TransCanada Investor Day

November 17, 2015

TransCanada
In business to deliver

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, 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, Earnings Before Interest and Taxes (EBIT), Comparable EBIT, Comparable Interest Expense, Comparable Interest Income and Other, Comparable Income Taxes, Funds Generated from Operations and Distributable Cash Flow. 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.

Strategic Overview

Russ Girling
President & Chief Executive Officer

TransCanada
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Investor Day Key Themes

Proven Strategy – Low Risk Business Model

- ~90% of EBITDA derived from regulated assets or long-term contracts

Three Complementary Businesses Performing Well in 2015

- EBITDA and Funds Generated from Operations expected to exceed 2014

Focus on Operating and Capital Discipline

- Leader in safety and reliability, focused on continuous improvement
- Disciplined capital allocation to maximize shareholder value

Visible Growth Through 2018 and Beyond

- $13 billion of short-term projects
- $35 billion of commercially secured long-term projects

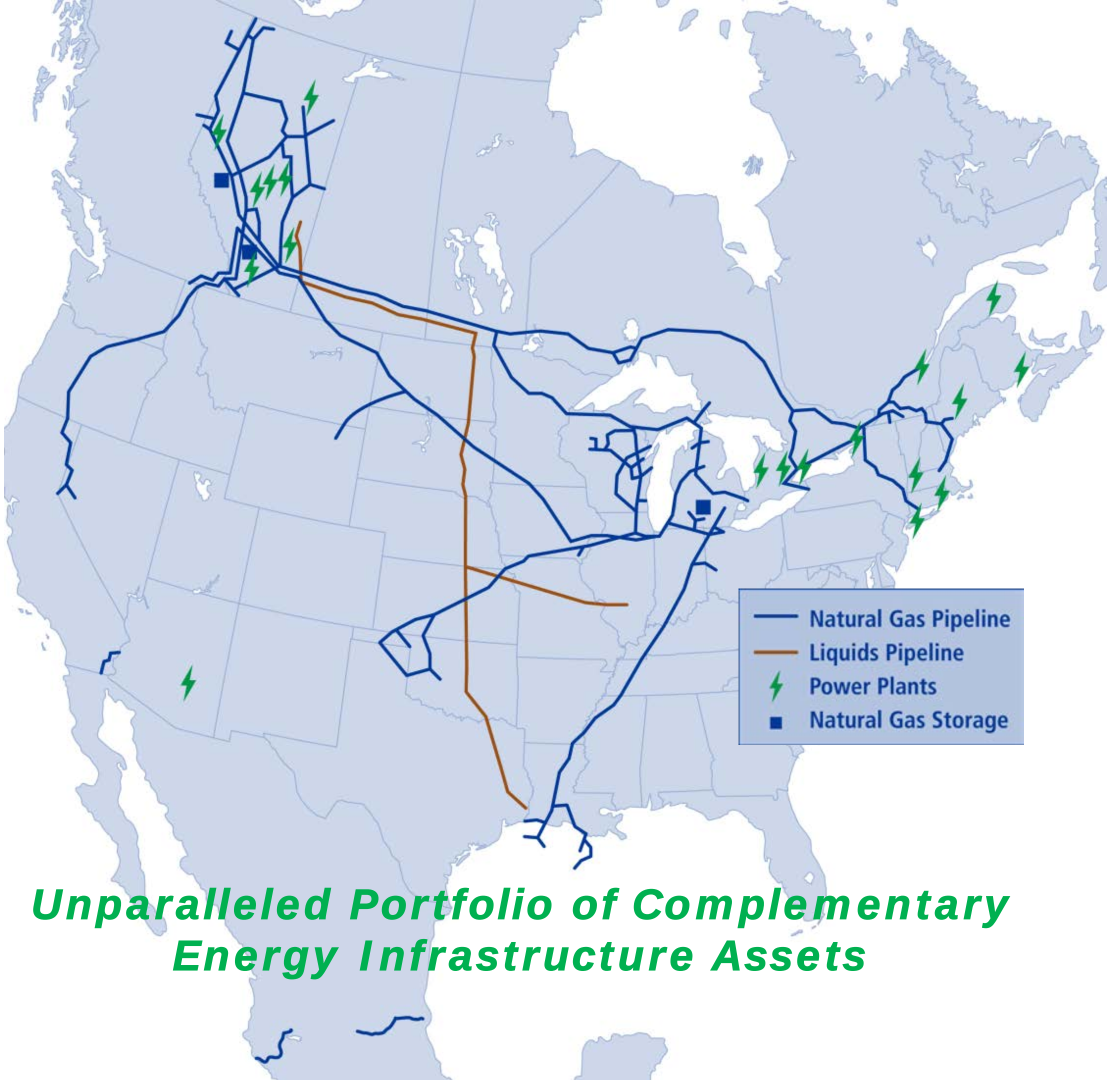
Dividend Poised to Grow Through 2020

- 8-10% average annual growth rate expected through 2020

Fundamental and Relative Valuation Highlight Significant Upside

- Compelling investment proposition based on outlook and relative valuation

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
  - 545,000 bbl/d or 20% of Western Canadian exports
- **Largest Private Sector Power Generator in Canada**
  - 19 power plants, 10,900 MW
- **Total Assets ~ $66 billion**

Unparalleled Portfolio of Complementary Energy Infrastructure Assets

We Have Made Significant Progress Since 2010



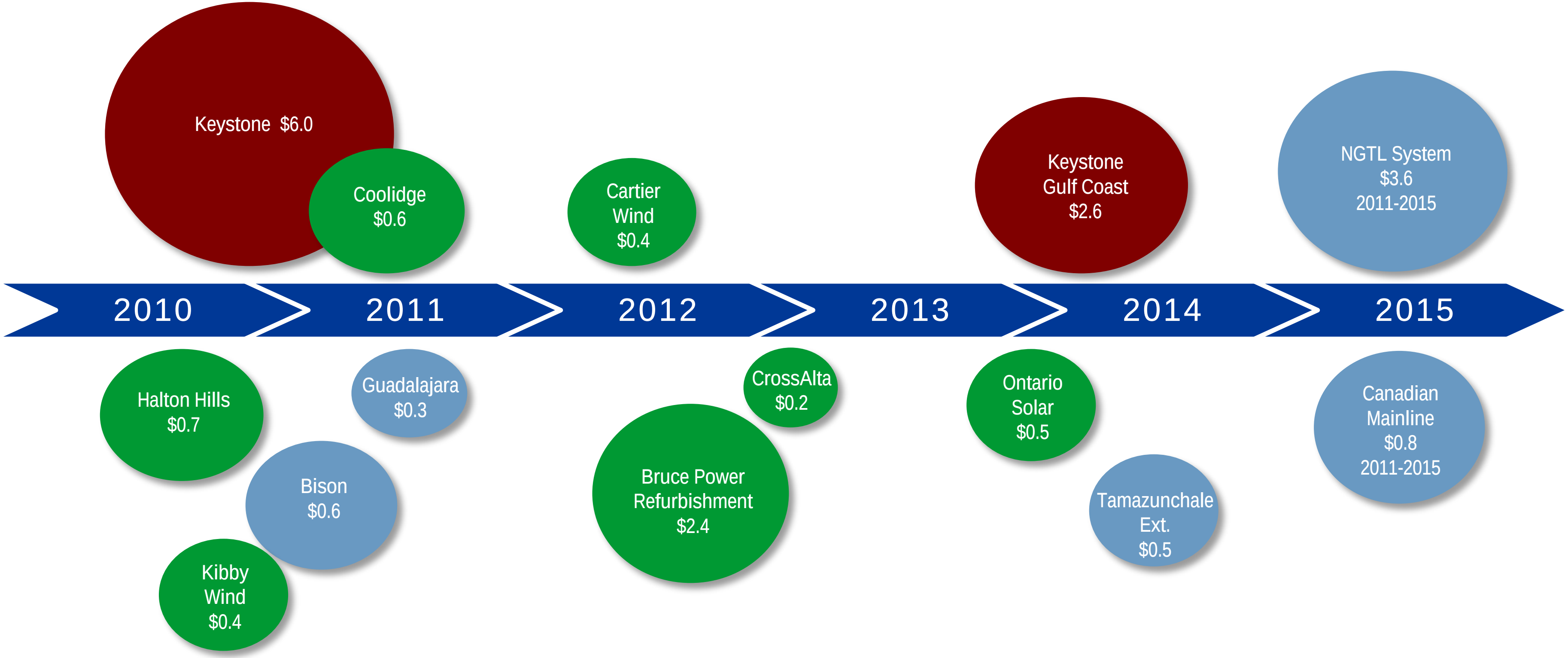




- $20 billion of assets placed into service
- $40 billion of new commercially secured projects
- $10 billion of financing completed, net of maturities
- US$2.5 billion of assets dropped down to TC PipeLines, LP
- $6 billion of dividends paid
- Common shares outstanding largely unchanged
- ‘A’ grade credit rating maintained
- Canadian Mainline secured through long-term settlement
- ANR System signed 2.0 Bcf/d of firm, long-term commitments
- Ravenswood capacity market issues addressed
- Operational efficiencies being identified

More to the TransCanada Story than Keystone XL

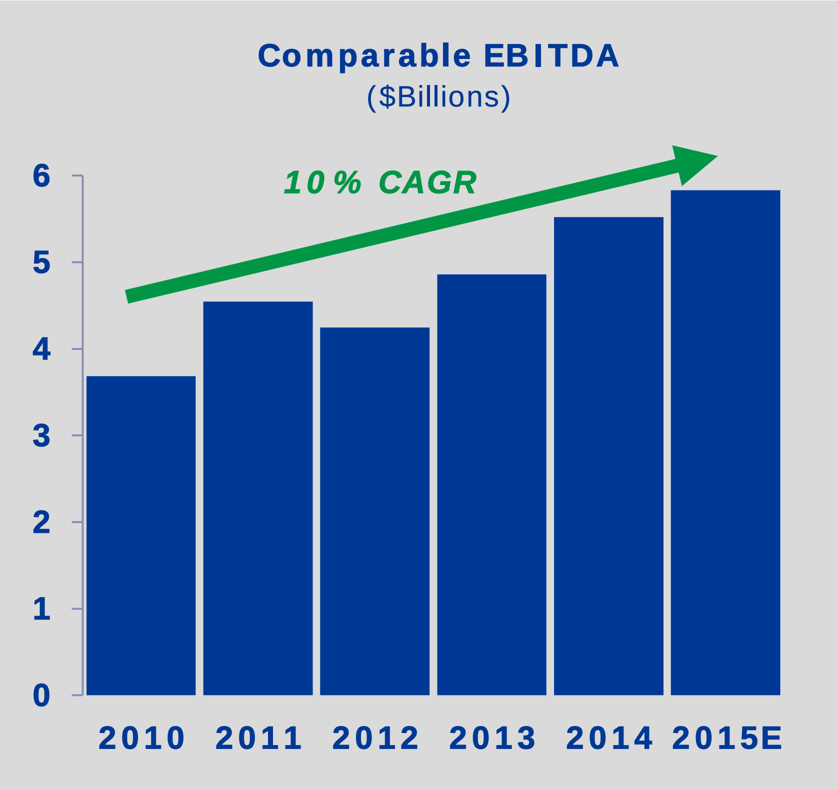
$20 Billion of Assets Placed In-Service since 2010

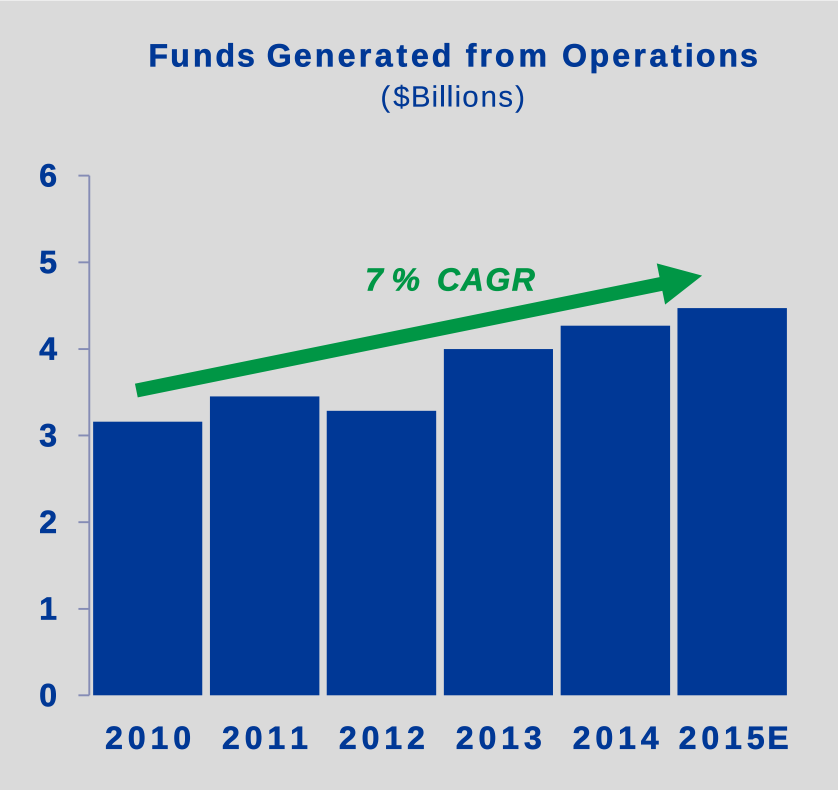


Underpinned by Long-Term Contracts or Cost-of-Service Regulation

** TransCanada share in billions of Canadian dollars*

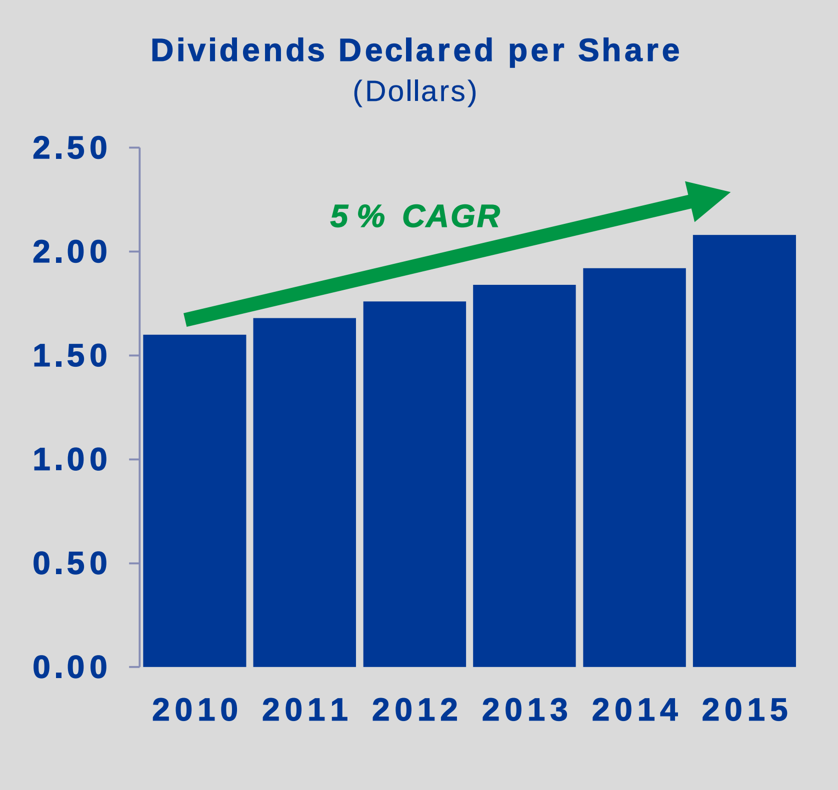
Capital Investment Drives Strong Financial Performance

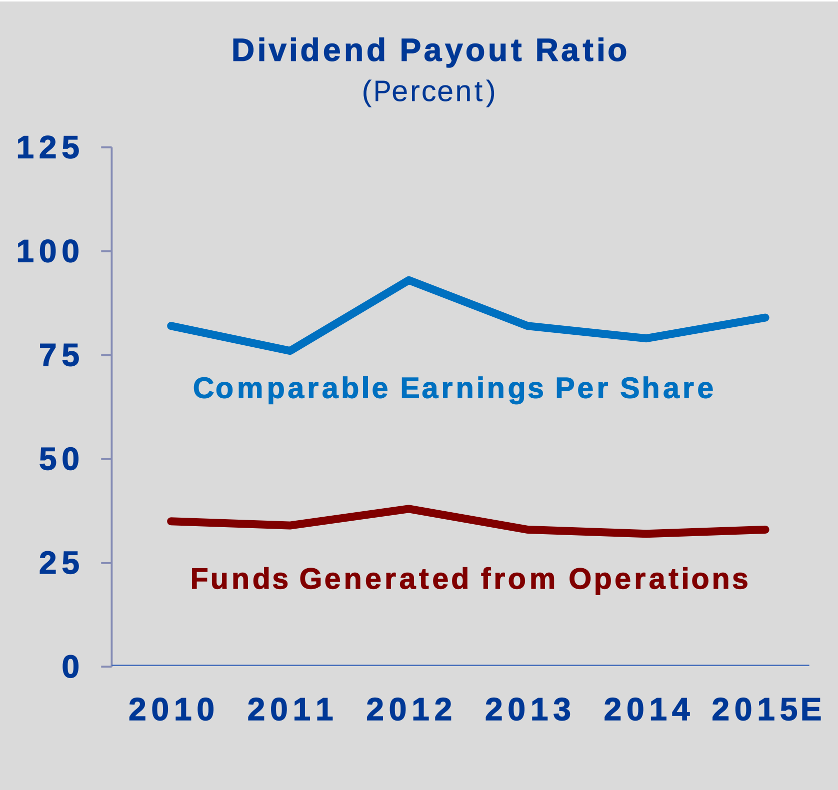




Significant Growth in
Comparable EBITDA and Funds Generated from Operations

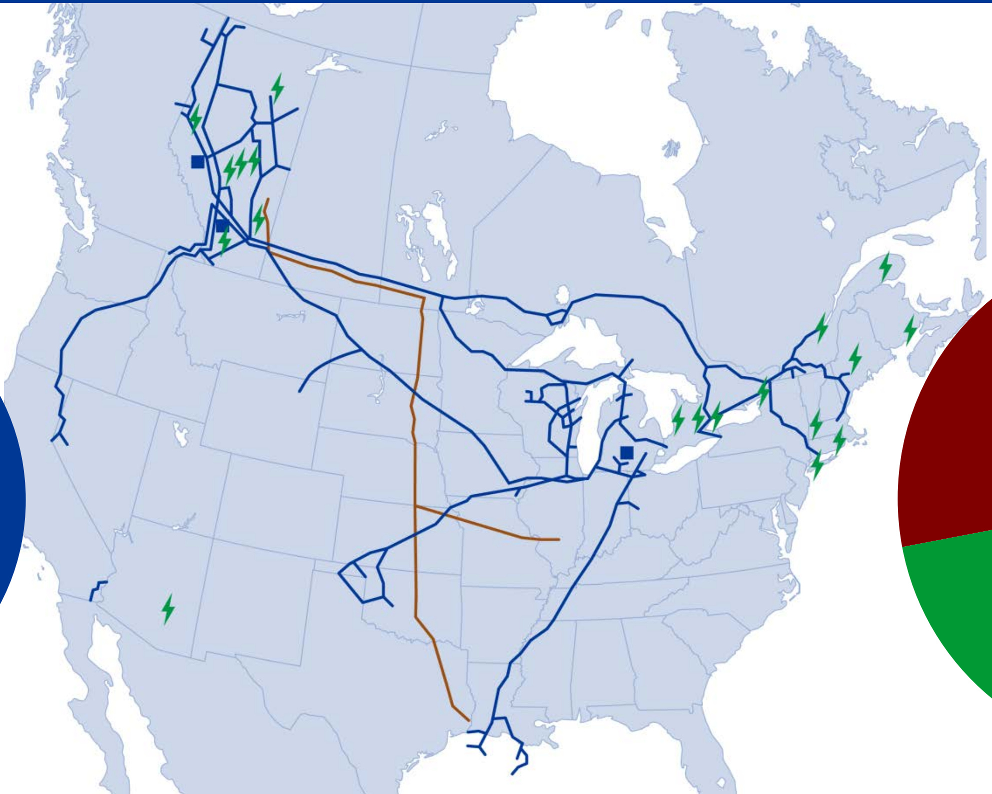
Long Track Record of Dividend Growth



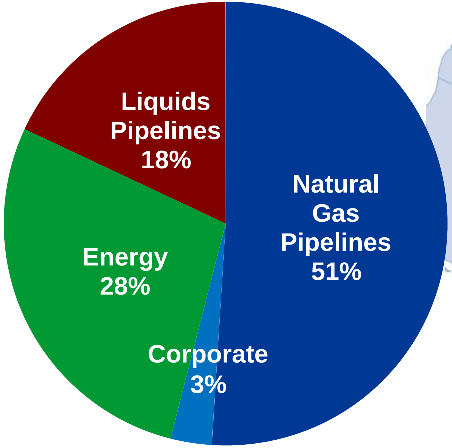


Supported by Industry-Leading Coverage Ratios

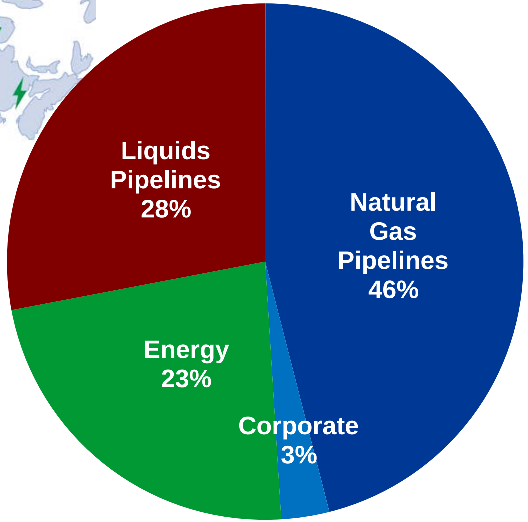
Three Strong Platforms for Future Growth*



2010
$47 Billion



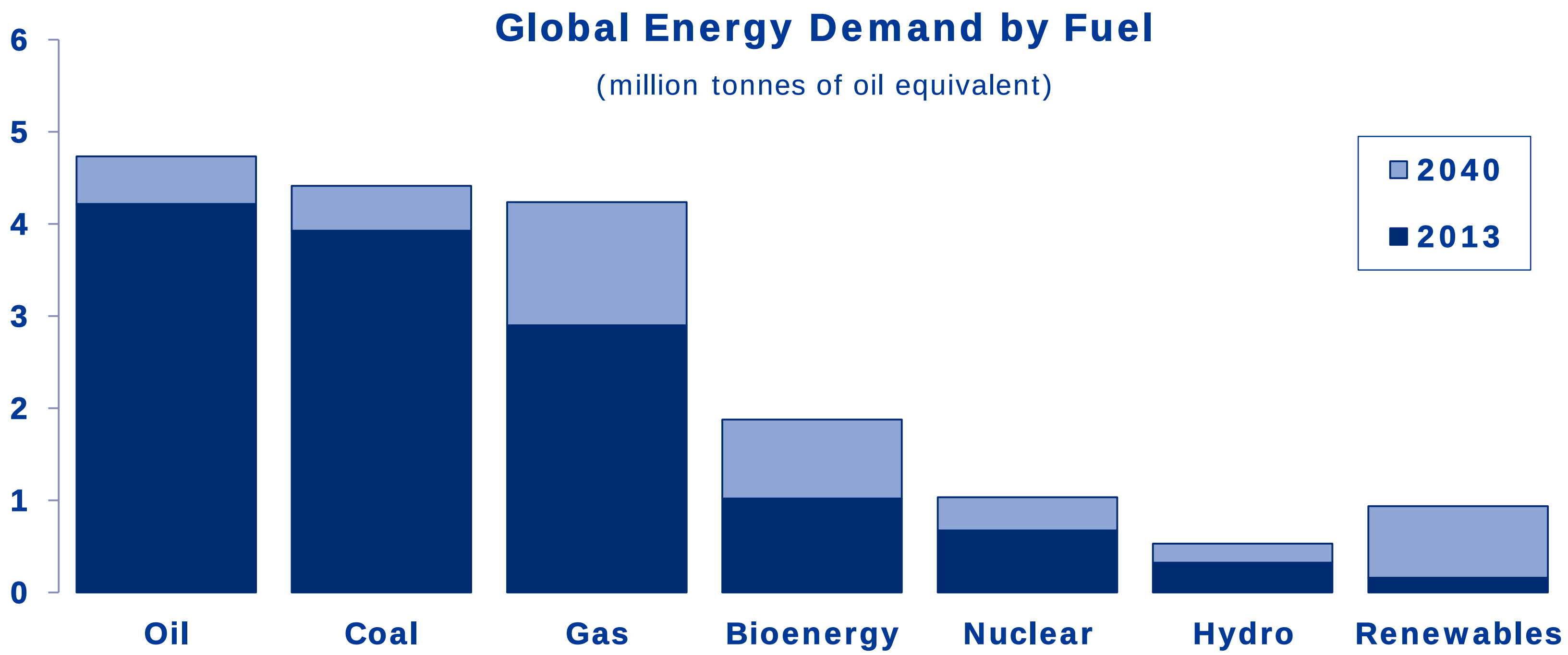
2015
$66 Billion



Natural Gas Pipelines, Liquids Pipelines and Energy
In Canada, the United States and Mexico

Total assets at December 31, 2010 and September 30, 2015

Global Energy Demand Expected to Increase 32% by 2040

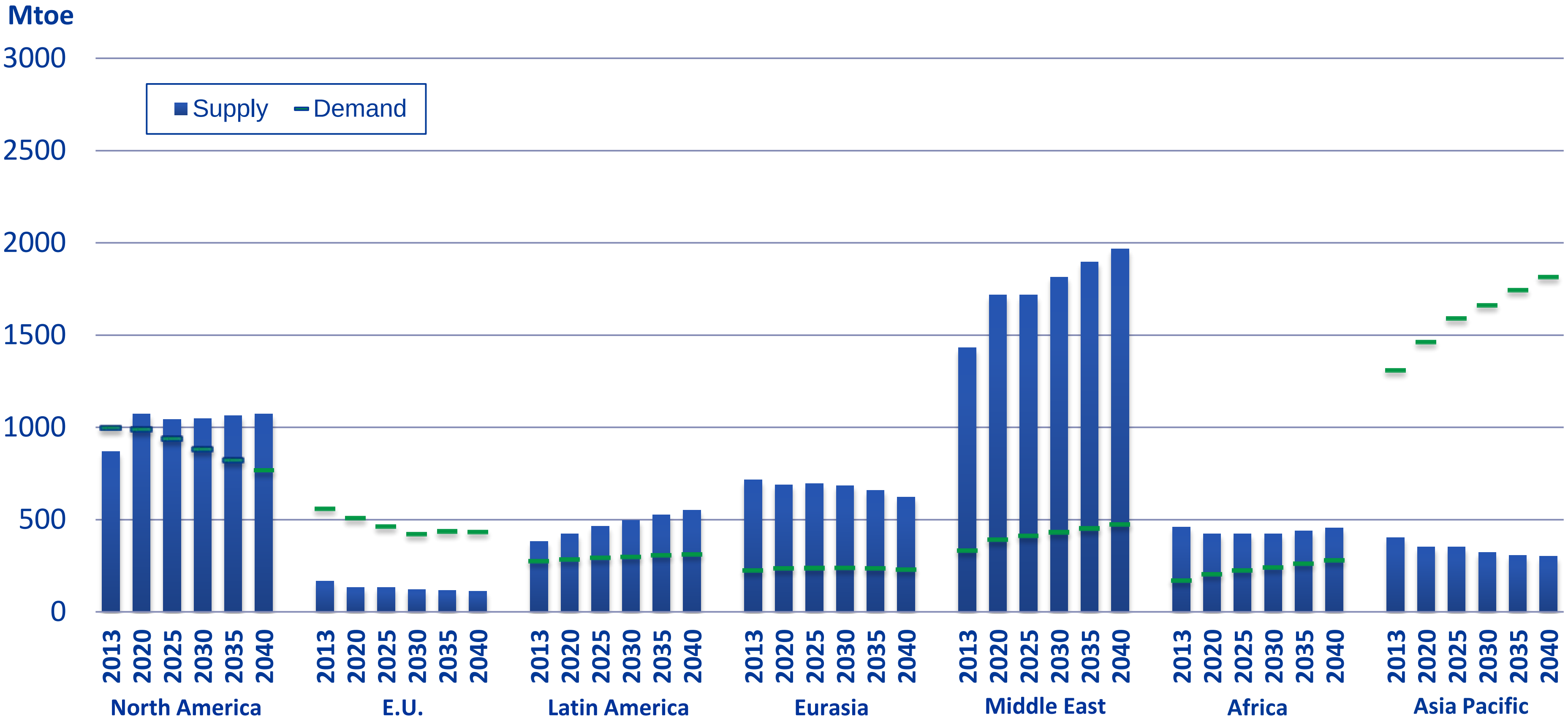


Oil Remains Largest Source of Energy

Primary Shift in Supply Mix to Natural Gas and Renewables

Source: IEA World Energy Outlook 2015, New Policies Case

Global Oil Supply and Demand: 2013 - 2040

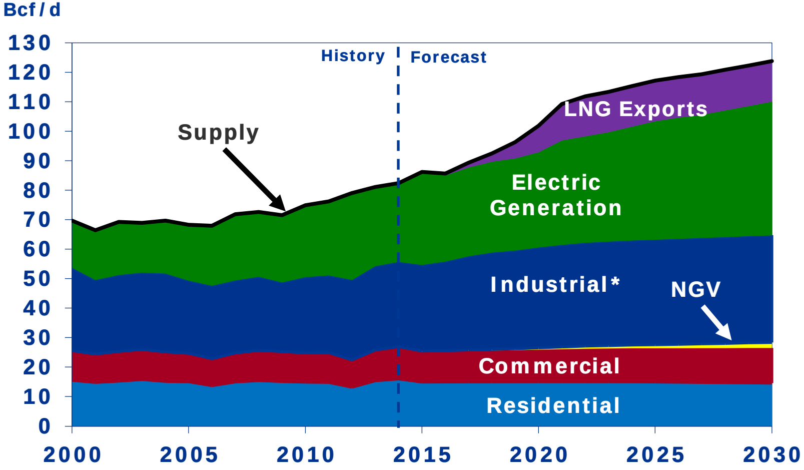


Source: IEA World Energy Outlook 2015, New Policies Case

North American Natural Gas and Power Generation Outlook

- New ***natural gas pipelines needed*** to connect growing supply with traditional and new markets
- New ***power generation and transmission needed*** to meet growing demand and replace aging infrastructure

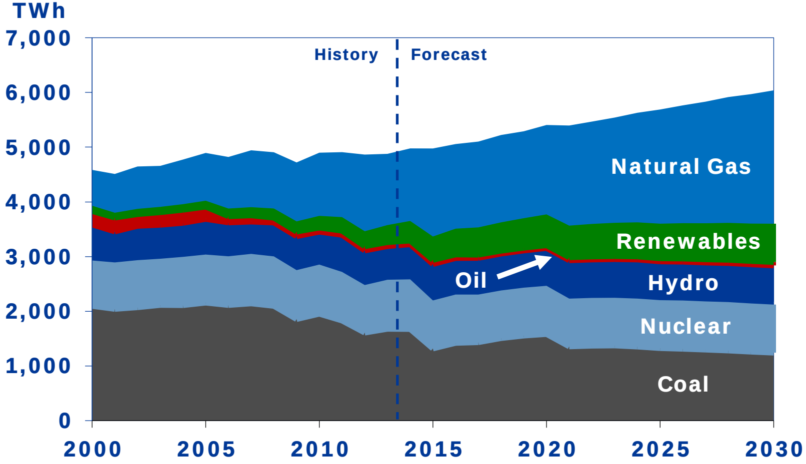
North American Natural Gas Demand



** Includes fuel used within the LNG process*

Source: TransCanada

North American Power Production



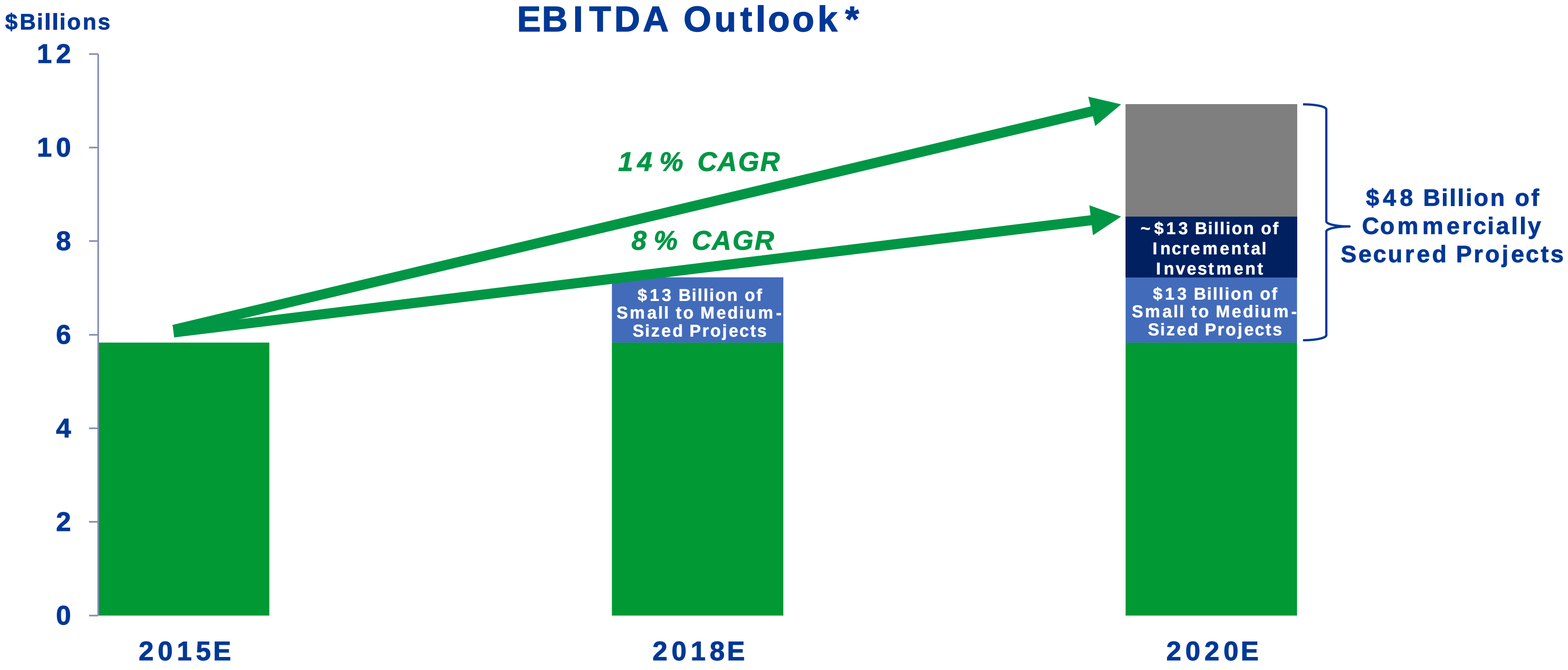
Source: TransCanada, EIA, StatsCan, SENER, Others

Our Priorities

- Deliver energy safely and reliably, every day
- Maximize the value of our base business
- Complete $13 billion of small to medium-sized projects
- Advance $35 billion of long-term projects
- Cultivate a portfolio of additional low-risk growth opportunities
- Maintain financial strength and flexibility

Deliver Superior Long-Term Returns to Shareholders

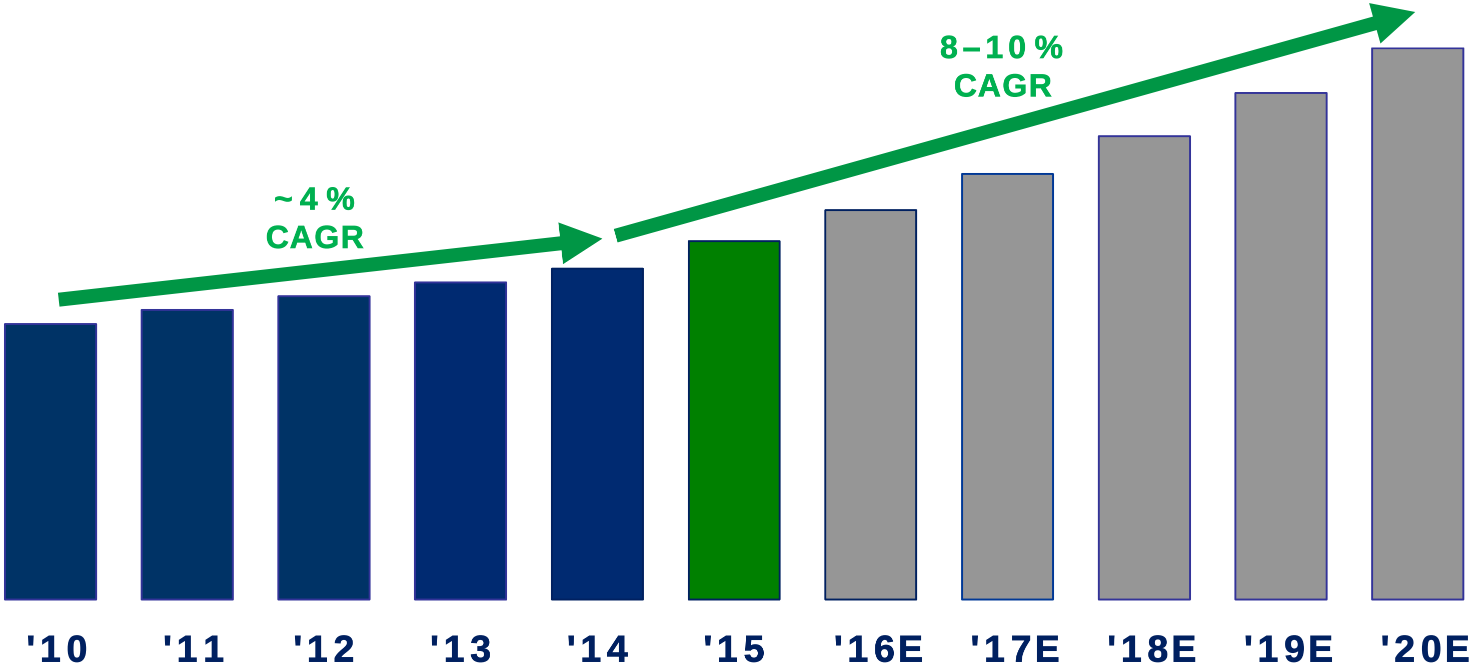
Our Plans are Expected to Generate Significant Value



* Includes existing assets, non-controlling interests in U.S. natural gas pipelines, $13 billion of small to medium-sized projects expected to be in-service by 2018 and $35 billion of long-term commercially secured projects, subject to various conditions including corporate and regulatory approvals

Dividend Growth Expected to Continue Through 2020

Supported by Base Business and Small to Medium-Sized Projects…



Additional Project Success Could Augment Growth

Key Takeaways

Track Record of Delivering Long-Term Shareholder Value

13% average annual return since 2000

Visible Growth Portfolio

$13 billion through 2018
Additional opportunity set includes $35 billion of long-term projects

Attractive, Growing Dividend

5.0% yield at current rate
8-10% CAGR through 2020

Strong Financial Position

'A' grade credit rating
Numerous levers available to fund growth

Attractive Valuation Relative to North American Peers

Our Executive Leadership Team

Russ Girling
President & Chief Executive Officer

Alex Pourbaix
Chief Operating Officer

Don Marchand
Executive VP, Corporate Development and Chief Financial Officer

Karl Johannson
Executive VP and President, Natural Gas Pipelines

Kristine Delkus
Executive VP, Stakeholder Relations and General Counsel

Paul Miller
Executive VP and President, Liquids Pipelines

Wendy Hanrahan
Executive VP, Corporate Services

Bill Taylor
Executive VP and President, Energy

Strategic Overview

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Business Outlook

Alex Pourbaix
Chief Operating Officer

TransCanada
In business to deliver

Our Competitive Advantage



- Diverse portfolio of critical energy infrastructure assets
- Talented employees that are expert in their fields
- Asset footprint that drives attractive organic growth
- Financial strength and flexibility

65-Year History of Designing, Building and Operating Large-Scale Energy Infrastructure




Committed to Stakeholder Engagement and the Environment



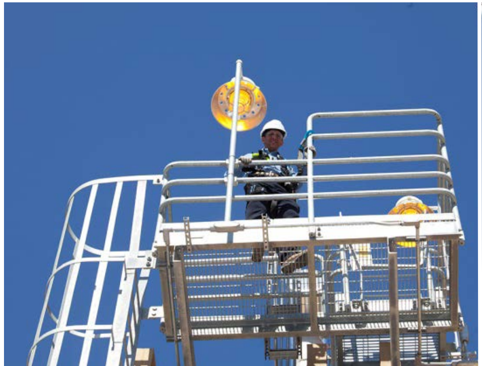
- **Long history of working collaboratively with stakeholders**
  - Customers, Landowners, Aboriginals, Native Americans, Governments, Regulators and local communities
  - Active throughout life-cycle: formative, development, construction and operations
- **Committed to protecting the environment**
  - Member of the Dow Jones Sustainability World Index for 14 consecutive years and the North American Index in 2014 and 2015
  - Member of CDP’s Carbon Disclosure Leadership Index for the fourth consecutive year – ranked in the top two percent of Canadian Energy Companies




Our Priorities



- Deliver energy safely and reliably, every day
- Maximize the profitability of our base business
- Complete $13 billion of small to medium-sized projects, on-time and on-budget
- Advance $35 billion of long-term projects through regulatory and permitting phases
- Cultivate a portfolio of low-risk growth opportunities

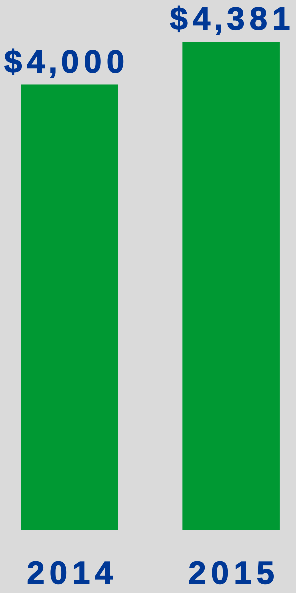
Our Progress in 2015

- **$66 billion portfolio of high-quality assets performing well**
- **$6 billion of assets currently under construction**
- **$2.3 billion of new commercially secured projects**
- **Continued to advance large-scale projects**
  - Reached LDC Agreement on Eastern Mainline and Energy East
  - Permits received for Prince Rupert Gas Transmission; Outstanding Coastal GasLink permits expected by year end
  - Project agreements signed with Aboriginal and First Nations groups
- **Assessing numerous other growth opportunities including Bruce Power refurbishments, NGTL expansions and development opportunities in Mexico**
- **Commenced restructuring initiative to reduce overall costs**

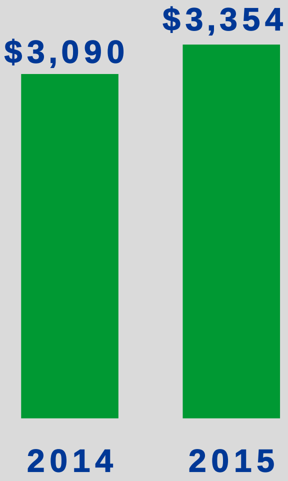
Significant Achievements in a Challenging Environment

Financial Highlights – Nine Months ended September 30

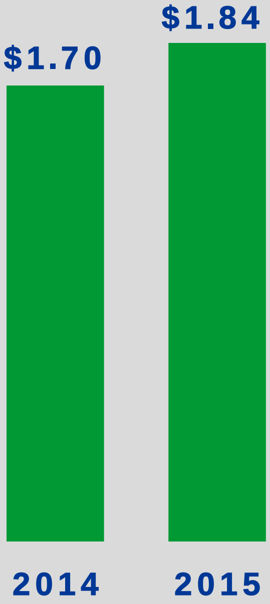
Comparable EBITDA
($Millions)
10% increase



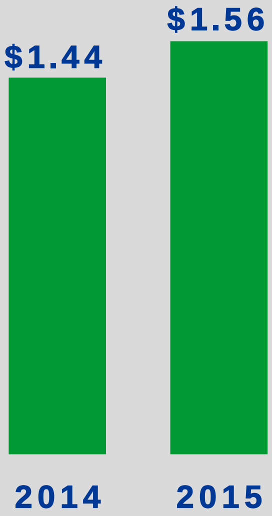
Funds Generated from Operations
($Millions)
9% increase



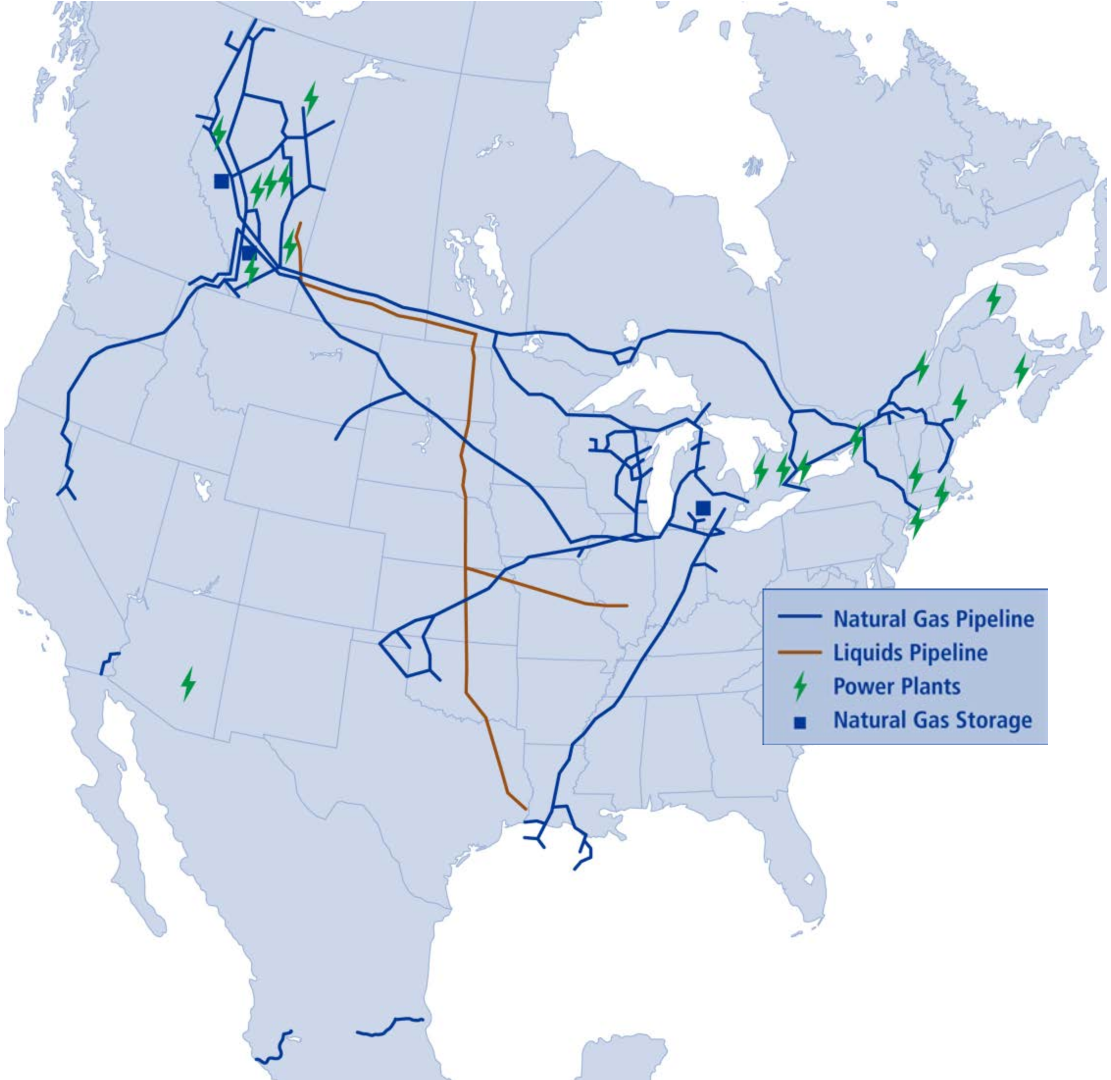
Comparable Earnings per Share
(Dollars)
8% increase



Dividends Declared per Share
(Dollars)
8% increase

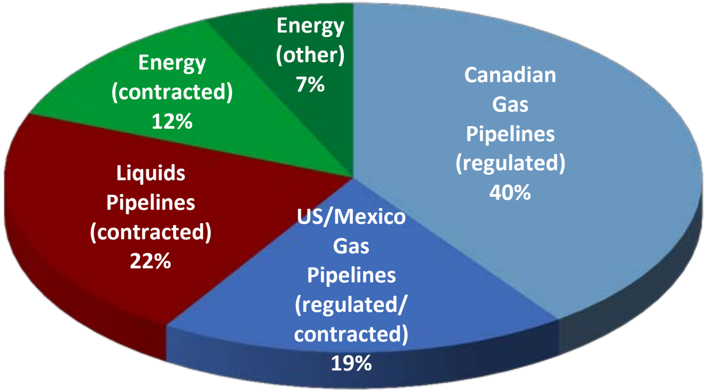


Strong Performance Highlights Resiliency of Base Business



Portfolio of High-Quality Assets

2015E EBITDA ~$5.8 Billion



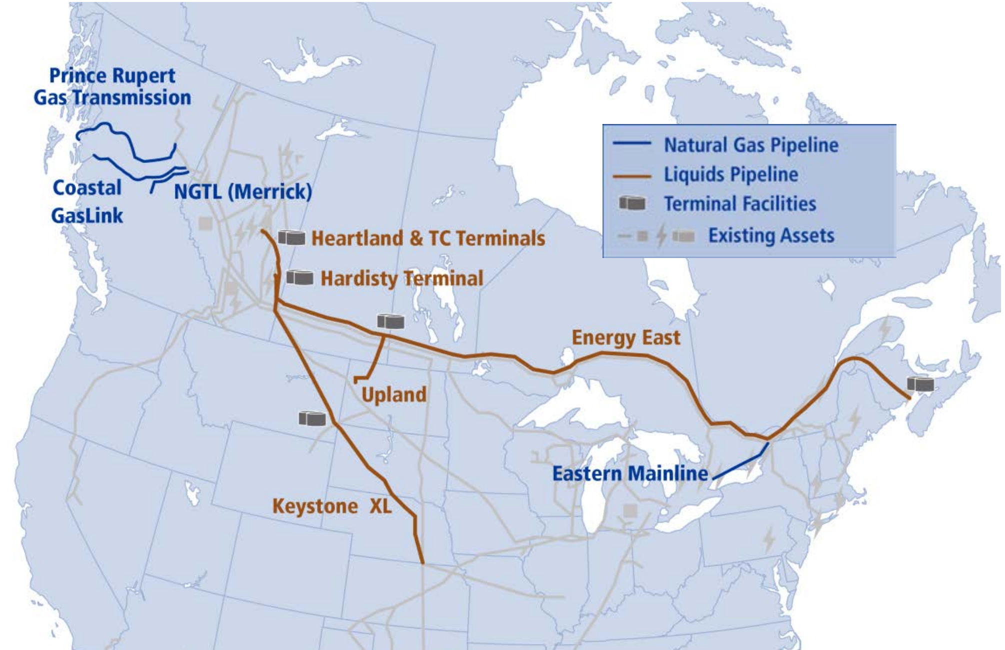
~90% of EBITDA Derived from Regulated or Long-Term Contracted Assets

$13 Billion of Visible Near-Term Growth Projects

Project	Capital Cost*	Expected In-Service Date*
Houston Lateral & Terminal	US0.6	2016
Ironwood Acquisition	US0.7	2016
Topolobampo	US1.0	2016
Mazatlan	US0.4	2016
Canadian Mainline	0.4	2015-2016
NGTL System	5.5	2015-2018
Grand Rapids	1.5	2016-2017
U.S. Natural Gas Pipelines	US0.5	2016-2018
Tuxpan-Tula	US0.5	2017
Northern Courier	1.0	2017
Napanee	1.0	2017-2018
Total	13.1	

* *TransCanada share in billions of dollars. Certain projects are subject to various conditions including corporate and regulatory approvals.*

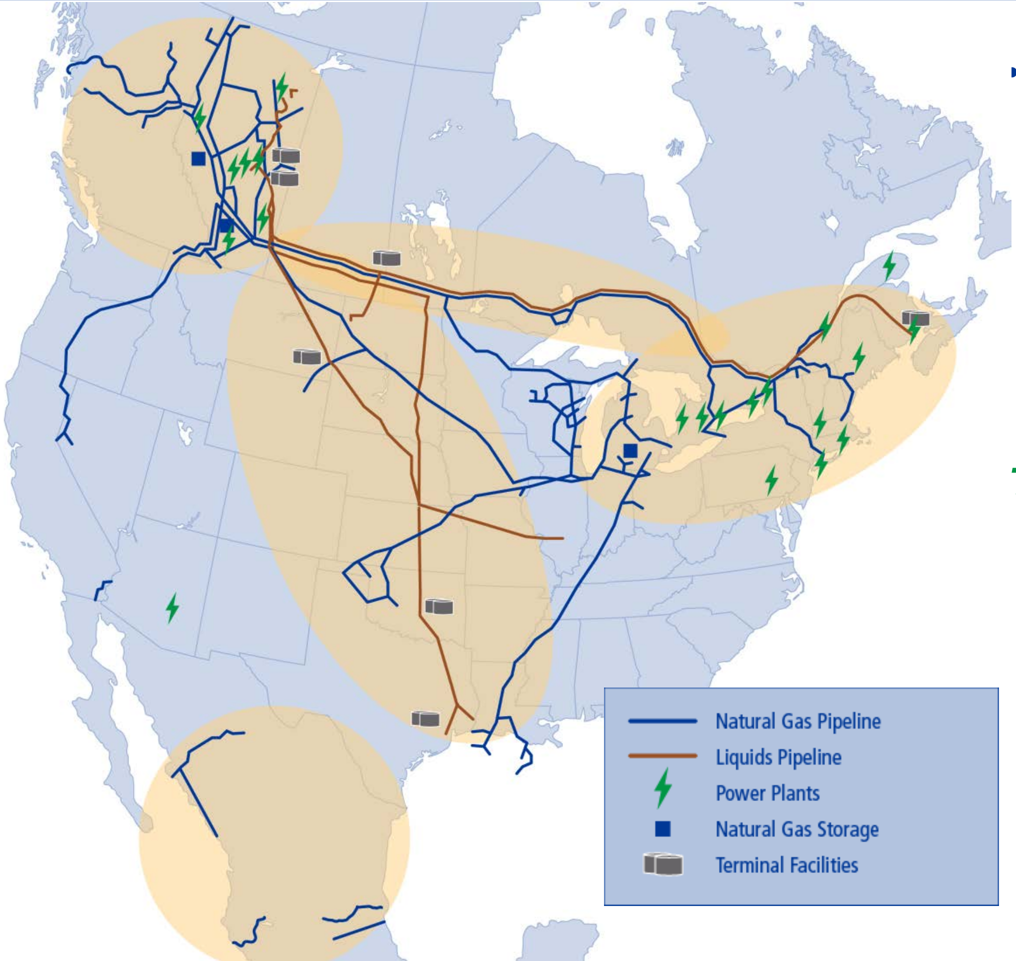
$35 Billion of Commercially Secured Long-Term Projects*



- **Includes four transformational projects**
  - Energy East ($12 billion) and related Eastern Mainline Expansion ($2.0 billion)
  - Keystone XL (US$8 billion)
  - Prince Rupert Gas Transmission ($5 billion)
  - Coastal GasLink ($4.8 billion)
- **Establish us as leaders in the transportation of crude oil and natural gas for LNG export**
  - 2 million bbl/d of liquids pipeline capacity
  - 4+ Bcf/d of natural gas pipeline export capacity
- **EBITDA from these projects would total approximately $4 billion annually**

* *TransCanada share in billions of dollars. Certain projects are subject to various conditions including corporate and regulatory approvals.*

Strong Platform for Future Growth



- **Significant opportunities in our core businesses and geographies**
  - To connect growing supply to market
  - Replace aging infrastructure as we shift to a less carbon-intensive energy mix

Our Industry-Leading Technical Expertise, Financial Strength and Approach to Responsible Development are Real Competitive Advantages

Corporate Restructuring



- Operating model shift to stronger business unit orientation
- Business units given more decision making authority and direct control over costs
- Aimed at reducing costs and maximizing the effectiveness of existing operations
- Savings will benefit shareholders and customers and improve our competitiveness
- Changes commenced in fourth quarter 2015 and continue into 2016

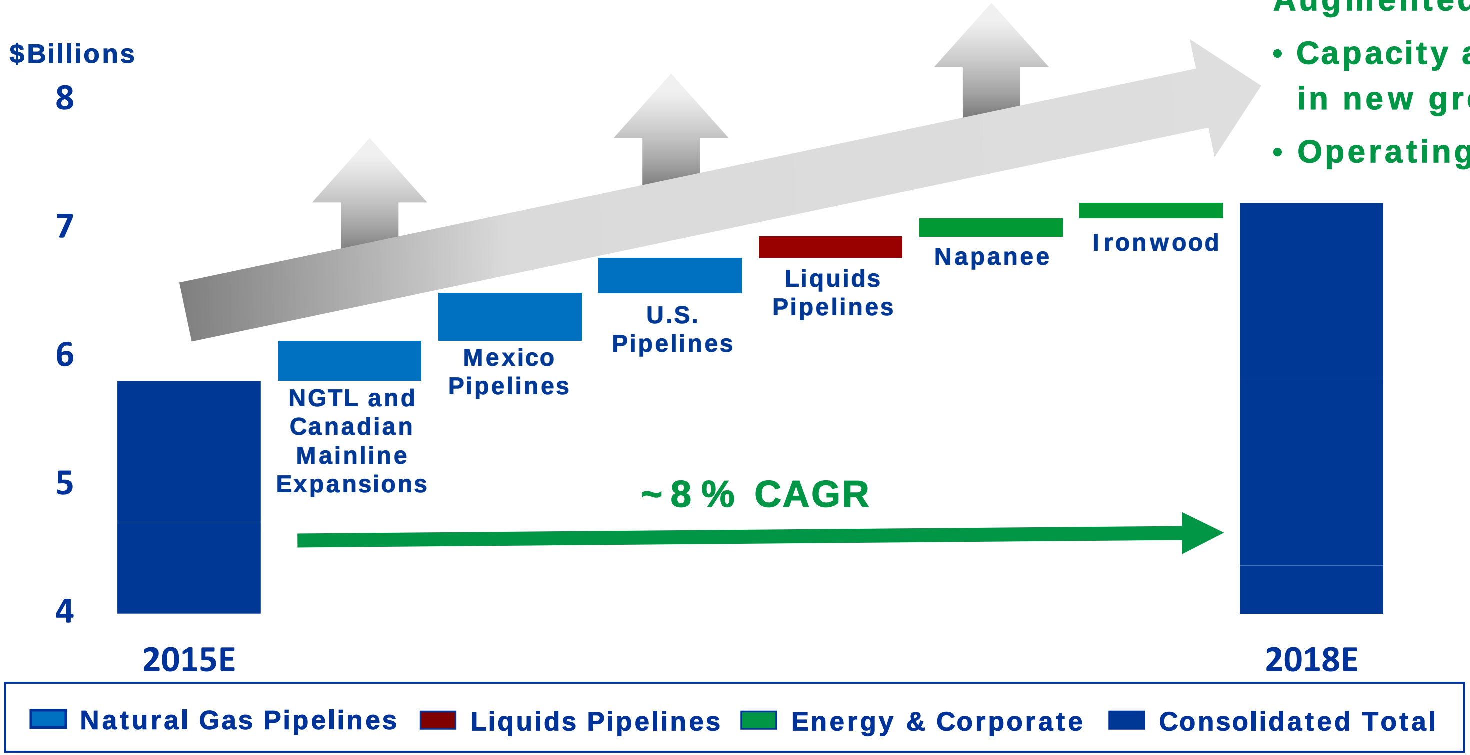
Corporate Strategy, Long-Term Plans and Commitment to Safety Remain Intact





Small to Medium-Sized Projects Drive Significant Growth

EBITDA Outlook*
2015E – 2018E



Augmented by:

- **Capacity available to invest in new growth opportunities**
- **Operating efficiencies**

** Includes existing assets, non-controlling interests in U.S. Natural Gas Pipelines and $13 billion of commercially secured projects expected to be in service by 2018, subject to various conditions including corporate and regulatory approvals*

Business Outlook

Alex Pourbaix
Chief Operating Officer

TransCanada
In business to deliver

Natural Gas Pipelines

Karl Johannson
President, Natural Gas Pipelines

TransCanada
In business to deliver

Our Base Business is Highly Predictable

On track for record performance in 2015

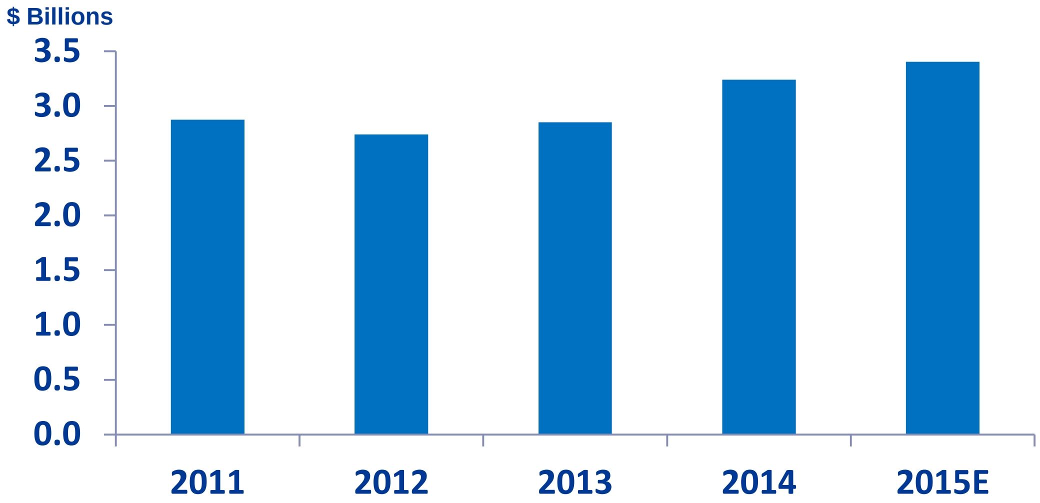
Well-positioned asset portfolio

- ✓ NGTL System; Canadian Mainline; U.S. Pipes; Mexico

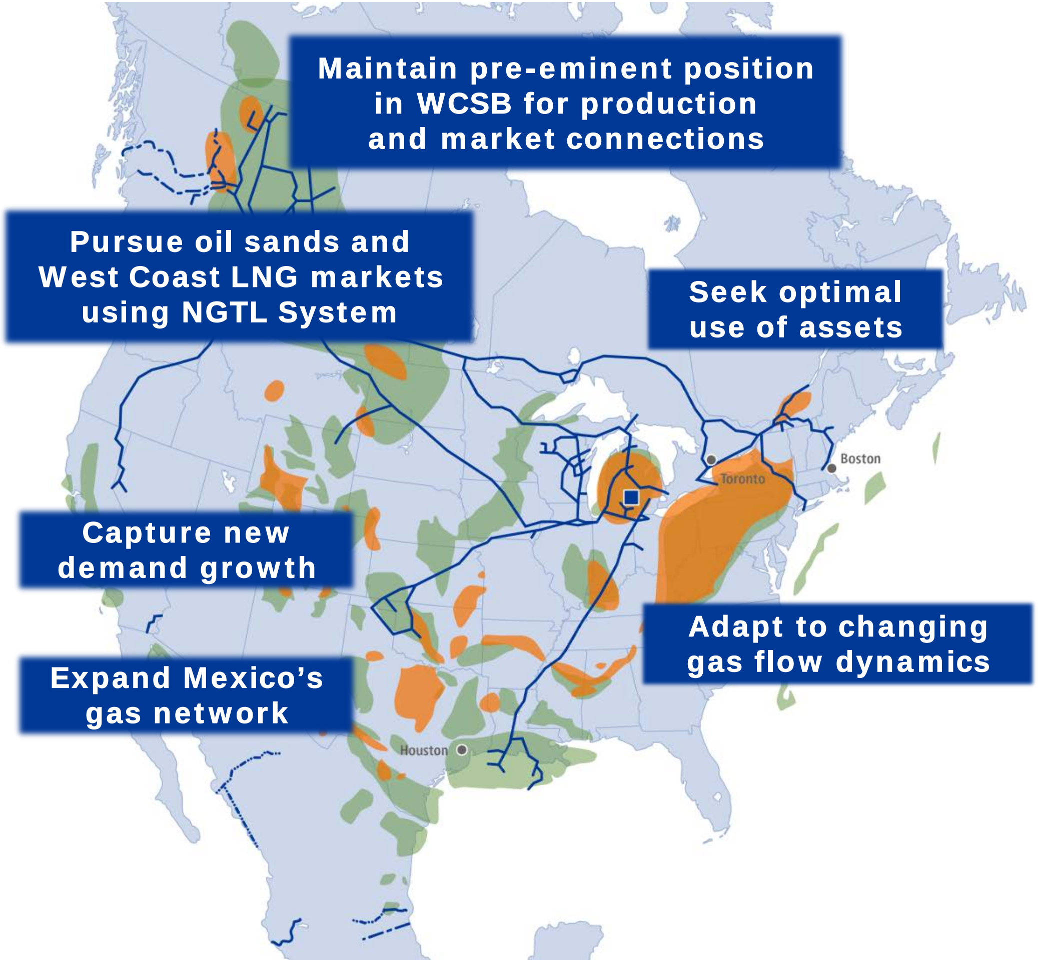
Secure cash flow streams

- ✓ Regulated, cost-of-service, take-or-pay businesses

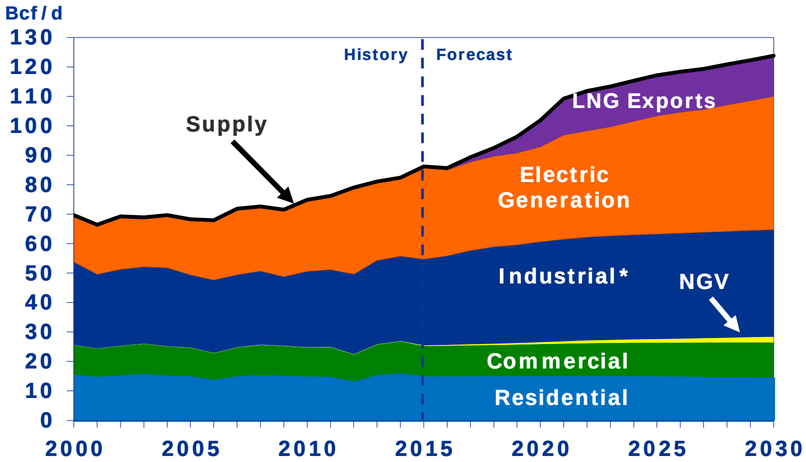
Steady and growing EBITDA



Our Natural Gas Pipelines Strategy

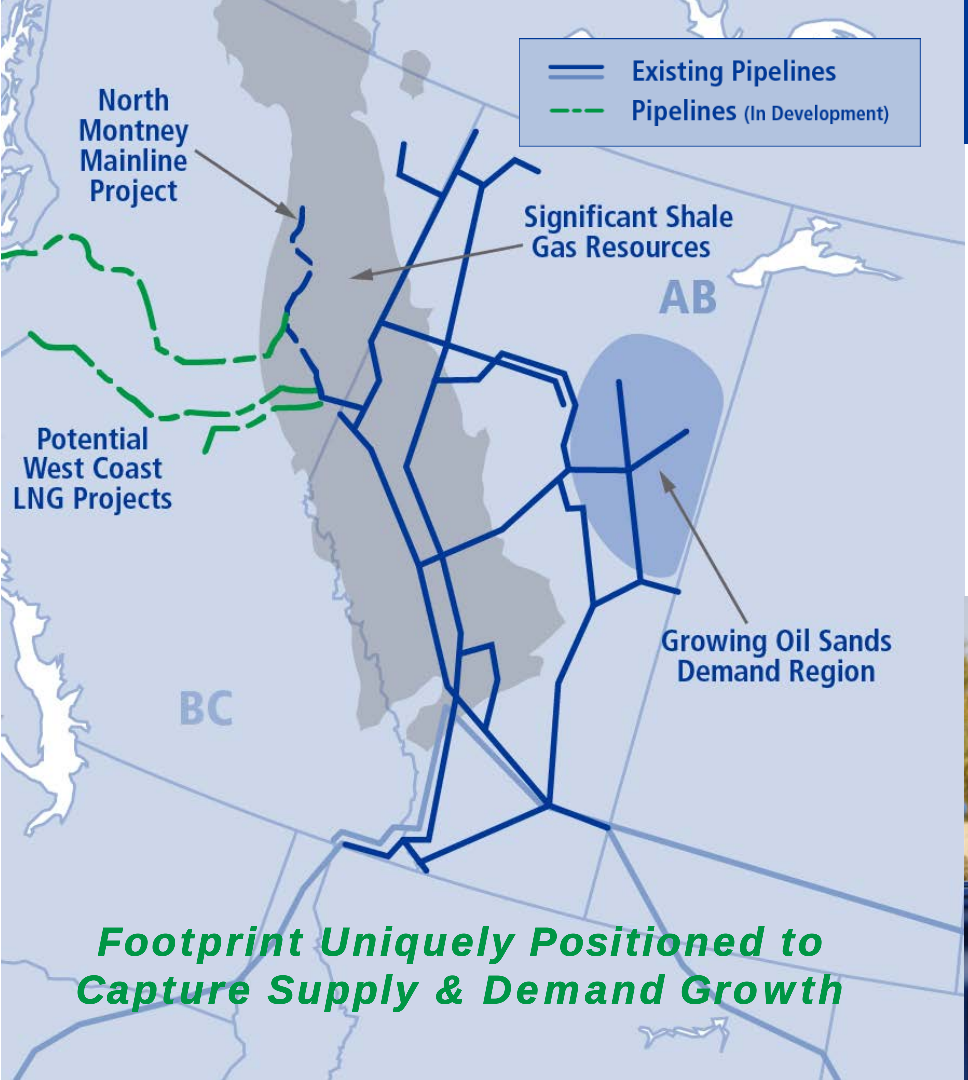


Growing Natural Gas Supply and Demand Provides Opportunity



* Includes fuel used within the LNG process

Source: TransCanada



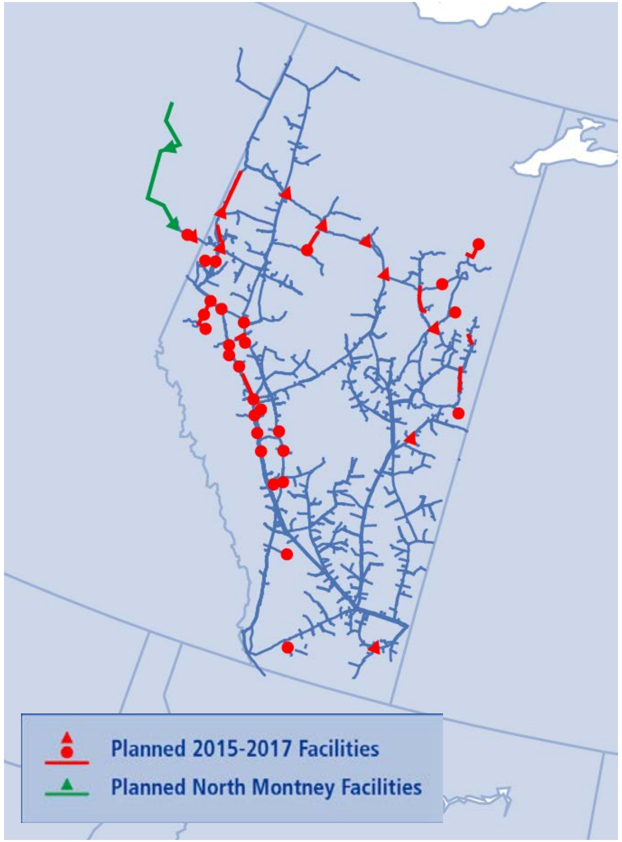
Footprint Uniquely Positioned to Capture Supply & Demand Growth

NGTL System's Unparalleled Position

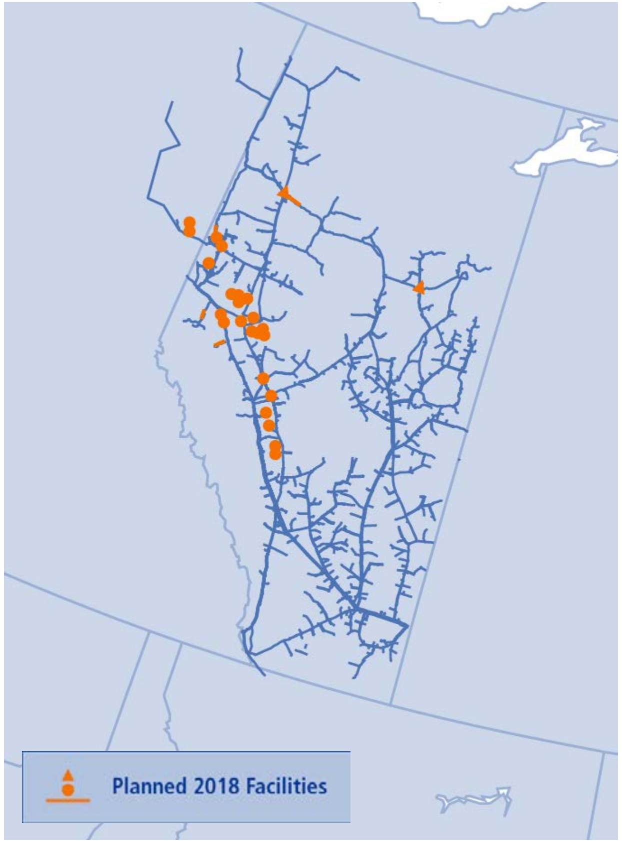
- **Primary transporter of WCSB supply with NIT hub providing optionality & liquidity**
- **Averaging ~11 Bcf/d in 2015 year-to-date; peak intra-basin demand of 6.5 Bcf/d**
- **Significant new firm contracts**
- **Key connections to Alberta and export markets**
- **Ideally positioned for unconventional gas development**

NGTL Growth to Continue Through 2018

2015-17 Facilities - $4.9 B



2018 Expansion Facilities - $0.6 B



- **$5.5 billion of new investments**
  - Expected in-service between 2015 and 2018
  - Includes $1.7 billion North Montney pipeline
  - Excludes $1.9 billion Merrick pipeline
- **Average investment base expected to increase significantly from $6.2 billion in 2014 to $11.2 billion in 2018**
- **Growth expected to continue**

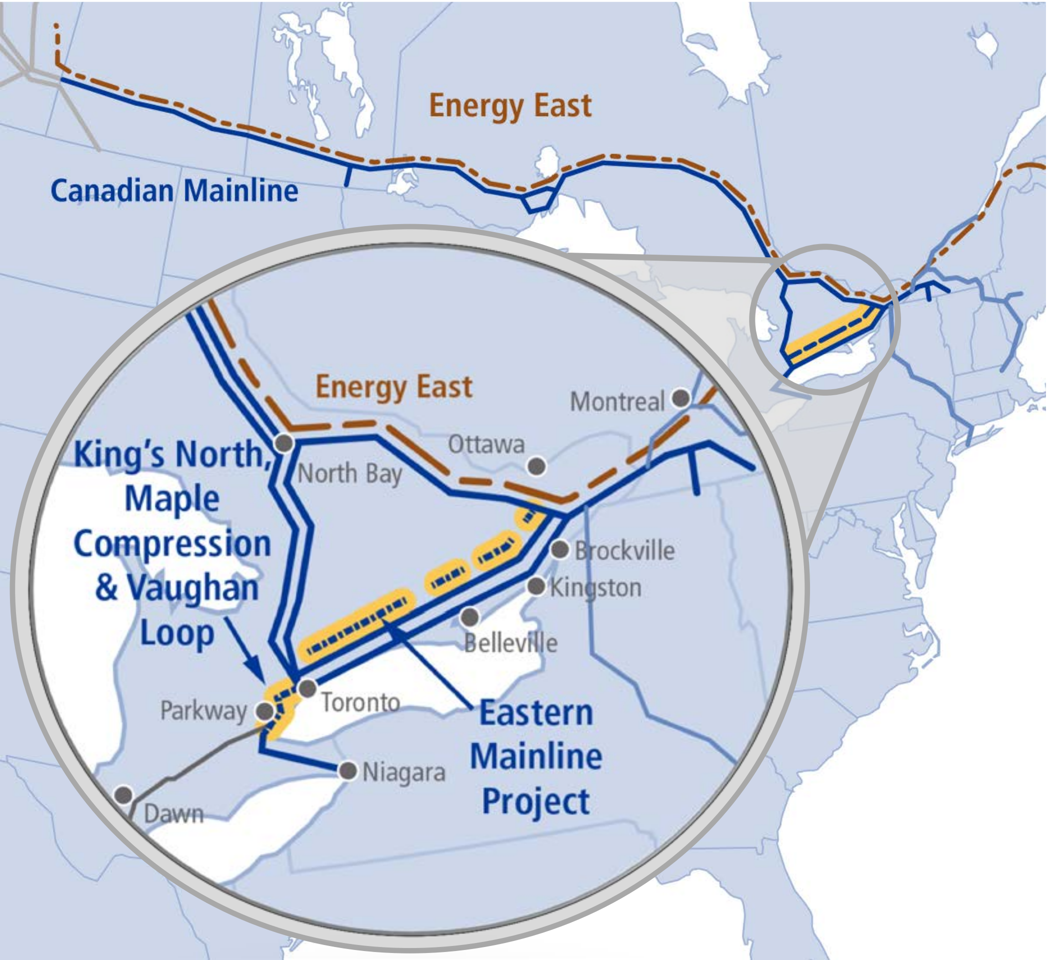
Canadian Mainline – Critically Important Infrastructure

	Western Leg	Eastern Triangle	Total
2014 Investment Base	$3.1 B	$2.6 B	$5.7 B
Delta	-2.1	+1.3	-0.8
2020 Investment Base	$1.0 B	$3.9 B	$4.9 B

- NEB approval of LDC Settlement creates long-term stability and reduces risk considerably
- Multi-year agreement beginning in 2015 with certain elements expiring in 2020 and 2030
- Base ROE of 10.1% on 40% deemed common equity
- Annual contribution and incentives could result in ROE of 8.7% to 11.5%
- Strong delivery volumes – averaging ~4 Bcf/d year-to-date

Mainline Significantly De-Risked

Mainline Growth through Expansion within Eastern Triangle



- $0.4 billion of new facility expansion projects required as part of LDC Settlement
- Provides increased access to growing supply of U.S. shale gas
- Expected in-service dates range from 2015 to 2016, subject to regulatory approvals

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- $2.0 billion Eastern Mainline Project (EMP) ensures existing and new firm transportation commitments are met
- Reached agreement with LDCs that resolves their issues with Energy East and the EMP
- Target in-service in 2019, subject to regulatory approvals

U.S. Gas Pipelines – Producing Strong Results

- Majority of portfolio highly contracted over the long-term
- Positioned in key geographic areas with access to multiple supply basins and large market centres
- Strong results in 2015 year-to-date, a 5% increase in EBITDA year-over-year
- Expect to invest approximately US$500 million over the next three years
- Direct interest in four remaining natural gas pipeline systems expected to generate approximately US$420 million of EBITDA by 2016

TC PipeLines, LP (NYSE: TCP) – Disciplined Growth Continues

Asset	TransCanada Effective Ownership (%)*	TC PipeLines, LP Ownership (%)
ANR	100	0
Great Lakes	67	46
Portland**	61.7	0
Iroquois	45	0
GTN	28	100
Tuscarora	28	100
North Baja	28	100
Bison	28	100
Northern Border	14	50

- **US$5.0 billion enterprise value**
  - 7.3% yield as at November 12, 2015
- **Solid financial position with interest in six interstate natural gas pipelines**
- **Long track record of disciplined growth**
  - Announced dropdown of 49.9% interest in Portland to be completed at the end of 2015
  - Acquired final 30% interest in GTN on April 1, 2015
  - Annual distribution growth of 6% expected to continue over at least the next 2-3 years
  - Poised for future growth via dropdowns of TransCanada's remaining U.S. gas pipeline assets using a conveyor belt approach
- **TransCanada**
  - Operates assets, owns general partner and 28% interest
  - Current 25% GP/LP IDR split; high split max of 25%

** Ownership in GTN, Great Lakes, Northern Border, Tuscarora, North Baja and Bison includes ownership through TransCanada's 28% ownership in TC PipeLines, LP*

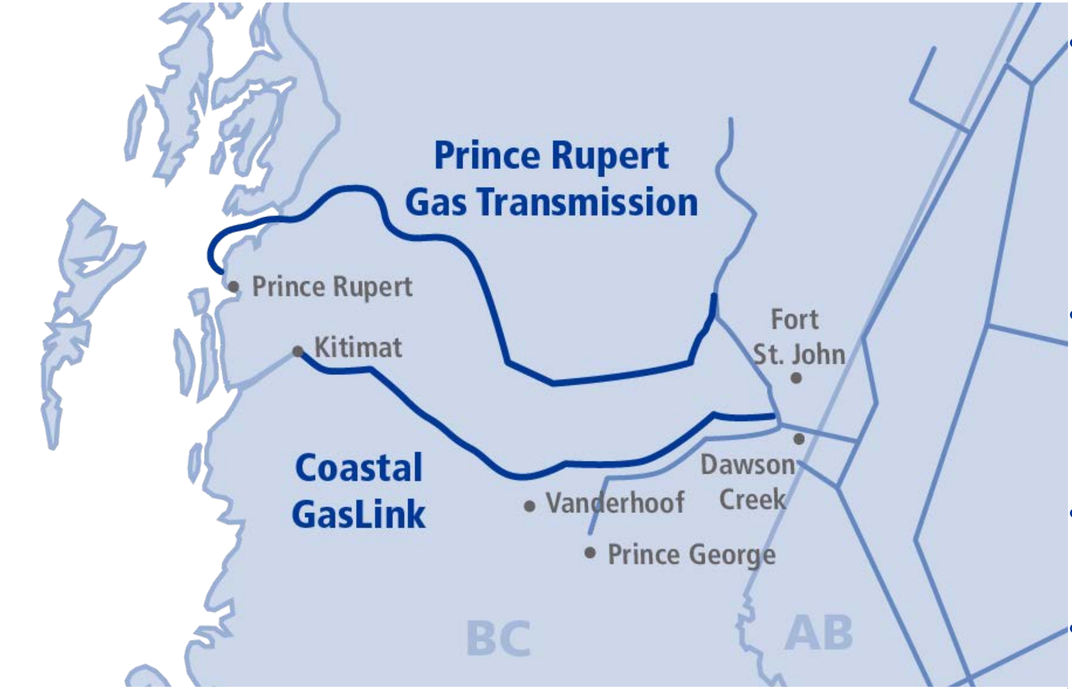
*** The sale of 49.9% ownership in Portland from TransCanada to TC PipeLines, LP is expected to close at year-end 2015*

Mexico – Solid Position and Growing

Potential CFE Pipeline Projects	
1	Tula – Villa de Reyes
2	Villa de Reyes – Aguascalientes-Guadalajara
3	La Laguna - Aguascalientes
4	Nueces - Brownsville
5	Sur de Texas

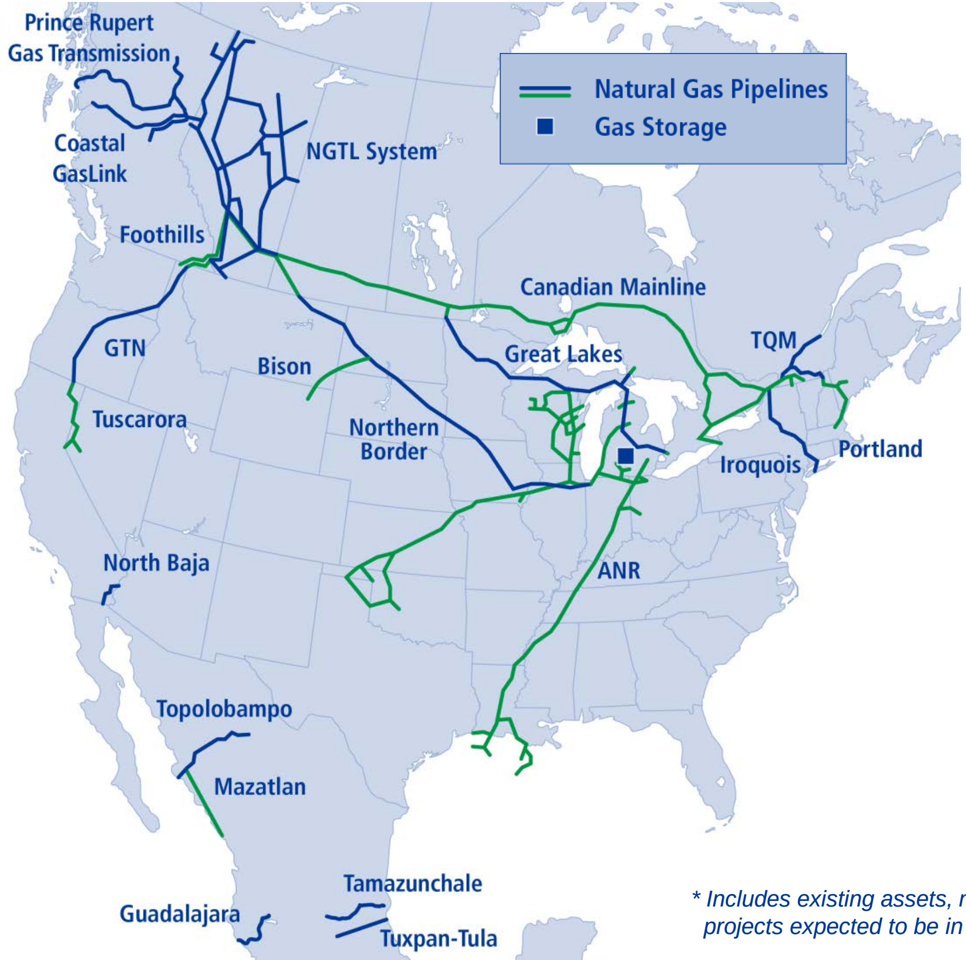
- **Awarded US$500 million Tuxpan-Tula Pipeline to be completed in 2017**
- **Asset base will increase to US$3.1 billion by the end of 2017**
- **Opportunities for future growth**

Positioned to Benefit from West Coast LNG

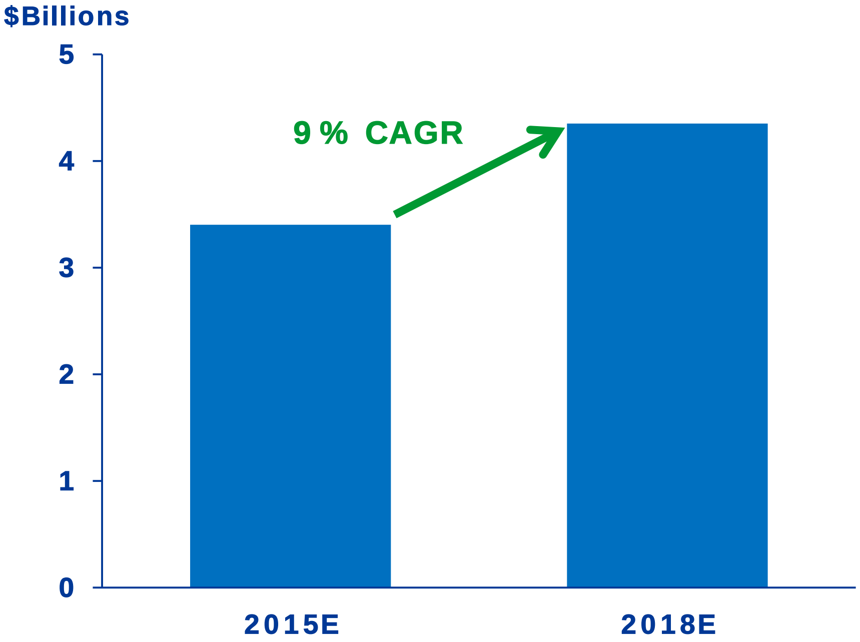


- **Two significant projects underpinned by long-term contracts**
  - $5 billion Prince Rupert Gas Transmission (PRGT) project
  - $4.8 billion Coastal GasLink project
- **In June 2015, Pacific NorthWest LNG announced a positive Final Investment Decision on PRGT, subject to one outstanding condition**
- **Final Investment Decision on Coastal GasLink expected in early 2016**
- **Advancing project agreements with First Nations along pipeline routes**
- **No development cost risk and minimal capital cost risk**

Natural Gas Pipelines - 2018 EBITDA Outlook*



2018 EBITDA Growth Driven by $8 Billion of Near-Term Projects



* Includes existing assets, non-controlling interests in U.S. Natural Gas Pipelines and $8 billion of commercially secured projects expected to be in service by 2018, subject to various conditions including corporate and regulatory approvals

Key Takeaways

- Significant value of current asset footprint
- Assets well positioned to deal with changing gas flow dynamics from growth in shale gas
- MLP strategy advancing – a cost effective / strategic financing vehicle
- Well positioned to capture incremental growth opportunities
- West Coast LNG projects could create significant long-term value

Premier Natural Gas Pipeline Business in North America

Natural Gas Pipelines

Karl Johannson
President, Natural Gas Pipelines

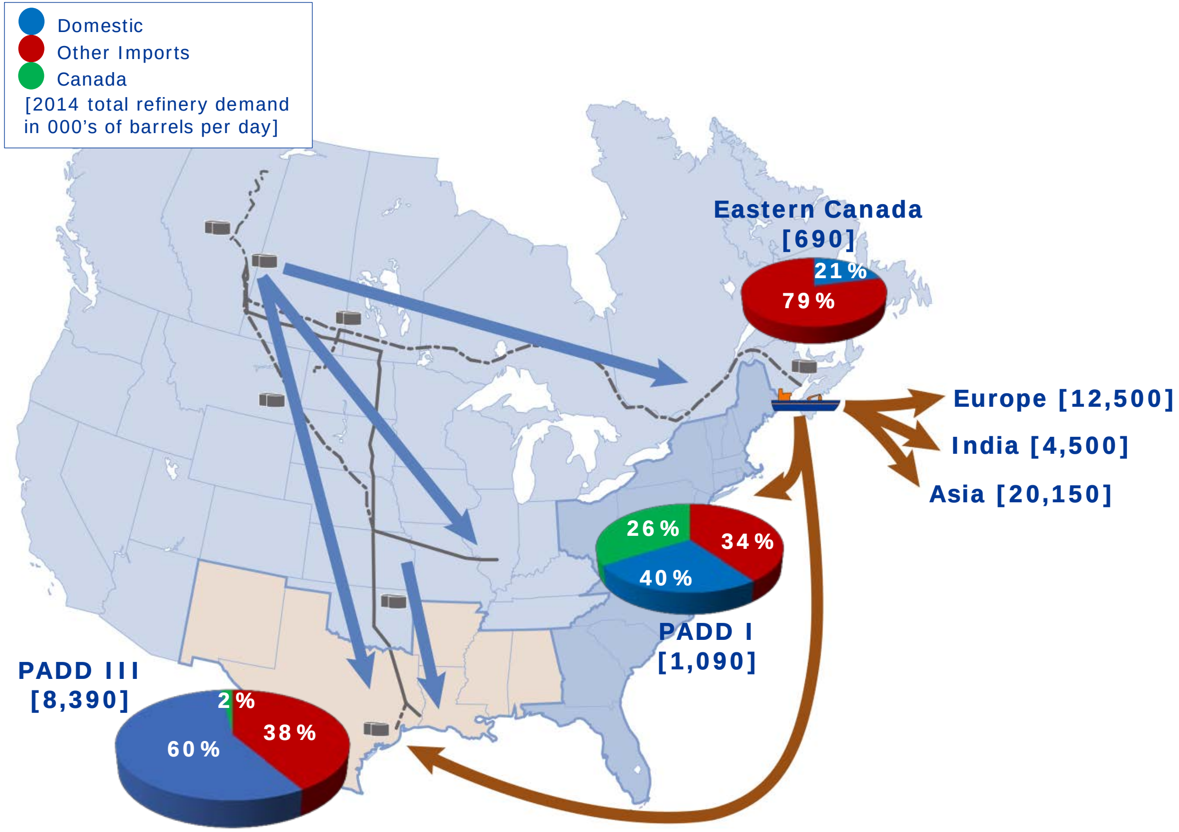
TransCanada
In business to deliver

Liquids Pipelines

Paul Miller
President, Liquids Pipelines

TransCanada
In business to deliver

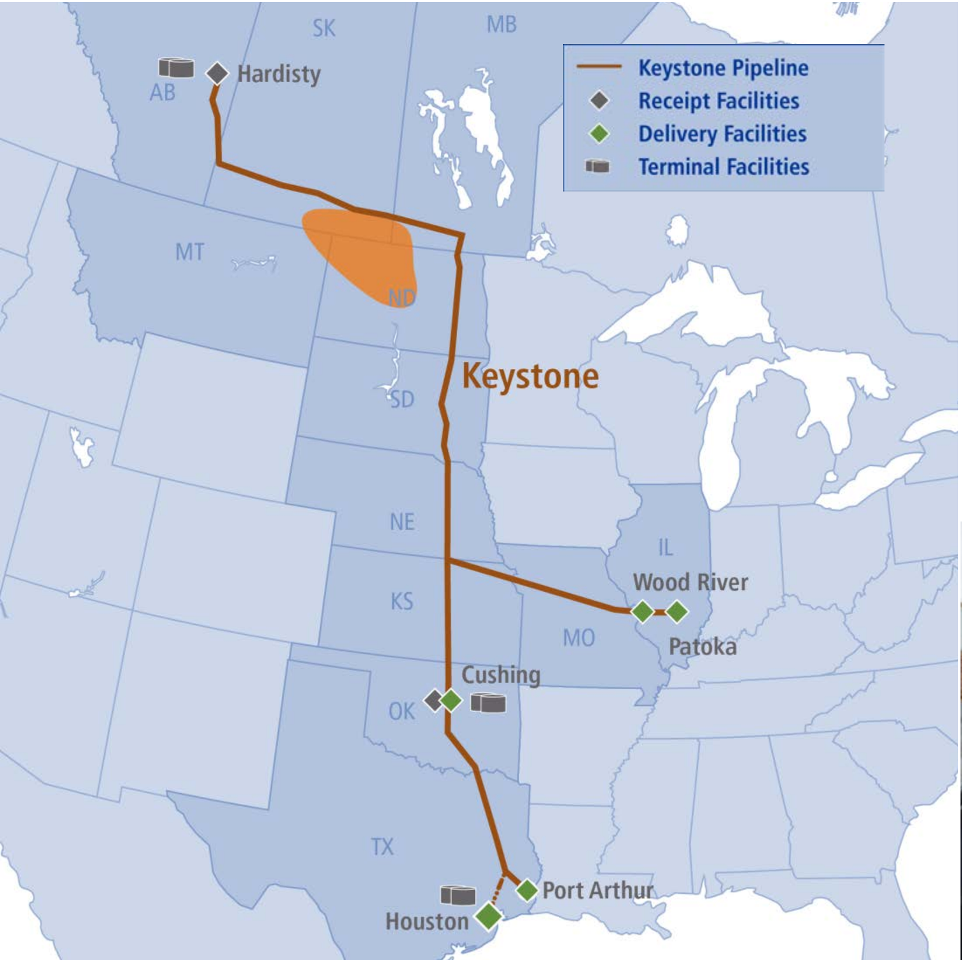
Liquids Pipelines Strategy



- **Leverage existing infrastructure**
- **Connect growing WCSB and U.S. shale oil supply to key refining markets**
- **Capture Alberta and U.S. regional liquids opportunities**
- **Value chain participation expansion**

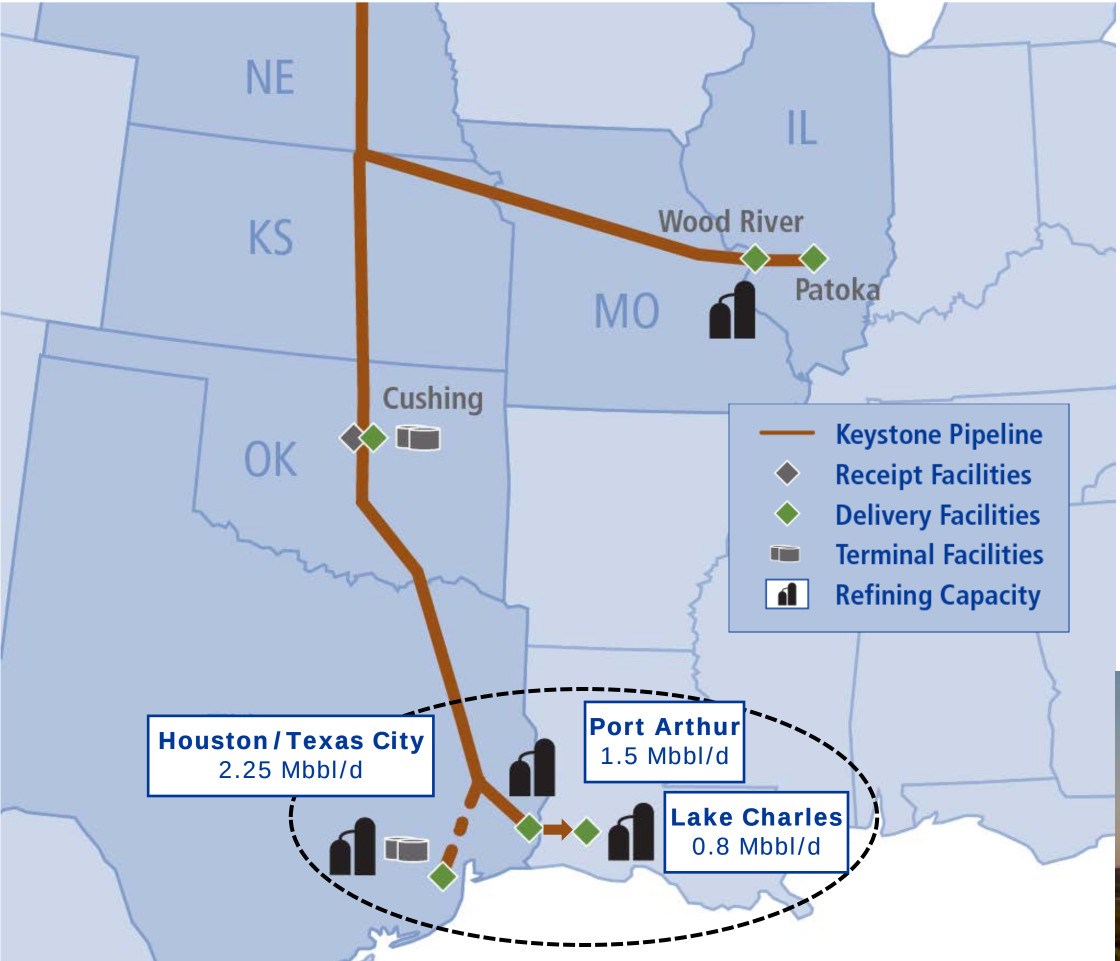
Source: CAPP 2015, IHS, EIA, Statistics Canada

Keystone - A Premier Crude Oil Pipeline System



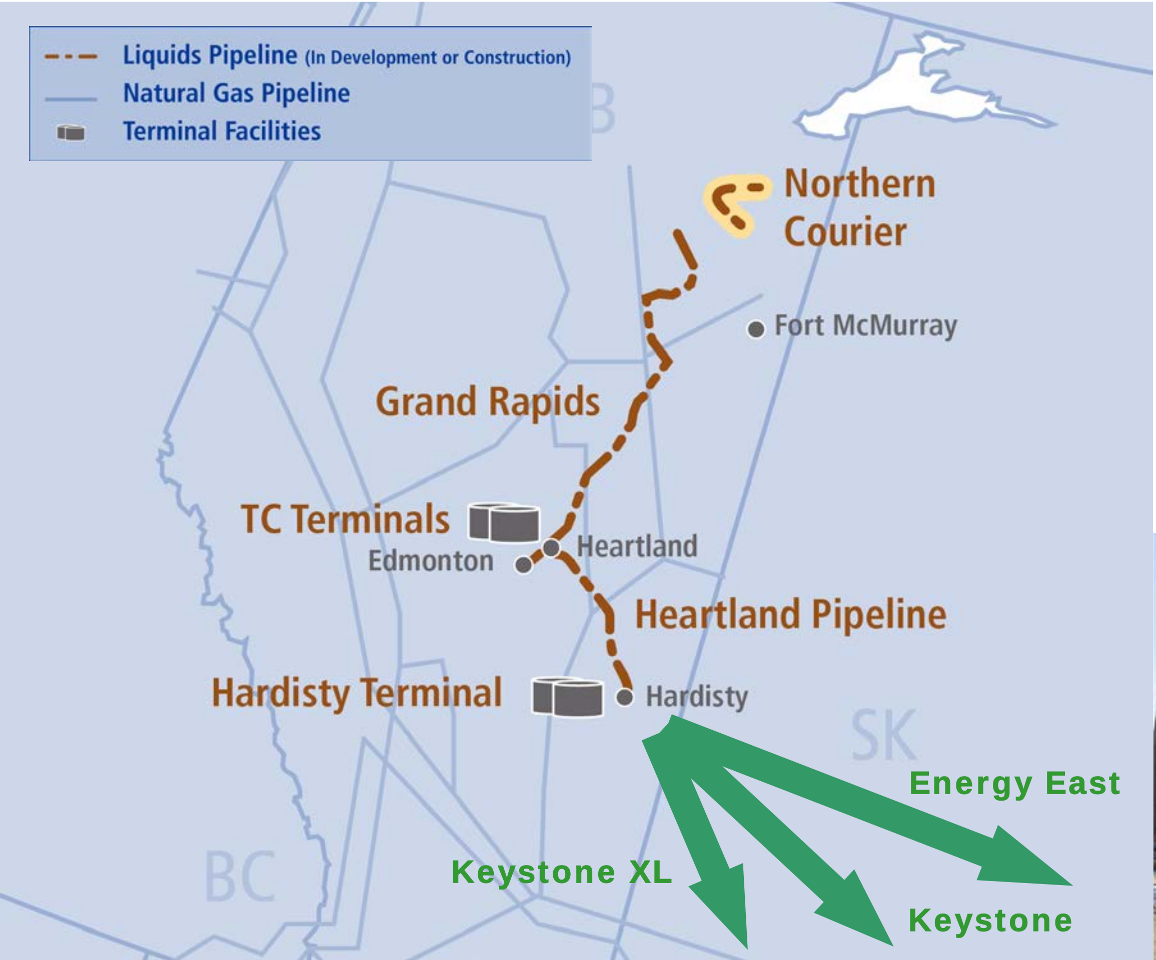
- Critical crude oil system that transports ~20% of Western Canadian exports to key U.S. refinery markets
- 545,000 bbl/d of long-haul, take or pay contracts
- 15-year average remaining contract length
- Predictably generates ~US$1 billion of EBITDA annually

Extending Keystone System's U.S. Gulf Coast Market Reach



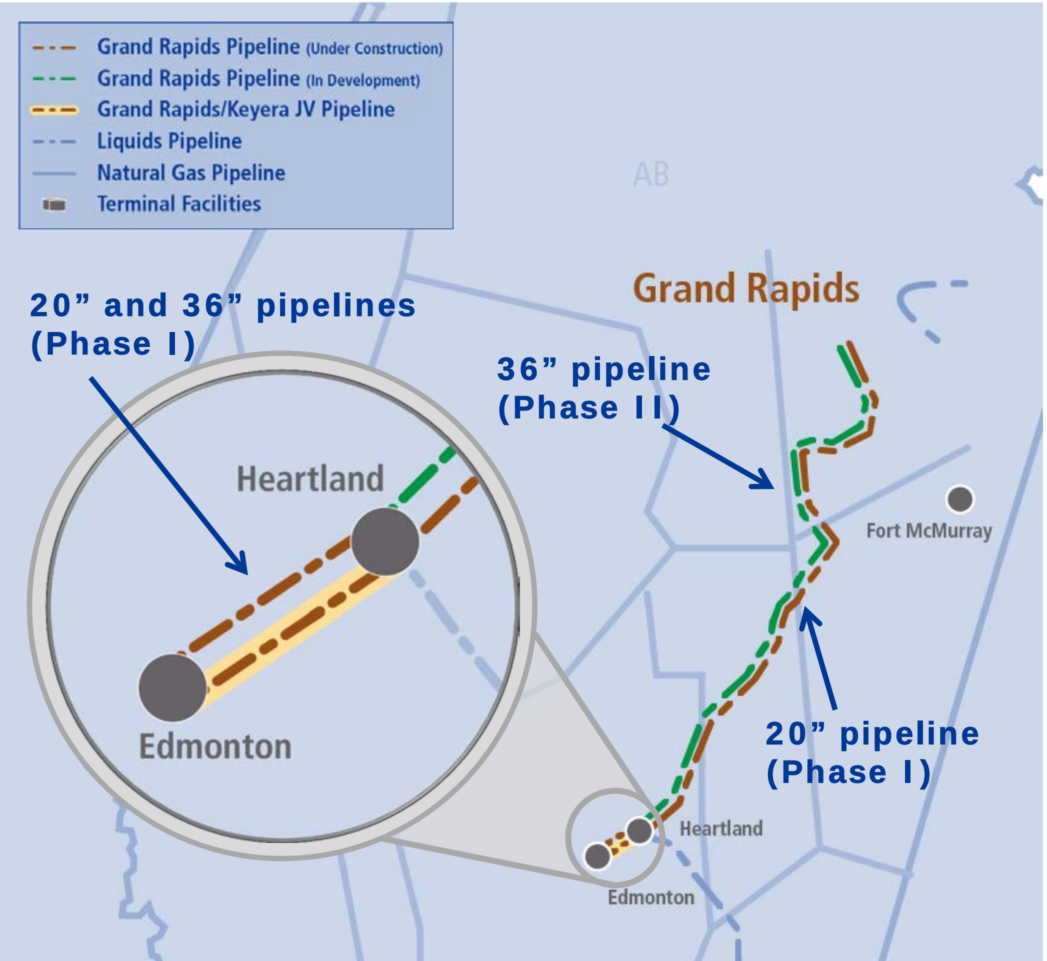
- **U.S. Gulf Coast is largest refining centre in North America (~8 Mbbl/d of capacity)**
- **Extending system's reach to over 4.5 Mbbl/d of regional Gulf Coast refinery centres:**
  - **Port Arthur**
  - **Houston / Texas City**
  - **Lake Charles**
- **Expected to enhance volumes on Keystone System**
- **Platform for growth and regional infrastructure expansion**

Northern Courier - Visible Liquids Pipeline Growth



- $1 billion capital investment
- 25-year contract with Fort Hills Partnership
- Transports bitumen and diluent between the Fort Hills mine site and Suncor's terminal
- Construction ~30% complete
- In-service in 2017

Grand Rapids Pipeline – Bringing Supply to Market

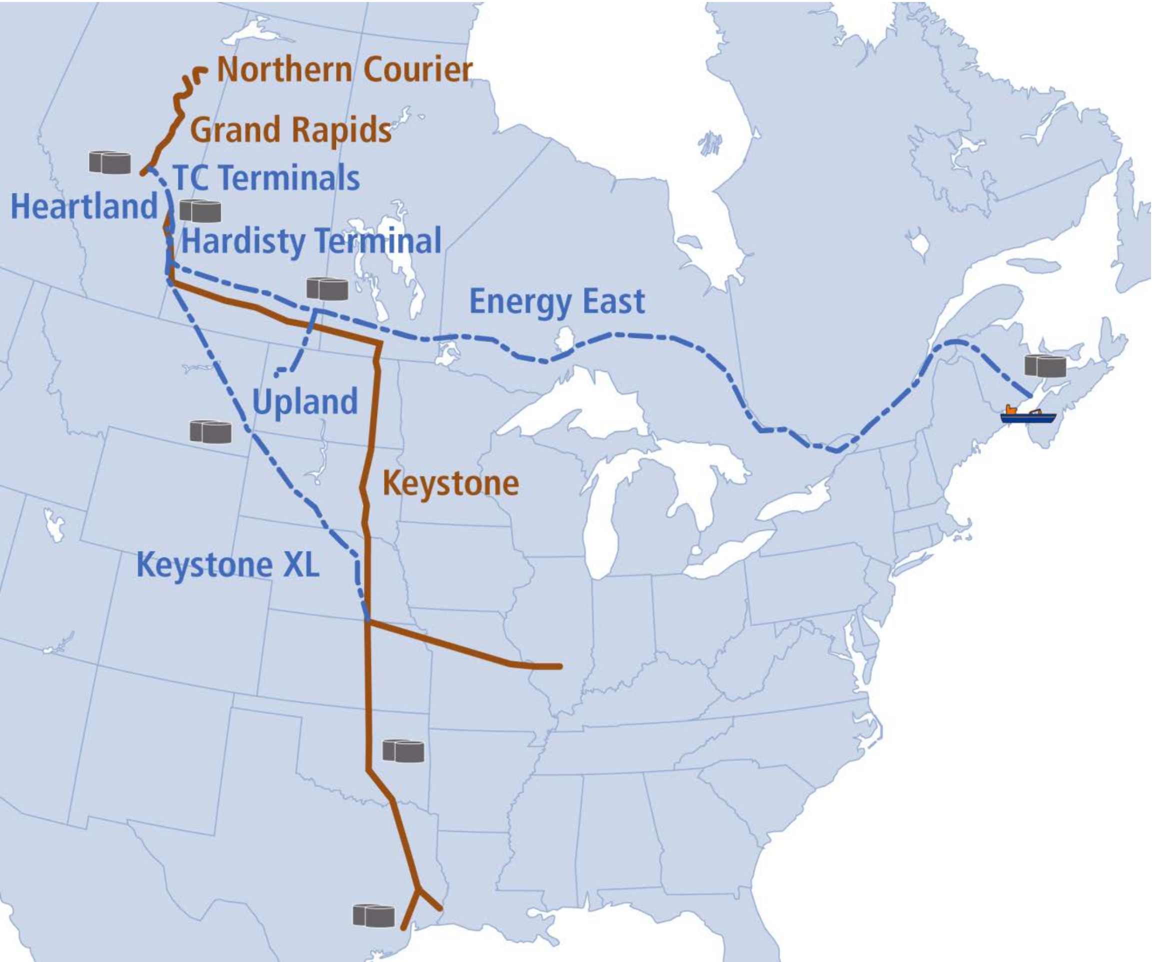


- $3 billion, 50/50 joint venture investment with Brion Energy, a subsidiary of PetroChina
- Long-term contract with Brion Energy
- Transports crude oil and diluent between northern Alberta and the Edmonton/Heartland region
- Keyera joint venture between Edmonton and Heartland enhances diluent supply
- Construction progressing on 20-inch pipeline
- Phase I ($750 million*) expected in-service in late 2016
- Phase II ($750 million*) aligned with market demand

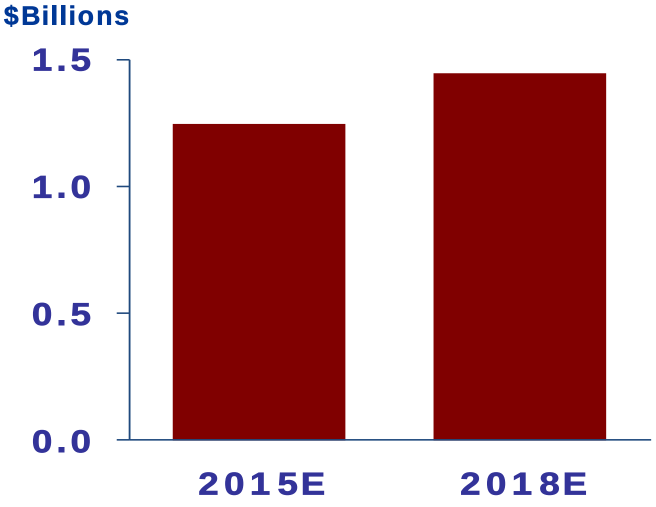
Capturing Production Growth and Meeting Diluent Requirements

* *TransCanada share*

Liquids Pipelines - 2018 EBITDA Outlook



- Keystone System produces stable and predictable results
- 2018 EBITDA growth driven by $2.4 billion of secured projects including Houston Lateral, Northern Courier and Phase I of Grand Rapids

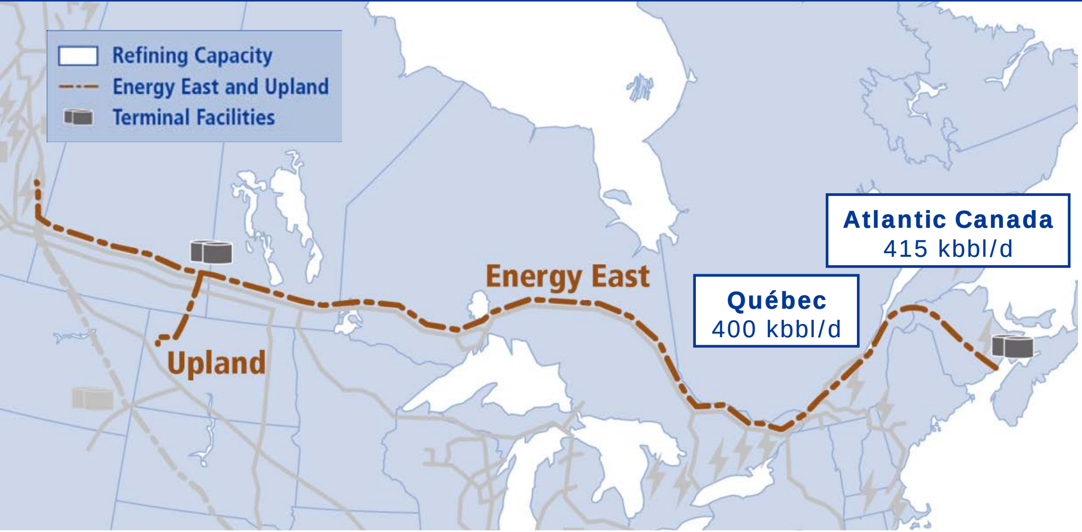


Keystone XL – Maintaining a Valuable Option

- **US$8 billion investment; US$2.4 billion invested to date and US$0.4 billion of capitalized interest recorded**
- **Reviewing options following Department of State decision**
- **Expected to generate US$1 billion of EBITDA annually**

Competitive Transportation Solution to U.S. Gulf Coast

Energy East – Critical to Reach Eastern Refineries and Tidewater



- $12+ billion investment
- 1.1 million bbl/d of capacity with approximately 1 million bbl/d of long-term, take-or-pay contracts
- Serves Montréal, Québec City and Saint John refineries
- Tidewater access
- Expected to generate ~$1.8 billion of EBITDA annually
- Targeted in-service in 2020, subject to regulatory approvals

Other Liquids Growth Opportunities

Further regional expansions

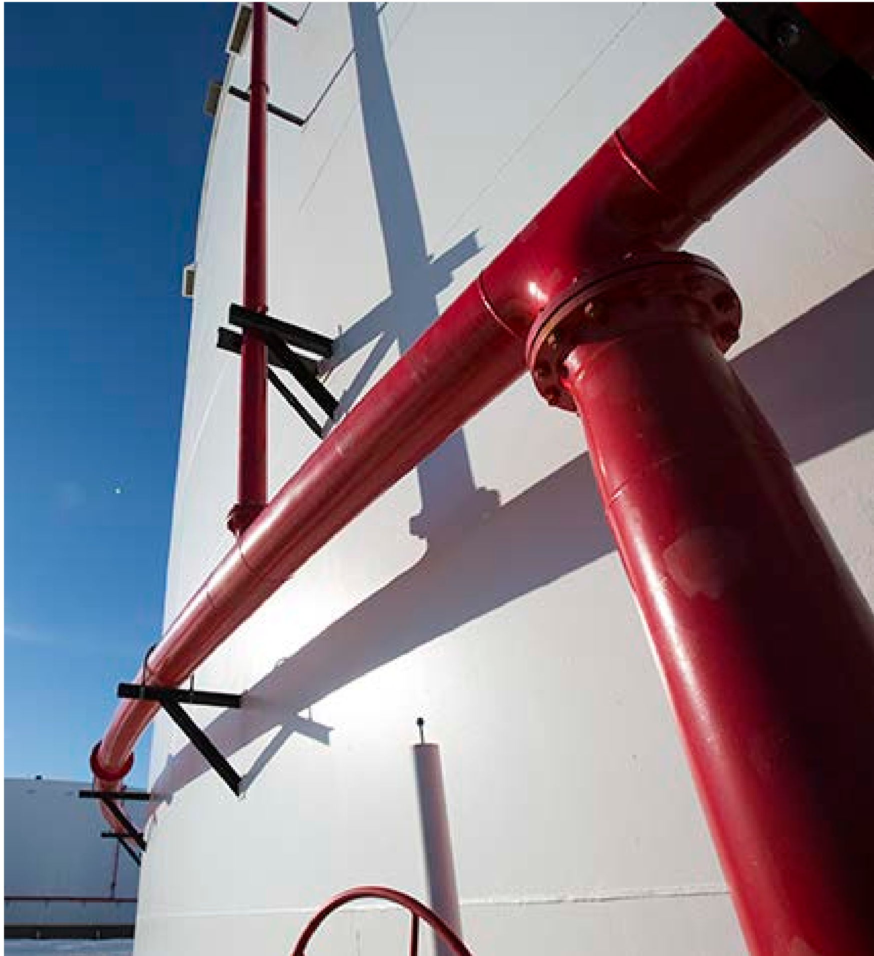
- Alberta, Mid-continent and U.S. Gulf Coast

Geographic diversification

- Greenfield, brownfield and acquisition initiatives

Value chain expansions

- Marketing group
- Terminal services
- Storage



Key Takeaways

- Keystone System generates stable and predictable earnings and cash flow
- $2.4 billion of new projects in-service by 2017
- Maintaining options in a challenging environment
- Disciplined capital allocation
- Large-scale projects offer significant upside

Liquids Pipelines

Paul Miller
President, Liquids Pipelines

TransCanada
In business to deliver

Energy

Bill Taylor
President, Energy

TransCanada
In business to deliver

Diversity of Base Business Delivers Stability



Proven independent power producer

- ✓ Builder of gas-fired, wind, solar power assets
- ✓ Expertise and experience in a variety of markets

Contracted power generation

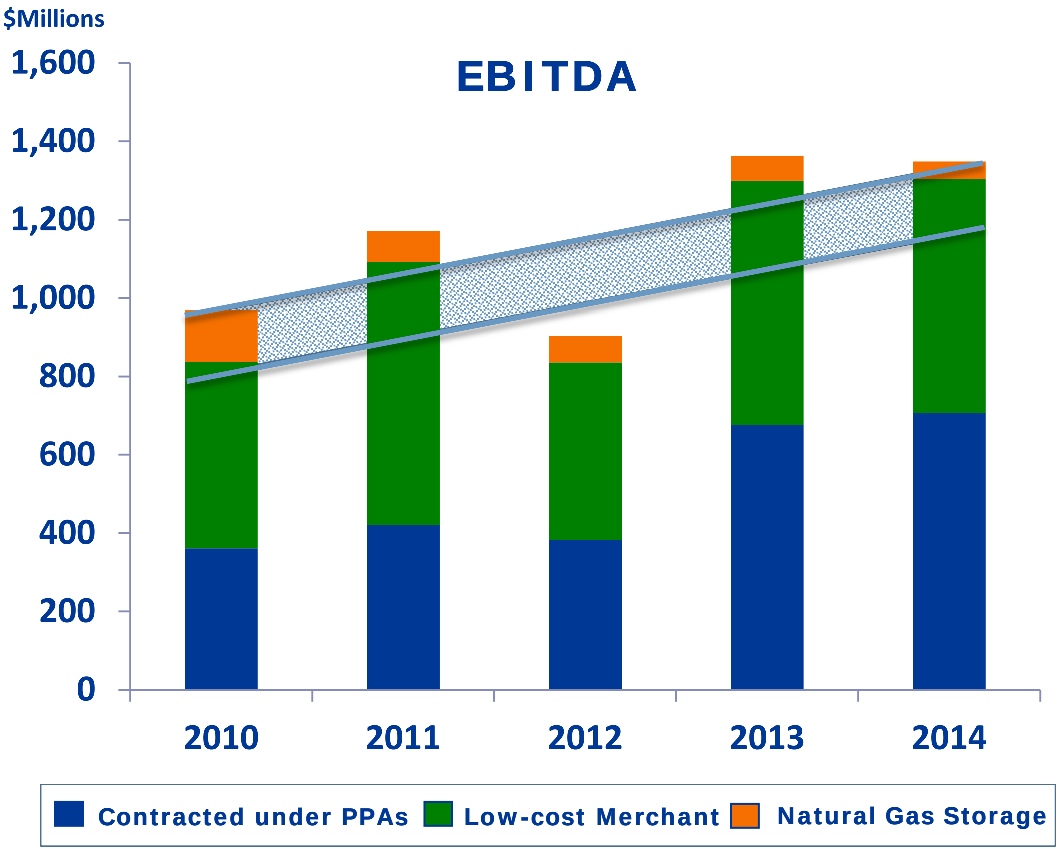
- ✓ Stable base of 5,100 MW of capacity contracted for average term of 14 years

Low-cost merchant power generation

- ✓ Variability mitigated by capacity markets, hedging activity, wholesale marketing and low-cost supply elements



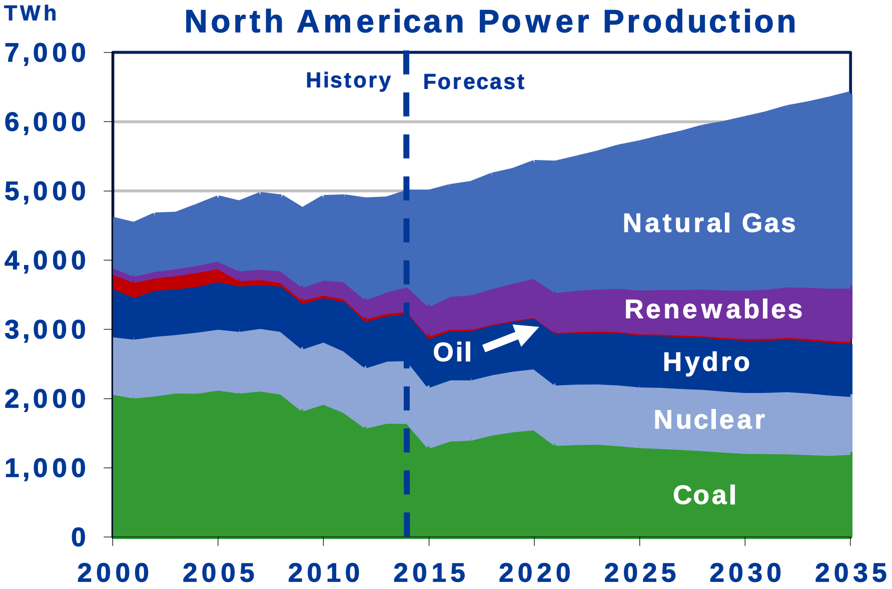

Proven Track Record of Success



- **Diverse asset portfolio delivering a stable range of results through various market conditions**
- **Underpinned by substantial portfolio of long-term contracted assets**
- **Low-cost merchant position provides ability to capture "upside"**
  - Baseload and capacity payments reduce volatility

Our Energy Strategy

Maximize and Grow our Diverse Portfolio in the Midst of a Transition to a Lower Carbon Footprint



Source: TransCanada, EIA, StatsCan, SENER, Others

Ironwood Acquisition – Extending into Large, Liquid Market

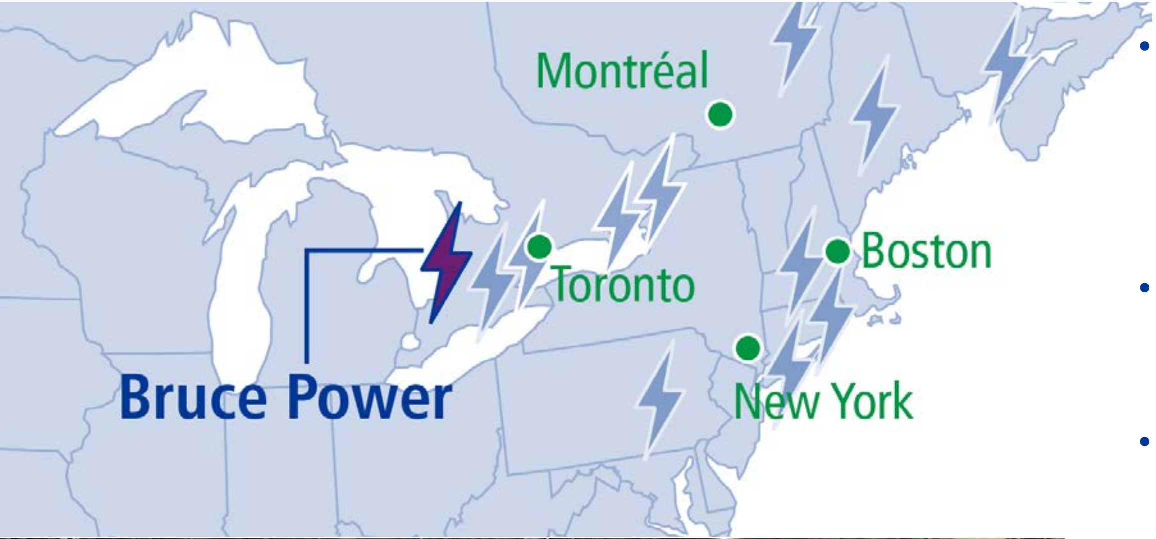
- 778 MW natural gas-fired power generation facility
- PJM is the largest and most liquid energy market in North America
- Access to competitively priced natural gas from Marcellus shale gas play
- Market mandate to retire coal facilities and replace with more energy-efficient plants
- Expect to run as a baseload to intermediate load facility
- Complementary to U.S. northeast wholesale marketing business
- US$90-$110 million of EBITDA annually based on combination of capacity and energy sales

Measured and Deliberate Growth

Napanee Generating Station – Construction on Time, on Budget

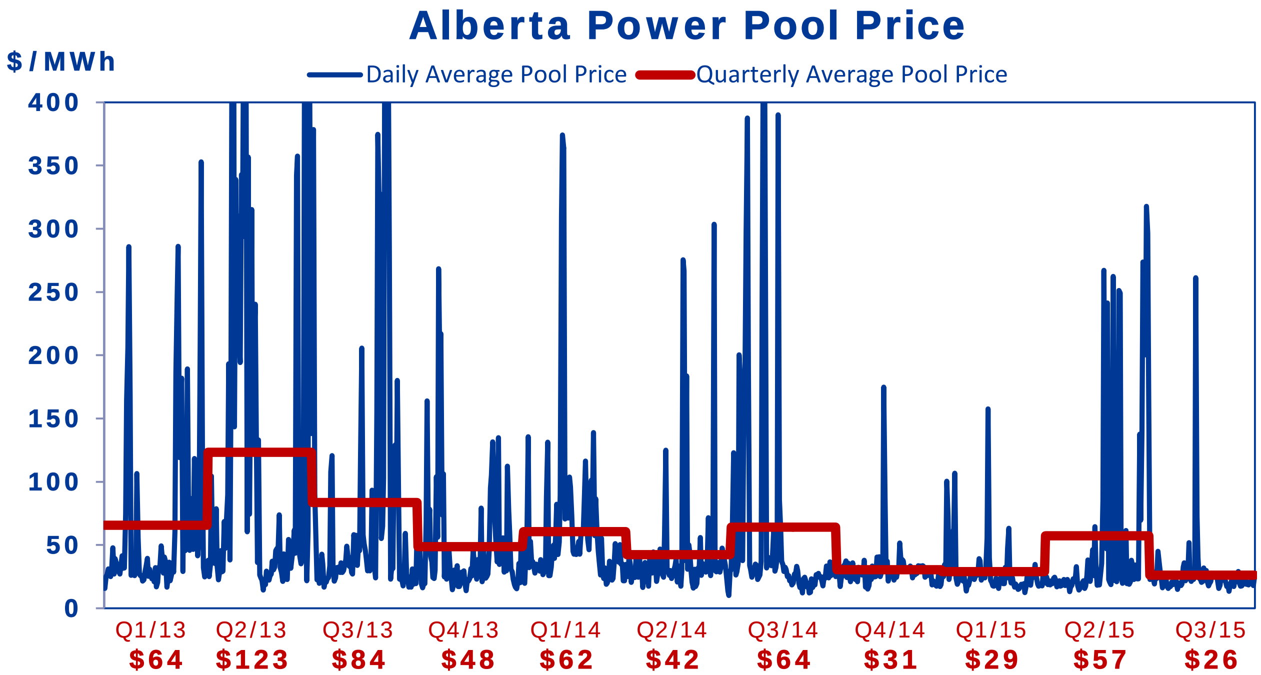
- $1.0 billion, 900 MW combined-cycle gas-fired plant
- 20-year PPA with the Ontario IESO
- Construction commenced in January 2015
- In-service Q4 2017 or Q1 2018

Bruce Power Refurbishment Opportunity



- **6,200 MW facility capable of generating ~ 30% of Ontario's power needs**
  - Achieved top nuclear operator status and performed well in 2015
- **Ontario Government committed to nuclear refurbishments as part of Long Term Energy Plan**
- **Refurbishment of Units 3 to 8 subject to negotiation of long-term arrangement with the Ontario IESO**
- **Discussions progressing in a positive direction**
  - Multi-billion, multi-year investment
  - Incorporating lessons learned from the refurbishment of Units 1 and 2
  - Will significantly extend the lives of Units 3 through 8

Alberta Power Market - Near-term Challenges

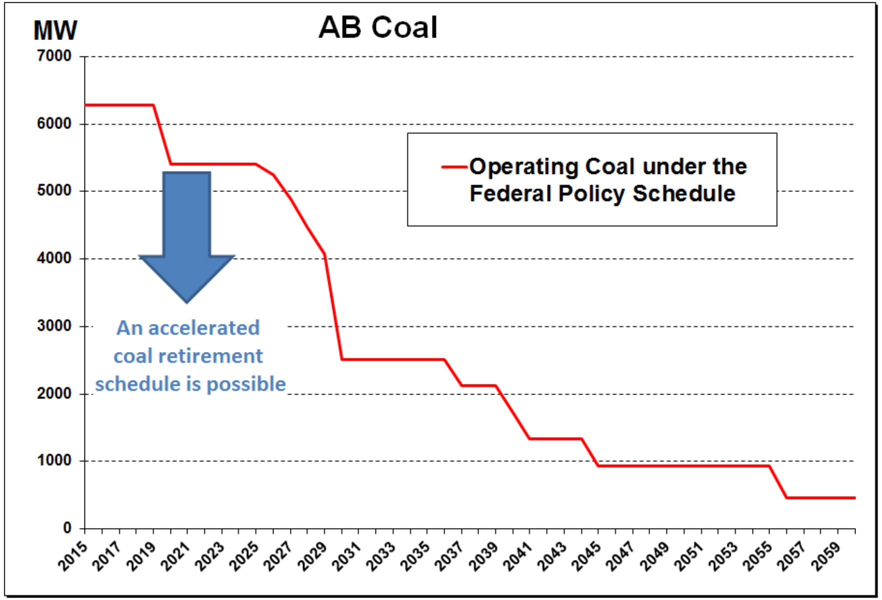


Source: AESO

- **Alberta market well supplied in near-term**
  - Recent capacity additions (~ 900 MW)
  - Soft demand growth
  - Low natural gas prices
- **All contributing to current low power price environment**
- **Market nearing a crossroad**
  - Policy shift to reduce greenhouse gas emissions will impact the electricity sector

Fundamentally Attractive Market Despite Current Weakness

Alberta Market - Evolution Longer Term



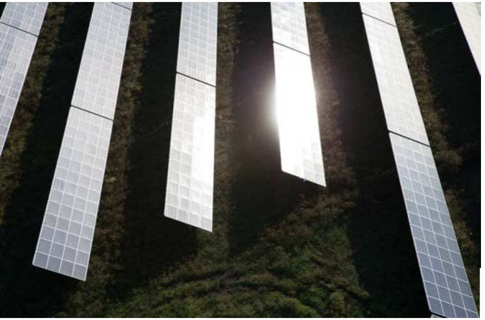
Source: TransCanada

Opportunity for Alberta to Meet its Climate Change Initiatives

- **Alberta government's election platform on climate action**
  - Phase out coal
  - Expand green power sources
  - Energy efficiency
- **Alberta's future is one of less coal and more renewables and gas-fired generation**
- **TransCanada well positioned to participate in the change**
  - Expertise
  - Financial strength and flexibility

Future Growth Opportunities



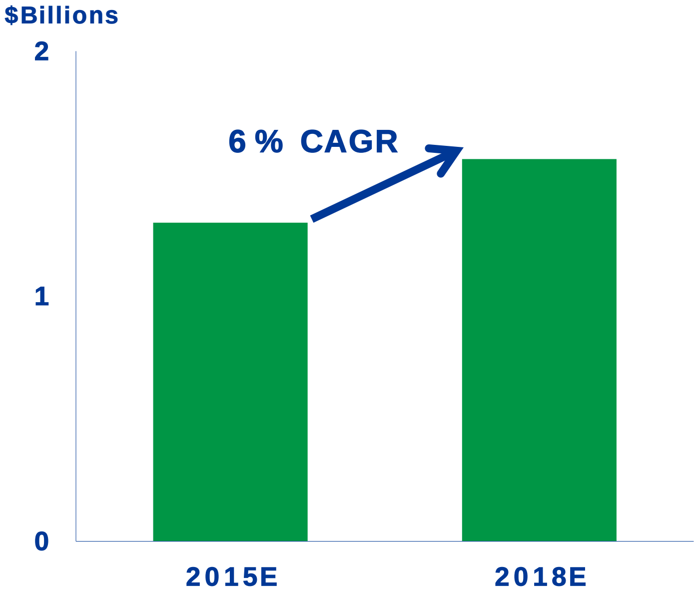




- **Bruce Power refurbishment**
- **Natural gas-fired generation**
- **Renewables: wind, solar and hydro**
- **Mexico power**
- **Organic growth off existing footprint**
- **Repowering opportunities**
- **Opportunistic and disciplined M&A**

Well Positioned to Capture Opportunities from the Move to a Less Carbon Intensive Grid and Replacement of Aging Infrastructure

Energy - 2018 EBITDA Outlook*

2018 EBITDA Growth Driven by Napanee and Ironwood



** Includes existing assets and $1.7 billion of commercially secured power projects and acquisitions expected to be in service by 2018*

Key Takeaways

- Diverse business that delivers a stable range of earnings
- New assets in 2016 (Ironwood) and 2018 (Napanee)
- Bruce refurbishment opportunity moving in positive direction
- Well positioned to capture growth opportunities in core markets
- Entries into new regions measured and deliberate




Energy

Bill Taylor
President, Energy

TransCanada
In business to deliver

Finance

Don Marchand
EVP, Corporate Development and Chief Financial Officer

TransCanada
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Financial Strategy

- Invest in low-risk assets that generate predictable and sustainable growth in earnings, cash flow and dividends
- Finance long-term assets with long-term capital
- Maintain financial strength and flexibility
- Value ‘A’ grade credit rating
- Effectively manage foreign exchange, interest rate and counterparty exposures
- Disciplined cost and capital management
- Simplicity and understandability of corporate structure

Built For All Parts of the Economic Cycle

Where Are We Today





- **Base business performing well; cost management initiative underway**
- **Funding for 2015 complete and has commenced for 2016**
- **‘A’ grade credit ratings with stable outlook**
- **Capital needs for near-term growth projects are manageable**
- **Large-scale projects are eminently financeable**
  - Strong contractual underpinnings attract capital in all economic conditions
  - Will not store capacity to fund major projects
- **Conveyor-belt LP drop down strategy continues to advance**
- **Dividend poised to grow, supported by earnings and cash flow**

Well Positioned To Fund Capital Program and Sustainably Grow Dividends

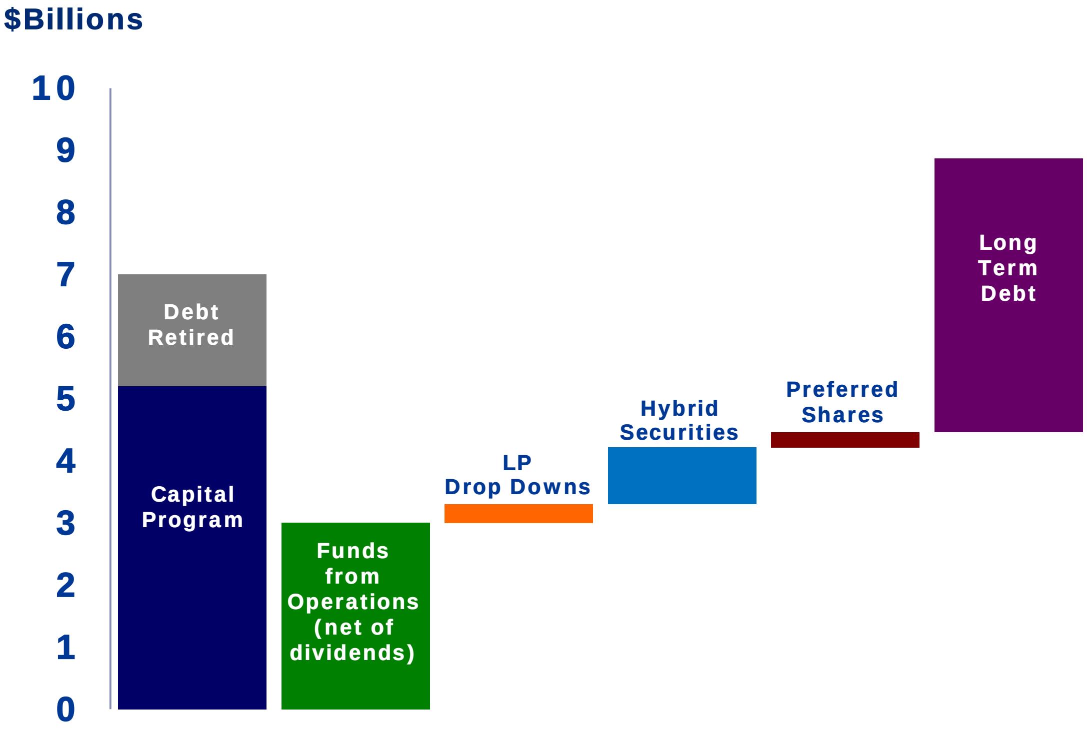
Risks are Known and Contained





- **Volumetric**
  - Spot movements on southern portion of Keystone System and on Great Lakes
  - Availability at Bruce Power
- **Commodity**
  - Alberta and Northeast U.S. Power; unregulated natural gas storage
  - Mitigated by low-cost supply characteristics, capacity markets, hedging activity and wholesale marketing
- **Counterparty**
  - Blue-chip counterparties on contracted assets
  - Cost-of-service regulated business
- **Interest Rates**
  - Largely fixed-rate debt financed (~90%) with long duration
  - 16-year average term at 5.3% coupon rate
- **Foreign Exchange**
  - U.S. dollar assets and income streams predominately hedged with U.S. dollar-denominated debt
  - Strengthening U.S. dollar creates tailwind

2015 Financing Program Complete – Begun Prefunding 2016



Over $6 billion raised on attractive terms through an array of funding products

- US$2.5 billion of long-term debt in U.S. and Taiwanese markets and $1.2 billion of MTNs in Canada
- US$750 million of hybrid securities
- $250 million of preferred shares
- US$457 million sale of remaining 30% interest in GTN to TC PipeLines, LP

2015 Financing Program Highlights Diversity and Attractiveness of Funding Levers

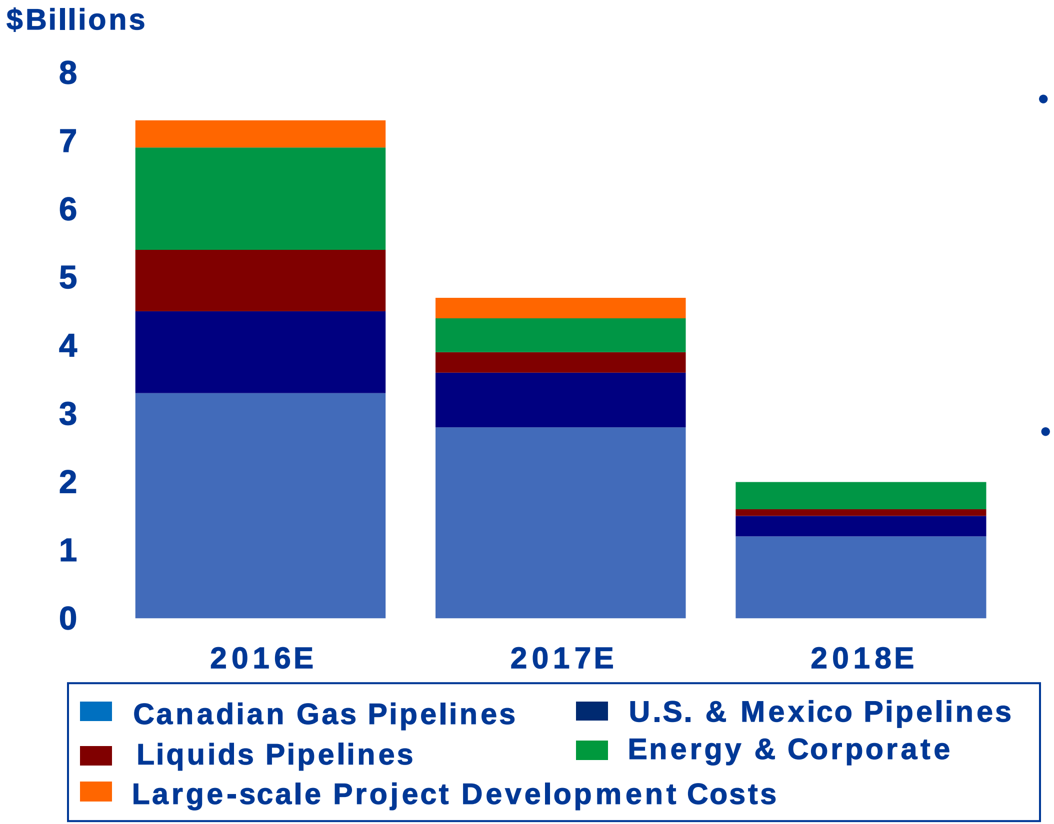
$13 Billion of Visible Near-Term Growth Projects



Project	Capital Cost*	Invested to Date*	Expected In-Service Date*	Revenue Stream	Counterparty
Houston Lateral & Terminal	US0.6	US0.5	2016	Spot	Multiple Shippers
Ironwood Acquisition	US0.7	--	2016	Capacity/Energy	PJM RTO
Topolobampo	US1.0	US0.8	2016	Fully Contracted	CFE
Mazatlan	US0.4	US0.3	2016	Fully Contracted	CFE
Canadian Mainline	0.4	--	2015-2016	Cost of Service	Multiple Shippers
NGTL System:					
Various small projects	0.5	0.2	2015-2017	Cost of Service	Multiple Shippers
2016/17 Facilities	2.7	0.2	2016-2018	Cost of Service	Multiple Shippers
North Montney	1.7	0.3	2017	Cost of Service	Multiple Shippers
2018 Facilities	0.6	--	2018	Cost of Service	Multiple Shippers
U.S. Natural Gas Pipelines	US0.5	--	2016-2018	Regulated	Multiple Shippers
Grand Rapids	1.5	0.4	2016-2017	Contracted/Spot	Brion (PetroChina)
Northern Courier	1.0	0.5	2017	Fully Contracted	Fort Hills
Tuxpan-Tula	US0.5	--	2017	Fully Contracted	CFE
Napanee	1.0	0.3	2017-2018	Fully Contracted	OPA
Total	13.1	3.5			

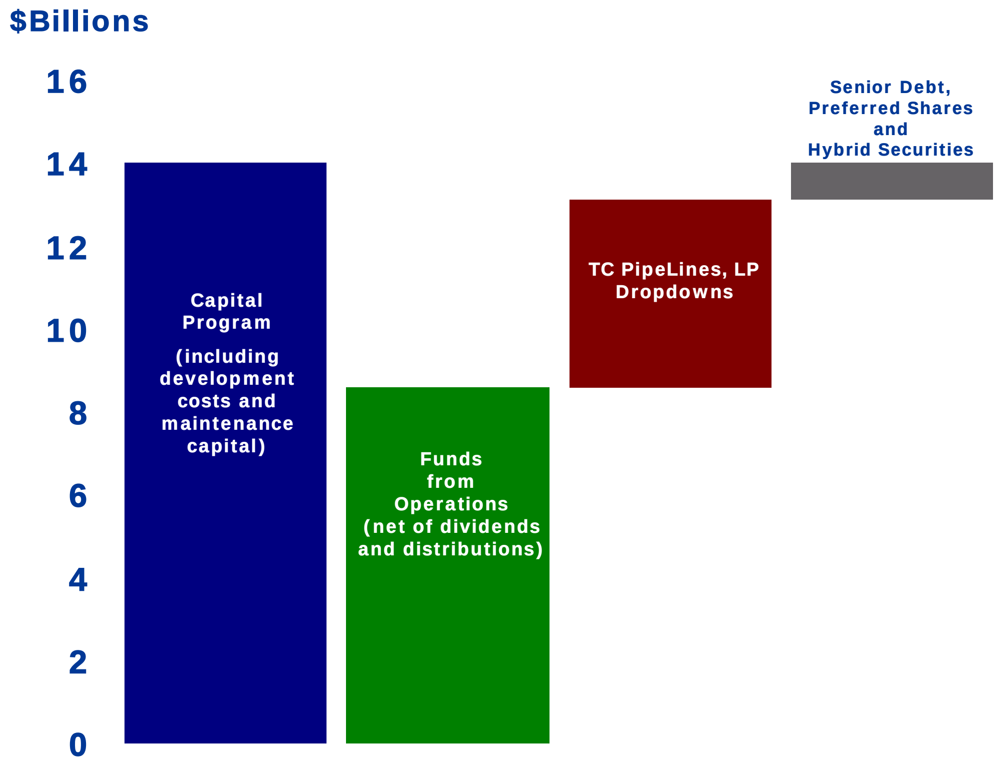
* *TransCanada share in billions of dollars. Certain projects are subject to various conditions including regulatory approvals.*

2016-2018 Capital Expenditure Outlook



- **Approximately $14 billion to be invested over the next three years related to:**
  - Near-term growth portfolio including Ironwood acquisition
  - Maintenance capital
  - Modest development costs associated with large-scale projects
- **Significant incremental capital expected for large-scale projects following regulatory approvals and Final Investment Decisions**

Funding Program for Near-Term Growth Portfolio



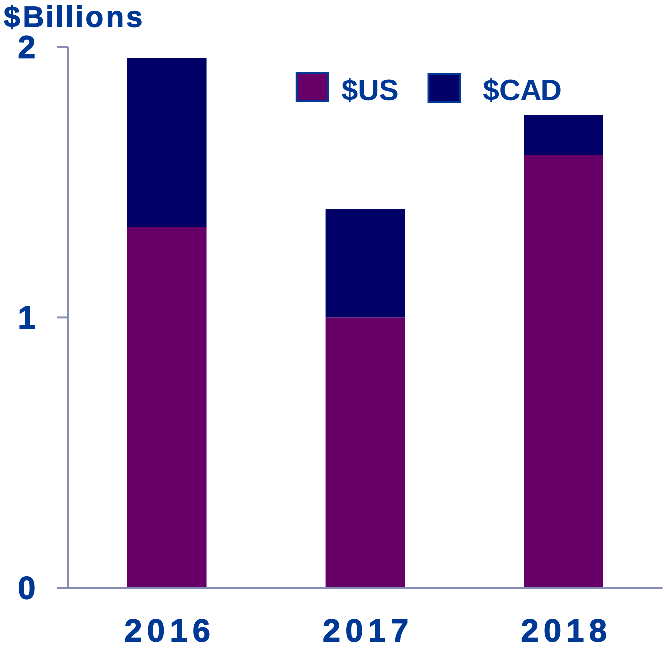
2016 – 2018 Outlook

- **Growth projects and maintenance capital largely funded with:**
  - Internally generated cash flow
  - TC PipeLines, LP drop downs
  - Senior debt and mezzanine capital
- **Does not include post-development capital or cash recoveries for large-scale projects**
  - Highly financeable, credit supportive annuity streams
  - Development cost risk minimized

Funding Program Very Manageable

Financial Flexibility to Refinance Maturities and Fund Growth

Debt Maturities
(2016-18)



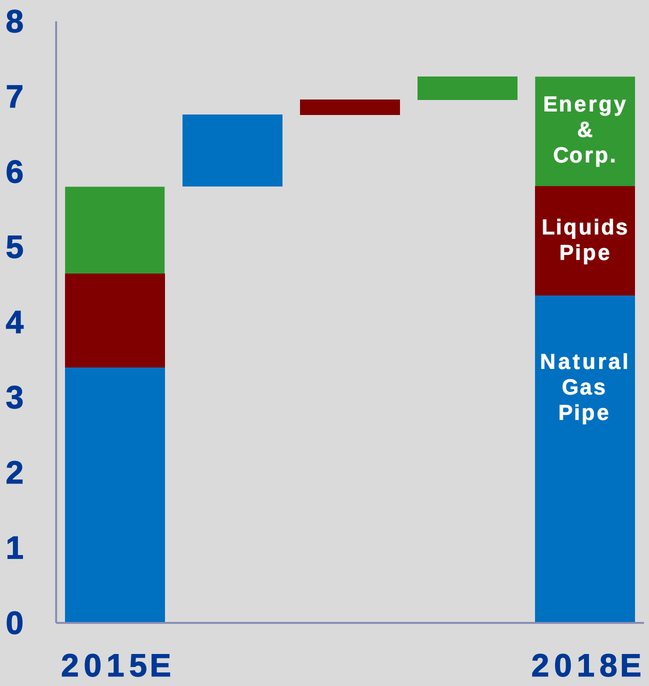
Financial Flexibility

- **Predictable and growing cash flow**
- **~$6 billion committed and undrawn credit lines**
- **Well supported commercial paper programs**
  - Canada – $3.0 billion
  - U.S. – US$1.5 billion
- **Access to global capital markets**
  - Senior debt
  - Hybrid securities
  - Preferred shares
  - Portfolio management including LP drop downs and partners
  - DRiP/discrete equity

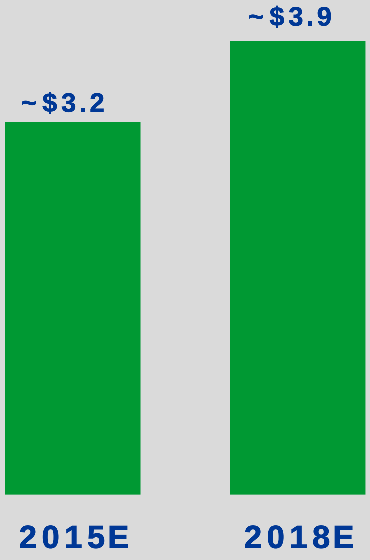
Normal Level of Scheduled Debt Maturities Through 2018
Diverse Set of Financing Levers Available

EBITDA and Distributable Cash Flow (DCF) Through 2018

Comparable EBITDA Outlook*
($Billions)
8% CAGR



Comparable DCF Outlook*
($Billions)
7% CAGR



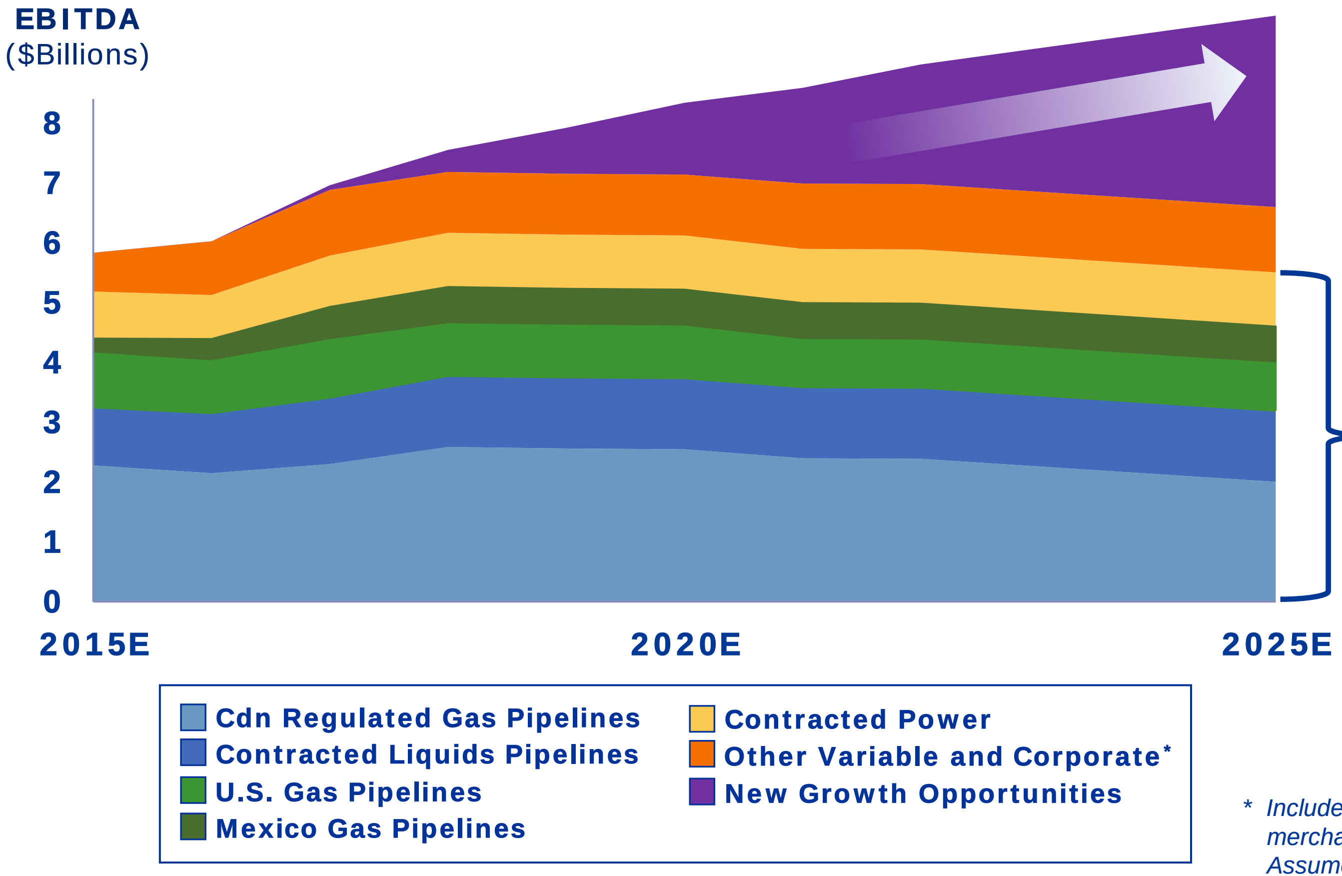
DCF defined as: Funds Generated from Operations less:

- Preferred share dividends
- Distributions to non-controlling interests
- Maintenance capital expenditures

Will Begin Reporting DCF as Supplementary Measure

** Includes existing assets and $13 billion of commercially secured projects expected to be in service by 2018, subject to various conditions including corporate and regulatory approvals*

Stability and Longevity of Core Asset Base + $13 Billion of Visible Growth with Upside

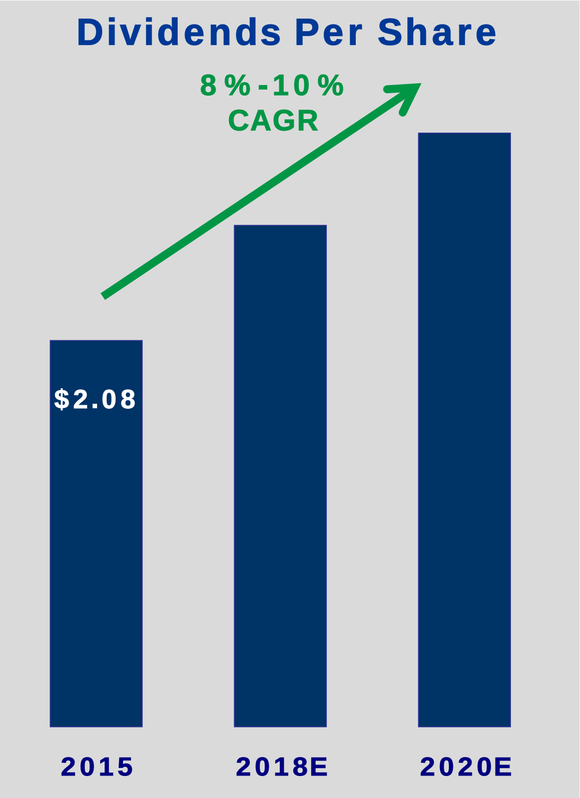


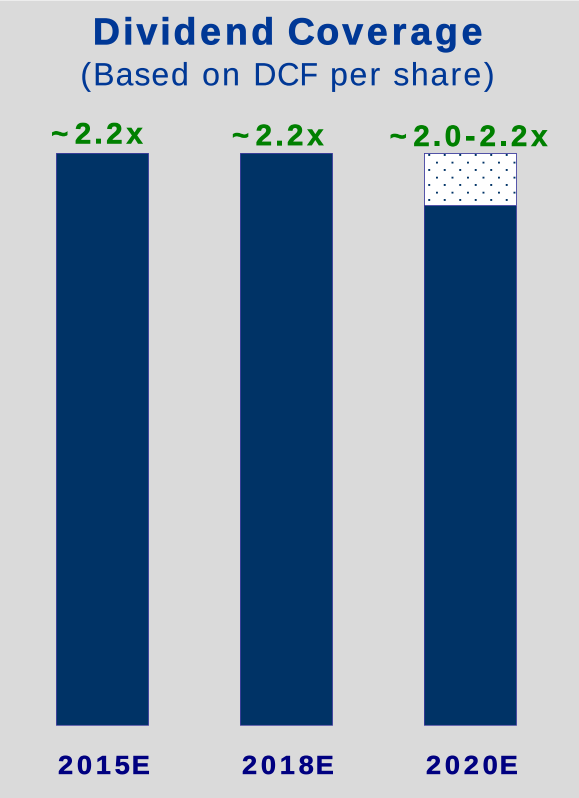
Generated by predictable cost of service and long-term contracted cash flow streams supported by:

- Solid counterparties
- Minimal volumetric risk
- No commodity price risk

* *Includes pipeline capacity not under long-term contract, merchant power and unregulated natural gas storage. Assumes no change in EBITDA contribution beyond 2015 for merchant power or gas storage.*

Committed to 8-10% Annual Dividend Growth Through 2020





Supported by:

- High-quality asset base generating predictable and long-life cash flow
- $13 billion of near-term growth projects
- Proven ability to find attractive investment opportunities
- Strong dividend coverage

Success in Advancing Other Growth Initiatives Extends and Augments Future Dividend Growth

Disciplined Capital Allocation

- **Sustainable dividend growth**
- **Significant opportunities in our core businesses and geographies, including large-scale projects**
- **Financial strength to execute at any point of the economic cycle**
- **Will accelerate return of capital if attractive low-risk investment opportunities do not materialize**

Focused on Per Share Economics to Maximize Short- and Long-Term Shareholder Returns

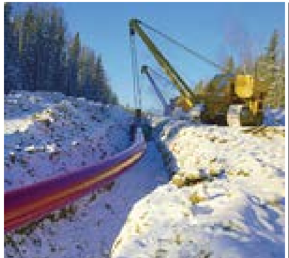
Certain projects are subject to various conditions including corporate and regulatory approvals

Key Takeaways



- **Resilient asset portfolio producing robust internally generated cash flow with visibility well beyond the end of the decade**
- **Manageable capital needs for near-term growth portfolio with support of ‘A’ grade credit rating**
- **Corporate structure is simple and understandable**
- **Focused on disciplined capital allocation**
- **Well positioned to grow dividend at an annual rate of 8-10% through 2020**

Proven Strategy to Deliver Superior Total Shareholder Returns



Finance

Don Marchand
EVP, Corporate Development and Chief Financial Officer

TransCanada
In business to deliver

Closing Remarks

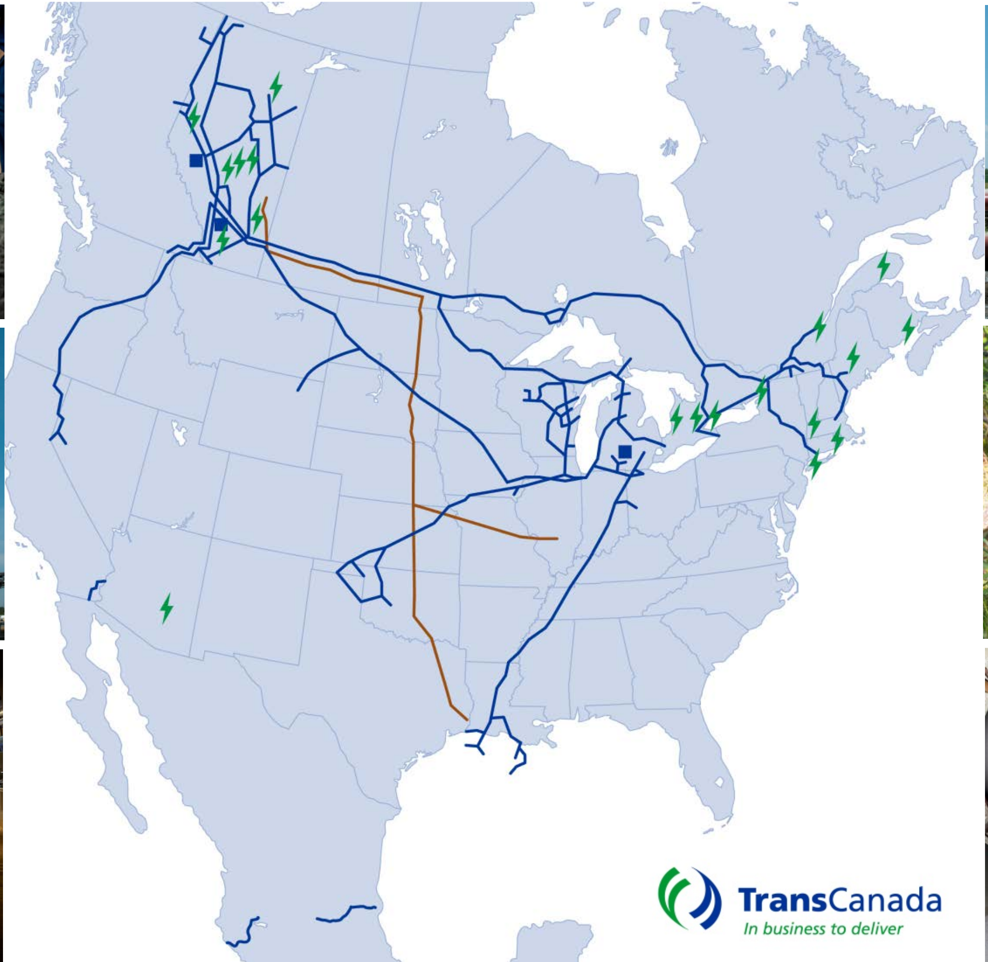
Russ Girling
President & Chief Executive Officer

TransCanada
In business to deliver

A Leading North American Energy Infrastructure Company







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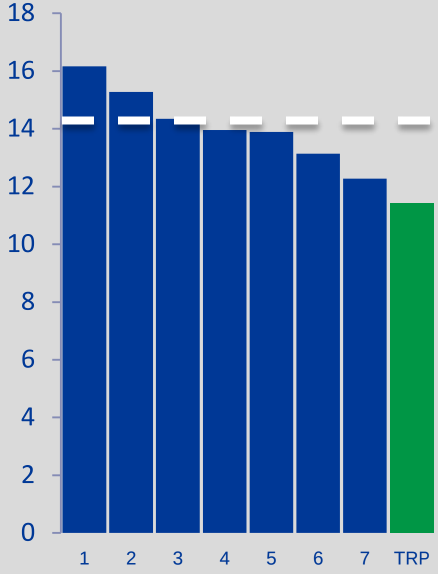
Relative Valuation

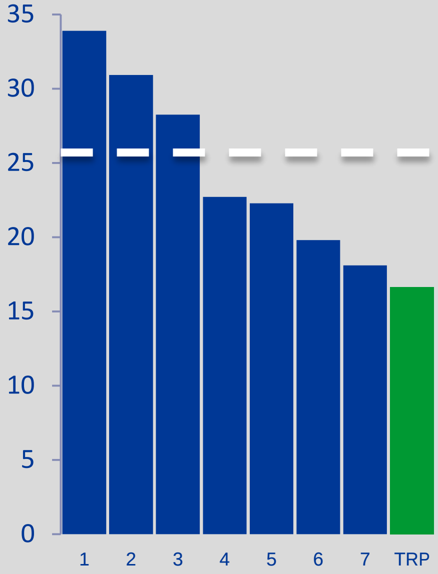
EV / EBITDA Multiple*

Peer Average ~14.2



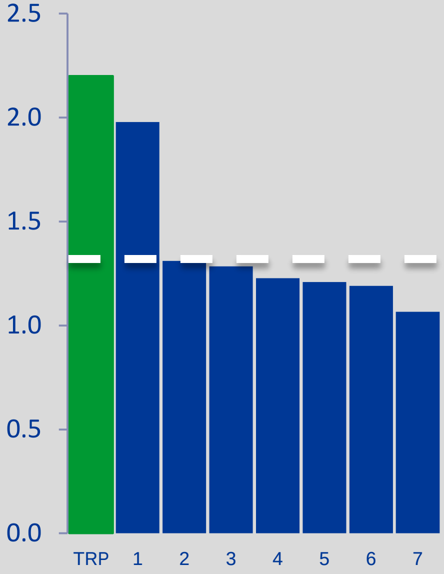
Price / Earnings Multiple*

Peer Average ~25.1



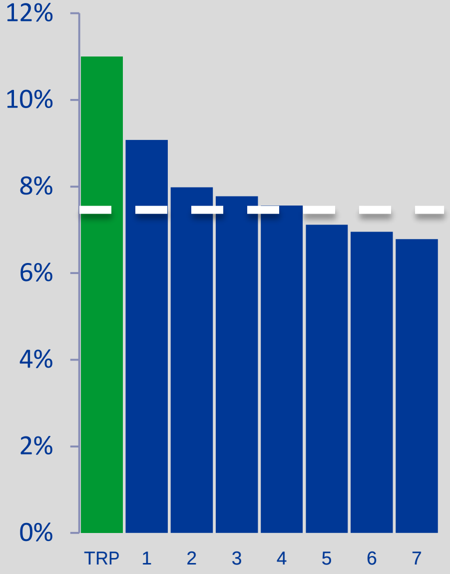
Distributable Cash Flow Dividend Coverage*

Peer Average ~1.3



Distributable Cash Flow Yield*

Peer Average ~7.6%

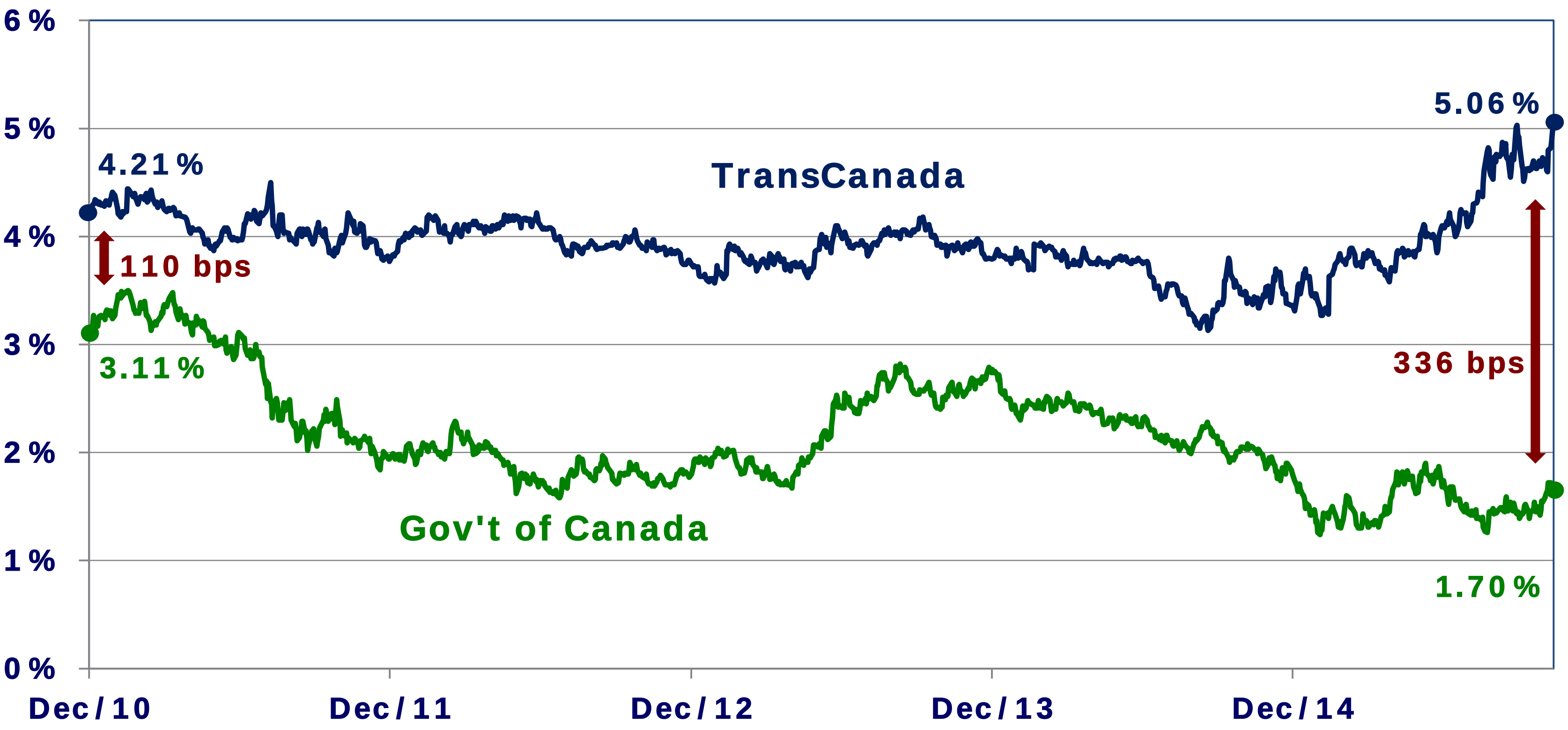


Attractive Valuation Relative to Peers

** Peer group: ALA, ENB, EPD, IPL, KMI, PPL, SE*

** Based on consensus estimates from FactSet, Thomson One and peer data from Scotia Capital and Wells Fargo. Valuation metrics based on closing share prices on November 12, 2015.*

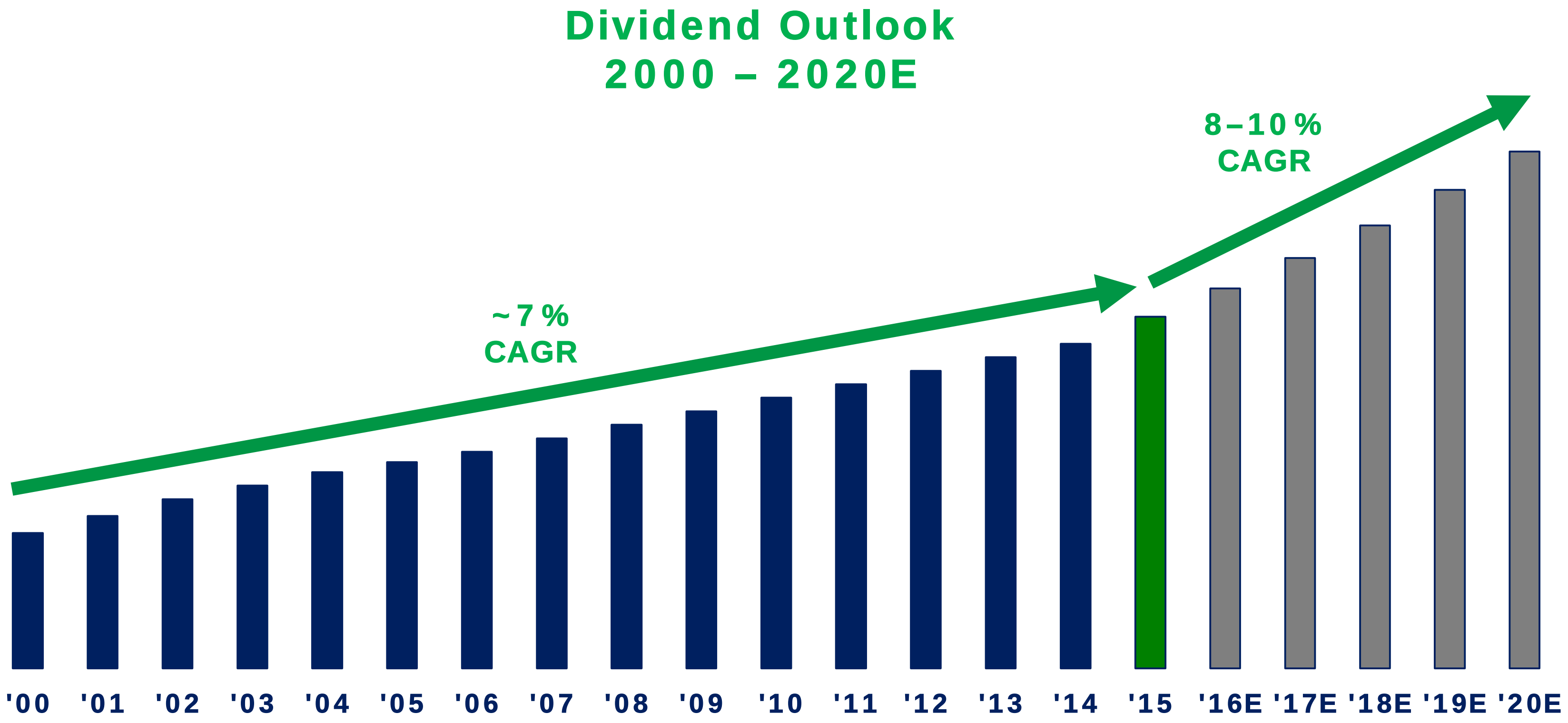
TransCanada Dividend Yield vs. 10-Year GOC Bond Yield



Attractive Yield Relative to the 10-Year Government of Canada Bond

** Based on share price at November 12, 2015*

Long Track Record of Dividend Growth Expected to Continue



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

Closing Remarks

Russ Girling
President & Chief Executive Officer

TransCanada
In business to deliver