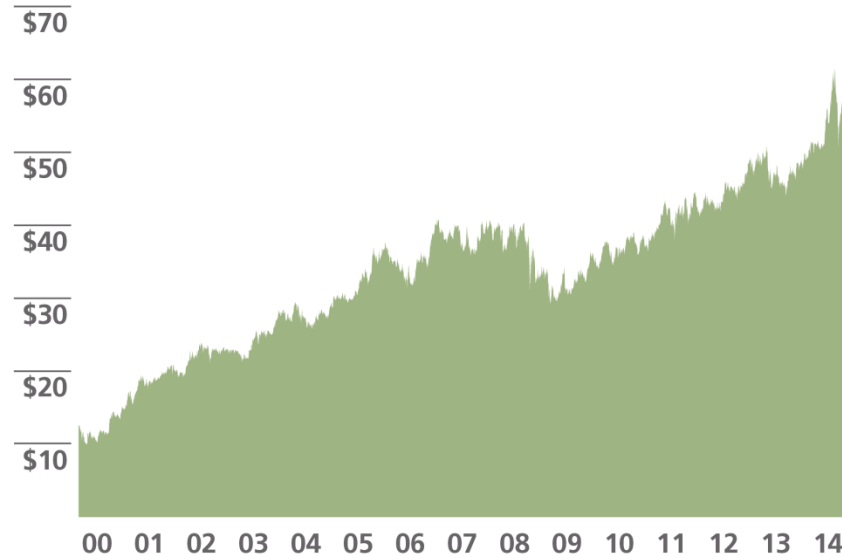
Track Record of Delivering Long-Term Shareholder Value

Common Share Dividend



* Annualized based on second quarter declaration

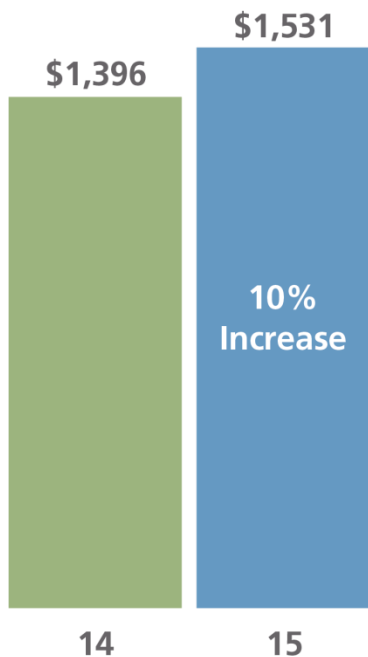
Common Share Price



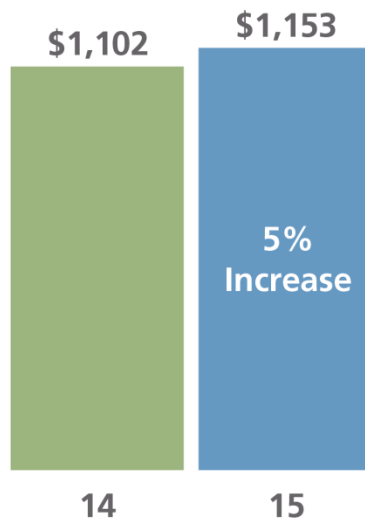
 **15% Average Annual Total Shareholder Return Since 2000**

First Quarter 2015 Financial Highlights

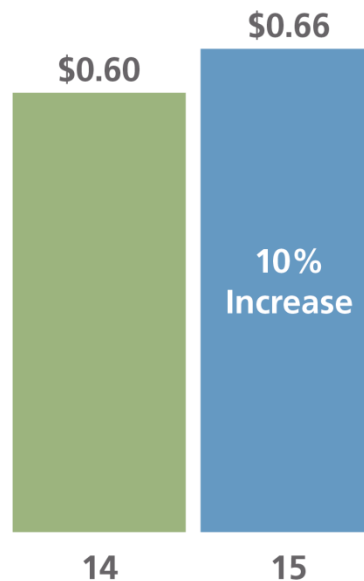
Comparable EBITDA
(\$Millions)



Funds Generated from Operations
(\$Millions)



Earnings per Share
(Comparable)



Our Priorities

- Maximize value of our \$64 billion asset base
- Complete \$46 billion capital program
- Cultivate a portfolio of low-risk growth opportunities
- Maintain financial strength and flexibility



**Deliver Superior
Long-Term
Returns to
Shareholders**

Maximizing the Value of our Base Business



Long-term stability for Canadian Mainline and ANR Pipeline

Maximizing the Value of our Base Business



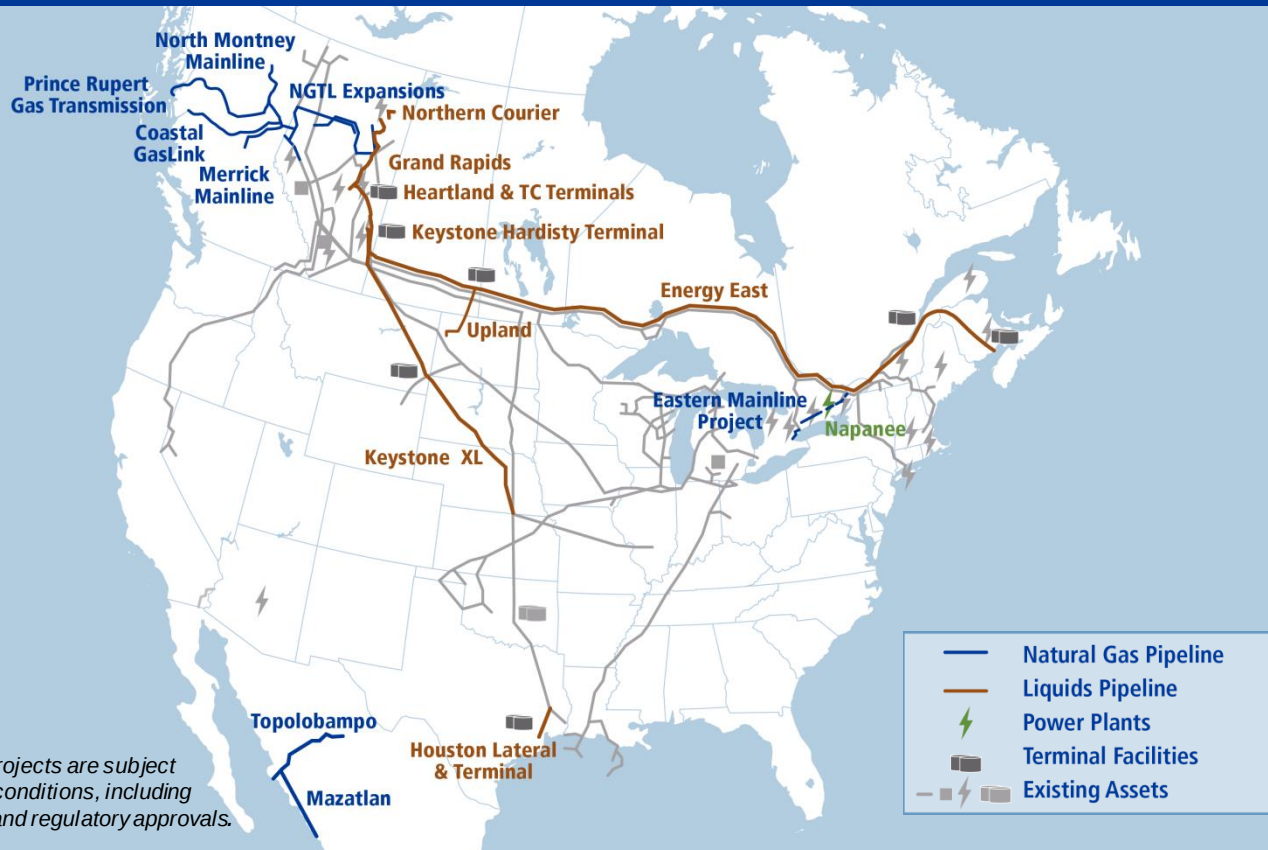
➔ **Keystone Pipeline EBITDA surpassed \$1 billion**

Maximizing the Value of our Base Business



 **Bruce Power and Ontario Solar online**

\$46 Billion Portfolio of Commercially Secured Projects*



Predictable & stable earnings and cash flow for decades

** Certain projects are subject to various conditions, including corporate and regulatory approvals.*

\$12 Billion of Small to Medium-Sized Projects Drive Growth*

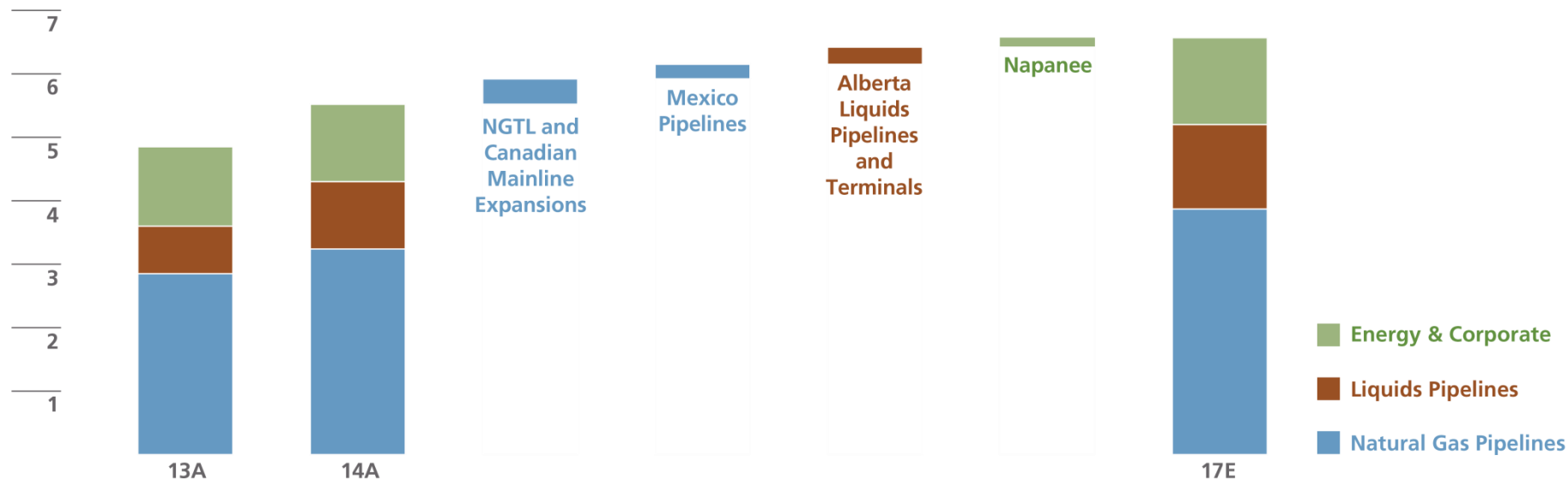


Projects expect to be completed by the end of 2017

* Certain projects are subject to various conditions, including corporate and regulatory approvals.

EBITDA Growth 2013A – 2017E*

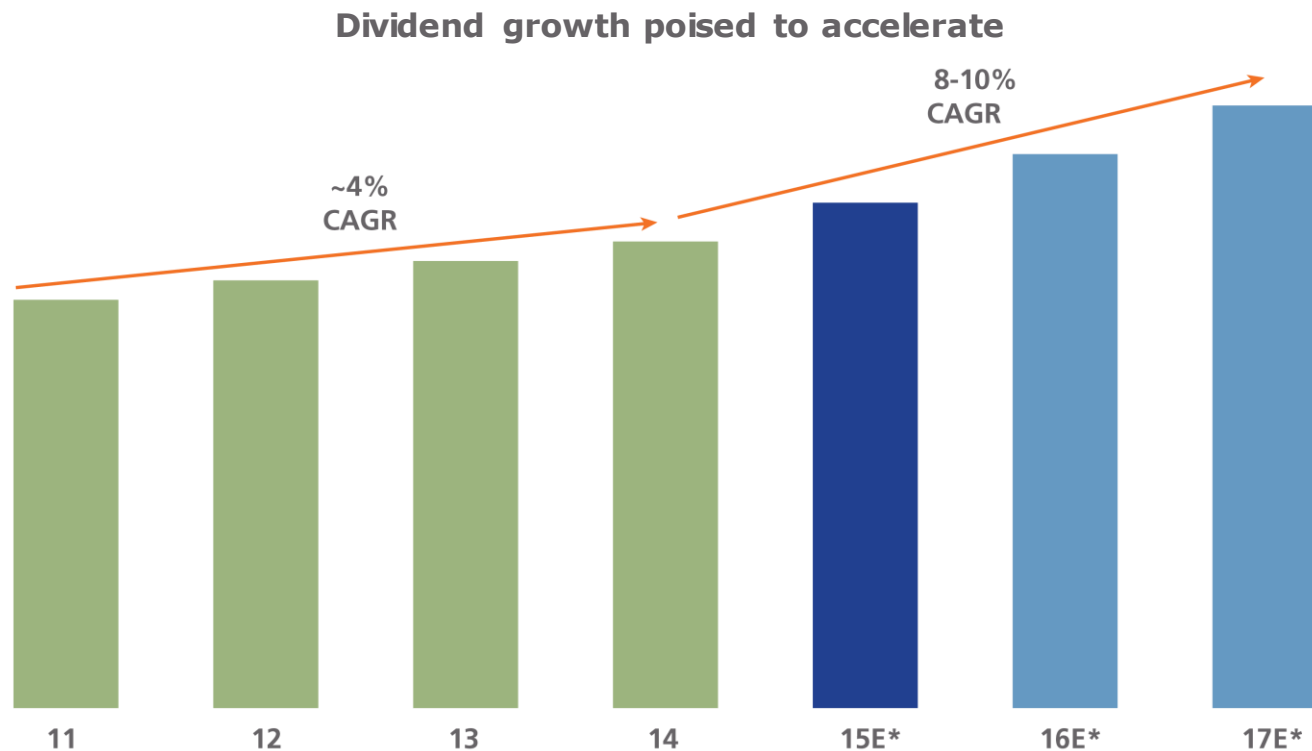
\$ Billions



* TransCanada share in billions of dollars. Certain projects are subject to various conditions including corporate and regulatory approvals. Includes existing assets, non-controlling interests in U.S. Natural Gas Pipelines and full year EBITDA contribution from \$12 billion of commercially secured projects expected to be in service by the end of 2017.

~8% CAGR in EBITDA through 2017

Dividend Outlook



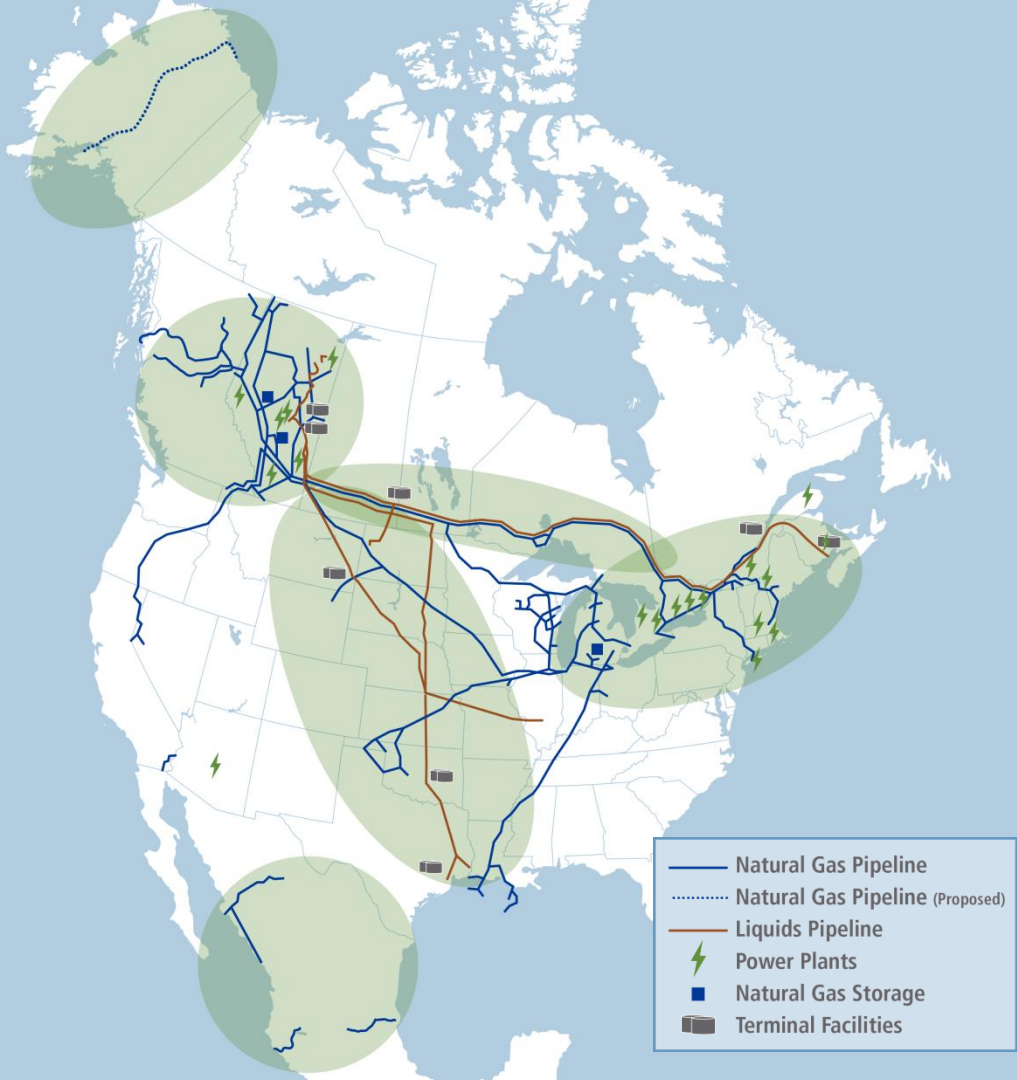
* Dividends are declared at the discretion of the Board of Directors



Equates to ~35%
of cash flow

Strong Platform for Future Growth

- North America requires new and improved energy infrastructure
- Secured \$34 billion in large-scale projects
- Numerous additional opportunities in our core markets
- Advancing growth plans will deliver exceptional value for shareholders



Natural Gas Pipelines Growth Opportunities



- Advance \$13 billion of large-scale commercially secured projects*
- Leverage NGTL's strong competitive position
- Connect growing Marcellus/Utica gas to market
- Capitalize on build-out of Mexico infrastructure

** Certain projects are subject to various conditions, including corporate and regulatory approvals.*

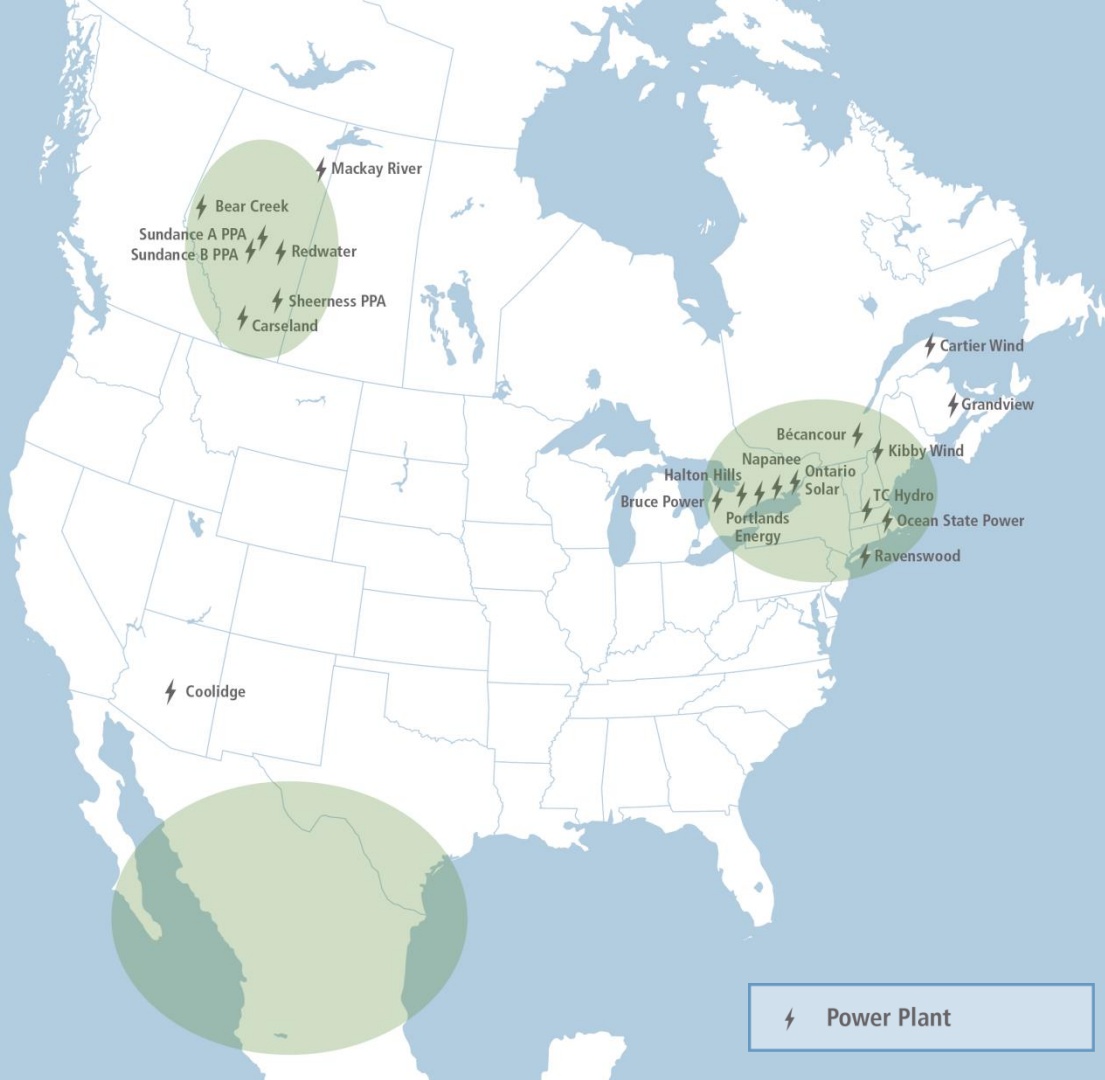
Liquids Pipelines Growth Opportunities



- Advance \$21 billion of large-scale commercially secured projects*
- Connect growing Western Canadian and U.S. oil supply to key refining markets
- Capture Alberta regional liquids infrastructure opportunities
- Extend market connectivity

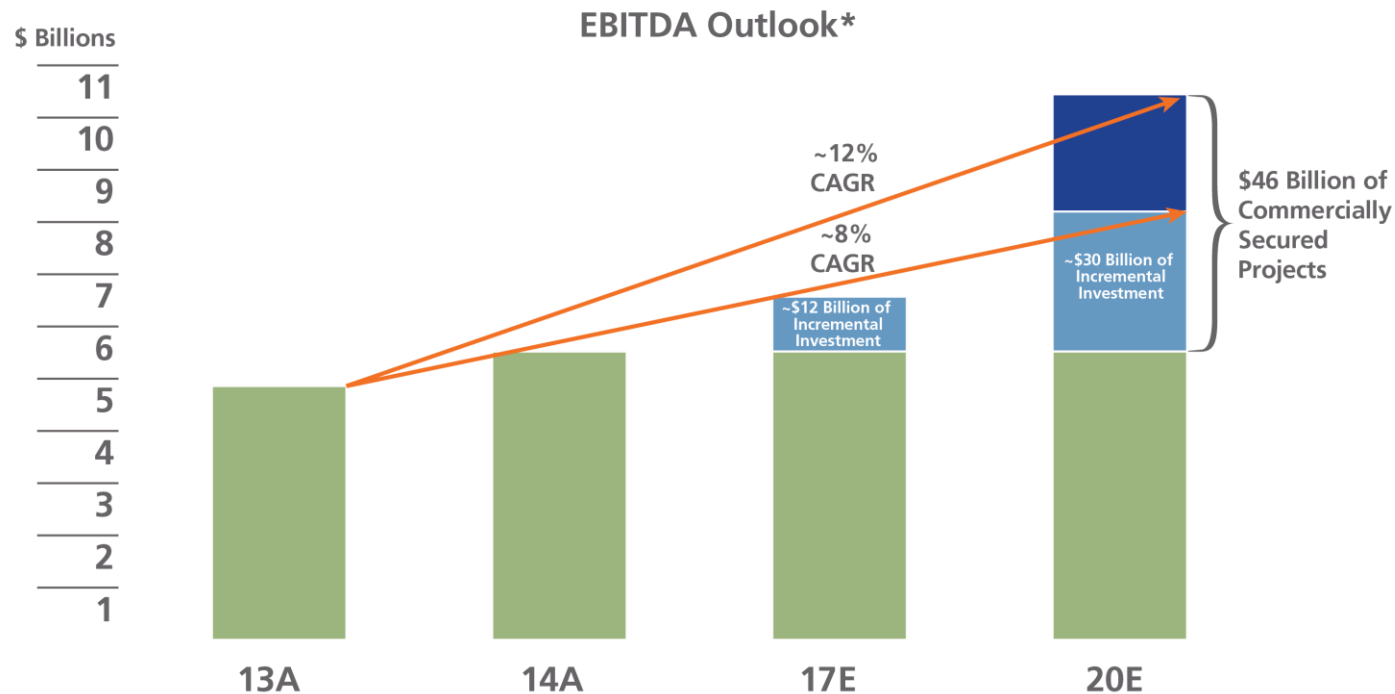
** Certain projects are subject to various conditions, including corporate and regulatory approvals.*

Energy Growth Opportunities



- Bruce Power refurbishments
- Renewables: wind, solar and hydro
- Natural gas-fired generation
- Mexico power
- Repowering opportunities

Deliver Significant Growth

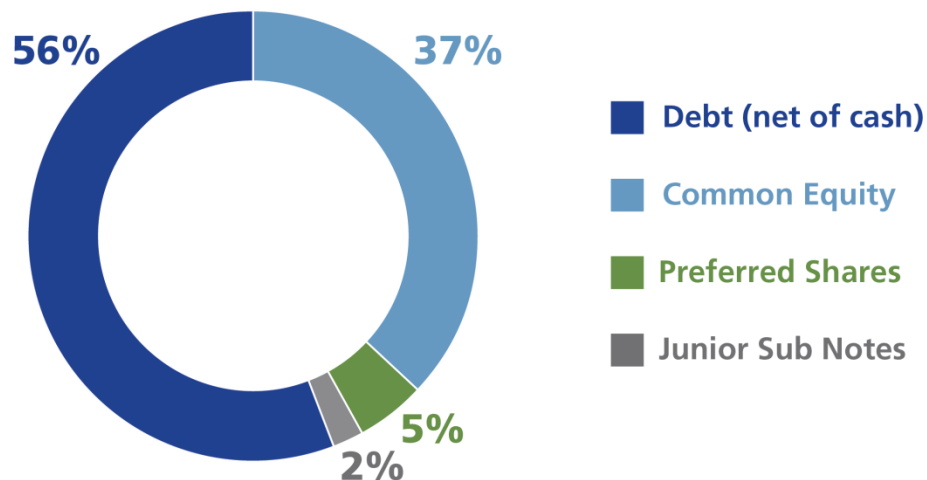


Predictable and sustainable EBITDA growth

* Includes existing assets, non-controlling interests in U.S. natural gas pipelines and \$46 billion of commercially secured projects expected to be in service by 2020, subject to certain conditions including corporate and regulatory approvals.

Financial Flexibility Enhances Long-Term Shareholder Value

Strong Financial Position*
Supports Access to Significant Capital at Attractive Rates



Funding Options Available:

- Internally generated cash flow
- Senior debt
- Preferred shares and hybrid securities
- Portfolio management including asset sales to TC PipeLines, LP
- Partners/Project Finance
- Dividend reinvestment plan
- Discrete common equity issue

* At March 31, 2015. Common equity includes non-controlling interests in TC PipeLines, LP and Portland.

Focus on Safety



Commitment to Responsible Development



Corporate
Social
Responsibility
Report

Summary
2014



It's what matters.

Conclusion



2015 Annual and Special Meeting

A worker in an orange safety suit and yellow hard hat is working on large industrial pipes. The worker is positioned in the center-left of the frame, leaning over a large pipe. The pipes are metallic and run diagonally across the image. The background shows more industrial equipment and a red structure.

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