TransCanada Investor Day

November 13, 2018

Forward Looking Information and Non-GAAP Measures

This presentation includes certain forward looking information, including future oriented financial information or financial outlook, which is intended to help current and potential investors understand management's assessment of our future plans and financial outlook, 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 in this presentation includes statements related to future dividend and earnings growth and the future growth of our core businesses, and the cost and completion date of our capital projects, among other things.

Our forward looking information is based on certain key assumptions and is subject to risks and uncertainties, including but not limited to: our ability to successfully implement our strategic priorities and whether they will yield the expected benefits, the operating performance of our pipeline and energy assets, amount of capacity sold and rates achieved in our pipeline businesses, the availability and price of energy commodities, the amount of capacity payments and revenues from our energy business, regulatory decisions and outcomes, including those related to recent FERC policy changes, outcomes of legal proceedings, including arbitration and insurance claims, performance and credit risk of our counterparties, changes in market commodity prices, changes in the regulatory environment, changes in the political environment, changes in environmental and other laws and regulations, competitive factors in the pipeline and energy sectors, construction and completion of capital projects, costs for labour, equipment and materials, access to capital markets, interest, tax and foreign exchange rates, including the impact of U.S. Tax Reform, weather, cyber security, technological developments and economic conditions in North America as well as globally. You can read more about these risks and others in our October 31, 2018 Quarterly Report to Shareholders and 2017 Annual Report filed with Canadian securities regulators and the 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 Common Share, Comparable Earnings Before Interest, Taxes, Depreciation and Amortization (Comparable EBITDA), Funds Generated from Operations, Comparable Funds Generated from Operations, Comparable Distributable Cash Flow (DCF) and Comparable DCF per Common Share. Reconciliations to the most directly comparable GAAP measures are included in this presentation and in our October 31, 2018 Quarterly Report to Shareholders filed with Canadian securities regulators and the SEC and available at www.transcanada.com.

Strategic Overview

Russ Girling

President and Chief Executive Officer

TransCanada

Key Themes

Businesses Performing Very Well

- Demand for our services has never been greater
- Record financial results expected in 2018

Proven Strategy – Low-Risk Business Model

- Invested ~$85 billion in our core businesses since 2000
- Delivered 12% average annual total shareholder return

Diversified High-Quality Assets Provide Multiple Platforms for Growth

- Five operating businesses, in three core geographies
- 95% of Comparable EBITDA from regulated assets or long-term contracts

Visible Growth

- Advancing $36 billion of secured projects
- $20+ billion of projects under development

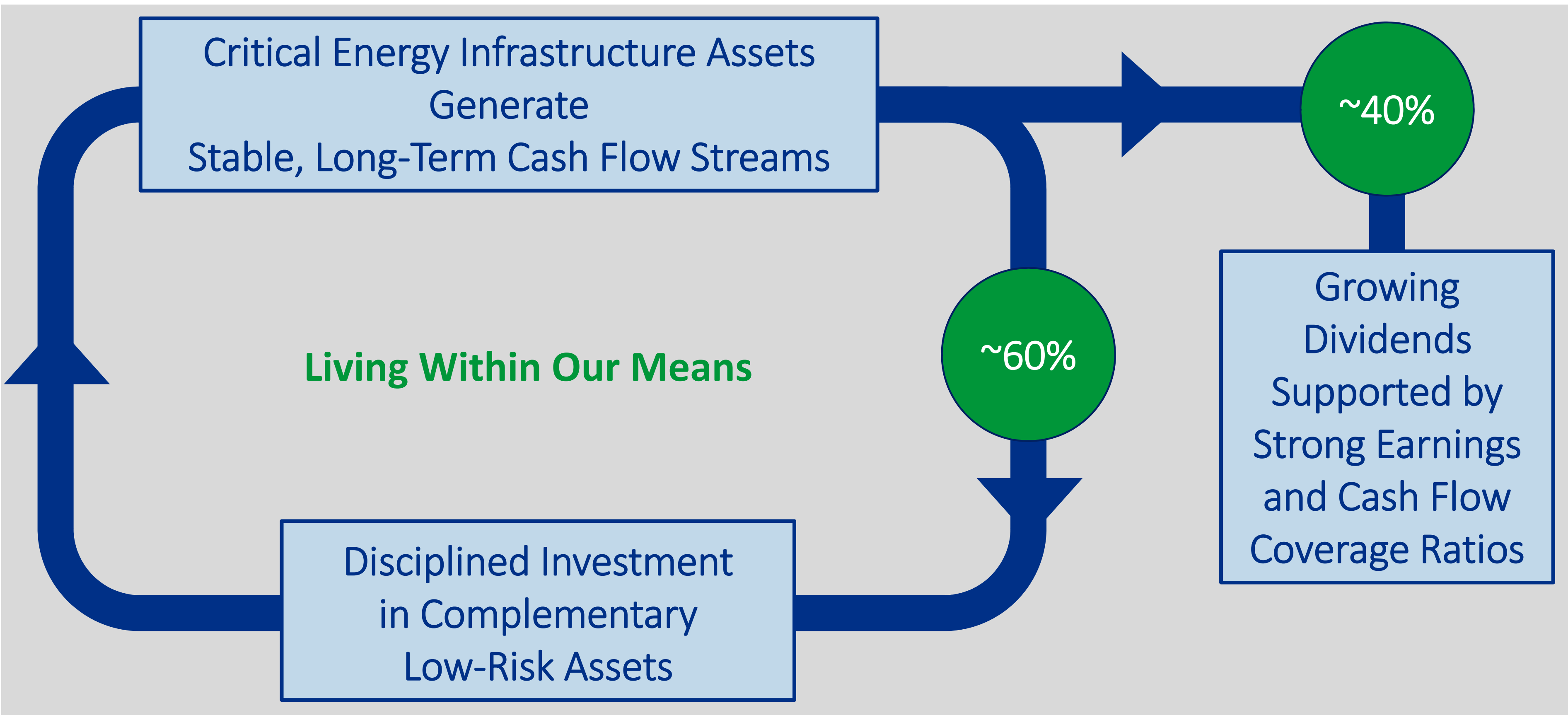
Dividend Poised to Continue to Grow

- Annual increases of 8 to 10% expected through 2021
- Supported by growth in earnings and cash flow

Financial Strength and Flexibility

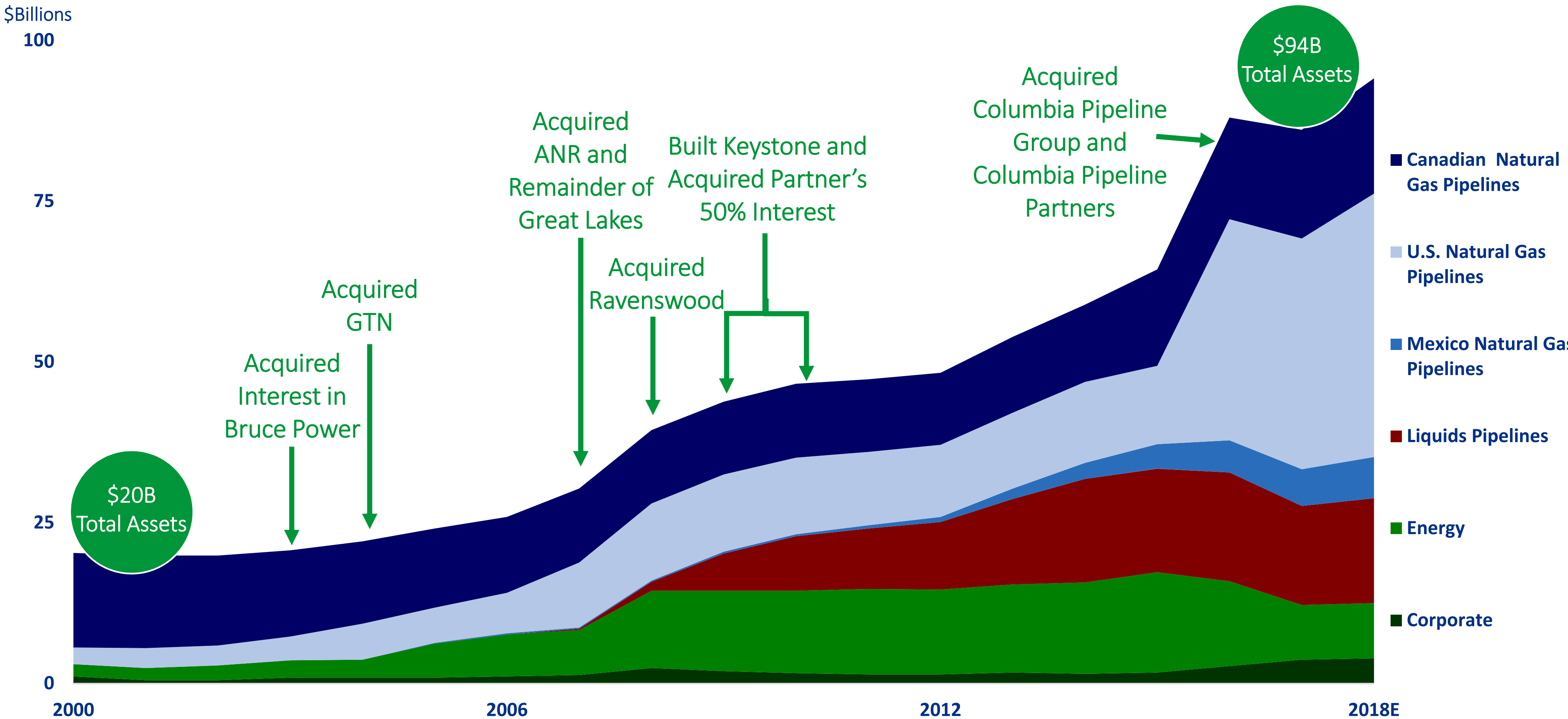
- Value 'A' grade credit ratings
- Consistent approach to capital allocation has delivered results

Proven Capital Allocation Framework Delivers Results



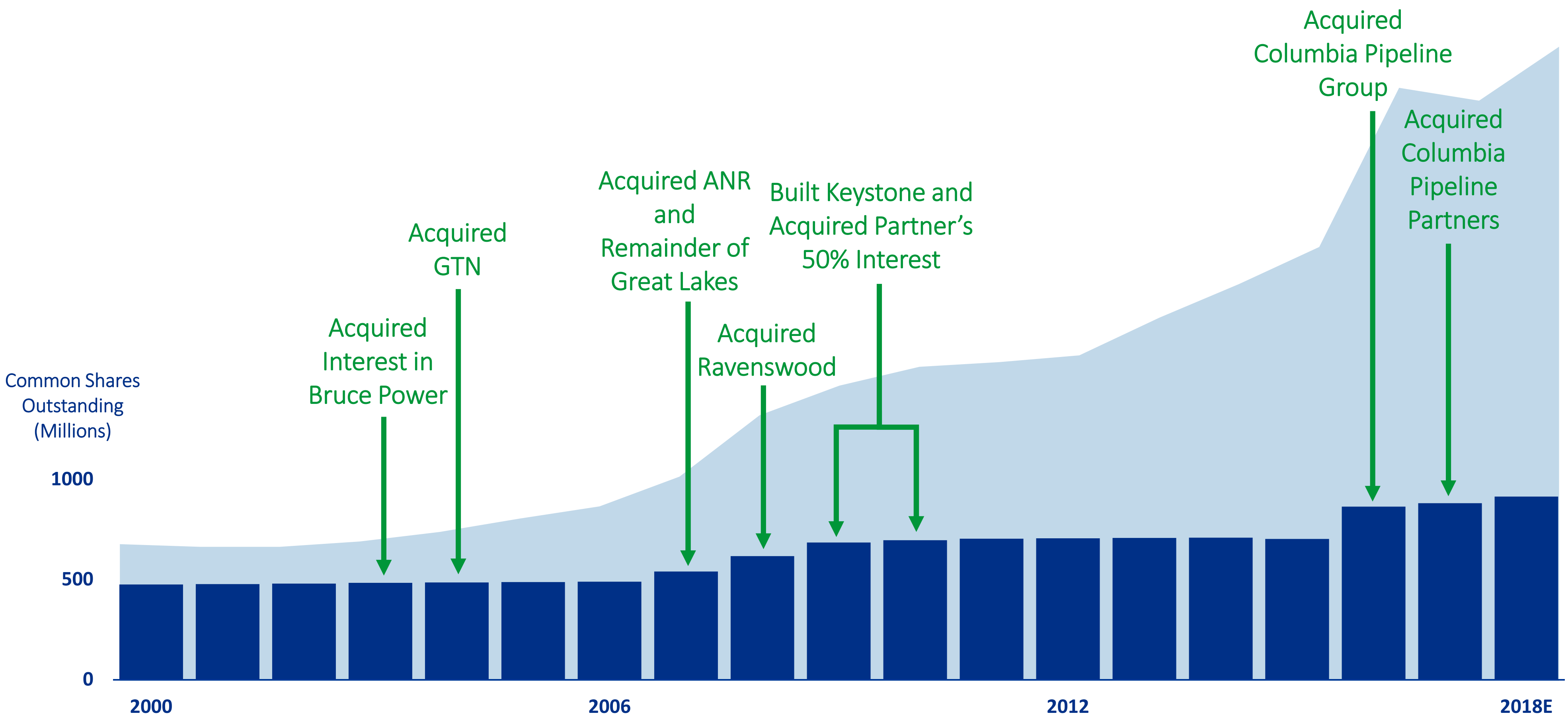
Produced Double-Digit Average Annual Total Shareholder Return Since 2000

~$85 Billion Invested Since 2000



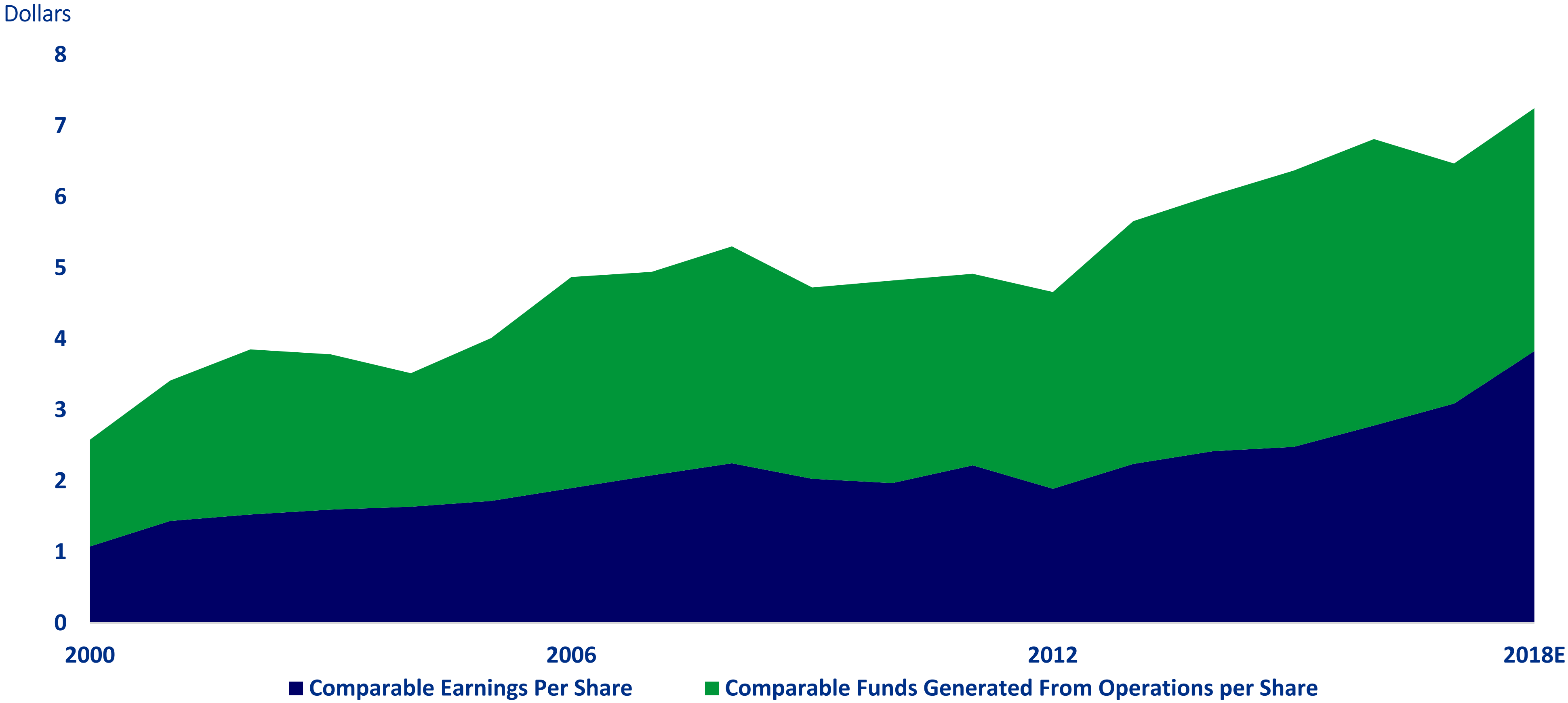
Today we are a Leading North American Energy Infrastructure Company

Track Record of Living Within Our Means



Common Share Issuance Historically Tied to Transformational Activity

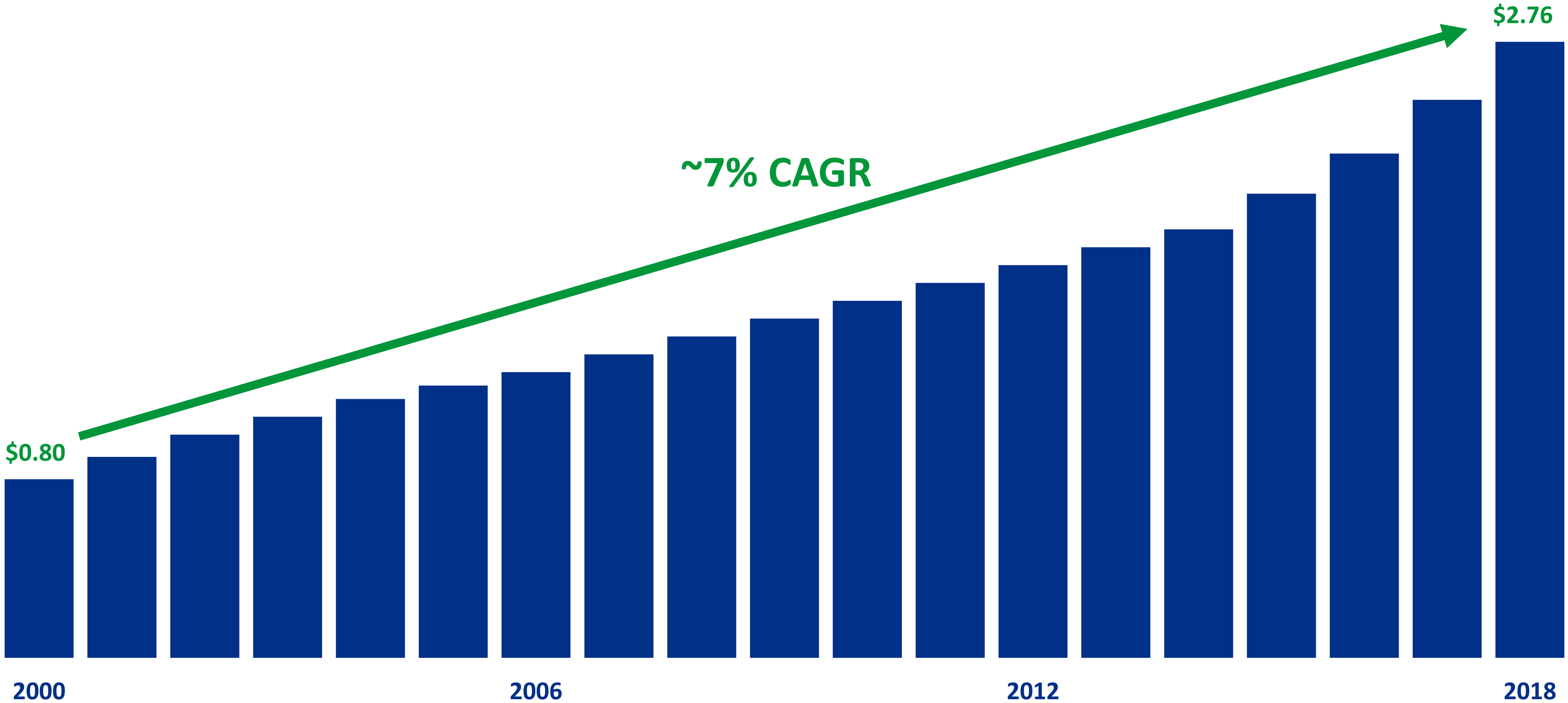
Investment has Created Significant Value



Delivering Substantial Growth on a Per Share Basis

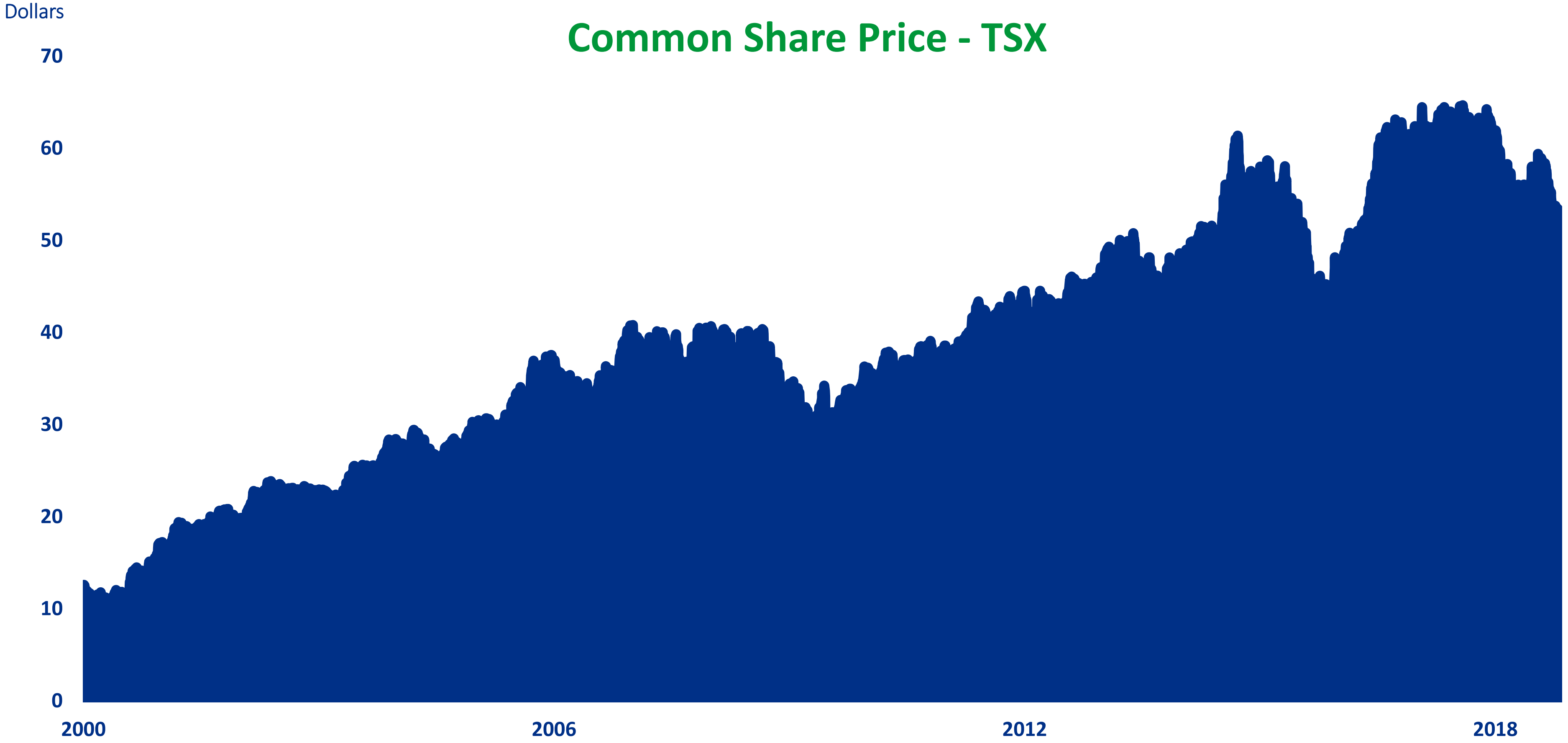
Comparable Earnings per Common Share and Comparable Funds Generated from Operations per share are non-GAAP measures. See the forward looking information and non-GAAP measures slide at the front of this presentation for more information.

Eighteen Consecutive Years of Common Share Dividend Increases



Supported by Growth in Earnings and Cash Flow and Strong Coverage Ratios

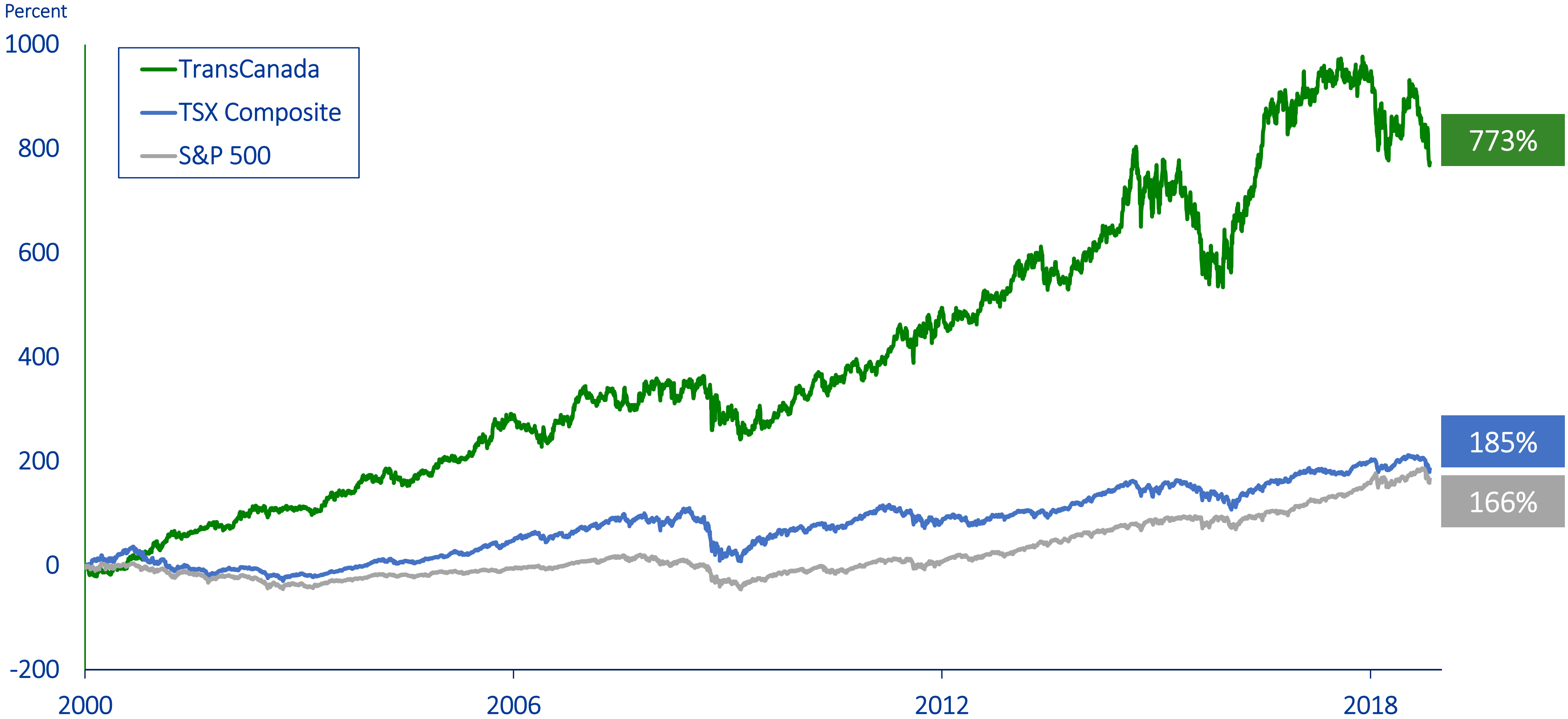
Performance Has Resulted in Significant Share Price Appreciation



12% Average Annual Total Shareholder Return Since 2000

Source: FactSet

Superior Total Shareholder Return



Source: FactSet data from January 1, 2000 to October 31, 2018

Outperforming Broader Market

TransCanada Today

One of North America's Largest Natural Gas Pipeline Networks

- 91,900 km (57,100 mi) of pipeline
- 653 Bcf of storage capacity
- 23 Bcf/d; ~25% of continental demand

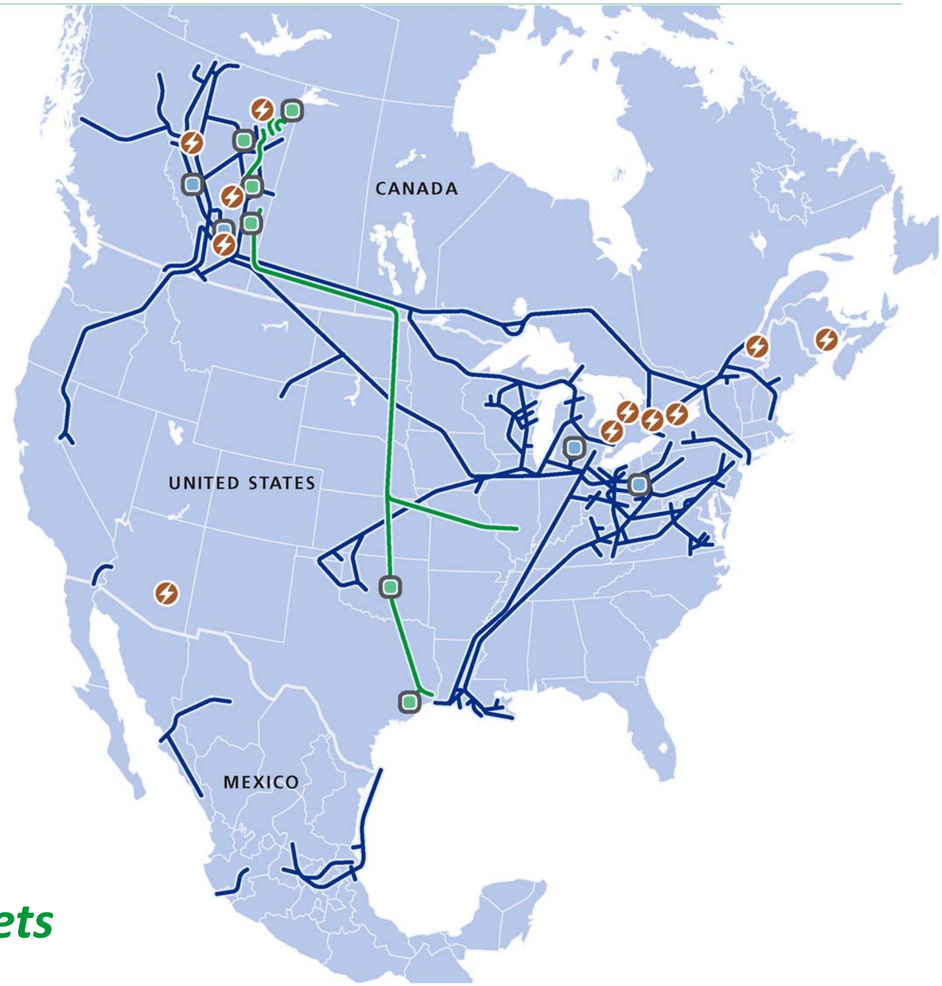
Premier Liquids Pipeline System

- 4,900 km (3,000 mi) of pipeline
- 590,000 Bbl/d Keystone System transports ~20% of Western Canadian exports

One of the Largest Private Sector Power Generators in Canada

- 11 power plants, 6,600 MW*
- Primarily long-term contracted assets

Enterprise Value ~$100 billion



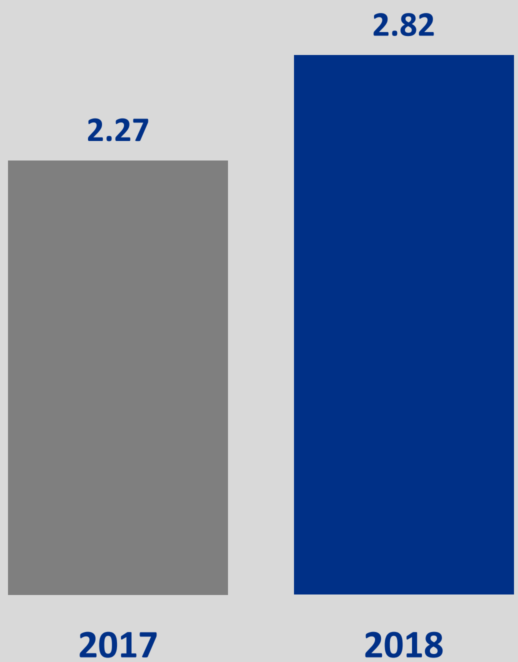
Portfolio of Critical Energy Infrastructure Assets

**Includes Napanee (under construction)*

Financial Highlights – Nine Months Ended September 30 (Non-GAAP)

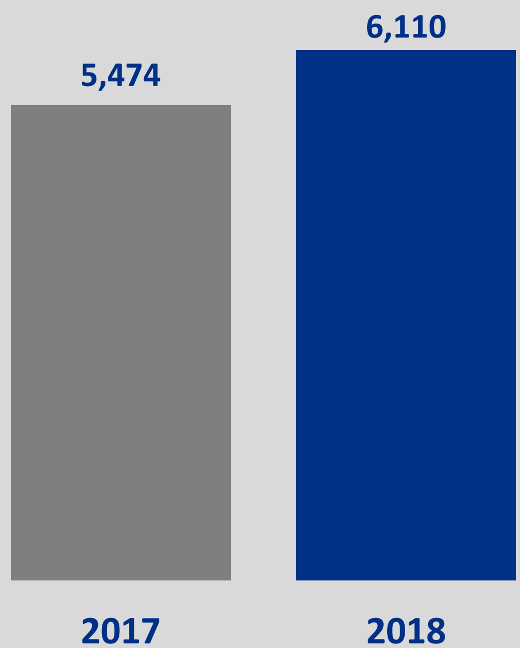
Comparable
Earnings per Common Share*
(Dollars)

24% Increase



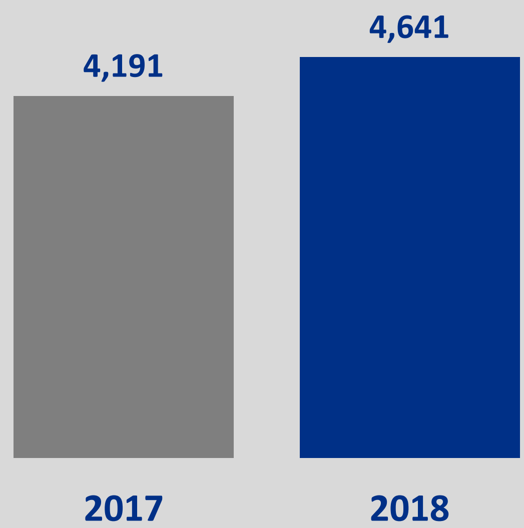
Comparable
EBITDA*
($Millions)

12% Increase



Comparable Funds
Generated From Operations*
($Millions)

11% Increase



**Comparable Earnings per Common Share, Comparable EBITDA and Comparable Funds Generated from Operations are non-GAAP measures. See the forward looking information and non-GAAP measures slide at the front of this presentation for more information.*

2018 Accomplishments

- ✓ **Generating record financial results**
- ✓ **Navigated through U.S. Tax Reform and 2018 FERC Actions**
- ✓ **Advanced $36 billion secured capital program**
  - Added $12 billion to project backlog in 2018
  - Placed $3 billion of assets in-service
  - Expect to place an additional $10 billion of assets in-service by early 2019
- ✓ **Progressed over $20 billion of projects under development**
- ✓ **Raised $8.1 billion in capital markets to help fund growth program**
- ✓ **Realized $1.0 billion through portfolio management activities including the sale of Cartier Wind**
- ✓ **On track to achieve targeted credit metrics**

Six Key Strategic Priorities

- ✓ Deliver energy safely and reliably, every day
- ✓ Maximize value of our $94 billion asset base
- ✓ Execute $36 billion secured capital program on-time, on-budget
- ✓ Advance over $20 billion of projects under development
- ✓ Cultivate a portfolio of additional low-risk growth opportunities
- ✓ Maintain our financial strength and flexibility

Deliver Superior Long-Term Shareholder Returns

Environmental, Social and Governance Commitment

Safety and reliability are critical priorities

- Operating objectives, targets and results

Long history of working collaboratively with stakeholders

- Customers, landowners, Indigenous groups, governments, regulators and local communities
- Active throughout life-cycle: development, construction and operations

Adhere to highest standards of corporate governance

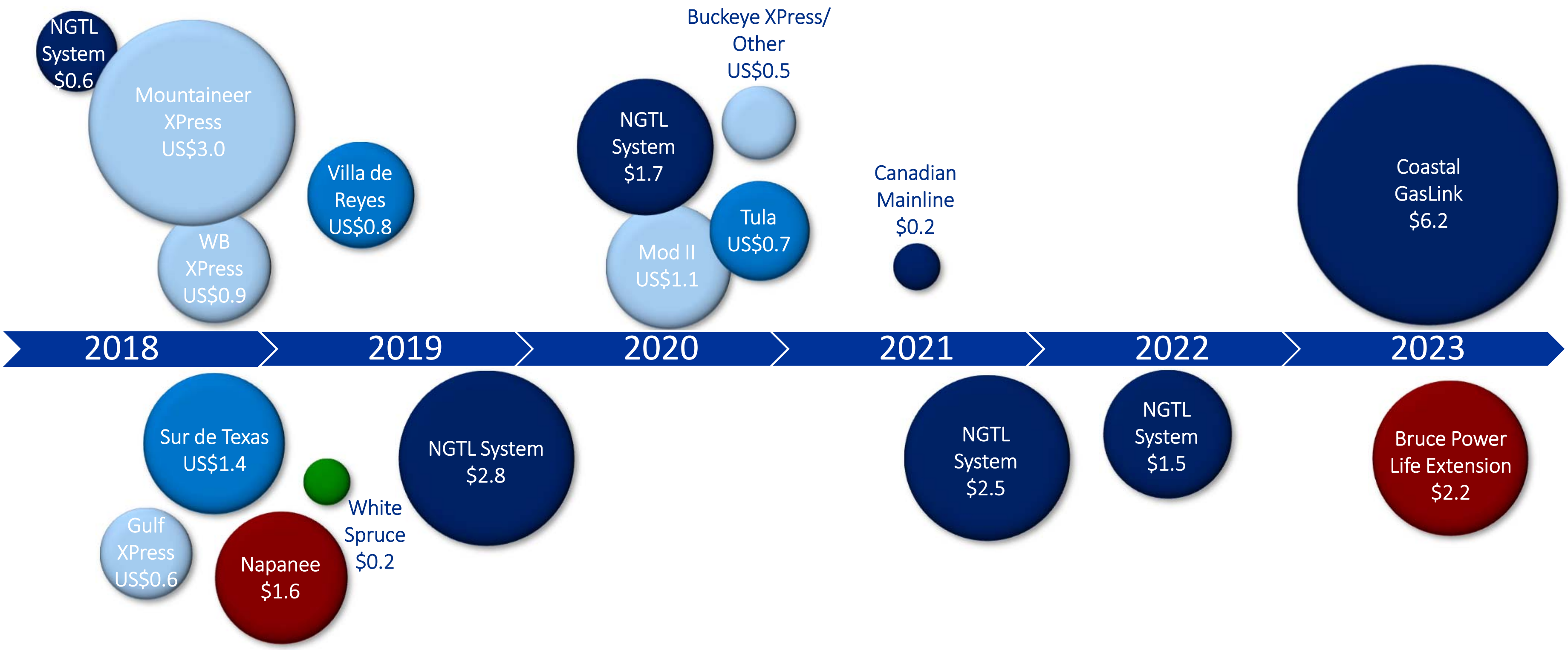
- Consistent top-tier performance in independent governance assessments

Committed to protecting the environment

- Member of the Dow Jones Sustainability North American Index
- Voluntarily reported to CDP since 2006

Delivering Energy Responsibly

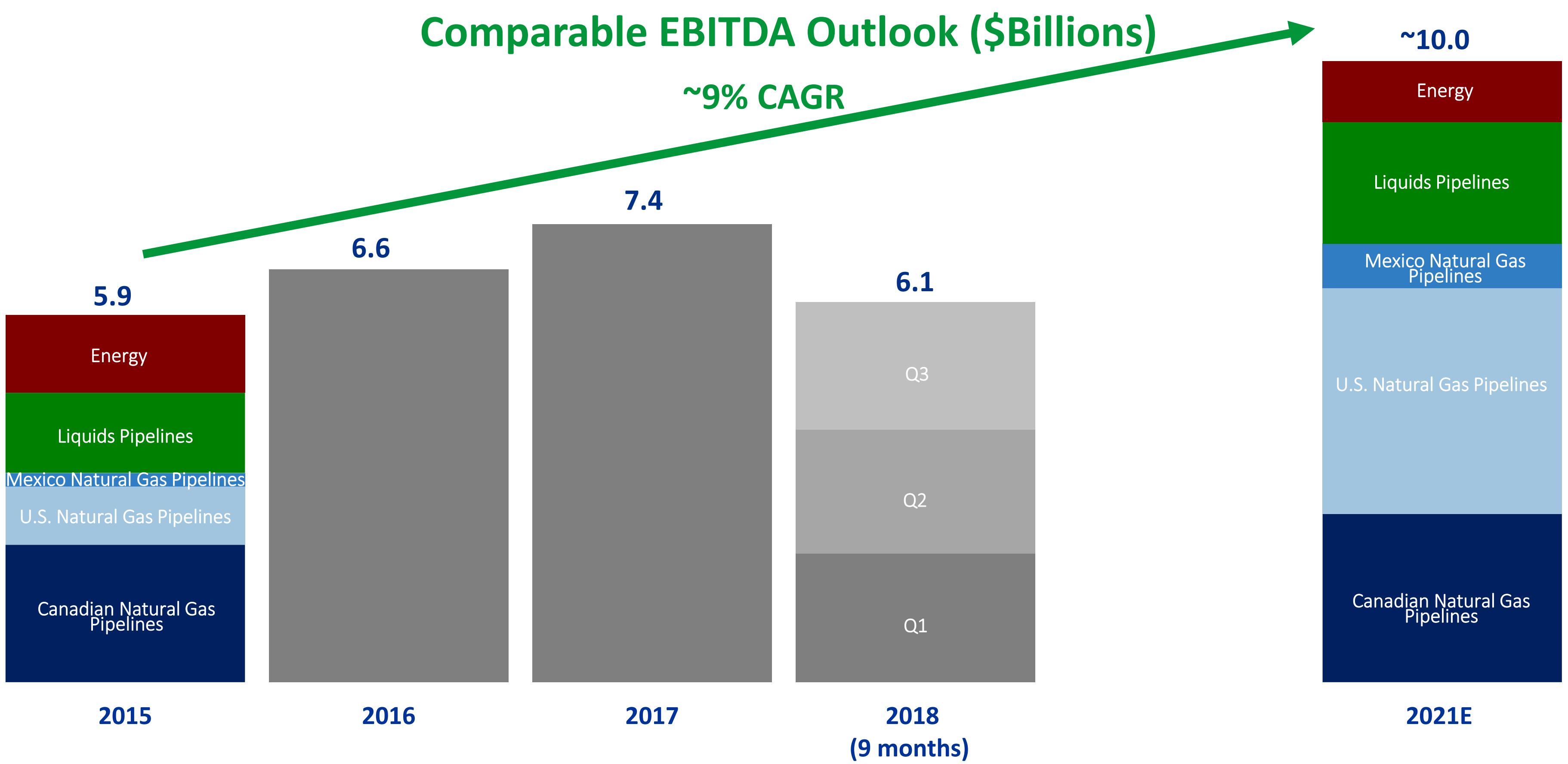
Advancing $36 Billion Secured Capital Program Through 2023*



Approximately $10 Billion Expected to Enter Service By Early 2019

**Amounts stated in billions of dollars and where applicable represent our proportionate share. Certain projects are subject to various conditions including corporate and regulatory approvals. For purposes of this illustration, maintenance capital is excluded.*

Secured Capital Program Drives Significant Growth

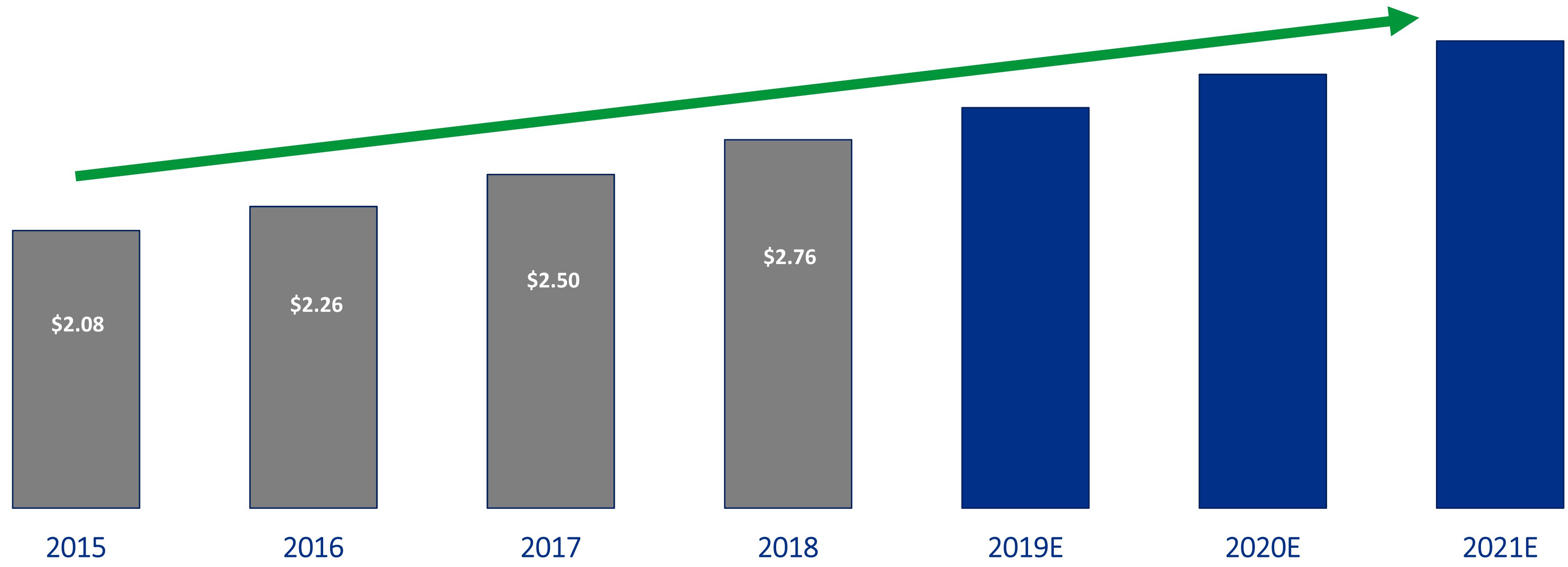


~95% of Comparable EBITDA to come from Regulated Assets or Long-Term Contracts

Comparable EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information.

Dividend Growth Outlook

Annual Growth of 8 to 10 Percent Expected Through 2021



Supported by Expected Growth in Earnings and Cash Flow and Continued Strong Coverage Ratios

$20 Billion+ of Projects Under Development

Natural Gas Pipelines

- Expansions across our extensive network including NGTL, Columbia and other pipelines serving premium markets

Liquids Pipelines

- Keystone XL
- Grand Rapids Phase II
- Heartland Pipeline
- Keystone Hardisty Terminal

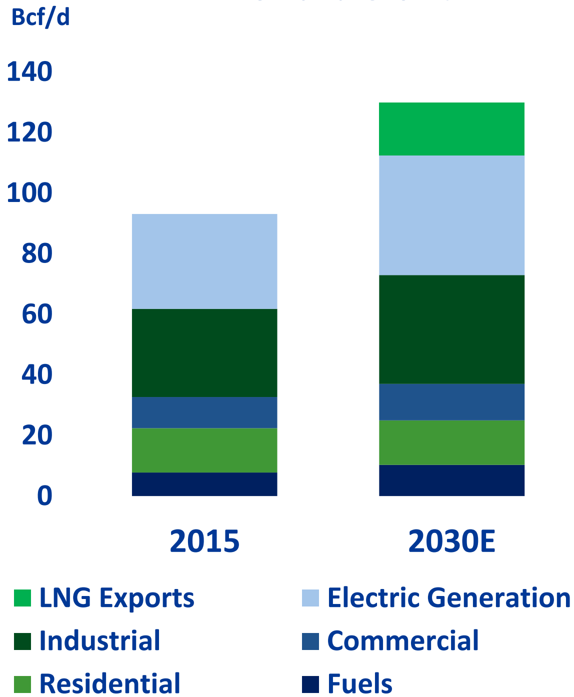
Energy

- Bruce Power Life Extension
- Pursue growth in contracted power

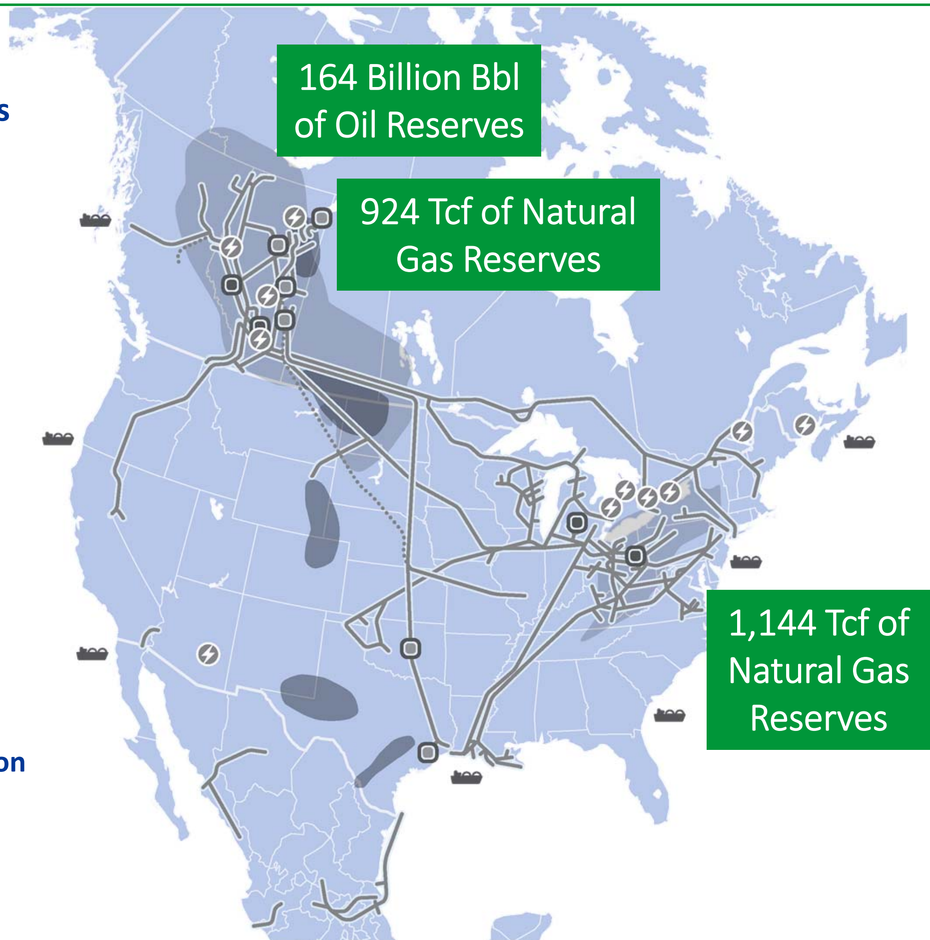
Over $20 Billion of Future Growth Opportunities

Strong Industry Fundamentals

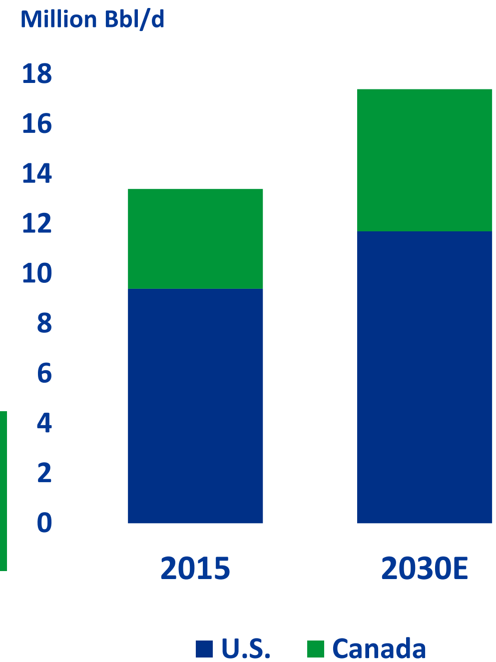
North American Natural Gas Demand Growth



Source: TransCanada Forecast



North American Crude Oil Supply Outlook



Source: CAPP, EIA

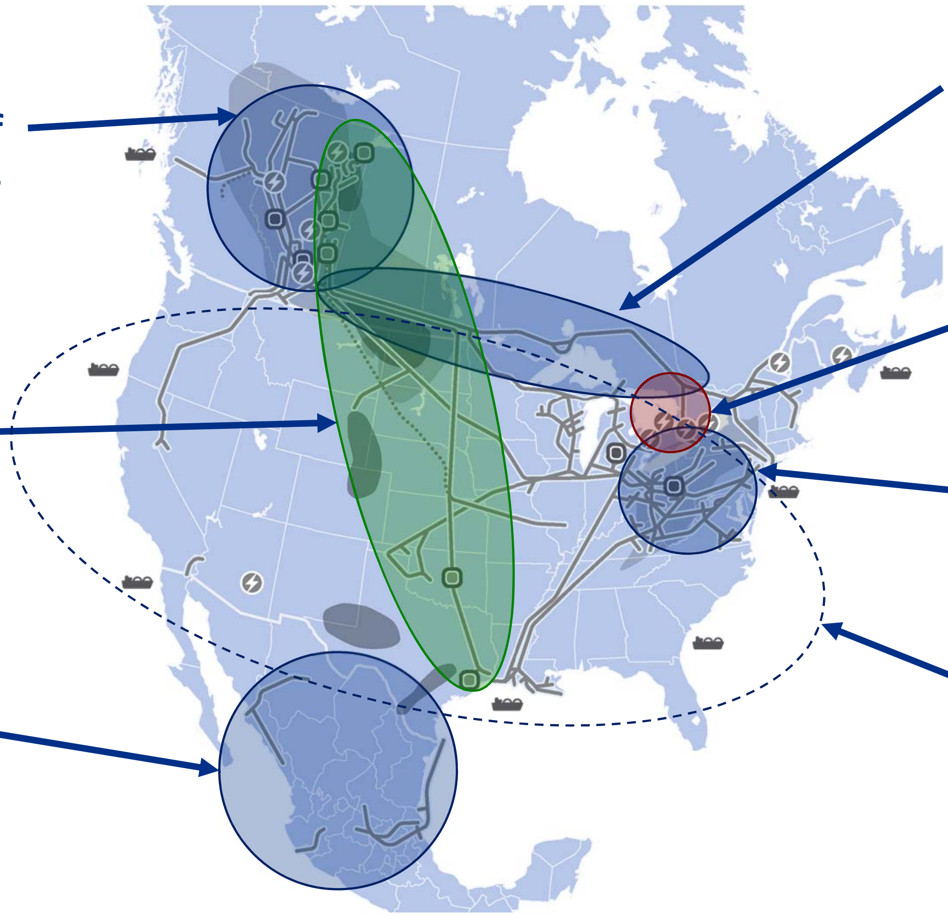
Highlights the Need for New Energy Infrastructure

Multiple Growth Platforms that Cannot be Replicated

NGTL System is uniquely positioned over 924 TCF of WCSB natural gas reserves

Keystone corridor provides a direct link to world's largest heavy oil refining market

Mexico Natural Gas Pipelines forming backbone of country's infrastructure



Canadian Mainline is a critical conduit to eastern markets

Bruce Power generates 30% of Ontario's power

Columbia Gas has an incumbent position over 1,144 TCF of Appalachian natural gas reserves

U.S. Natural Gas Pipelines connect abundant supply to key markets

Driving Over $50 Billion of Growth Opportunities

Our Executive Leadership Team

Russ Girling
President and Chief Executive Officer

Karl Johannson
Executive VP and President,
Canada and Mexico Natural Gas Pipelines and Energy

Tracy Robinson
Executive VP, Canadian Natural Gas Pipelines

Kristine Delkus
Executive VP, Stakeholder and
Technical Services and General Counsel

Wendy Hanrahan
Executive VP, Corporate Services

Don Marchand
Executive VP and
Chief Financial Officer

Stan Chapman
Executive VP and President,
U.S. Natural Gas Pipelines

Paul Miller
Executive VP and President,
Liquids Pipelines

Dean Patry
Senior VP, Liquids Pipelines

Francois Poirier
Executive VP, Strategy and
Corporate Development

Strategic Overview

Russ Girling

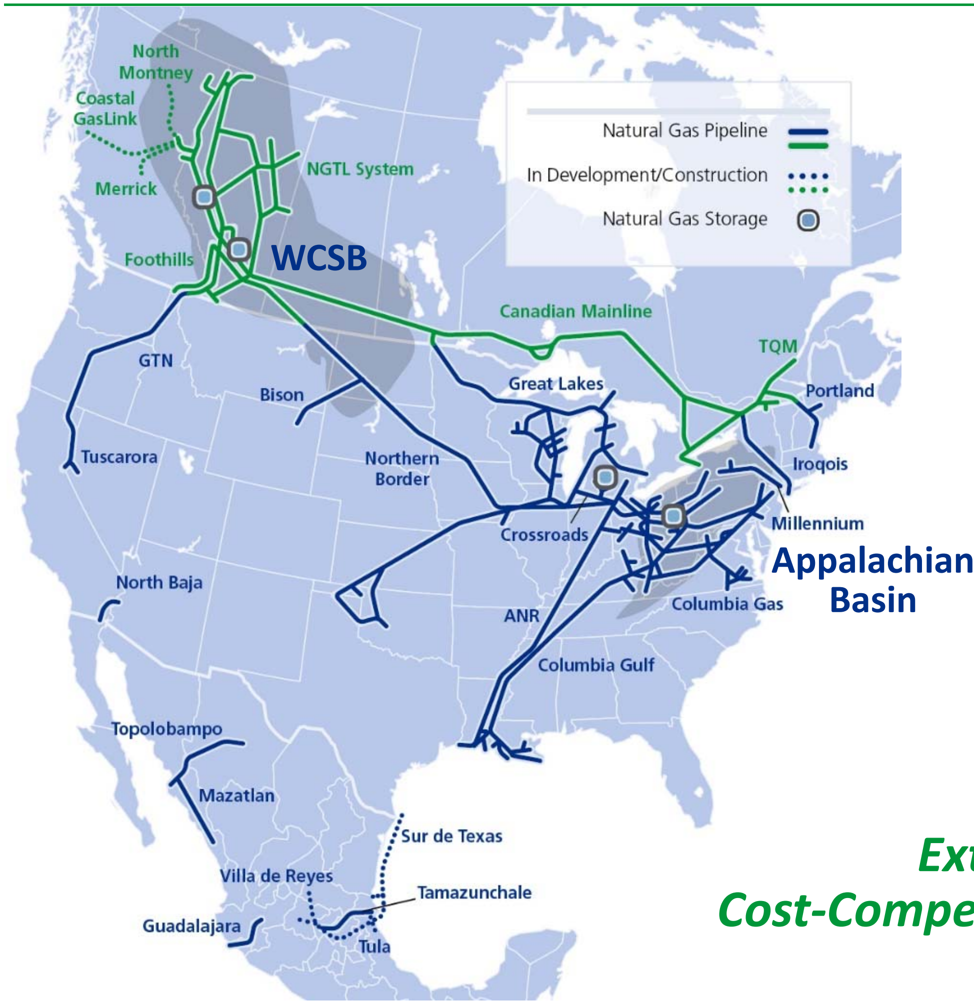
President and Chief Executive Officer

Canadian Natural Gas Pipelines

Tracy Robinson
Executive Vice President, Canadian Natural Gas Pipelines

TransCanada

Integrated High-Demand Natural Gas Pipeline Footprint



Well-positioned assets with access to North America's two most prolific natural gas supply basins

- 91,900 km (57,100 mi) of pipeline
- 653 Bcf of storage capacity

Diversified customer base

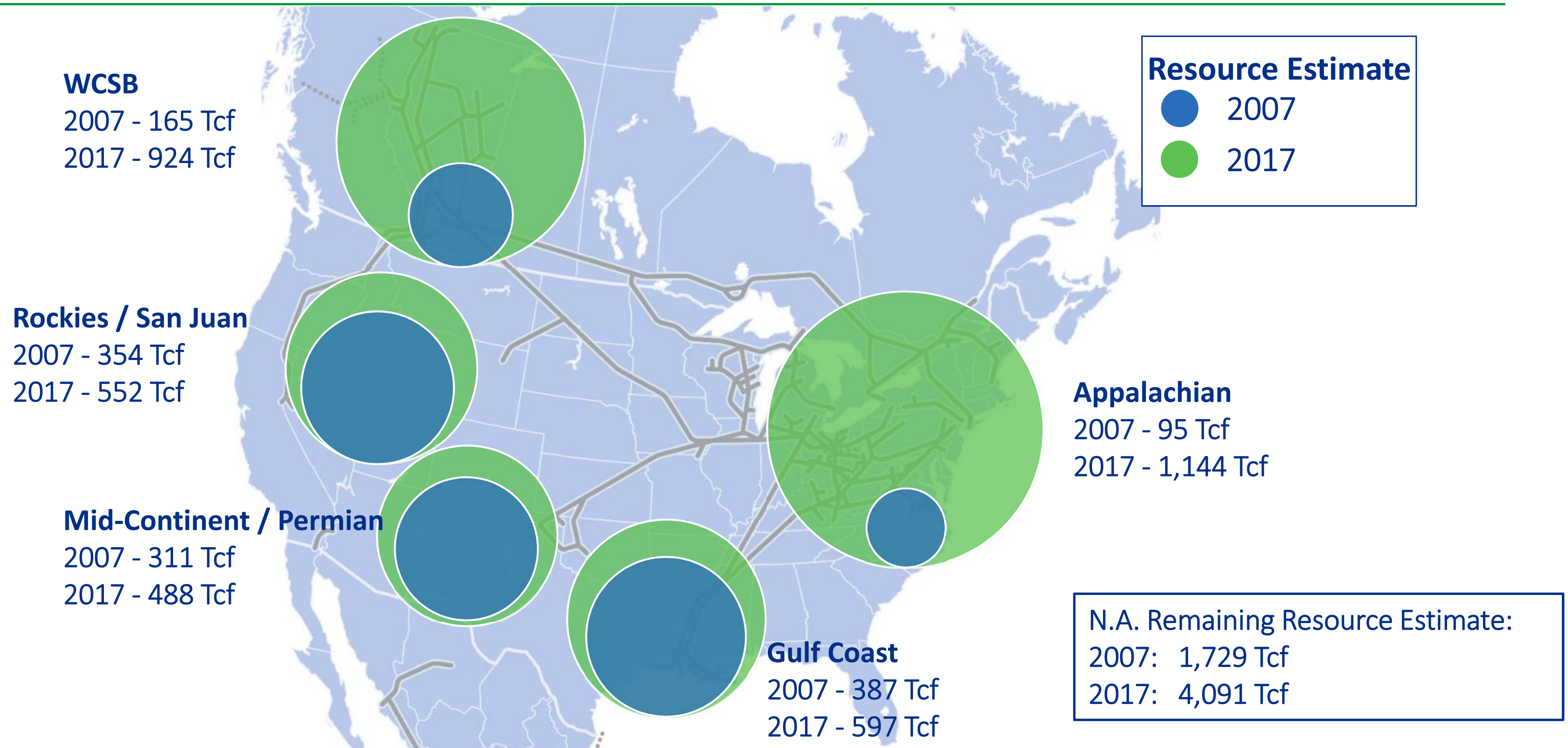
Large intra-basin demand in Alberta and the U.S. Northeast

Key transportation paths to large demand centres across Canada, the U.S. and Mexico

- Deliver ~25 percent of continental demand

Extensive Footprint – Connecting Major Cost-Competitive Basins to Markets Across North America

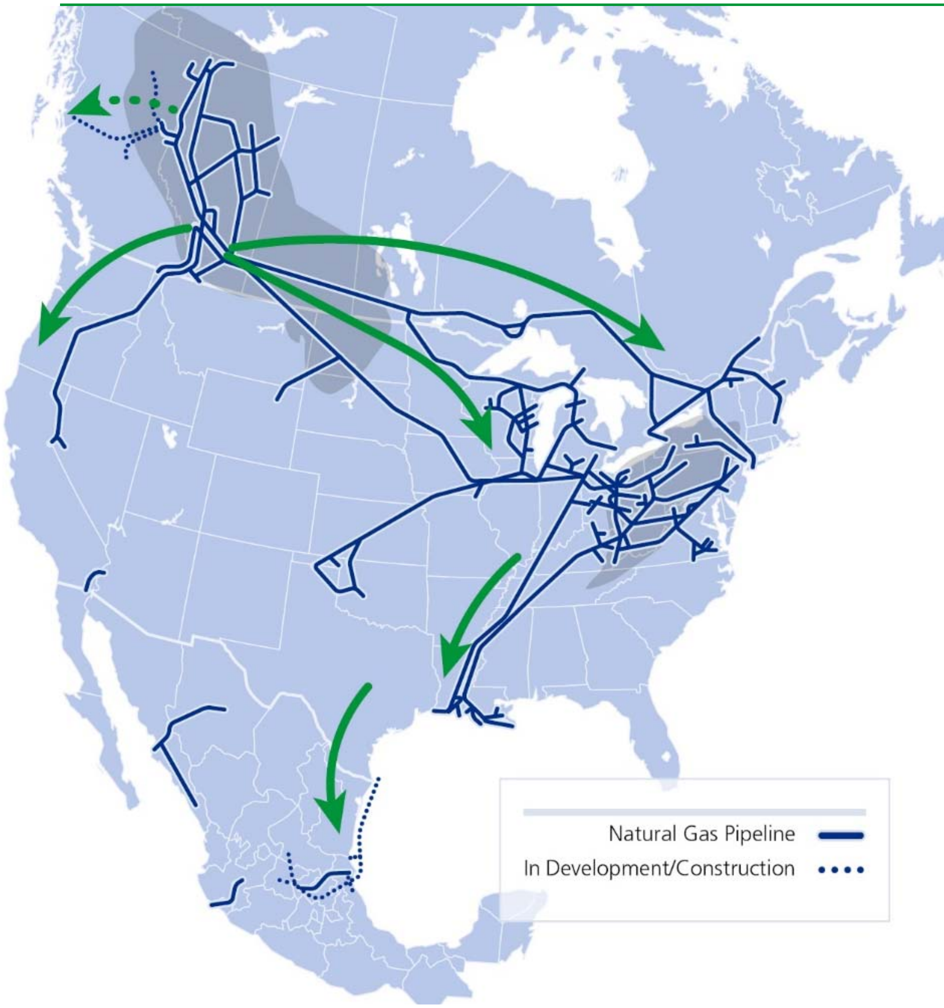
Substantial North American Natural Gas Resources

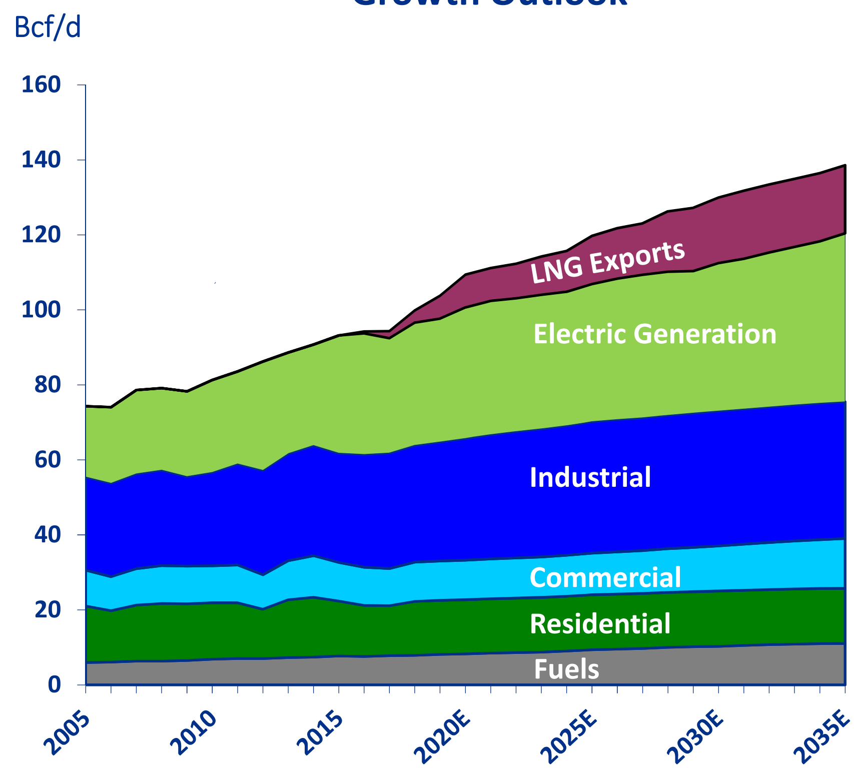


Resource Estimates in the WCSB and Appalachian Basin Have Grown Significantly

Source: TransCanada, U.S. Energy Information Agency, U.S. Potential Gas Committee, various Canadian regulatory agencies and various Canadian professional organizations

Connecting Growing Natural Gas Supply to Market





Source: TransCanada Forecast

Canadian Natural Gas Pipelines

NGTL System
- 24,500 km (15,300 mi) of pipeline
- Over 1,100 receipt and 300 delivery points
- Transports approximately 12 Bcf/d or 75% of WCSB production
- Provides connection to North American markets

Canadian Mainline
- 14,100 km (8,800 mi) of pipeline
- 7.1 Bcf/d of short- and long-haul firm contracts
- Connects WCSB production to eastern markets

Coastal GasLink
- 670 km (420 mi) pipeline from Dawson Creek, B.C. to LNG Canada facility in Kitimat, B.C.
- Phase 1 capacity of 2.1 Bcf/d
- Fully permitted with construction to start in January 2019

Extensive Network of Critical Gas Infrastructure

2018 Accomplishments

Increasing Utilization of Existing Assets to Provide Access to North American Demand

- NGTL and Canadian Mainline receipts/deliveries continue to grow
- Recent long-term fixed-price open season for Empress to North Bay Junction and downstream markets

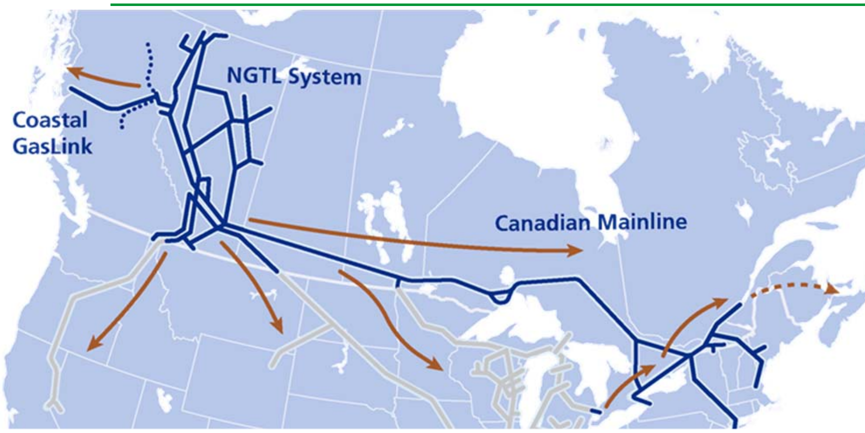
Advancing Regulatory Applications to Provide Certainty of Return and Toll

- Received NEB approval for NGTL's 2018-2019 Revenue Requirement Settlement
- Completed hearing for Canadian Mainline 2018-2020 tolls; awaiting NEB decision

Driving System Expansion in Concert with Customer Needs

- Advancing $9.1 billion of NGTL expansion projects
  - North Montney Mainline proceeding
  - Announced NGTL 2021 and 2022 Programs to expand intra- and ex-Alberta delivery capacity
- Progressing $6.2 billion Coastal GasLink pipeline project
- Construction continues on $200 million Canadian Mainline expansion

Canadian Natural Gas Pipeline Volumes



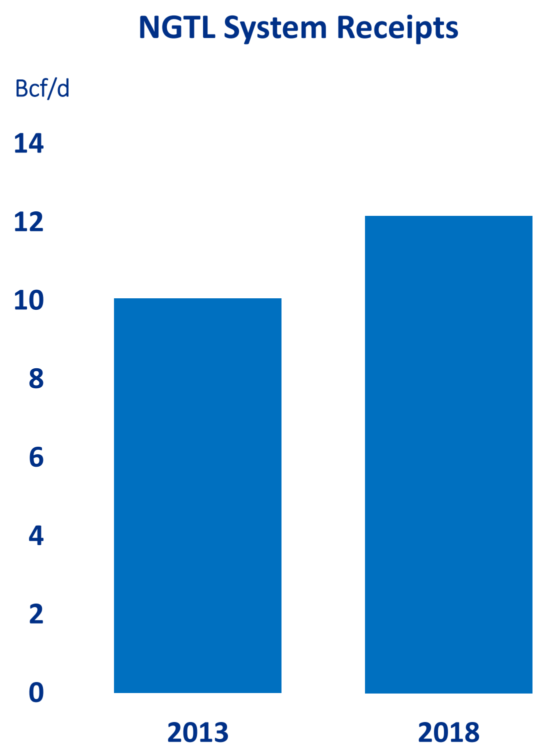
2013-2018

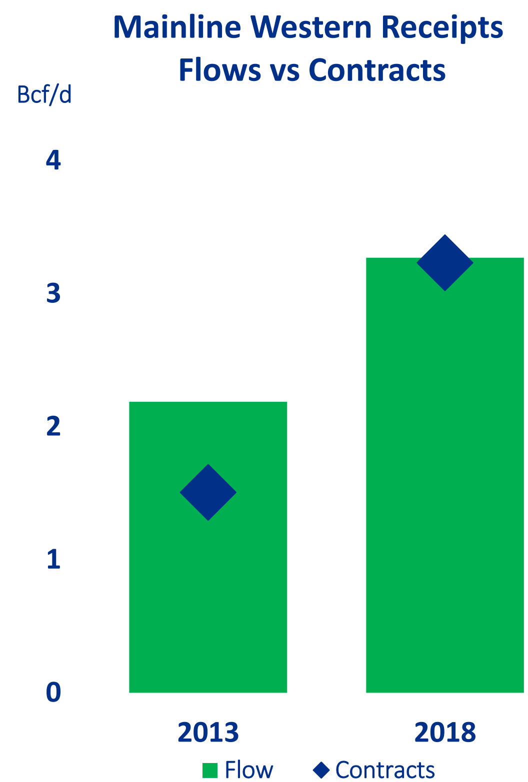
NGTL System

- Receipts and deliveries up ~22%

Canadian Mainline

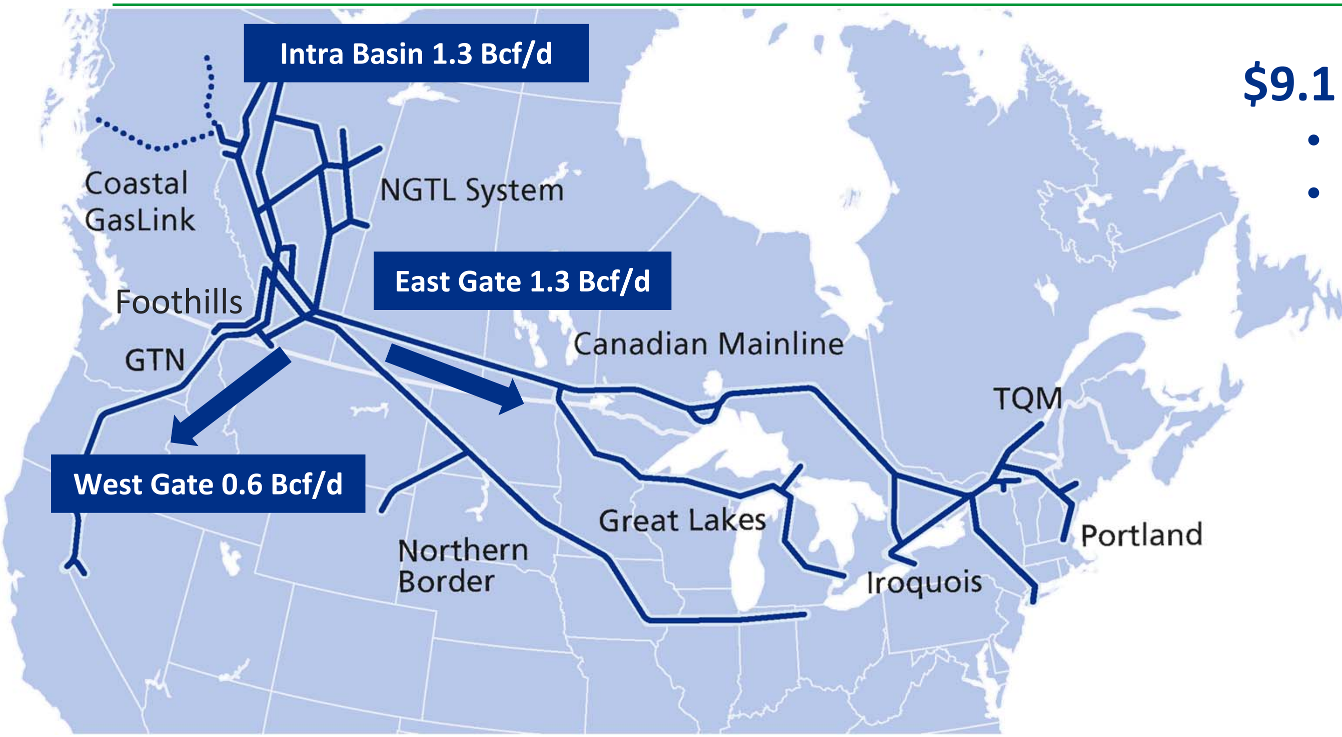
- Receipt flows up ~52%
- Firm contracts more than doubled





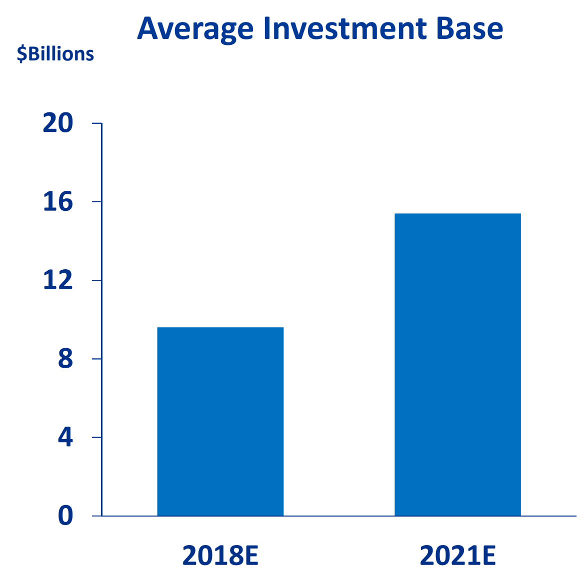
Pipeline Flows Have Increased Substantially

NGTL System - Expanding to Connect Growing WCSB Supply to Markets



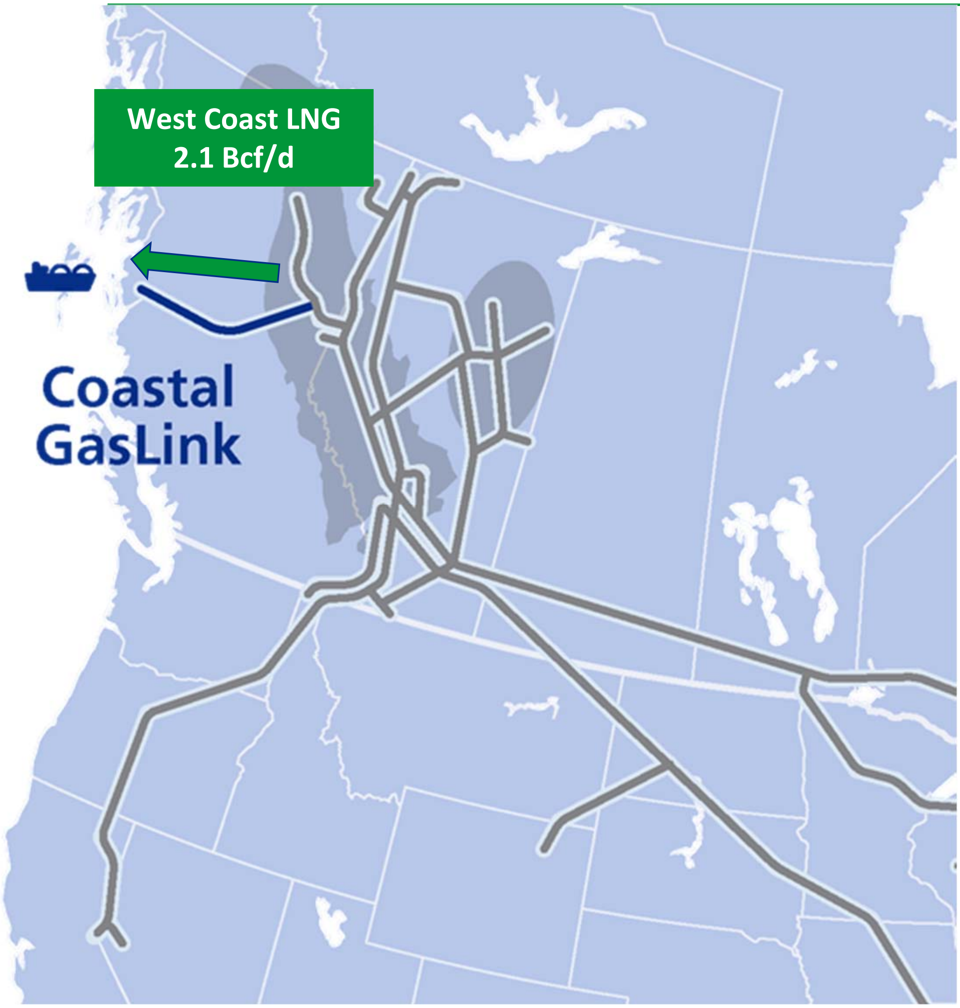
$9.1 billion expansion program

- ~1,400 km (875 mi) of 16 to 48 inch pipe
- 23 compressor units (650 MW)



Providing the WCSB 3.2 Bcf/d of Incremental Delivery Service from 2018-2022

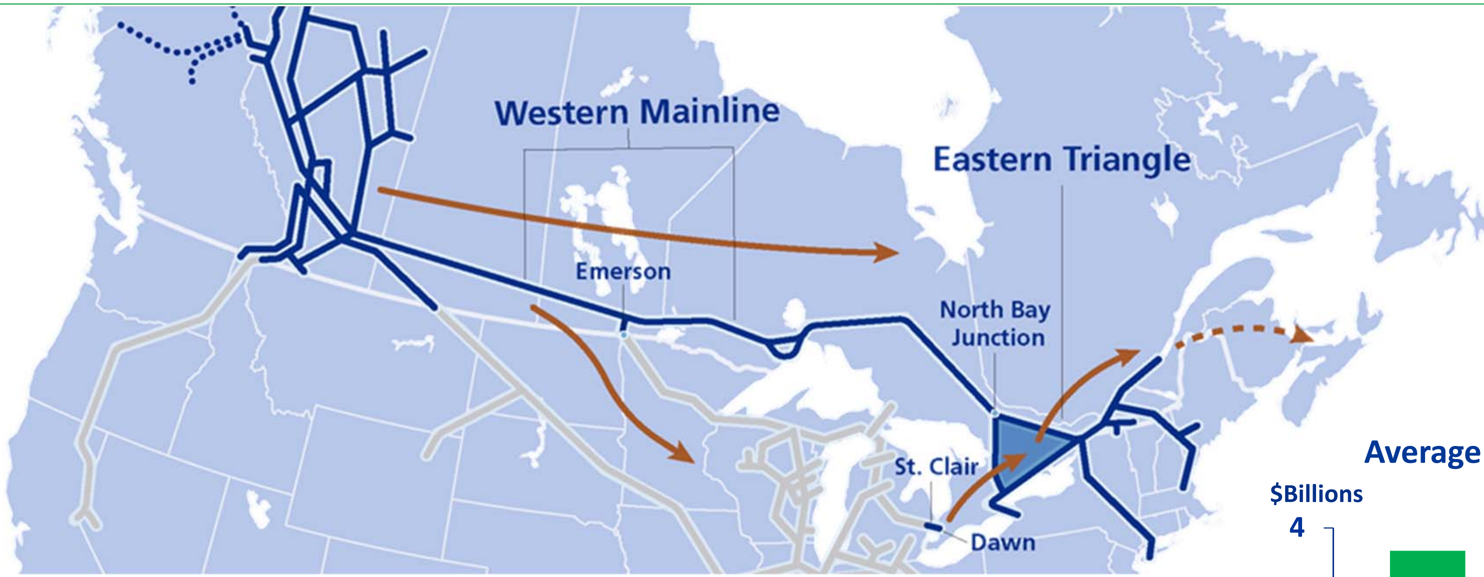
West Coast LNG - First Direct Access to World Market for WCSB Production



Coastal GasLink Pipeline Project

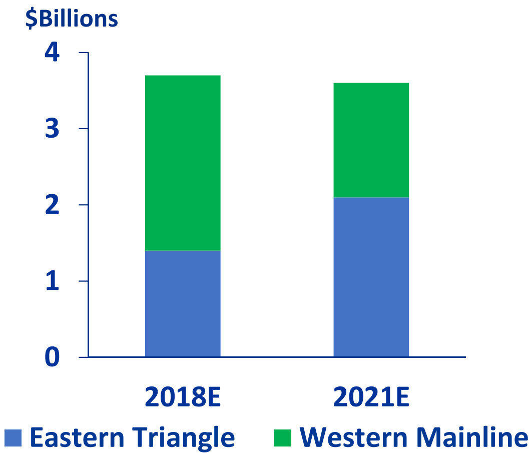
- $6.2 billion project to begin construction in 2019
- Initial capacity of 2.1 Bcf/d expandable to 5 Bcf/d
- Fully permitted
- Signed long-term Project Agreements with all 20 elected First Nations along the right-of-way
- Planned in-service 2023
- To serve LNG Canada liquefaction facility in Kitimat, B.C.

Canadian Mainline - Critical Conduit to Eastern Markets



- **Enabling competitive access for WCSB production to North American markets**
- **Advancing $200 million capital expansion**
- **Positive response to recent Empress to North Bay Junction open season**
  - Over 500 MMcf/d of long-term contracts anticipated
  - Expected to drive future commitments on our system downstream of North Bay
- **New Eastern Triangle open season to provide capacity for incremental volumes from Dawn**

Average Investment Base



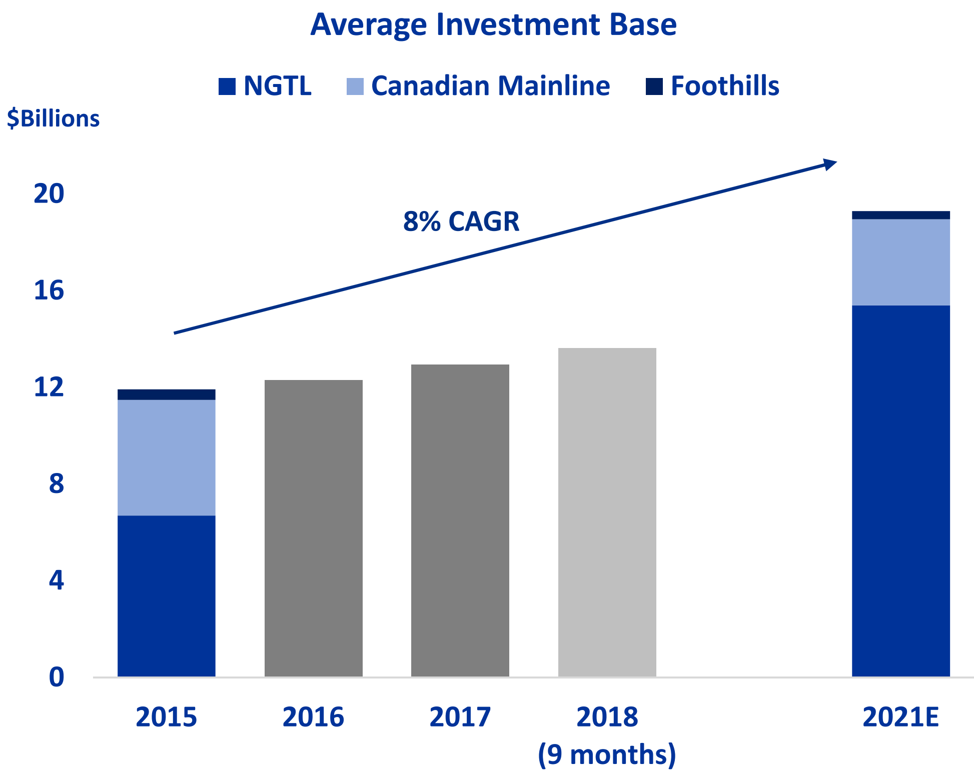
Canadian Natural Gas Pipelines Secured Capital Program

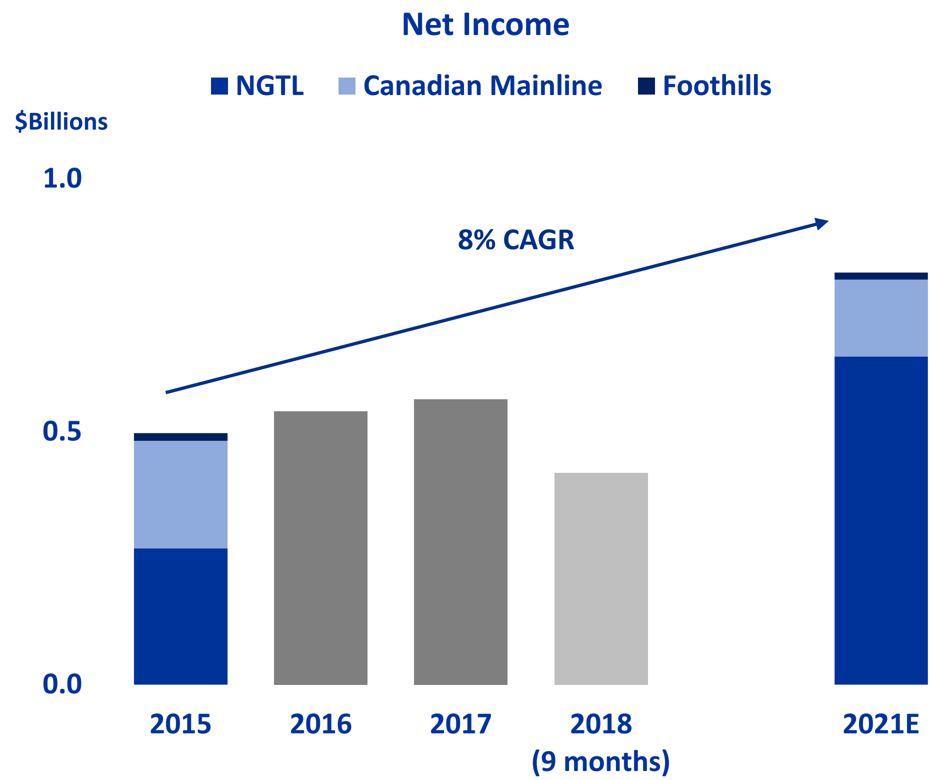
Project	Estimated Capital Cost	Expected In-Service
Canadian Mainline	0.2	2018-2021
NGTL System	0.6	2018
	2.8	2019
	1.7	2020
	2.5	2021
	1.5	2022
Recoverable Maintenance Capital	1.8	2019-2021
Coastal GasLink	6.2	2023
Total ($Billions)	17.3	

- $9.1 billion expansion of NGTL system to 2022
- $6.2 billion Coastal GasLink pipeline
- $200 million Eastern Mainline expansion; further expansion from open season being finalized
- Maintenance capital expected to approximate $600 million per year; immediately reflected in rates and earns return of and on capital

Significant Investment Program Drives Growth

Canadian Natural Gas Pipelines Financial Outlook





Growing Investment Base and Net Income Driven by Secured Capital Program

Key Focus Areas and Future Opportunities in Canada

- **Execute secured capital program safely, on-time, on-budget**
  - Complete NGTL $9.1 billion capital program
  - Complete $6.2 billion Coastal GasLink to meet LNG Canada's required in-service date
- **Maximize value of the Canadian Natural Gas pipelines**
  - Optimize utilization of existing assets
  - Define and implement Canadian Mainline structure post 2020

- **Facilitate growth in WCSB production and access to market**
  - Leverage competitive Canada / U.S. footprint to maximize options for our customers
  - Facilitate growing intra-Alberta demand
  - Explore options for further LNG connectivity

Potential Incremental Growth Opportunities	
NGTL	North Montney Mainline expansion
NGTL	Intra-Alberta deliveries expansion
NGTL/Foothills	Westpath expansion to GTN
NGTL	Empress deliveries to Mainline
Western Mainline	Emerson deliveries to GLGT
Western Mainline	North Bay deliveries to Eastern Triangle
Eastern Triangle	Deliveries within Ontario/Quebec and to U.S. pipeline connections

Building on Growing Momentum

Canadian Natural Gas Pipelines

Tracy Robinson
Executive Vice President, Canadian Natural Gas Pipelines

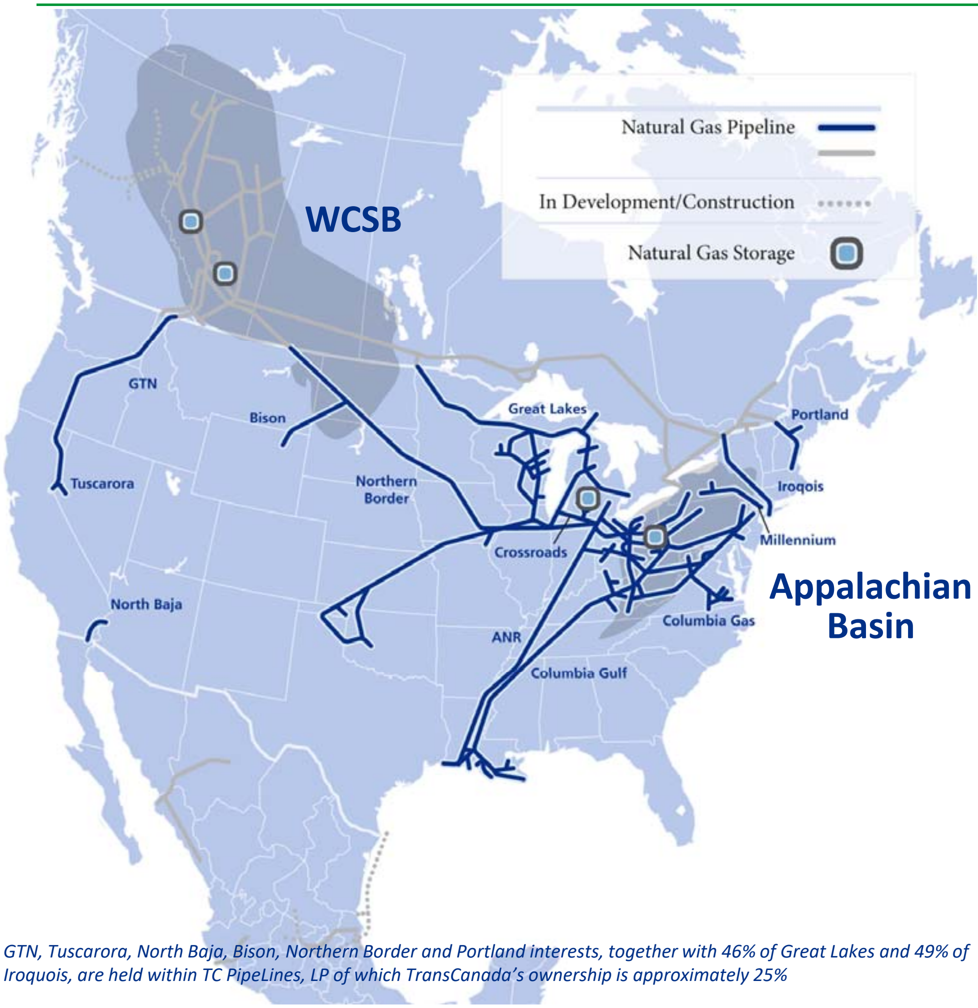
TransCanada

U.S. Natural Gas Pipelines

Stan Chapman
President, U.S. Natural Gas Pipelines

TransCanada

Premier System Connects Prolific Gas Supplies to High Growth Markets



* *GTN, Tuscarora, North Baja, Bison, Northern Border and Portland interests, together with 46% of Great Lakes and 49% of Iroquois, are held within TC PipeLines, LP of which TransCanada's ownership is approximately 25%*

Broad National Network

- ~31,000 miles (50,000 km) of FERC-regulated pipelines with operations across 40 states
- 535 Bcf of regulated storage
- 183 miles (295 km) of non-regulated midstream pipelines
- Serves ~25% of U.S. natural gas demand

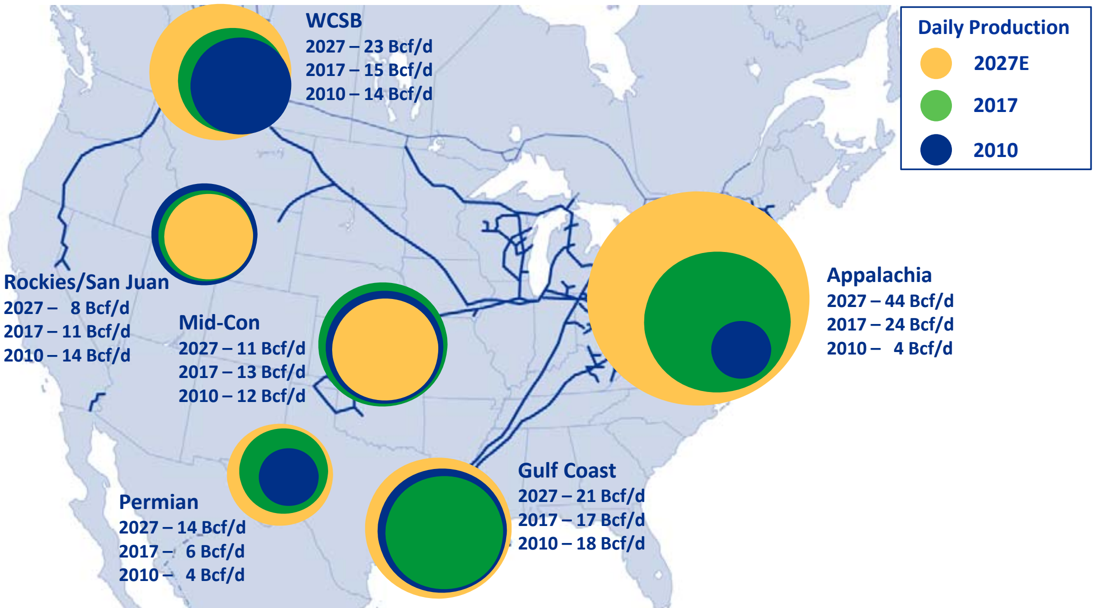
Strategically Connected to Low Cost Supply Basins

- Best in class footprint across Appalachian basin
- Provides market outlets for WCSB natural gas

Unparalleled Connectivity to Key Markets

- LNG exports, power generation and key interconnects
- Traditional LDC markets

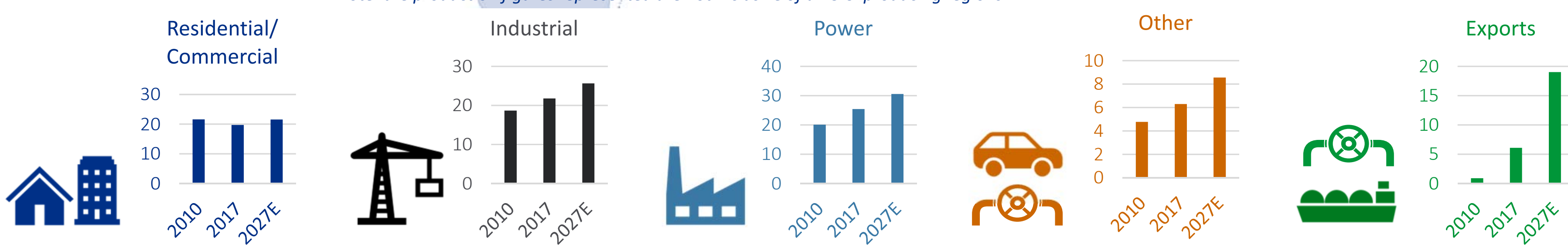
U.S. Supply/Demand Outlook - Continued Growth Opportunities



* Note: the production figures represented are not inclusive of all U.S. producing regions

* The U.S. has technically recoverable gas resources of 3,158 Tcf
* Technically recoverable gas resources across Appalachia have grown from 95 Tcf in 2007 to 1,144 Tcf in 2017

Source: TransCanada, EIA, Potential Gas Committee



Source: TransCanada

2018 - Transformative Year Positions Us for Continued Success

On-track to complete US$7.2 billion of US$7.4 billion growth project portfolio

- Placed US$2.7 billion of growth projects in-service
- US$4.5 billion of additional growth projects tracking for year end in-service

Completed US$1.5 billion Modernization I program and initiated spend on US$1.1 billion Modernization II program

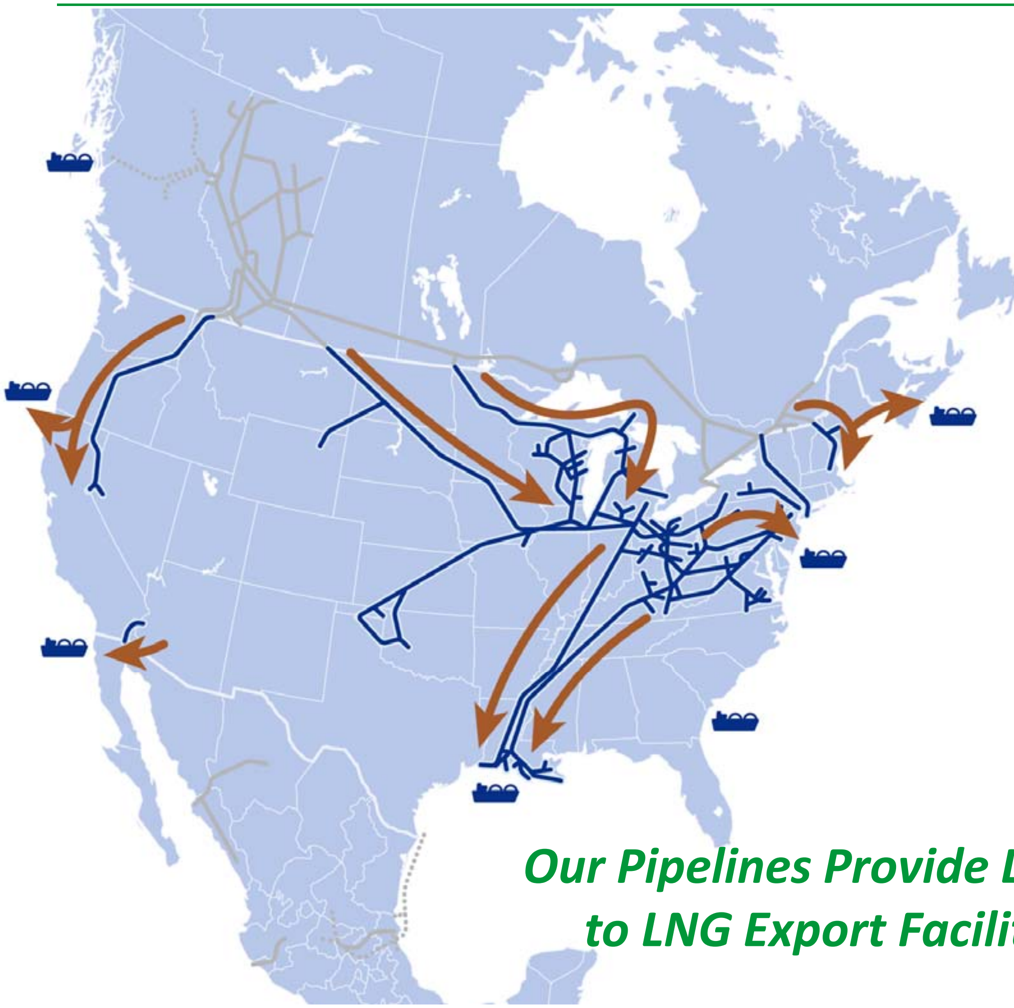
Strong results

- Achieved record EBITDA
- Successfully navigating FERC actions related to U.S. Tax Reform
- Set new peak day delivery record of over 30 Bcf

Securing next wave of growth projects

Supply Enhancements Accomplished; Poised to Develop Premier Demand Connections

Realizing Synergies with Canada Gas and Accessing International Demand Centers



North American supply continues to grow; new flow patterns emerging

Realizing synergies with NGTL and Canadian Mainline

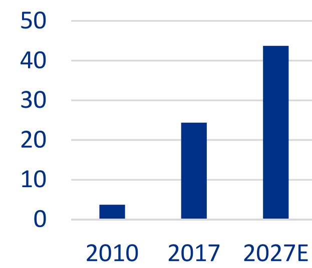
- GTN
- Northern Border
- Great Lakes/ANR
- PNGTS

Focusing on increased connectivity to new demand centers

- LNG export facilities
- Gas-fired power generation
- Large scale industrial facilities

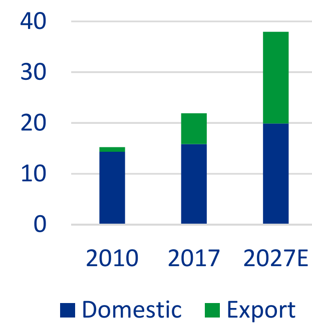
Our Pipelines Provide Last Mile Connectivity to LNG Export Facilities Coast-to-Coast

Appalachian Supply



Source: TransCanada, Bcf/d

U.S. Gulf Coast Demand



Source: TransCanada, Bcf/d

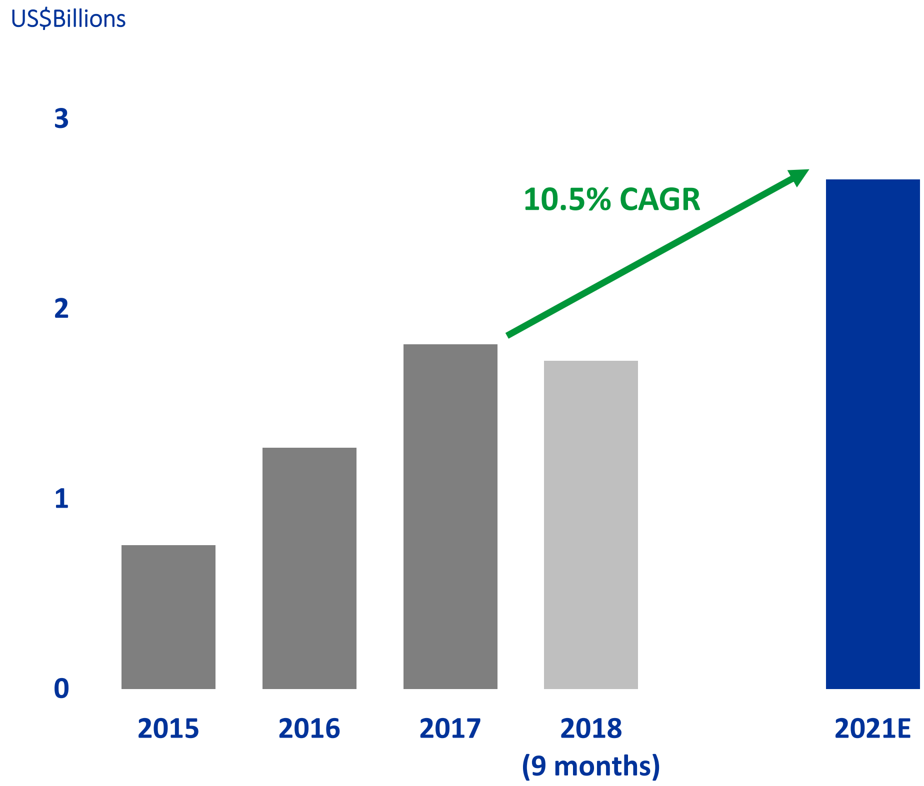
Completion of Growth Program Extends Our Long-Term EBITDA Outlook

Project	Estimated Capital Cost (US $Billions)	Estimated Spend to Date (US $Billions)*	Expected In-Service Date	CAPEX / EBITDA Multiple
Leach XPress	1.7	1.7	In-Service	
Rayne XPress	0.4	0.4	In-Service	
Cameron Access	0.3	0.3	In-Service	
WB XPress	West – 0.2	0.2	In-Service	
	East – 0.7	0.6	Q4/2018	
Mountaineer XPress	3.0	2.2	Q4/2018	
Gulf XPress	0.6	0.5	Q4/2018	
Buckeye XPress	0.2	-	Q4/2020	
Other	0.3	0.2	2018-2020	
Total	**7.4**	**6.1**		
Weighted Average				**7.4x**
Modernization II	1.1	0.4	2018-2020	
Recoverable Maintenance Capital**	2.0	-	2019-2021	
Total	10.5	6.5		

** As at September 30, 2018*

*** Recoverable maintenance capital spend expected to become part of rate base and earn a return on and of capital*

Comparable EBITDA Outlook for U.S. Natural Gas Pipelines



Comparable EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information.

Key Focus Areas and Future Opportunities in the U.S.

Execution of near-term growth program

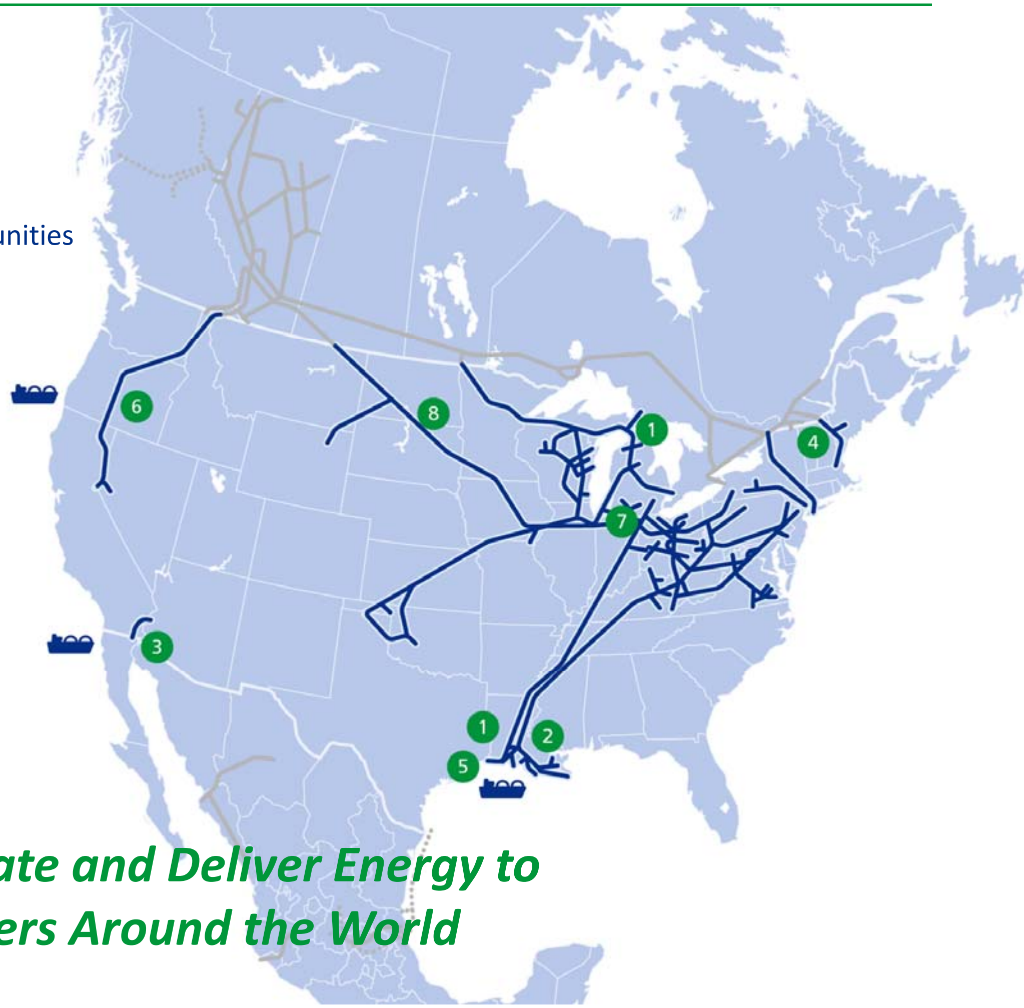
- Mountaineer XPress, Gulf XPress, WB XPress East nearing completion

Optimization of existing assets

- Synergies with Canada Gas increase utilization and provide growth opportunities
- Successfully navigating U.S. Tax Reform and developing future regulatory strategies to sustain and enhance cash flow generation
- Potential Modernization III Program to be reviewed with customers

Securing the next wave of growth opportunities

	Projects in Development
1	Alberta XPress
2	Louisiana XPress
3	North Baja XPress (TCP)
4	Westbrook XPress (TCP)
5	Grand Chenier XPress
6	GTN Expansion (TCP)
7	Joliet XPress
8	Northern Border Expansion (TCP)



Safely Operate and Deliver Energy to Consumers Around the World

U.S. Natural Gas Pipelines

Stan Chapman
President, U.S. Natural Gas Pipelines

TransCanada

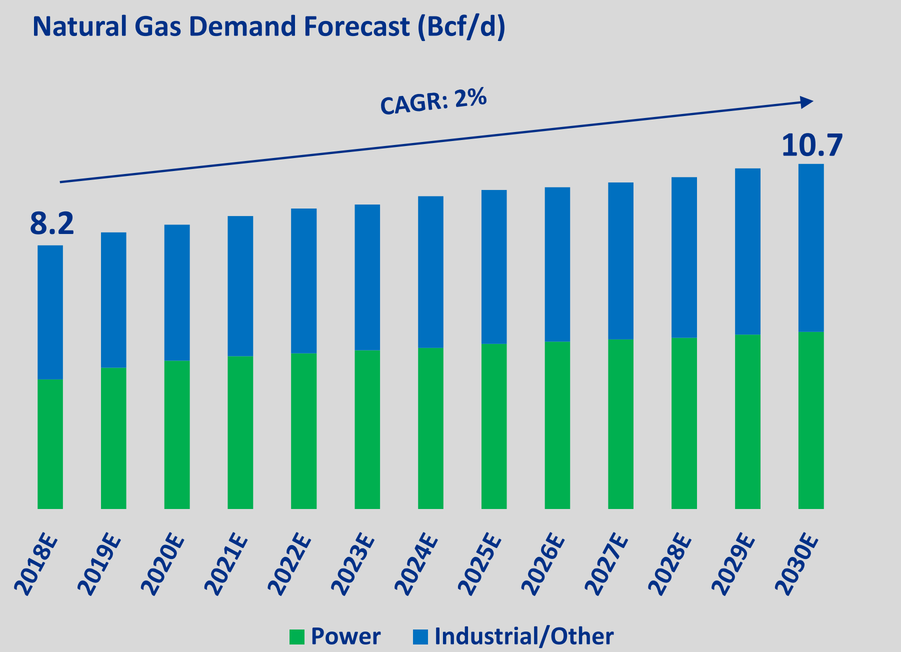
Mexico Natural Gas Pipelines

Karl Johannson
President, Canada and Mexico Natural Gas Pipelines and Energy

TransCanada

Sur de Texas Landfall Tunnel

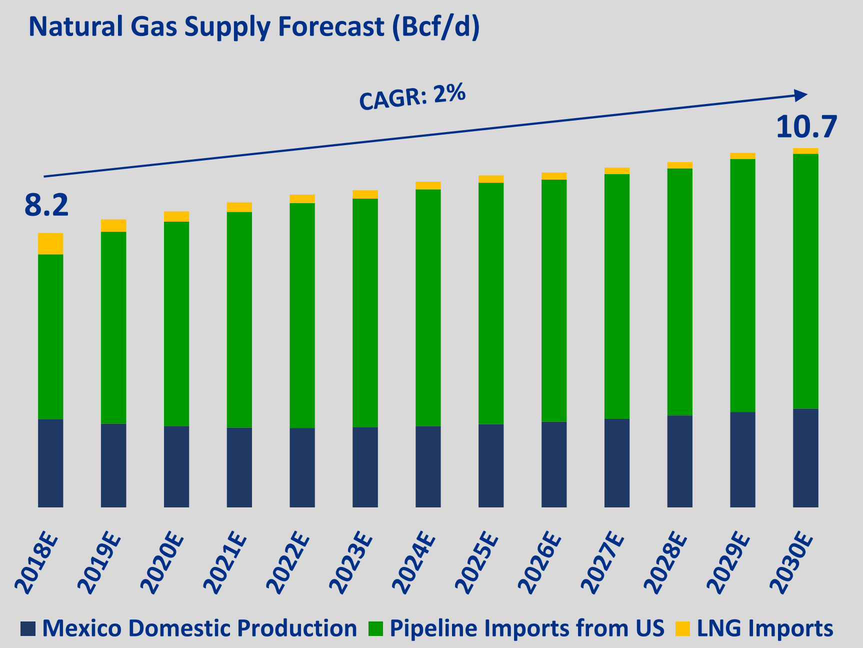
Mexico Demand and Supply Forecast



Mexico Demand through 2030E (Bcf/d):

Gas Fired Power Generation: Increases from 4.0 to 5.5

Industrial/Other: Increases from 4.2 to 5.2



Mexico Supply through 2030E (Bcf/d):

Domestic Production: Increases from 2.7 to 3.0

Pipeline Imports from U.S.: Increases from 4.9 to 7.5

LNG Imports: Decreases from 0.6 to 0.2

Source: TransCanada Outlook

2018 Accomplishments

- Advancing US$2.9 billion capital program
- Completion of Sur de Texas is scheduled for December and in-service early January 2019
- Topolobampo in full operation in June 2018
- CFE recognized force majeure events for Tula and Villa de Reyes projects with payments for fixed capacity charges received since December 31, 2017 and January 31, 2018, respectively
- CFE recognized force majeure events for Sur de Texas with payments for fixed capacity charges starting October 31, 2018

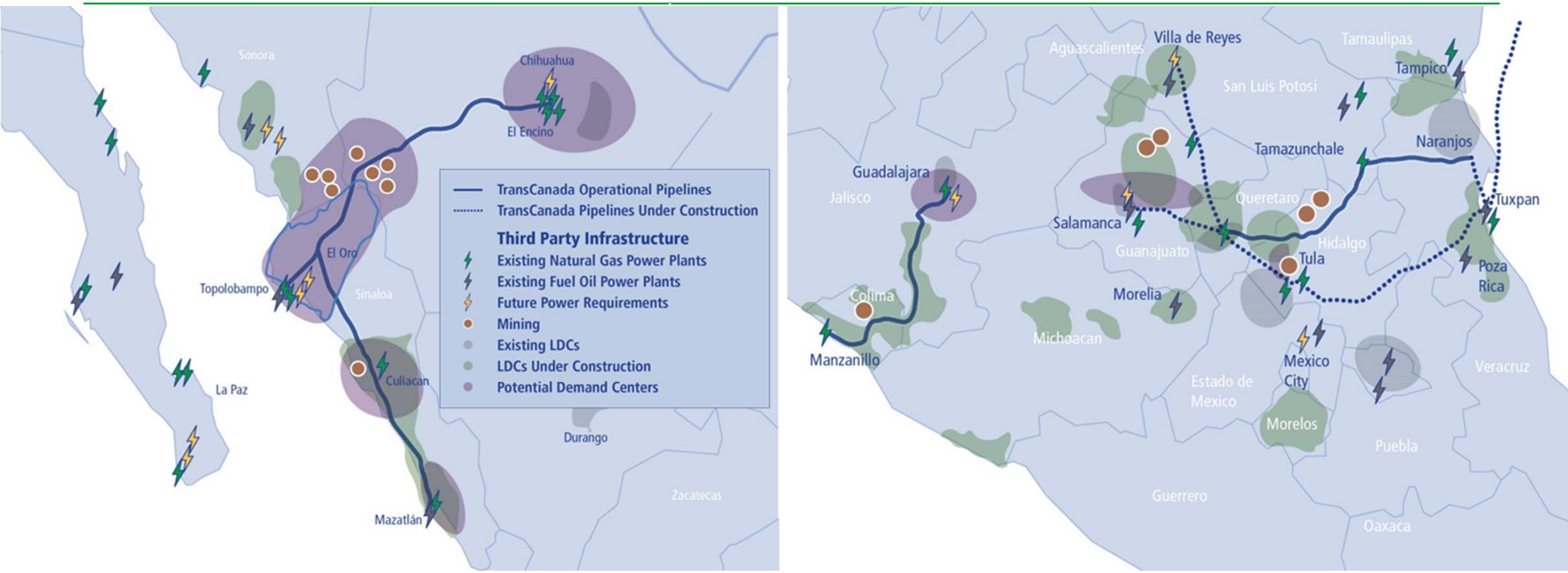
Mexico – Solid Position and Growing

- **Four revenue-generating pipelines**
  - Tamazunchale
  - Guadalajara
  - Mazatlán
  - Topolobampo
- **Three new projects expected to enter service which will increase portfolio to ~US$5 billion**
  - Tula – US$0.7 billion
  - Villa de Reyes – US$0.8 billion
  - Sur de Texas – US$1.4 billion*
- **All underpinned by U.S. dollar denominated long-term contracts with the Comisión Federal de Electricidad**
- **Well positioned to connect U.S. natural gas supply to growing power generation and industrial markets in central Mexico and to new, captive markets in the northwest of the country**

Developing an Integrated Natural Gas Delivery System

** TransCanada's 60% share*

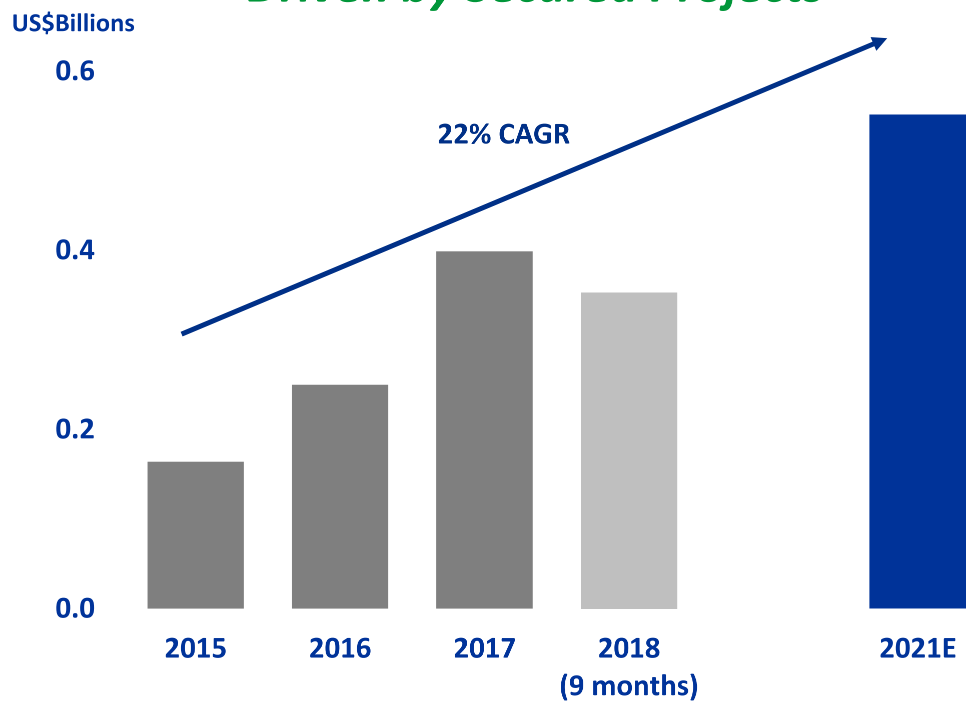
Opportunities to Increase Natural Gas Deliveries



Growing Demand Expected to Enhance the Value of Our Infrastructure

Comparable EBITDA Outlook for Mexico Natural Gas Pipelines

Solid Position and Growing Driven by Secured Projects

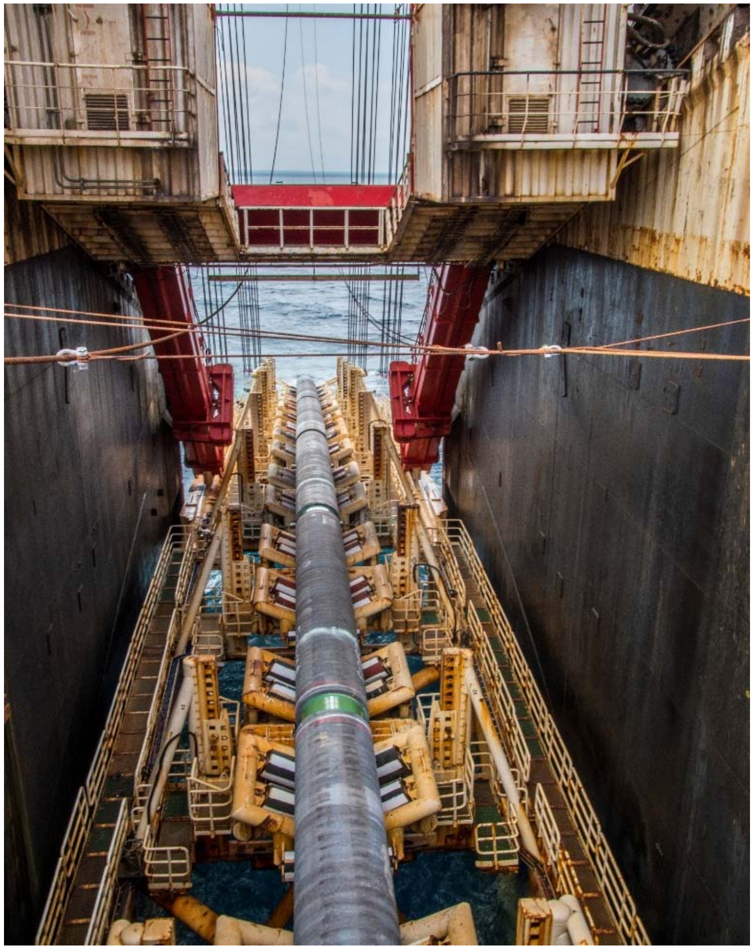


Comparable EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information.

Key Focus Areas and Future Opportunities in Mexico

- **Execute capital program**
- **Pursue organic growth opportunities**
  - Provide connections and increase capacity through efficient expansions to new end-users
  - Capitalize on dominant position in the northwest of the country
  - Connect high demand markets in the central region of the country with abundant U.S. supply
- **Assess value-chain extensions such as gas storage and electric transmission**

Building on Growing Momentum



Mexico Natural Gas Pipelines

Karl Johannson
President, Canada and Mexico Natural Gas Pipelines and Energy

TransCanada

Liquids Pipelines

Paul Miller
President, Liquids Pipelines

TransCanada

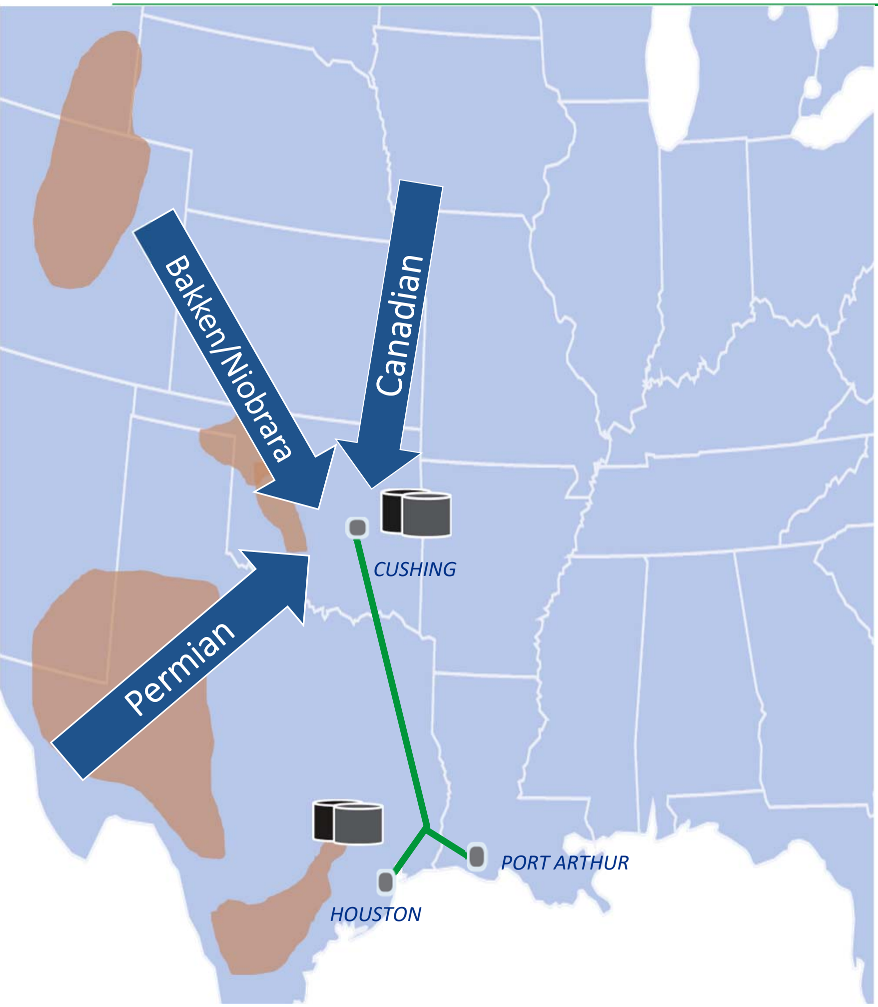
Sustainable Performance

- Long-term take-or-pay contracts
- Highly contracted portfolio
- Strong demand for uncommitted capacity

High-Quality EBITDA

- Keystone: >90% contracted
- Marketlink: ~80% contracted
- Grand Rapids: recovery through base contracts
- Northern Courier: 100% contracted
- White Spruce: 100% contracted

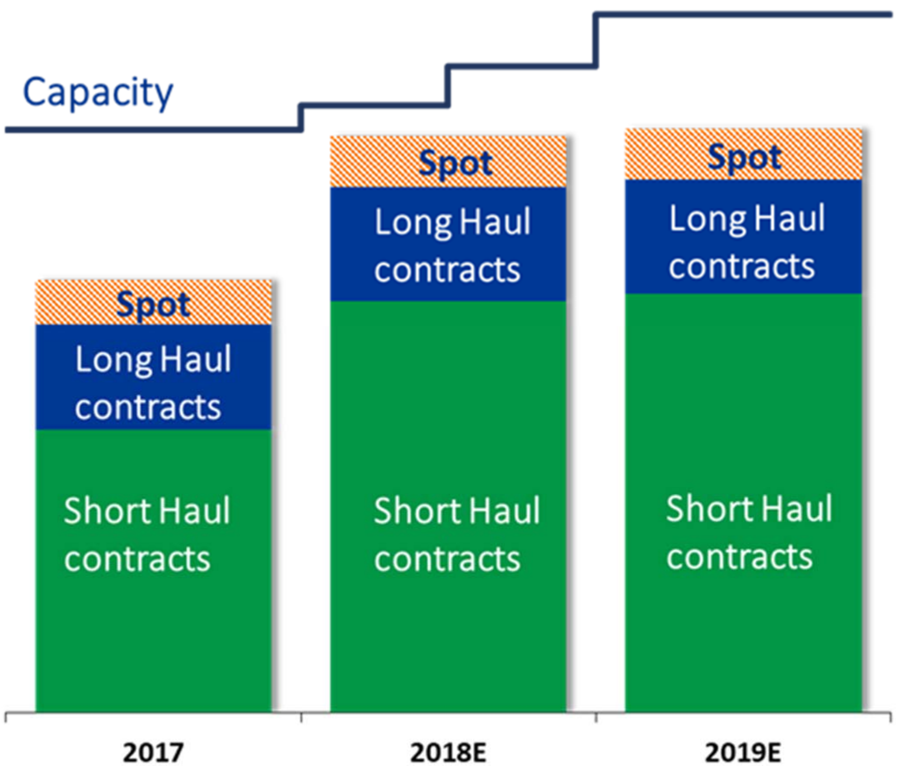
Strong U.S. Gulf Coast Fundamentals



Marketlink

- Well positioned to respond to market demand
- Strong demand for transportation service
  - Growing U.S. light crude oil production
  - Wide differentials

Marketlink Response



- Increasing capacity in response to demand
- Increasing contracts with increased capacity
- Launched open season
- Optimizing uncommitted capacity

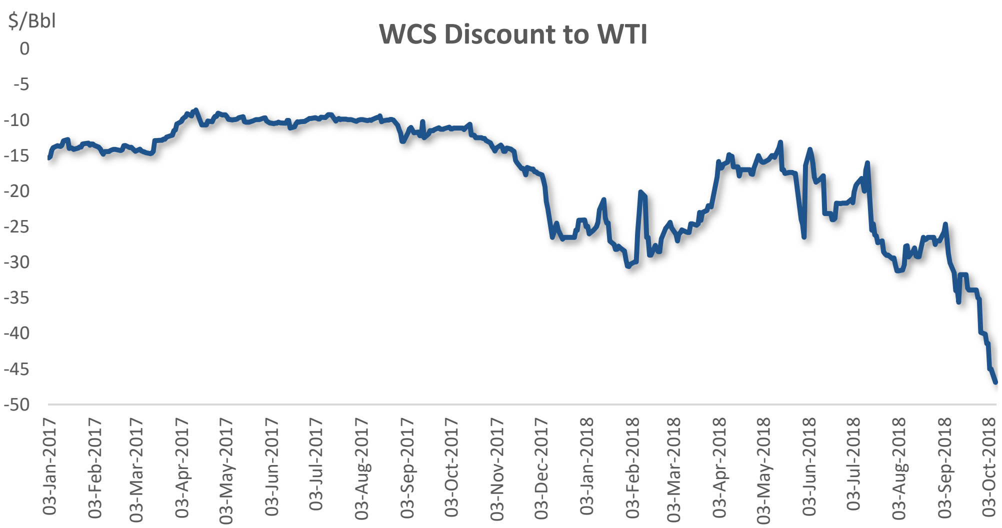
Strong Market Demand

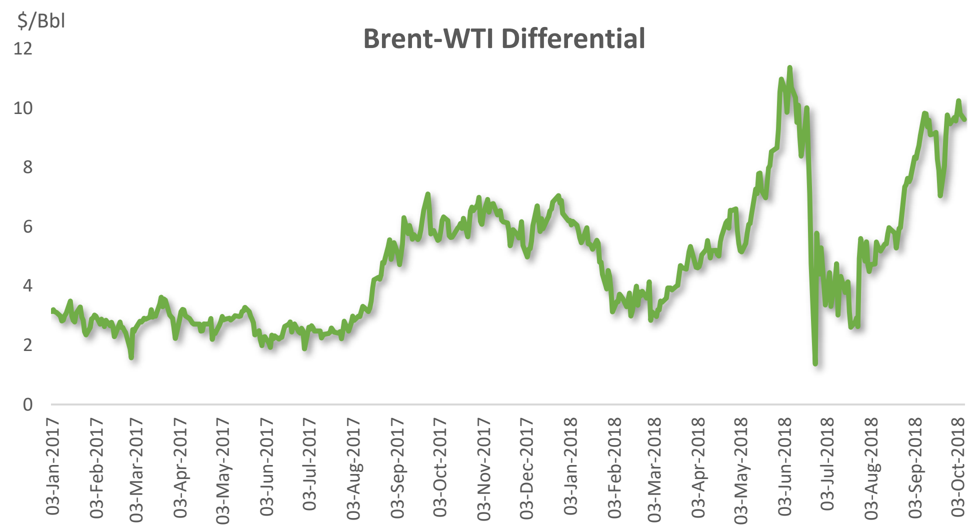
High demand for uncommitted capacity

Wide price differentials

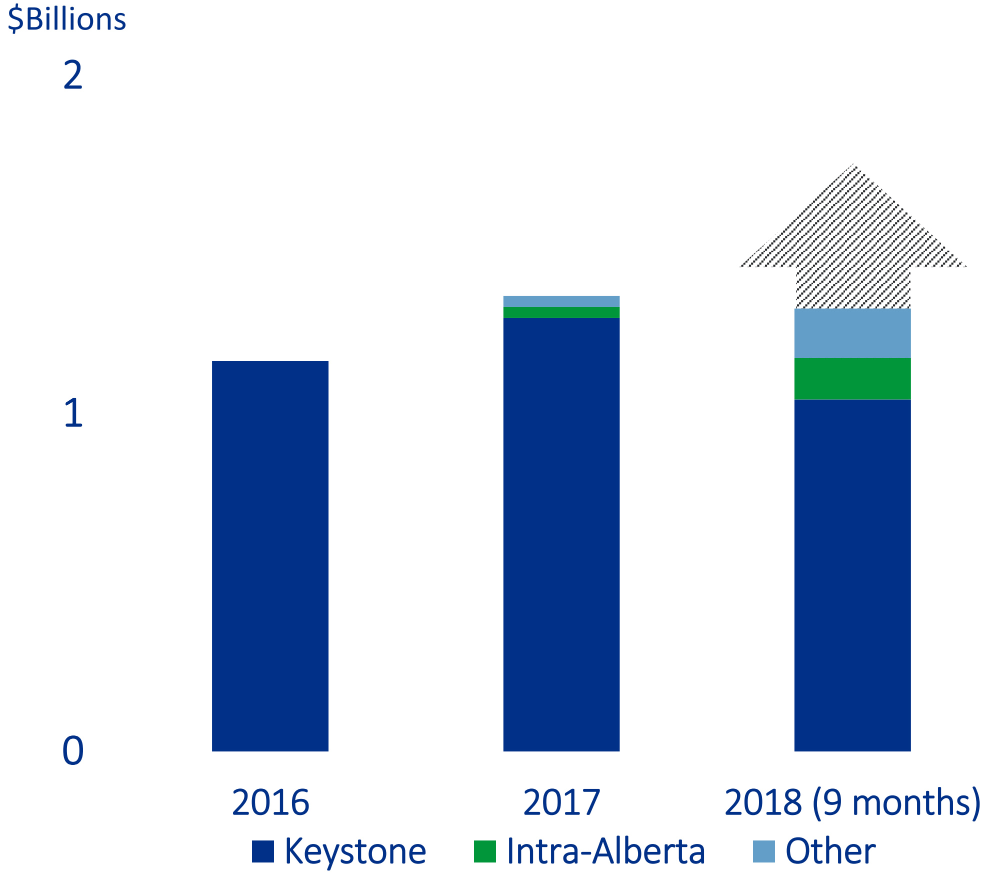
Liquids Marketing

- Pursues marketing opportunities
- Utilizes TransCanada and third-party assets





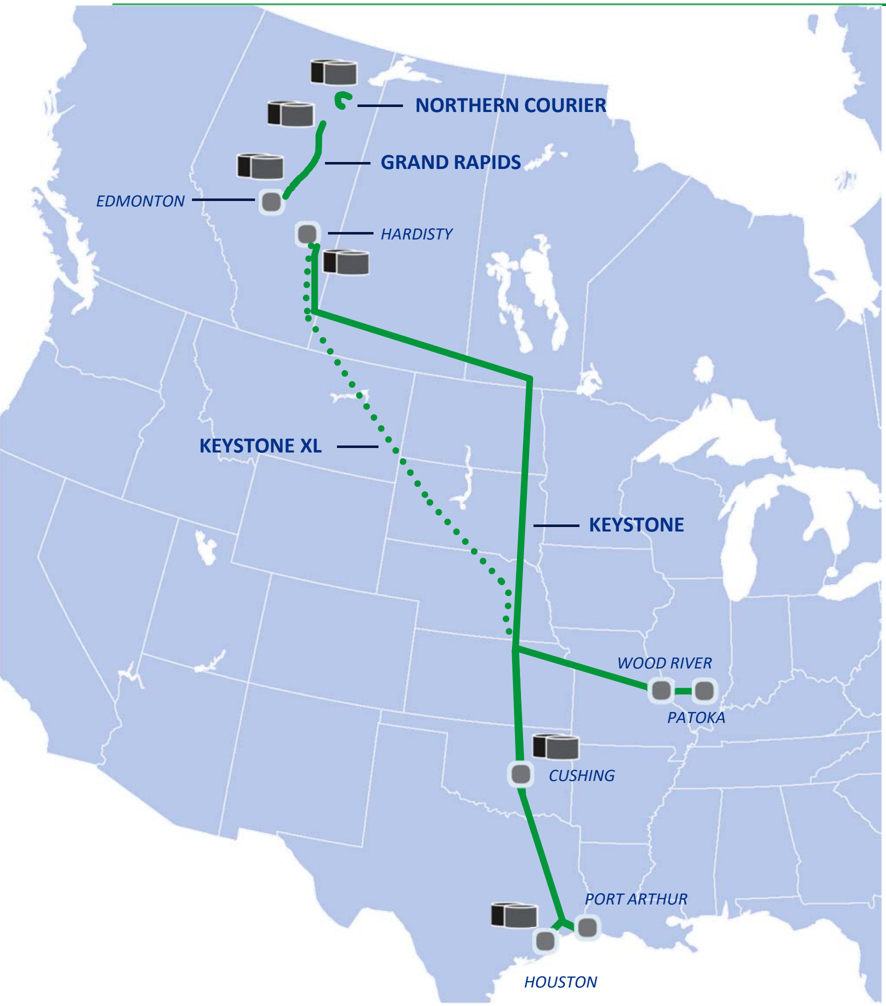
Growing Comparable EBITDA



- ~80% of EBITDA contracted
- Strong demand for capacity
- Similar total results expected in 2019-2021

Comparable EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information.

Attractive Keystone XL Investment

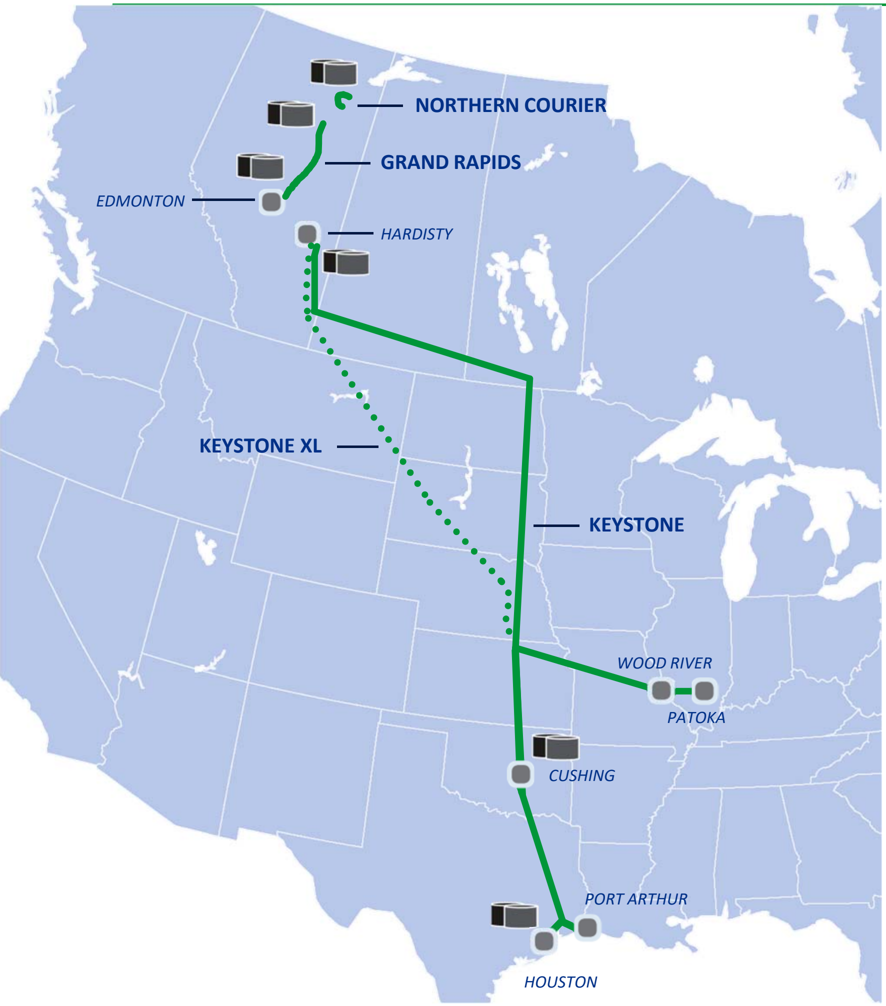


- Expected to be fully contracted
- Return on total capital consistent with similar projects
- Commercial model largely unchanged
- Development costs and capex risk shared with shippers

Contracted Integrated System

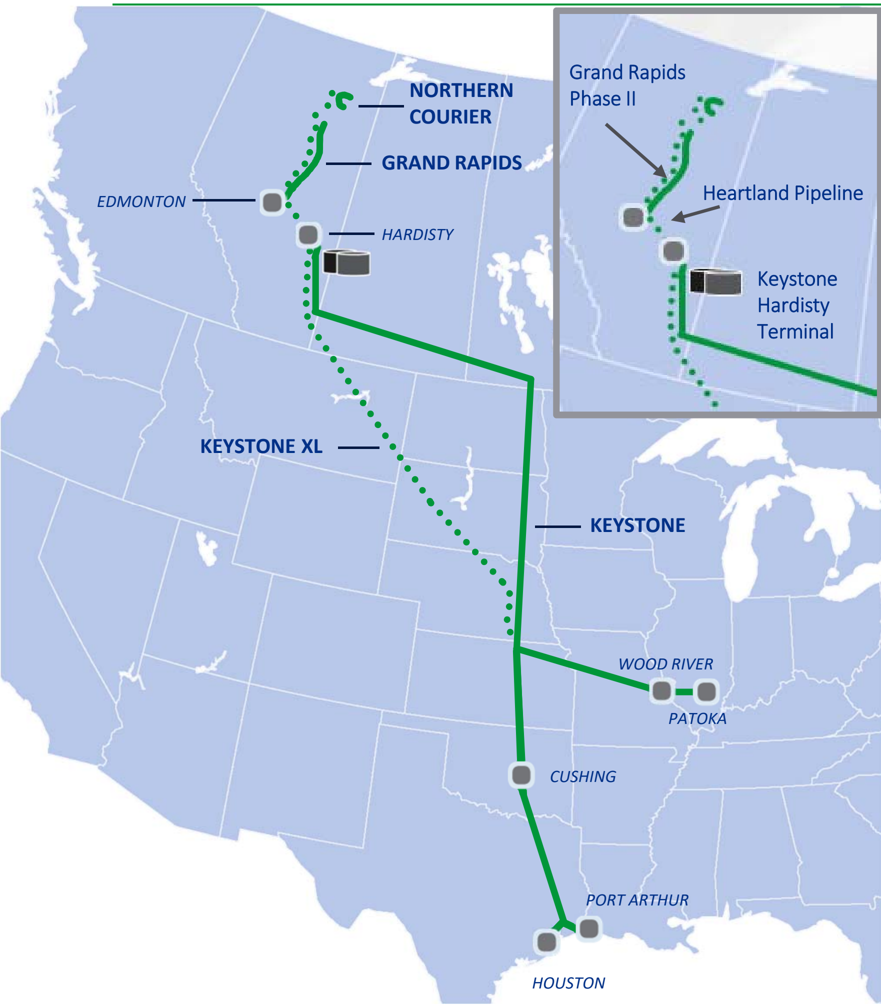
- Highly contracted integrated system
- Capacity ~1.4 million Bbl/d
- Long-haul commitments tracking ~1.2 million Bbl/d
- Remaining capacity for spot reservation
- Capacity enhancement opportunities

Keystone XL Progress



- **NEB approved**
- **U.S. permits**
  - Presidential Permit challenges
  - Nebraska Public Service Commission challenge
- **Other Federal permits**

Permitted Growth Opportunities

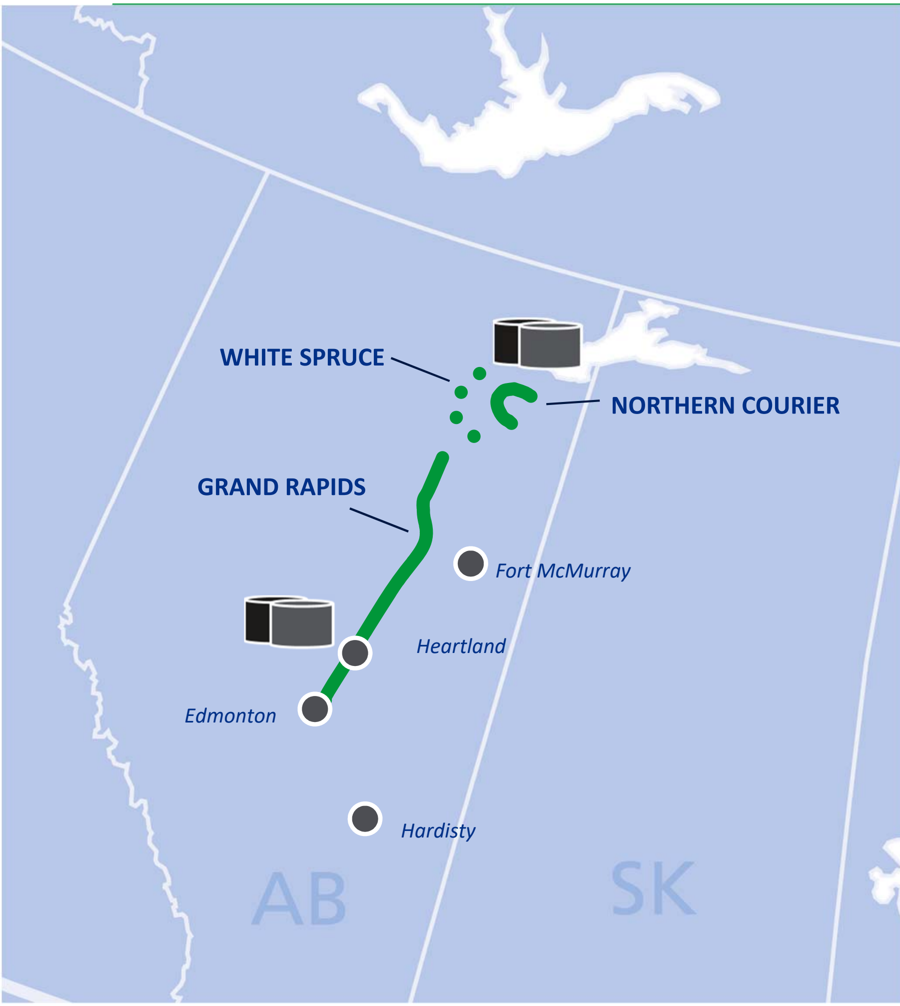


Keystone XL facilitates further development

- Grand Rapids Phase II
- Heartland Pipeline
- Keystone Hardisty Terminal

Contiguous Path From Supply to Market

Alberta Regional Growth



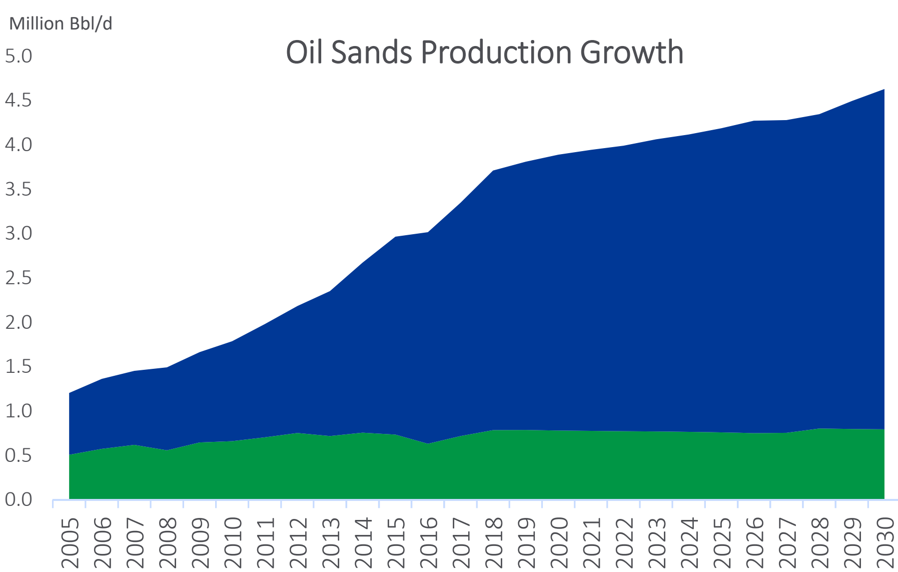
White Spruce Pipeline

- 72 km pipeline to connect CNR Horizon crude oil volumes
- $200 million investment
- Construction commenced in Q3/2018
- In-service Q2/2019

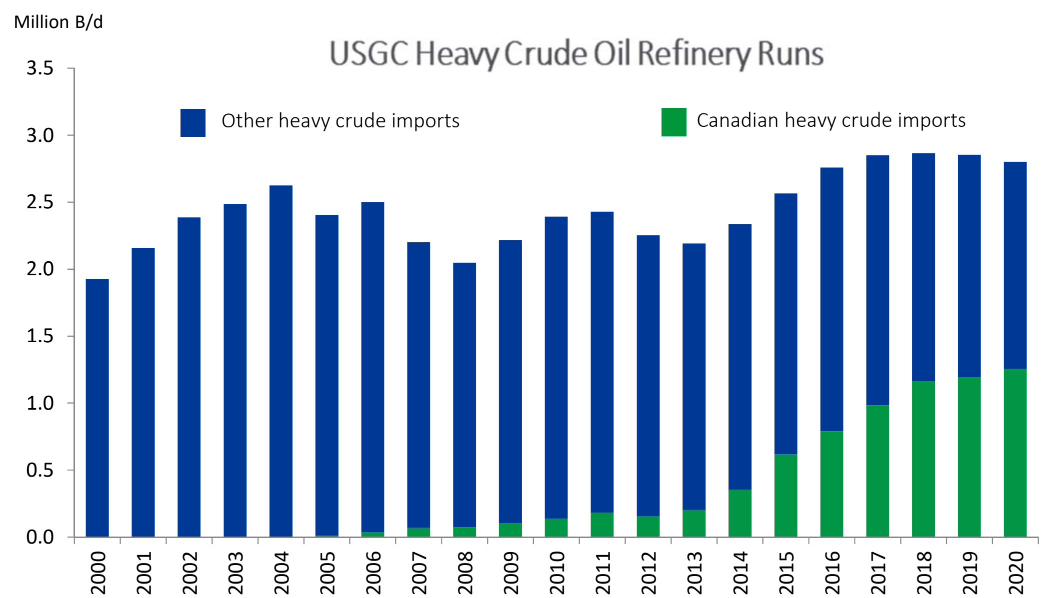
Canadian Production Growth

Western Canadian Sedimentary Basin

- Declining production in Latin America
- Significant opportunity for Canadian heavy crude oil in the U.S. Gulf Coast



Source: CAPP 2018



Source: IHS Markit

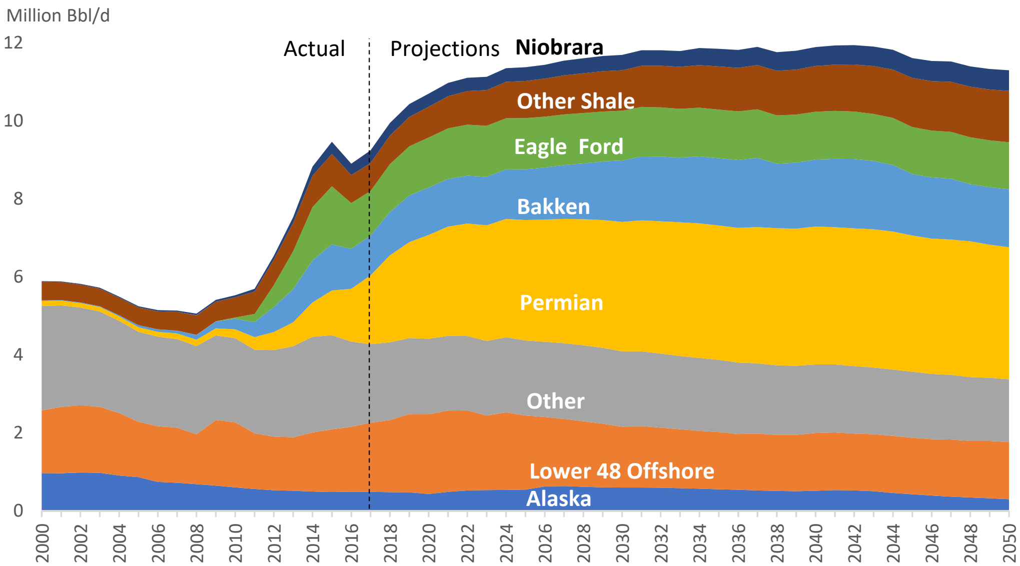
U.S. Production Growth

U.S. Light Tight Oil (LTO)

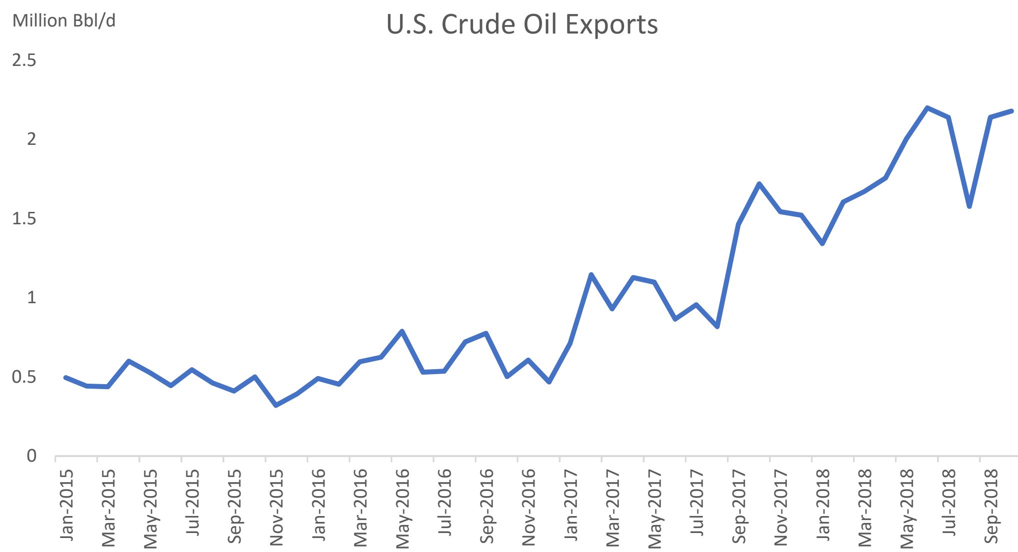
- Williston (Bakken)
- DJ/Niobrara
- SCOOP/STACK (Oklahoma)
- Permian

Permian and Bakken lead growth

LTO destined for export markets

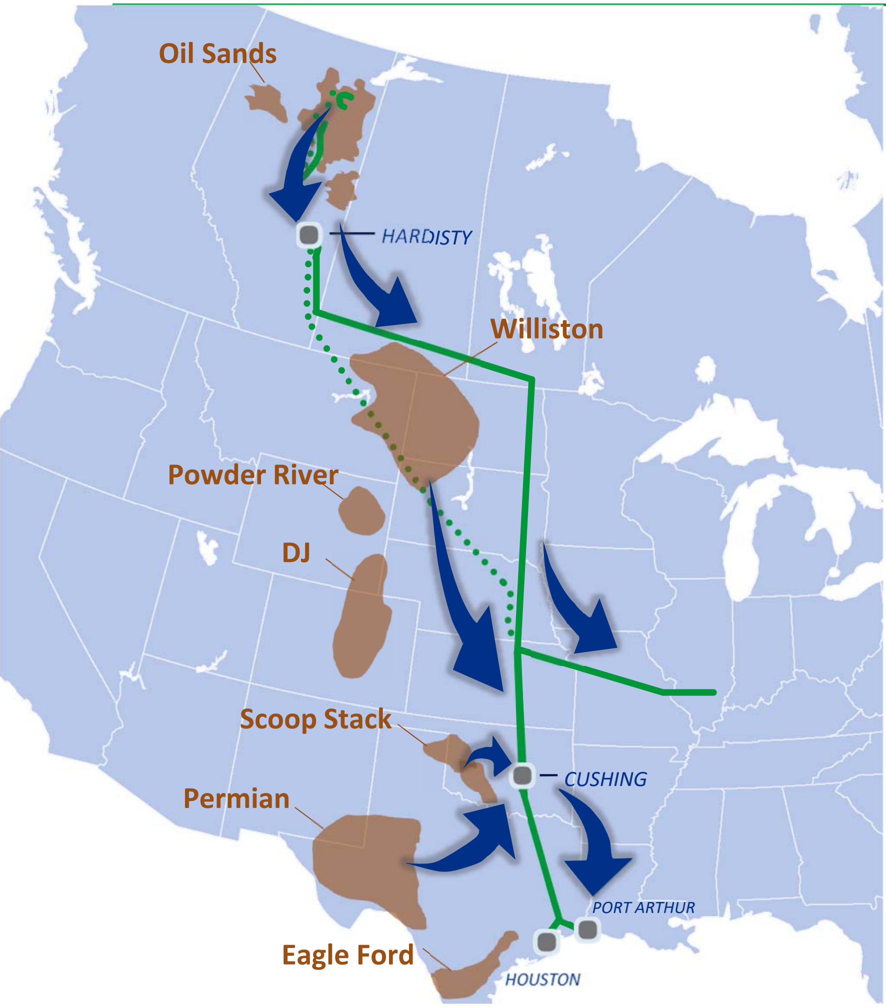


Source: EIA Annual Energy Outlook



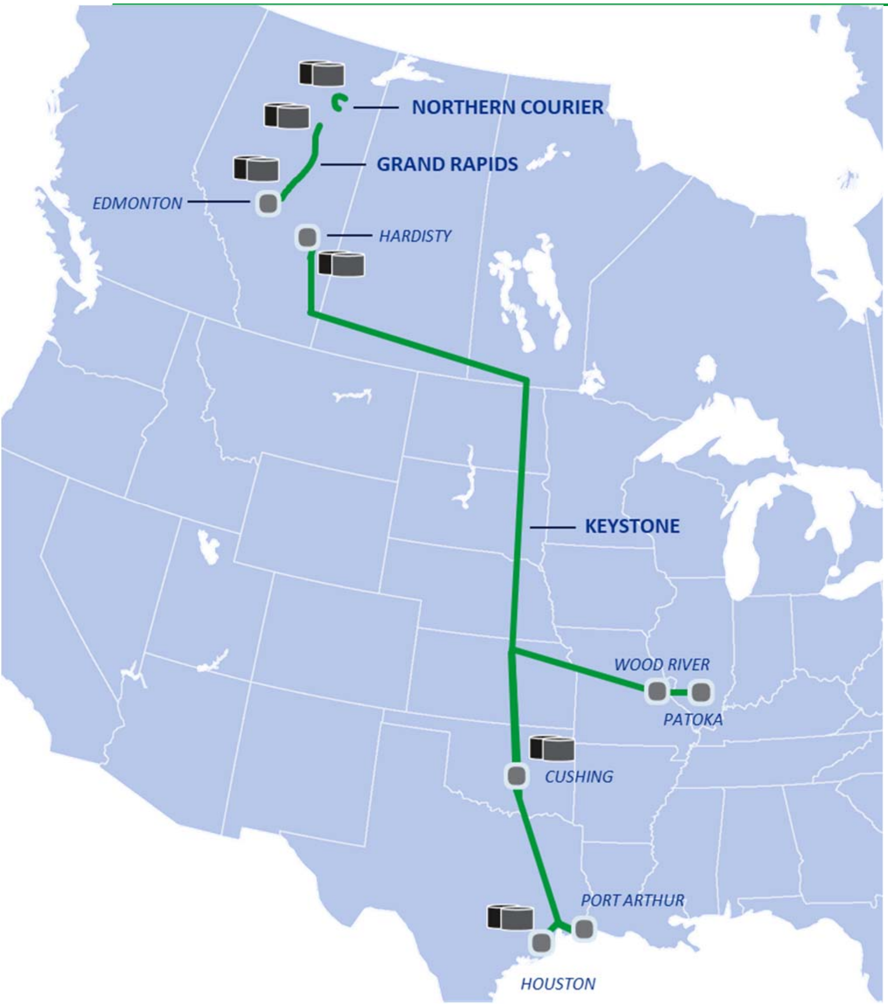
Source: EIA

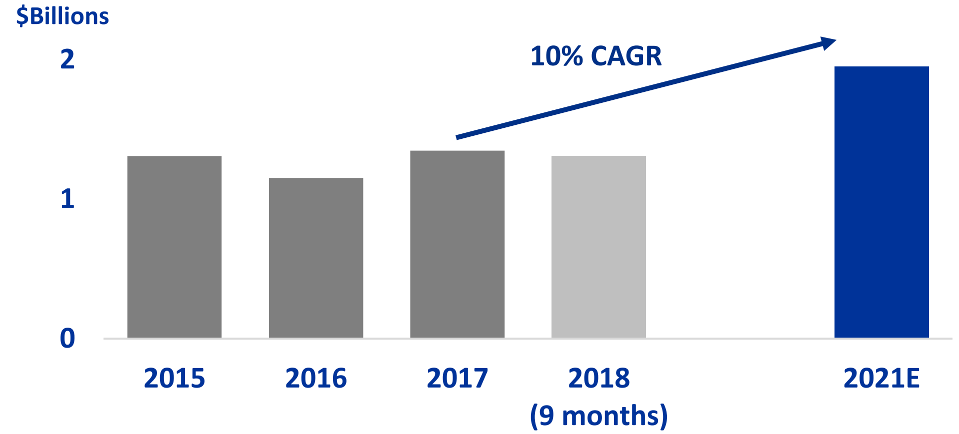
Well Positioned Assets



- **Maximize value of existing assets**
- **Leverage footprint**
- **Strategic corridor**
  - Proximate to growing supply basins
  - Accesses key U.S. markets
- **Significant growth projects identified**

Comparable EBITDA Outlook for Liquids Pipelines





- Growing EBITDA
- Highly contracted portfolio
- Sustainable performance
- Outlook does not include Keystone XL and Keystone XL-related projects, which would significantly increase EBITDA outlook

Comparable EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information.

Liquids Pipelines

Paul Miller
President, Liquids Pipelines

Energy

Karl Johannson

President, Canada and Mexico Natural Gas Pipelines and Energy

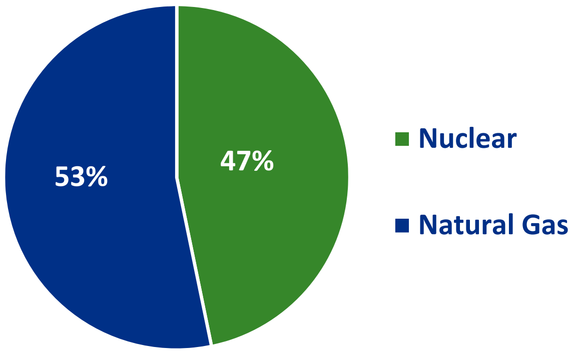
Energy – A Proven Platform

One of the largest private sector power generators in Canada

11 power plants, 6,615 MW

- Generating enough to power over 6 million homes
- Low-emissions portfolio

Power Capacity by Fuel Type



Two non-regulated natural gas storage facilities with 118 Bcf of capacity

- Approximately one-third of Alberta's storage capacity

Energy Portfolio Underpinned by Long-term Contracts

Plant	Capacity (MW)*	Counterparty	Contract Expiry
Coolidge	575	Salt River Project	2031
Bécancour	550	Hydro-Québec	2026
Grandview	90	Irving Oil	2024
Halton Hills	683	IESO	2030
Portlands	275	IESO	2029
Bruce Power Units 1-8	3,094	IESO	Up to 2064
Napanee (under construction)	900	IESO	20 Years from In-Service
Alberta plants	127	various	2022-2027

~95% of Generating Capacity Underpinned By Long-Term Contracts

** Our proportionate share of power generation capacity*

2018 Accomplishments

Generating solid results

Construction progressing on the 900 MW Napanee project

- Expected in-service in the first quarter of 2019

Advancing Bruce Power life extension program for Unit 6

- First Major Component Replacement (MCR) program to begin in 2020

Closed sale of Cartier Wind Energy for $630 million

Closed sale of U.S. Northeast power retail contracts for proceeds of approximately US$23 million

Stable and Predictable Business

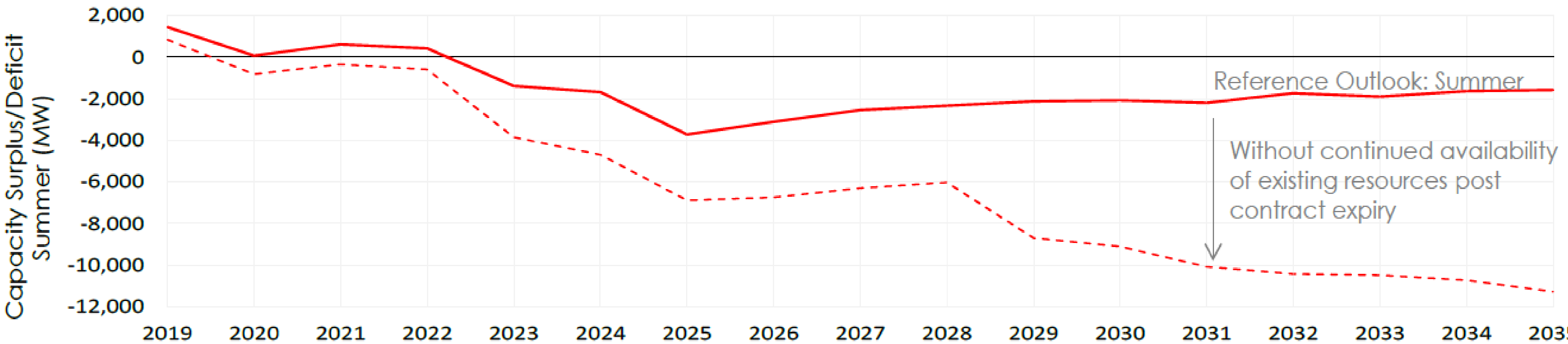
Ontario – Core Market

New planning forecast by the Ontario Independent Electricity System Operator (IESO) identifies:

- Ongoing new supply need beginning in 2023 of approximately 2 GW
- A need for existing contracted capacity in the post contract expiry periods
- A need for refurbished Bruce units

Outlook for our Generation Fleet is Positive

Supply Deficit



Source: Ontario IESO Sept 2018 Technical Planning Conference

Napanee Generating Station

- 900 MW natural gas-fired combined cycle plant
- 20 year firm PPA contract with the Ontario IESO
- Construction progressing
- Expect in-service in the first quarter of 2019
- Capital cost of $1.6 billion

Adds to Stable, Predictable, Contracted EBITDA

Bruce Power
Critical Component of Ontario's Electricity Market

- 6,400 MW or ~30% of Ontario's needs
- 48.3% ownership interest
- Power sales contracted through 2064 with the Ontario IESO
- Spent fuel and decommissioning liabilities are the responsibility of Ontario Power Generation
- $8+ billion investment through 2055 in life extension program for 6 reactors
- Bruce Power will play an important role in the province's energy sector for decades
- Received a 10 year license renewal from the Canadian Nuclear Safety Commission in late September

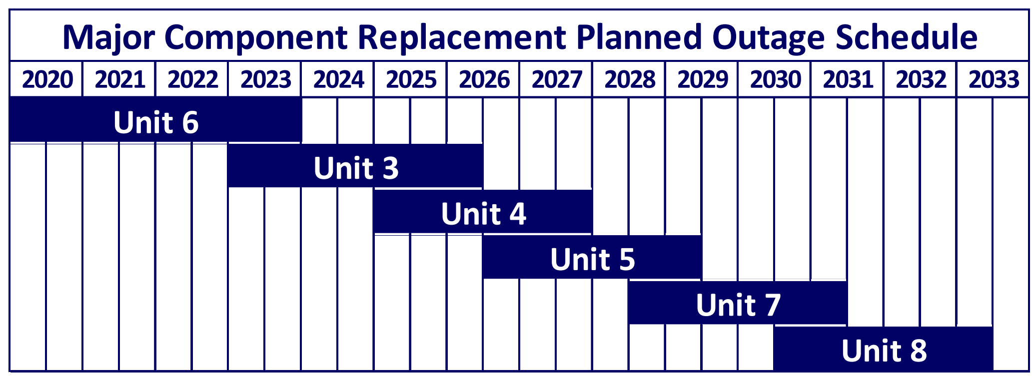
Fundamental to
Ontario's Energy Future

Refurbishment Readiness

- ✓ Comprehensive plant condition and scoping exercise complete
- ✓ Significant project governance in place
- ✓ Improved processes, systems, people and project controls
- ✓ Unit condition assessments undertaken on all six units
- ✓ Project cost and execution schedule are well developed and have been independently validated
- ✓ Cost and duration estimates finalized and fixed 15 months prior to outage
- ✓ IESO agreement gives certainty in pricing and outcome
- ✓ Minimal MCR overlap
- ✓ Bruce Power and OPG are collaborating on their nuclear refurbishment programs; sharing knowledge and leveraging economies of scale

Life Extension Program

- **The Life Extension Program, Major Component Replacement (MCR) and Asset Management (AM), remain on schedule and on budget**
- **Bruce Power submitted the Final Basis of Estimate for the Unit 6 MCR on September 28, 2018**
- **The Unit 6 MCR will proceed as planned in early 2020**
- **MCR and AM capital to be reflected in the uniform price received beginning April 1, 2019**
- **$2.2 billion* of expected investment for the Life Extension Program through 2023**
- **$6.0 billion** for the remaining Life Extension Program through to 2055**



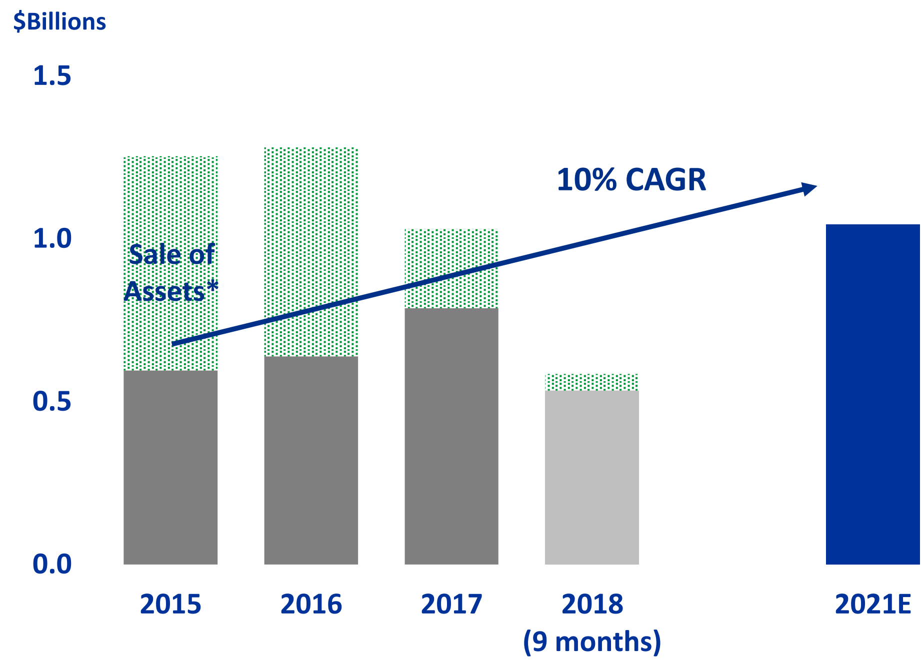
**TransCanada's share in nominal dollars*
***TransCanada's share in 2018 dollars*

Alberta - Core Market

- Own and operate four natural gas-fired cogeneration plants with total capacity of 448 MW
- Also own two non-regulated natural gas storage facilities with 118 Bcf of capacity
- Long history of power generation and marketing services in the province
- The Alberta Electric System Operator forecasts positive power demand growth
- Future supply needed as Alberta fully transitions off coal by 2030
- Cogeneration will help fill needs

Comparable EBITDA Outlook for Energy

Comparable EBITDA Growth Driven by Secured Projects



** U.S. NE Power generation assets sold in Q2, 2017; Ontario solar portfolio sold in Q4, 2017; Cartier Wind sold in Q4, 2018*

Comparable EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information.

Key Focus Areas and Future Opportunities

- Maximize the value of our assets through safe and optimized operations
- Complete Napanee plant construction
- Advance Bruce Power Life Extension Program
- Pursue growth in contracted power infrastructure with a focus on our core markets of Alberta and Ontario

Energy

Karl Johannson
President, Canada and Mexico Natural Gas Pipelines and Energy

Finance

Don Marchand

Executive Vice President and Chief Financial Officer

TransCanada

Financial Strategy

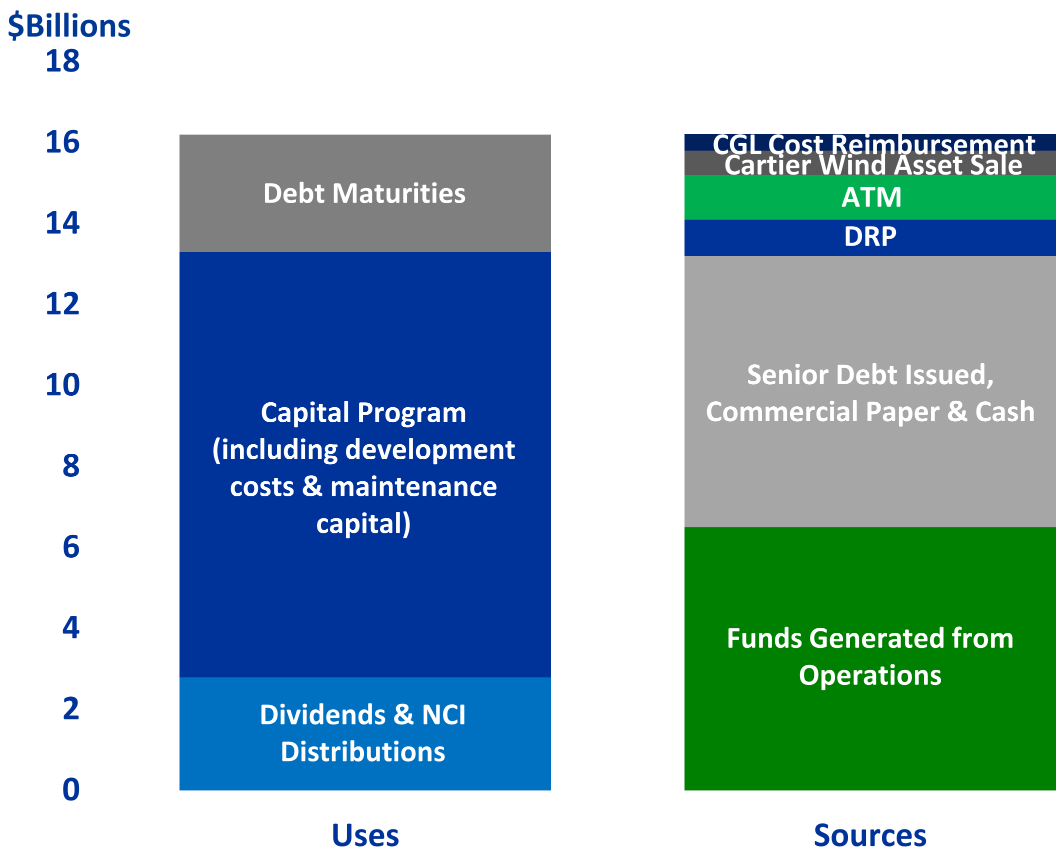
- Invest in low-risk, high-quality assets that generate predictable and enduring growth in earnings and cash flow
- Balance prudent and sustainable dividend growth with reinvestment in our businesses focusing on per share metrics
- Finance long-term assets with long-term capital
- Preserve financial strength and flexibility – value 'A' grade credit ratings
- Maintain simplicity and understandability of corporate structure
- Effectively manage foreign exchange, interest rate and counterparty exposures

Built For All Phases of the Economic Cycle

Delivering on Columbia Pipeline Acquisition Commitments

Commitments	Action
Acquire Columbia Pipeline Group (CPG)	✓ Closed acquisition on July 1, 2016
Realize CPG Synergies	✓ Achieved targeted US$250 million of annual synergies ✓ Developing integrated natural gas platform
Maintain Simple Structure	✓ Acquired Columbia Pipeline Partners for US$921 million ✓ Maintained 100% ownership interest in Mexico Natural Gas Pipelines
Maximize Value of Base Business	✓ Generating record financial results – pipelines are full; disciplined cost control ✓ Navigated U.S. Tax Reform and 2018 FERC Actions
Execute Growth Program	✓ $21 billion of assets placed into service through early 2019
Find New Opportunities	✓ Added $18 billion of commercially secured projects
Complete Substantial Funding Plan	✓ Raised $33 billion through a diverse suite of funding levers ✓ Monetized $7 billion of assets at attractive multiples ✓ Well positioned for secular change in interest rates ✓ On track to achieve targeted credit metrics

2018 Funding Complete



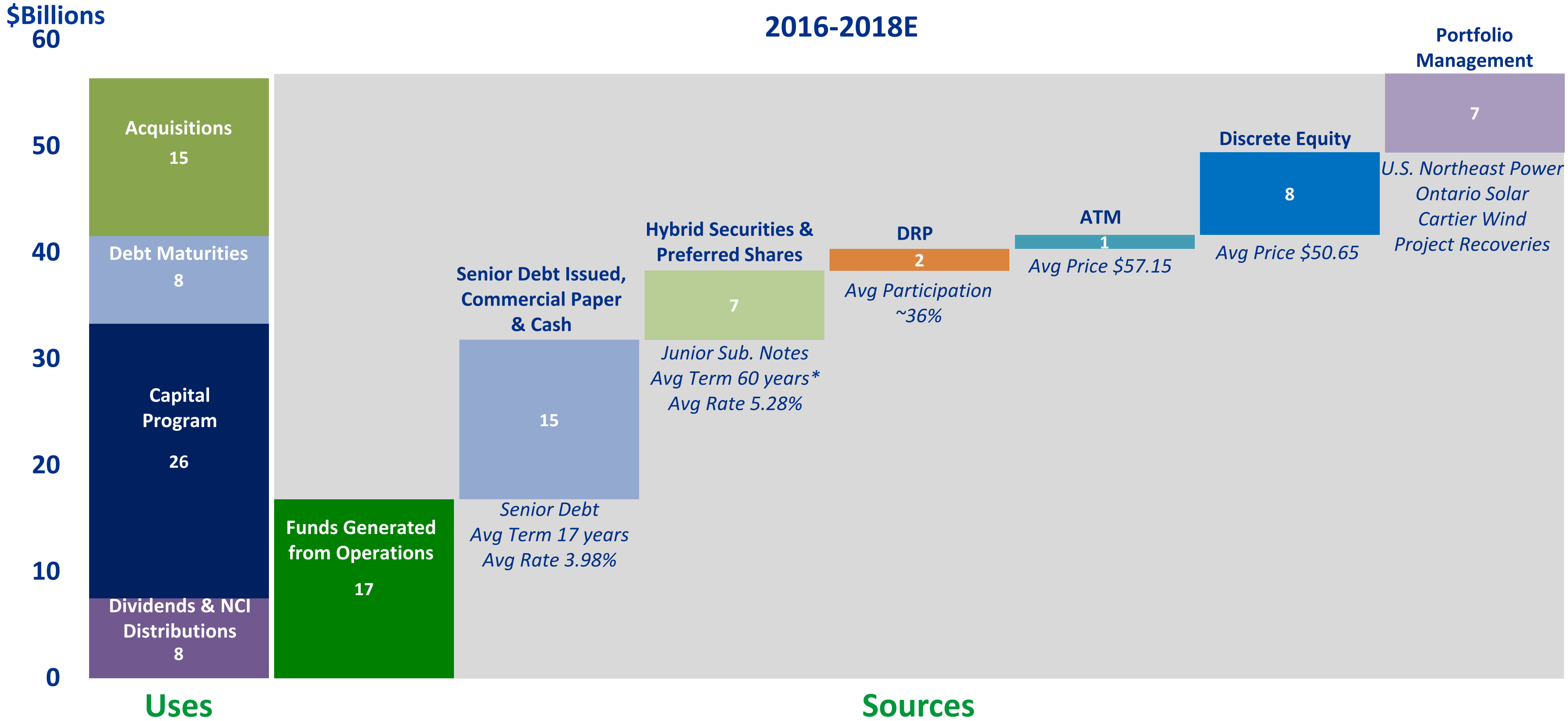
$9+ billion raised through an array of competitive funding options

- $6.1 billion of long-term debt in Canadian and U.S. markets
- ~$900 million of proceeds from Dividend Reinvestment Plan (DRP)
- $1.1 billion of At-the-Market (ATM) common equity issuance
- $630 million from sale of Cartier Wind
- $400 million reimbursement of Coastal GasLink development costs

Program Highlights Diversity and Depth of Funding Levers

Delivering Simultaneous and Sustainable Improvement in Balance Sheet and Earnings

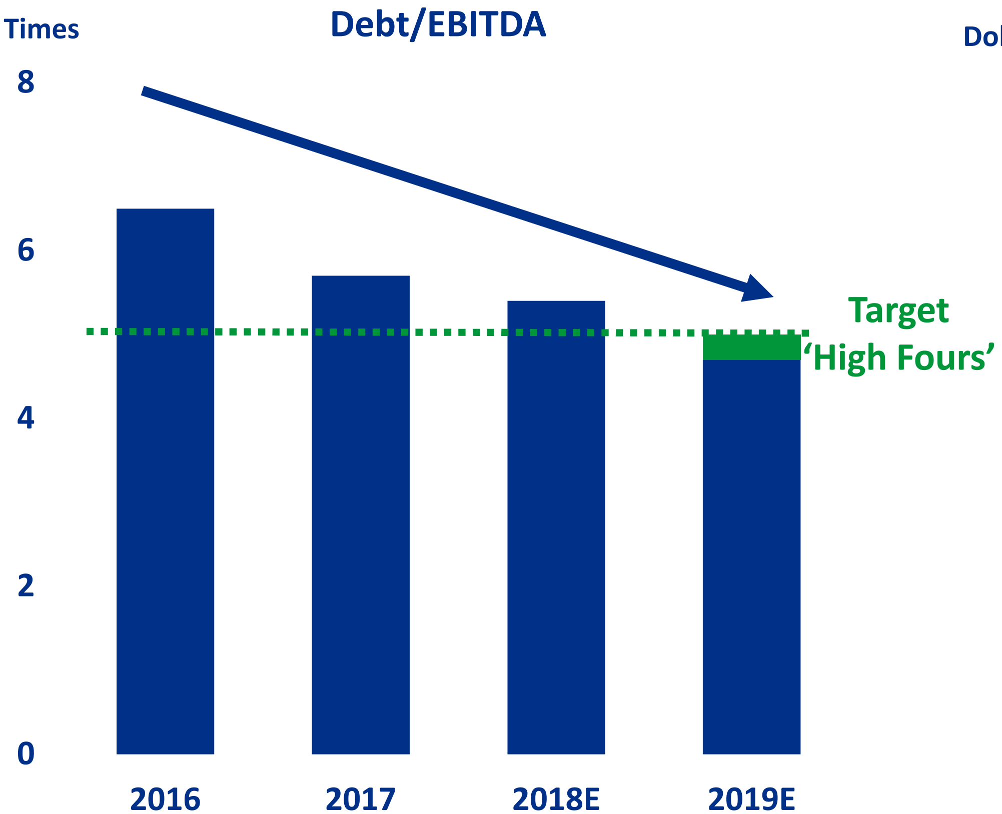
Executed Balanced Program to Fund $57 Billion of Capital Needs

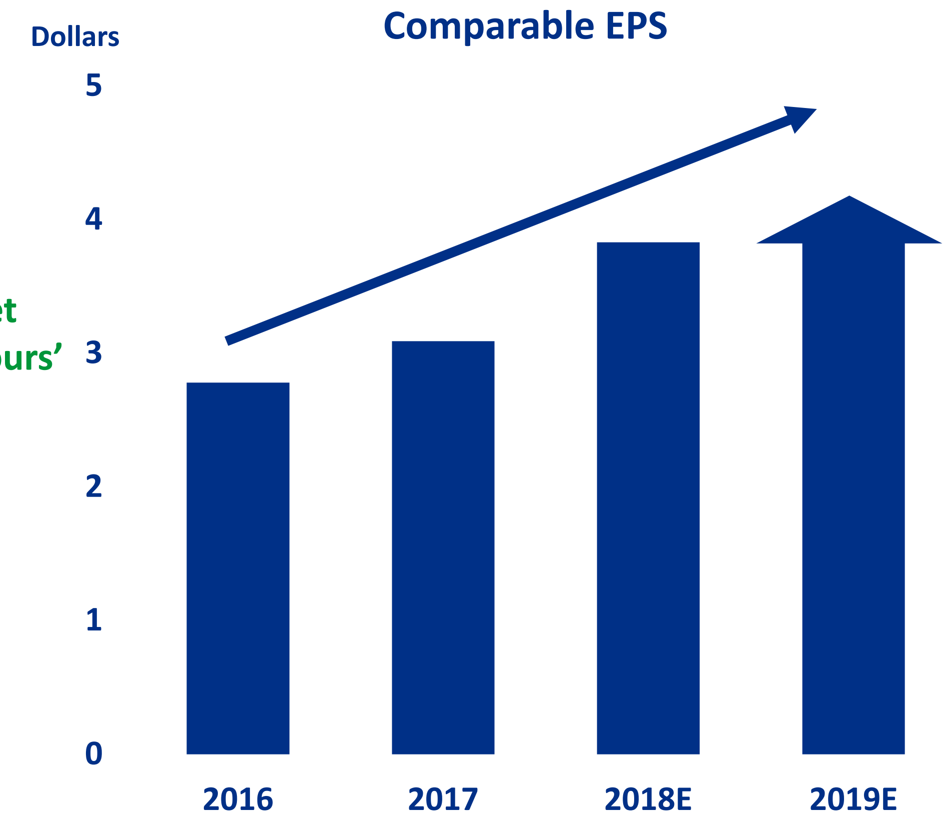


Excludes Columbia acquisition bridge facilities which were repaid with proceeds from the November 2016 equity issuance and sales of the U.S. Northeast Power assets; acquisitions net of debt assumed

**Average term includes hybrids to final call; instruments subject to first call and rate reset 10 years from issuance*

Deleveraging While Growing Per Share Earnings



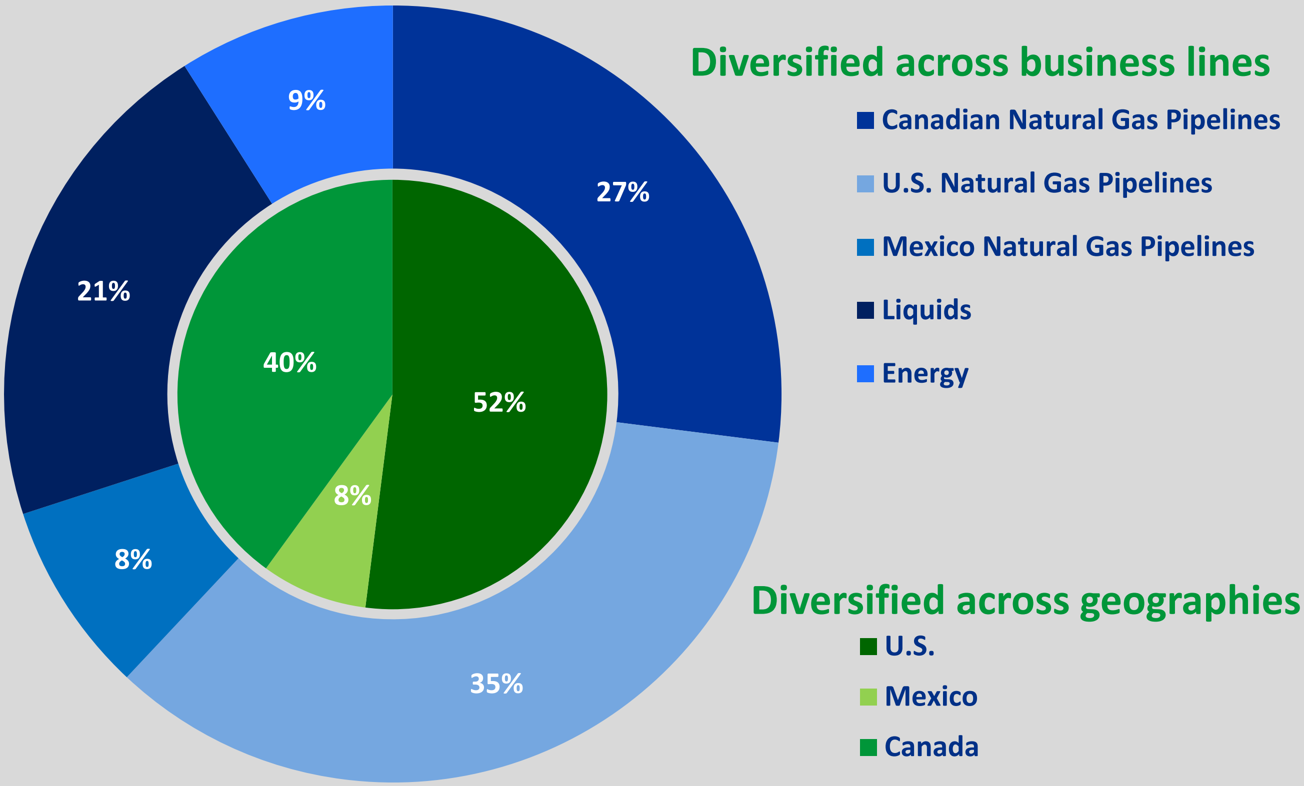


On Track to Achieve and Maintain Targeted Credit Metrics

**EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information.*

Diversified North American Portfolio

2018E Comparable EBITDA*



Multiple platforms that cannot be replicated

Highly utilized critical energy infrastructure

Platforms driving future growth

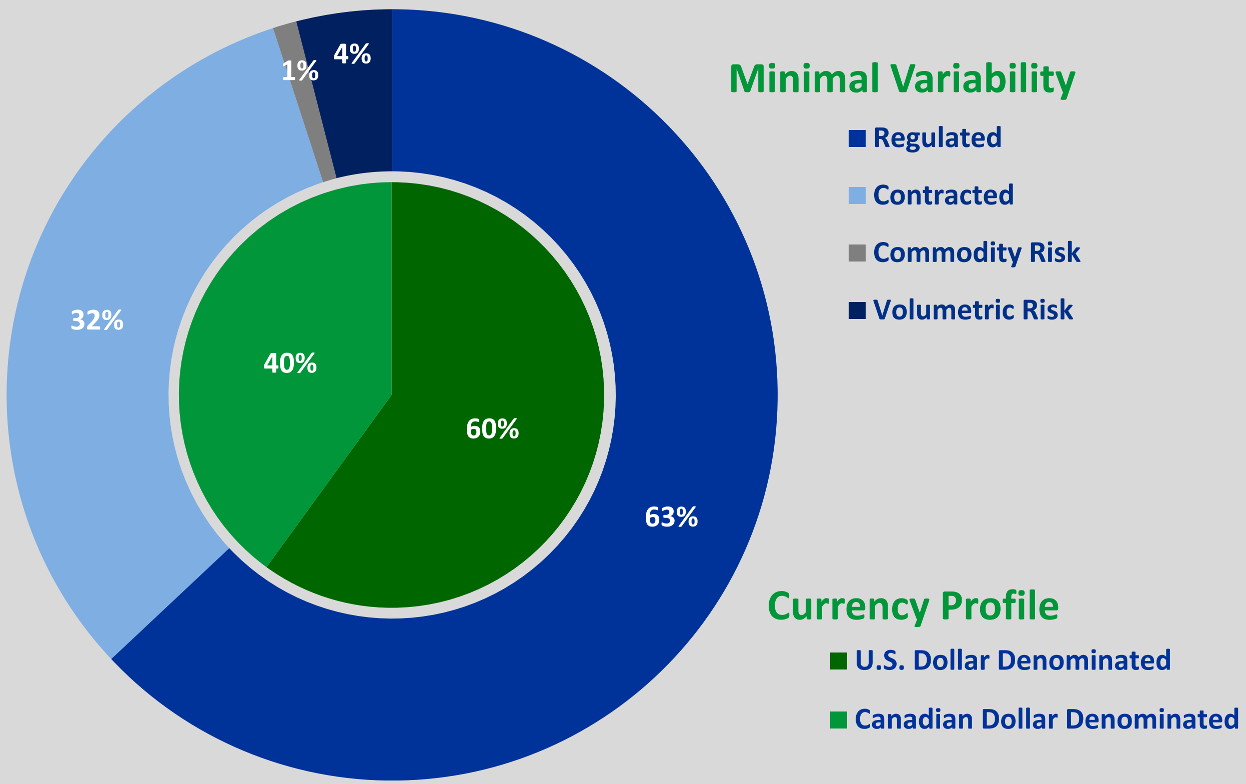
Long-term contracted assets with blue-chip counterparties

Established regulatory regimes in all jurisdictions

**Comparable EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information.*

Portfolio Generates High-Quality, Long-Life Cash Flows

2018E Comparable EBITDA*



Approximately 95% of Comparable EBITDA from regulated assets or long-term contracts

High visibility to sustained EBITDA well into the next decade

Currency profile of EBITDA now skewed towards U.S. dollars

Virtually all Mexico revenue streams denominated in U.S. dollars – peso exposure minimal

**Comparable EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information.*

Prudent Management of Financial Exposures

Positioned for Rising Interest Rate Environment

- Cash flows largely immune to fluctuating interest rates
- Long-term assets funded with long-term capital
  - 21-year average term of debt; 14 years reflecting hybrid first call
  - Predominantly fixed rate (~90%); average coupon 5.2%
  - Manageable maturity profile
- Built-in mitigation
  - All regulated Canadian Natural Gas Pipeline debt flow-through to tolls
  - Additional commercial arrangements shelter against interest rate moves
  - Regulated ROEs historically track interest rates

Foreign Exchange

- U.S. dollar assets and income streams partially hedged with U.S. dollar-denominated debt and associated interest expense
- Structurally long ~US$2 billion per annum after-tax; actively managed on a rolling 12-month forward basis

Income Taxes

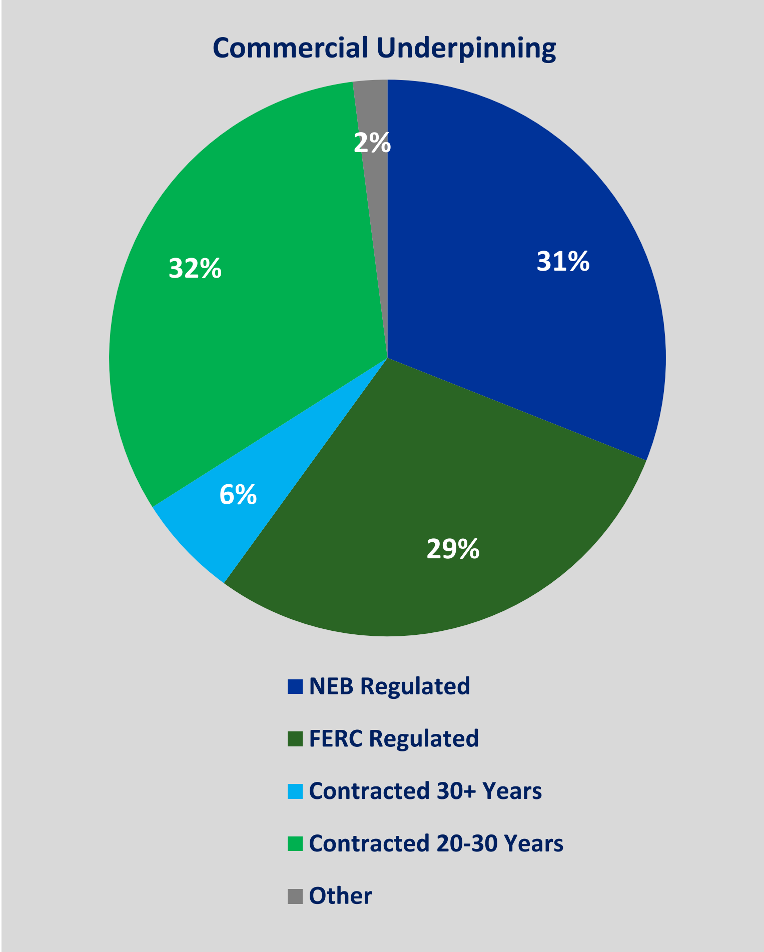
- Planning horizon effective tax rate in the mid-teens
  - Excludes Canadian Natural Gas Pipelines regulated income as well as equity AFUDC in U.S. and Mexico
- Current/deferred mix gravitating from <50% to >50%

Long History of Adeptly Managing Financial Risks

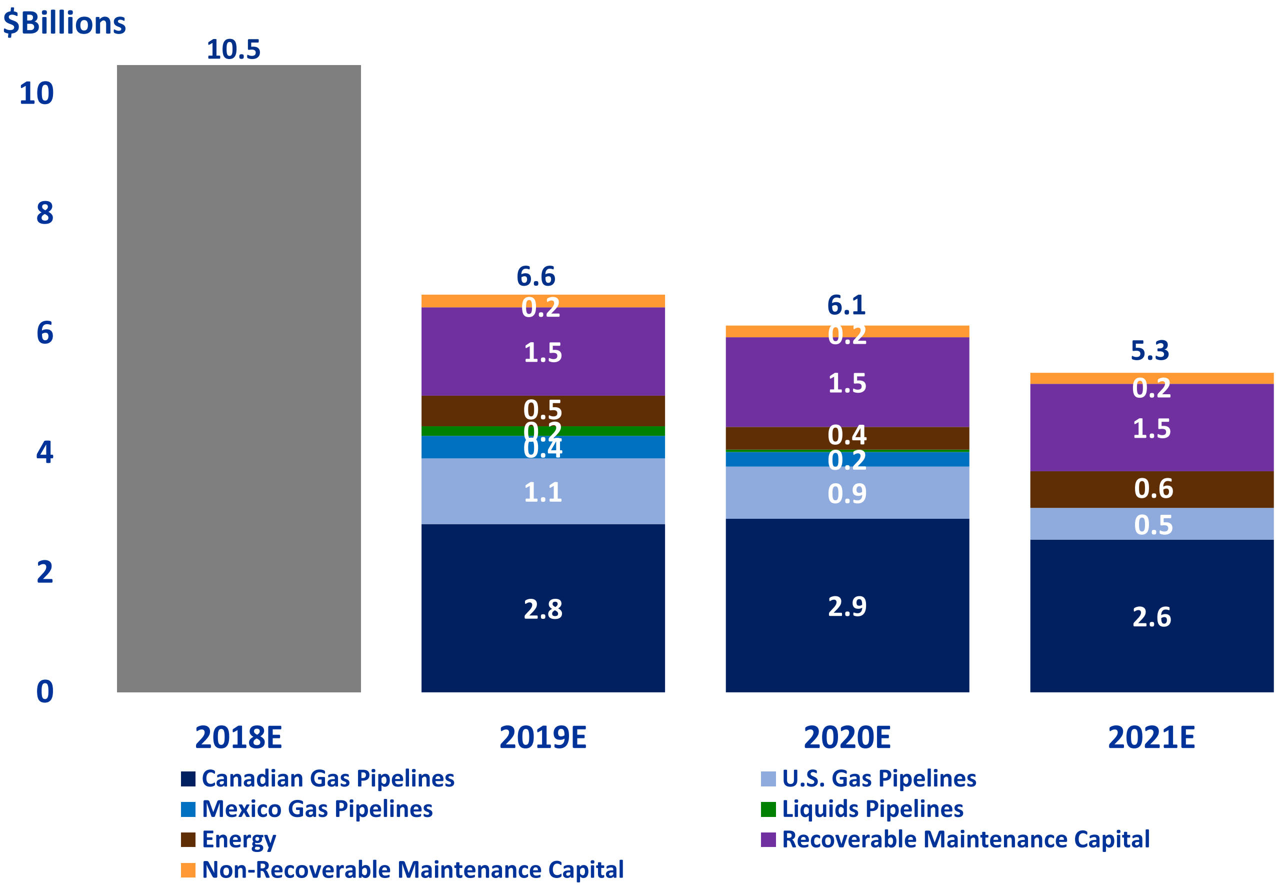
Advancing $36 Billion Secured Capital Program Through 2023

Project	Estimated Project Cost*	Invested to Date*	Expected In-Service Date*
Canadian Mainline	0.2	0.1	2018-2021
NGTL System	0.6	0.5	2018
WB XPress	US 0.9	US 0.8	2018
Mountaineer XPress	US 3.0	US 2.2	2018
Gulf XPress	US 0.6	US 0.5	2018
Sur de Texas**	US 1.4	US 1.3	2018
Napanee	1.6	1.4	2019
Canadian Pipelines Regulated Maintenance	1.8	-	2019-2021
U.S. Pipelines Regulated Maintenance	US 2.0	-	2019-2021
Liquids Pipelines Recoverable Maintenance	0.1	-	2019-2021
Non-recoverable Maintenance	0.6	-	2019-2021
Modernization ll	US 1.1	US 0.4	2018-2020
Other U.S. Natural Gas Pipelines**	US 0.3	US 0.2	2018-2020
Bruce Power Life Extension**	2.2	0.5	2018-2023
Villa de Reyes	US 0.8	US 0.6	2019
White Spruce	0.2	0.1	2019
NGTL System	2.8	0.8	2019
Tula	US 0.7	US 0.6	2020
Buckeye XPress	US 0.2	-	2020
NGTL System	1.7	0.1	2020
NGTL System	2.5	-	2021
NGTL System	1.5	-	2022
Coastal GasLink	6.2	0.5	2023
Foreign Exchange Impact (1.29 exchange rate)	3.2	1.9	-
Total Canadian Equivalent	36.2	12.5	

**Billions of dollars. Certain projects are subject to various conditions including corporate and regulatory approvals. **Our proportionate share.*



Capital Expenditure Outlook 2019-2021



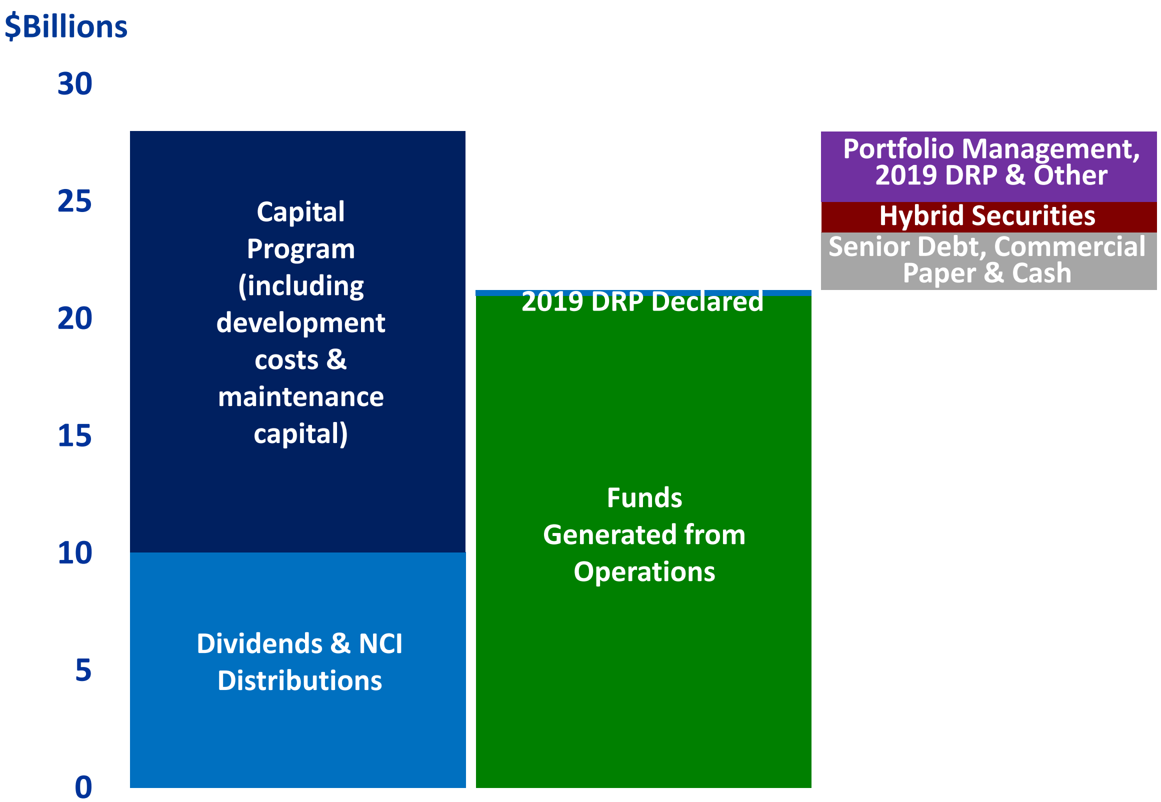
Approximately $18 billion* to be invested over the next three years related to:

- Secured growth portfolio
- Maintenance capital
  - ~85% has opportunity to earn a return on and of through current and future tolls
- Capitalized interest and debt AFUDC
- Modest development costs associated with medium- to longer-term projects

Capital Program Moving to More Normalized Levels Post-2018

**Assumes 25% ownership interest in Coastal GasLink (for illustrative purposes), reflecting expected TransCanada equity cash contribution; accounting treatment may differ from this outlook.*

Funding Program Outlook 2019-2021



Numerous Levers Available to Fund Secured Capital Program

- Strong, predictable and growing cash flow from operations
- 2019 Dividend Reinvestment Plan
- Access to capital markets including:
  - Senior debt
  - Hybrid securities and preferred shares
- Portfolio management

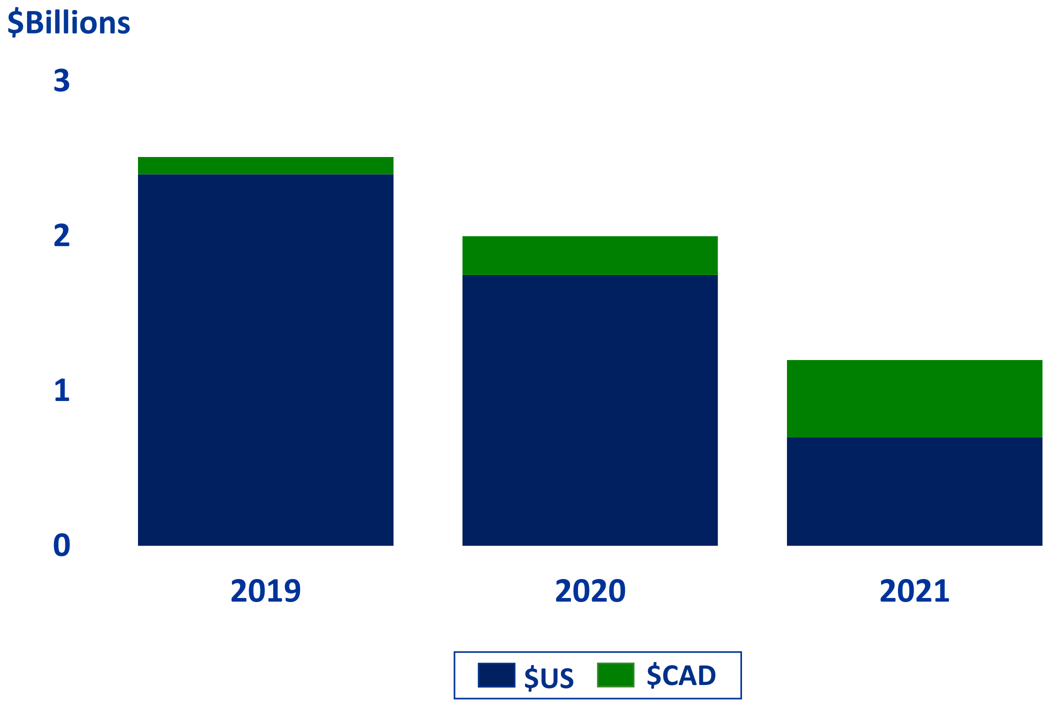
Moving Back to Historical Self-Funding Model

Completion of Secured Capital Program Does Not Require Discrete Equity

Assumes 25% ownership interest in Coastal GasLink, reflecting expected TransCanada equity cash contribution, accounting treatment may differ from this outlook.

Debt Maturity Profile 2019-2021

Debt Maturities in Home Currency



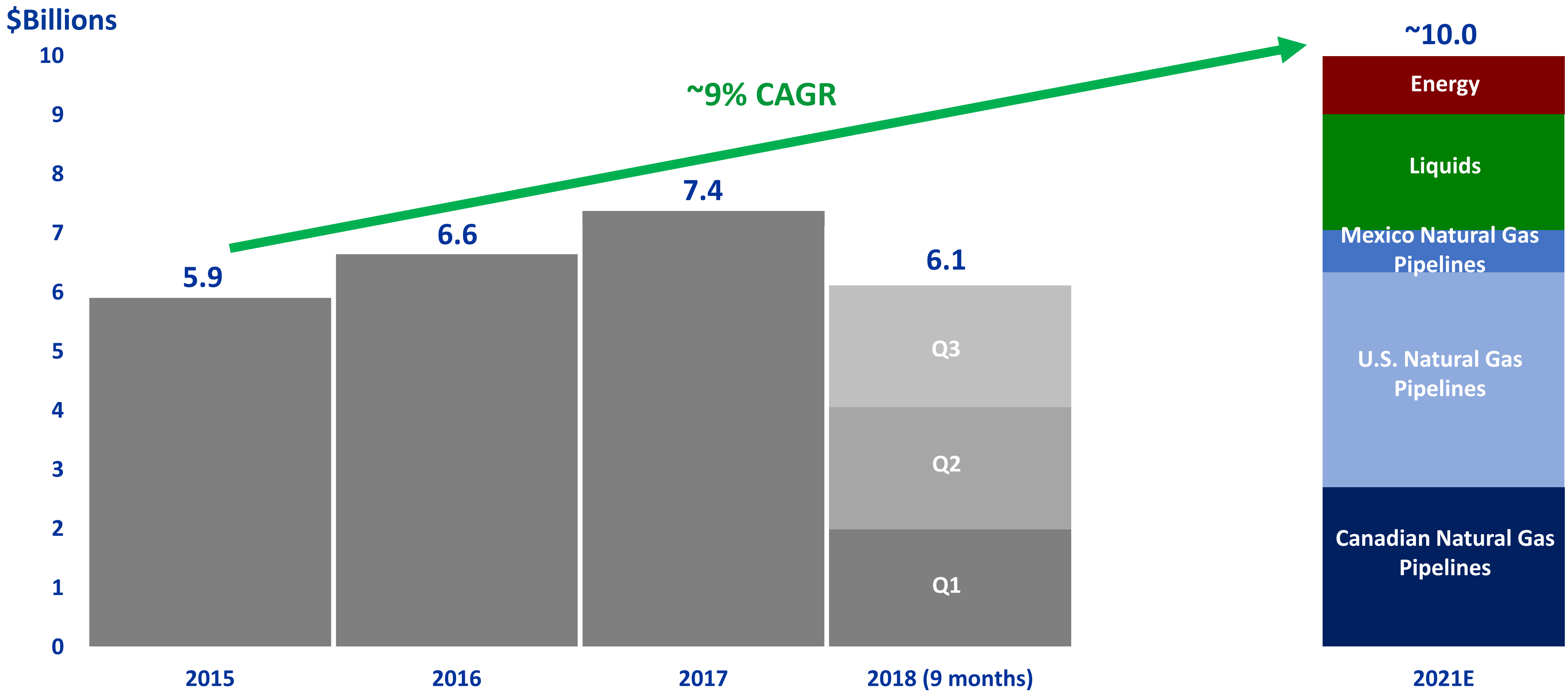
Solid Liquidity and Market Access

- ~$10 billion* of committed and undrawn credit lines
- Well supported commercial paper programs
  - Canada – $2.0 billion
  - U.S. – US$3.5 billion*
- Shelf facilities in place which allow for expedited access to global capital markets
- US$1.15 billion January 2019 maturity pre-funded

Very Manageable Level of Scheduled Debt Maturities Through 2021

**Credit lines expected to increase from ~$9 billion to ~$10 billion and U.S. commercial paper program increasing from US$2.5 billion to US$3.5 billion in December 2018*

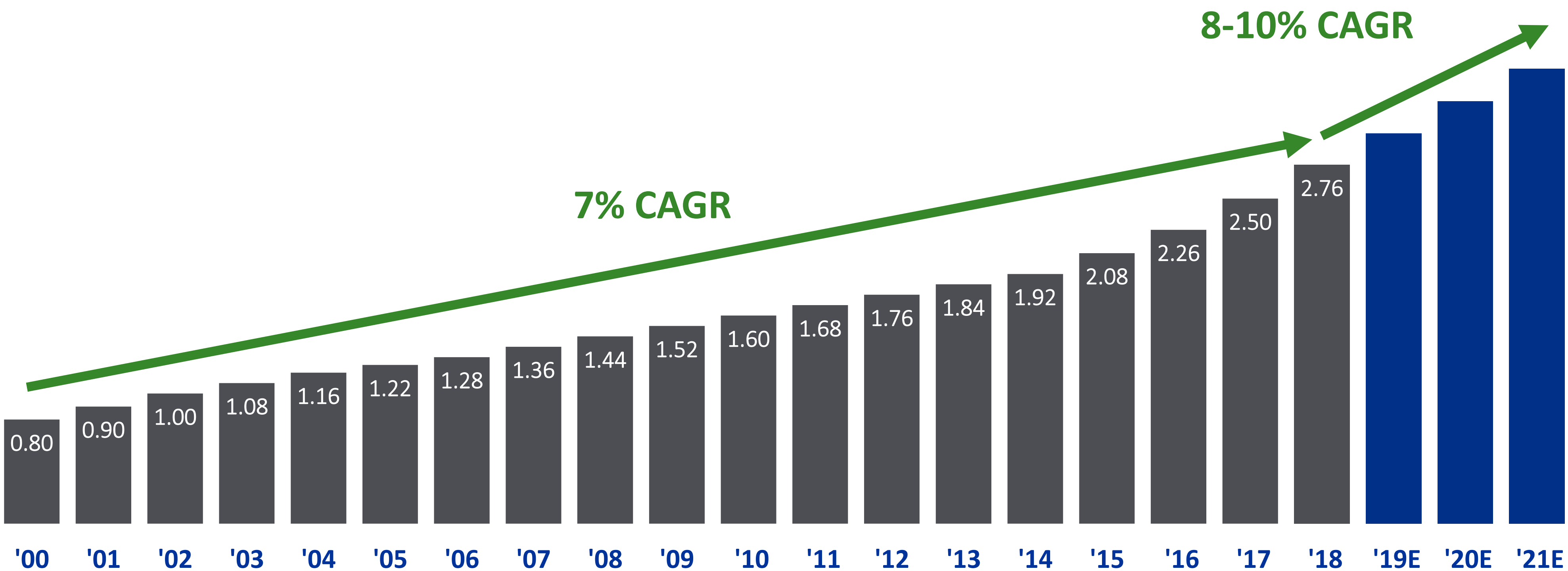
Comparable EBITDA Outlook 2015-2021E



Realizing Significant Growth

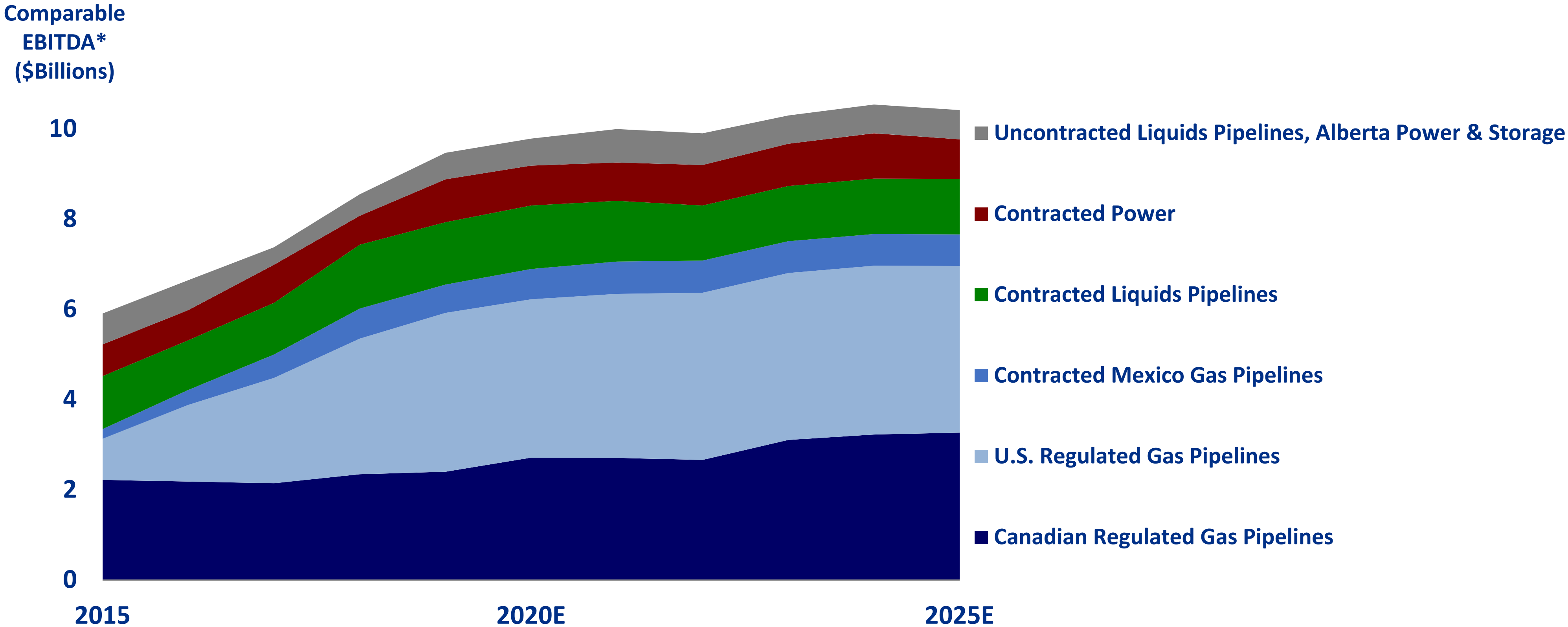
Comparable EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information.

Continuing Long Track Record of Dividend Growth



Supported by Expected Growth in Earnings and Cash Flow and Continued Strong Coverage Ratios

Stability and Longevity of Core Asset Base



Predictable and Resilient Cash Flow Streams

Underpinned by Regulated Businesses and Long-term Contracts

**Comparable EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information.*

Proven Business Model Through All Points of Business Cycle

Long-term Contracted Assets
Platforms that cannot be replicated
Simple and understandable corporate structure

Prudently Funded with Long-term Capital
Internal cash flow and numerous financing levers
Value 'A' grade credit ratings

Predictable Earnings and Cash Flow
~95% of Comparable EBITDA from regulated assets or long-term contracts with visibility well into next decade

Sustainable & Growing Dividend
5.5% yield and 8 to 10% CAGR through 2021
12% average annual TSR since 2000

Reinvestment in Growth Opportunities
Line-of-sight to over $50 billion of in-footprint investment
Five platforms for future growth

Long History of Living Within Our Means

Poised to Deliver Third Decade of Double-Digit TSR

Finance

Don Marchand

Executive Vice President and Chief Financial Officer

TransCanada

Closing Remarks

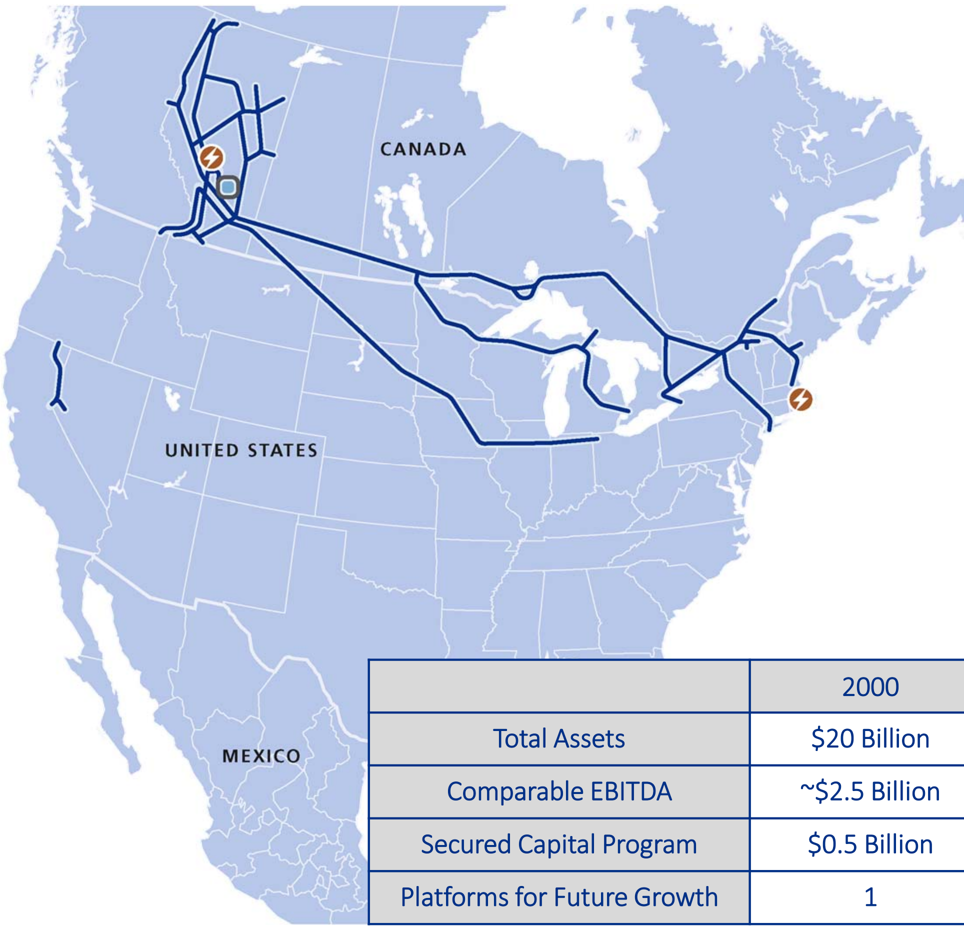
Russ Girling

President and Chief Executive Officer

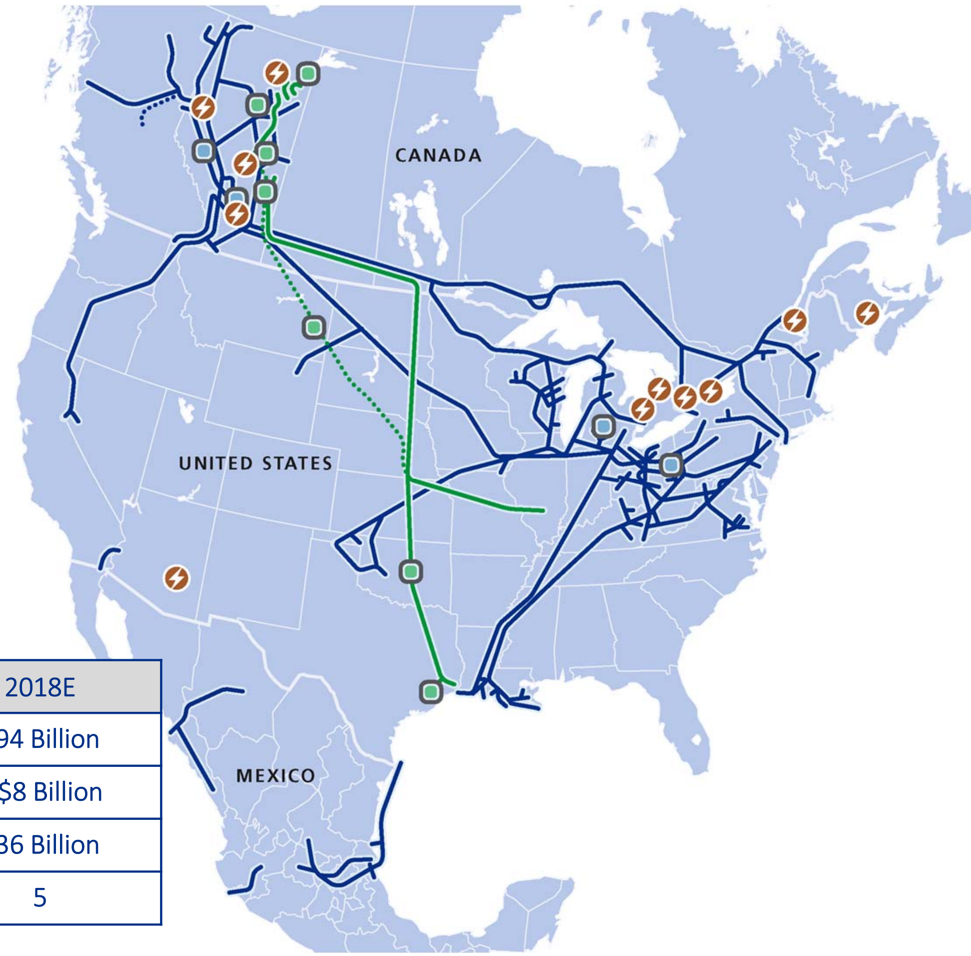
TransCanada

A Leading North American Energy Infrastructure Company

2000

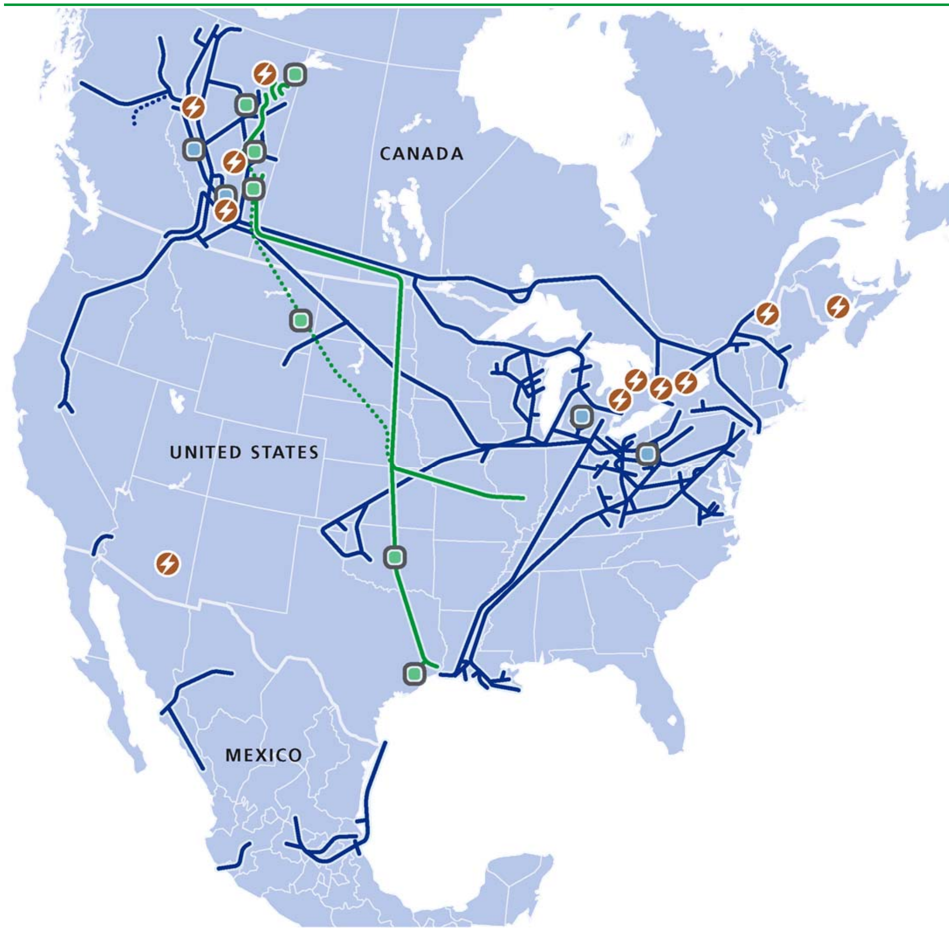


2018



	2000	2018E
Total Assets	$20 Billion	$94 Billion
Comparable EBITDA	~$2.5 Billion	> $8 Billion
Secured Capital Program	$0.5 Billion	$36 Billion
Platforms for Future Growth	1	5

Key Takeaways



- ✓ Business Performing Very Well
  - Record financial results expected in 2018
- ✓ Diversified Portfolio of Critical Energy Infrastructure Assets
  - 95% of Comparable EBITDA from regulated assets or long-term contracts
- ✓ Visible Growth
  - $36 billion portfolio of secured projects
  - $20+ billion of projects under development
- ✓ Dividend Poised to Continue to Grow
  - Annual increases of 8 to 10% through 2021
- ✓ Financial Strength and Flexibility
  - Long history of living within our means

Track Record of Delivering Long-Term Shareholder Value

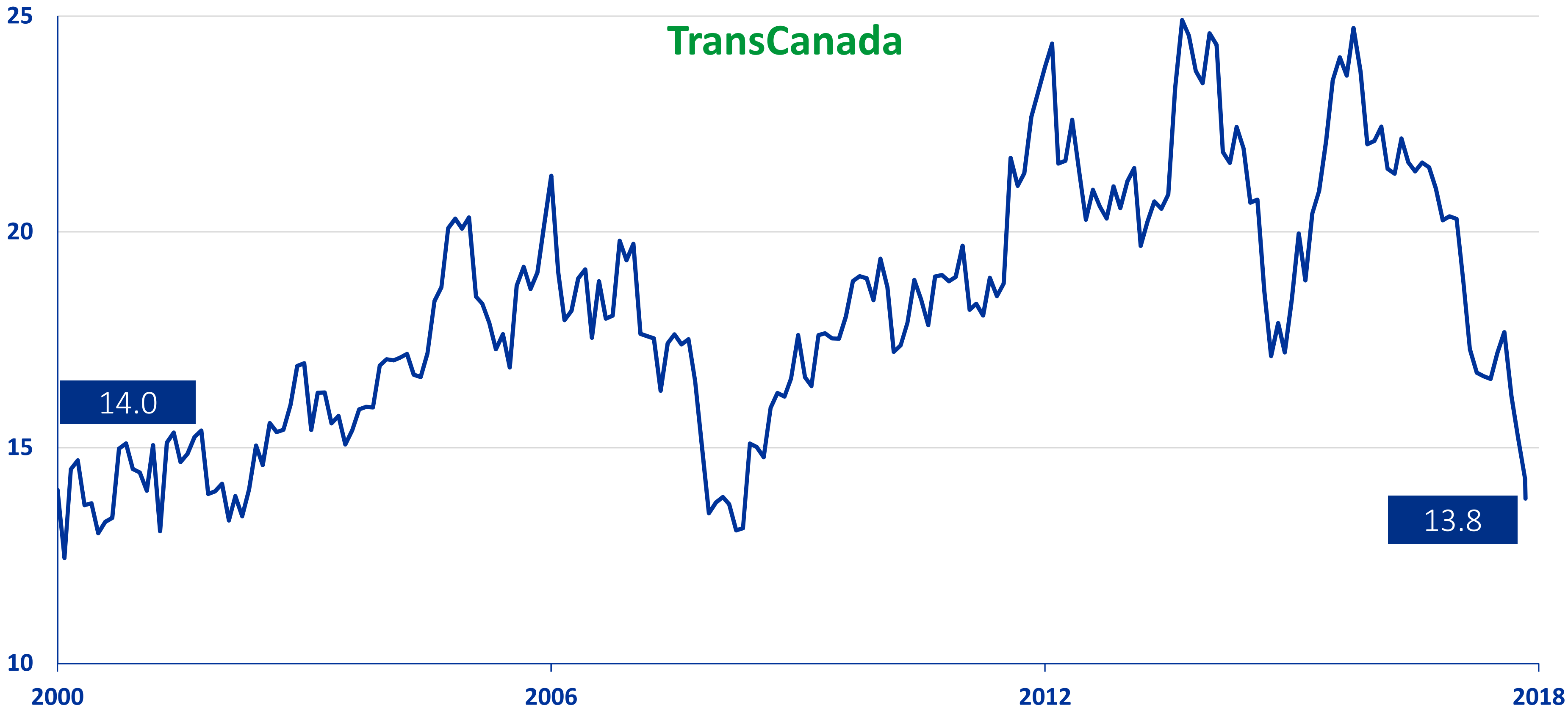
Closing Remarks

Russ Girling

President and Chief Executive Officer

TransCanada

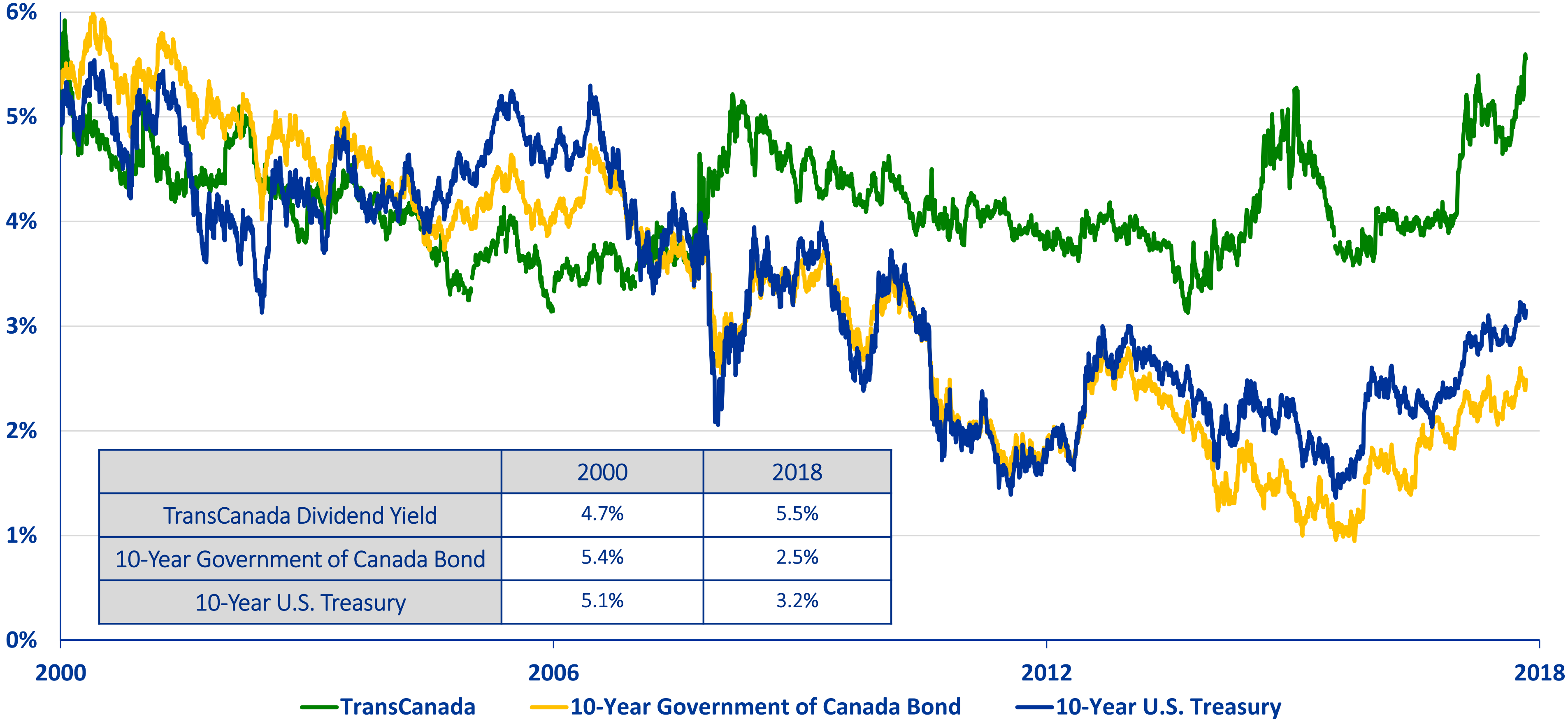
Price Earnings Multiple



Source: FactSet

Trading at Historically Low Multiple Despite Record Performance

Historic Yields



	2000	2018
TransCanada Dividend Yield	4.7%	5.5%
10-Year Government of Canada Bond	5.4%	2.5%
10-Year U.S. Treasury	5.1%	3.2%

Source: FactSet

The Spread Between our Dividend Yield and Government Bonds has Widened Significantly

Appendix – Reconciliation of Non-GAAP Measures

Appendix – Reconciliation of Non-GAAP Measures
(unaudited) (millions of dollars, except per share amounts)

	Three months ended September 30		Nine months ended September 30	
	2018	2017	2018	2017
Net Income Attributable to Common Shares	928	612	2,447	2,136
Specific items (net of tax):				
U.S. Northeast power marketing contracts	(8)	-	(3)	-
Net gain on sales of U.S. Northeast power generation assets	-	12	-	(243)
Integration and acquisition related costs - Columbia	-	30	-	69
Keystone XL asset costs	-	8	-	19
Keystone XL income tax recoveries	-	-	-	(7)
Risk management activities	(18)	(48)	90	(3)
Comparable Earnings[1]	902	614	2,534	1,971
Net Income Per Common Share	$1.02	$0.70	$2.72	$2.46
Specific items (net of tax):				
U.S. Northeast power marketing contracts	(0.01)	-	-	-
Net gain on sales of U.S. Northeast power generation assets	-	0.01	-	(0.28)
Integration and acquisition related costs - Columbia	-	0.03	-	0.08
Keystone XL asset costs	-	0.01	-	0.02
Keystone XL income tax recoveries	-	-	-	(0.01)
Risk management activities	(0.01)	(0.05)	0.10	-
Comparable Earnings Per Common Share[1]	$1.00	$0.70	$2.82	$2.27
Weighted Average Basic Common Shares Outstanding (millions)	906	873	898	870

(1) Non-GAAP measure excluding specific items. See the non-GAAP measures slide at the front of this presentation for more information.

Appendix – Reconciliation of Non-GAAP Measures continued

(unaudited) (millions of dollars)

	Three months ended September 30		Nine months ended September 30	
	2018	2017	2018	2017
Comparable EBITDA[1]	2,056	1,667	6,110	5,474
Depreciation and amortization	(564)	(506)	(1,669)	(1,532)
Comparable EBIT[1]	1,492	1,161	4,441	3,942
Specific items:				
Foreign exchange gain/(loss) – inter-affiliate loan	(60)	7	(52)	(1)
U.S. Northeast power marketing contracts	12	-	5	-
Net gain on sales of U.S. Northeast power generation assets	-	(12)	-	469
Integration and acquisition related costs - Columbia	-	(32)	-	(91)
Keystone XL asset costs	-	(10)	-	(23)
Risk management activities	(34)	45	(44)	(102)
Segmented Earnings	1,410	1,159	4,350	4,194

(1) Comparable EBITDA and Comparable EBIT are non-GAAP measures excluding specific items. See the non-GAAP measures slide at the front of this presentation for more information.

Appendix – Reconciliation of Non-GAAP Measures continued
(unaudited) (millions of dollars)

	Three months ended September 30		Nine months ended September 30	
	2018	2017	2018	2017
Net Cash Provided by Operations	**1,299**	**1,185**	**4,516**	**3,840**
Increase in operating working capital	284	86	130	224
Funds Generated from Operations(1)	**1,583**	**1,271**	**4,646**	**4,064**
Specific items:				
U.S. Northeast power marketing contracts	(12)	-	(5)	-
Integration and acquisition related costs - Columbia	-	32	-	84
Keystone XL asset costs	-	10	-	23
Net loss on sales of U.S. Northeast power generation assets	-	3	-	20
Comparable Funds Generated from Operations(1)	**1,571**	**1,316**	**4,641**	**4,191**

(1) Funds Generated from Operations and Comparable Funds Generated from Operations are non-GAAP measures excluding specific items. See the non-GAAP measures slide at the front of this presentation for more information.