

American Gas Association – 2015 Financial Forum Karl Johannson, EVP & President, Natural Gas Pipelines

May 18, 2015



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 and Funds Generated from Operations. Reconciliations to the most closely related GAAP measures are included in our most recent Quarterly Report to Shareholders filed with Canadian securities regulators and the SEC and available at www.transcanada.com.

Natural Gas Pipeline Liquids Pipeline Power Plants Natural Gas Storage

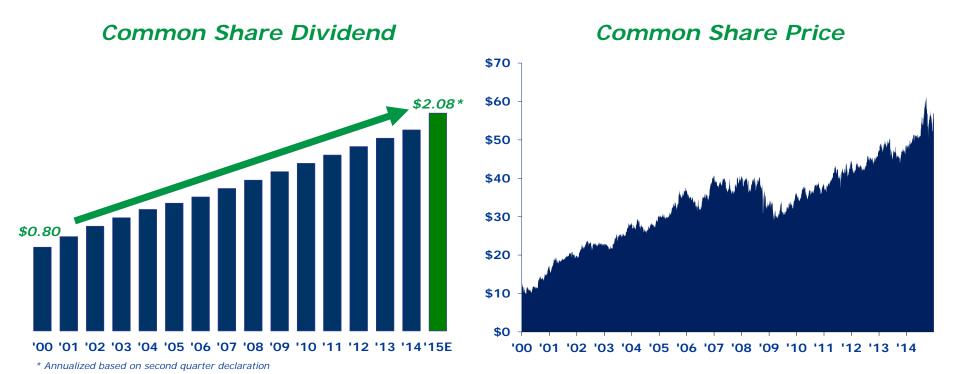
Unparalleled Portfolio of Complementary Energy Infrastructure Assets

TransCanada Today

- One of North America's Largest Natural Gas Pipeline Networks
 - 68,000 km (42,000 mi) of pipeline
 - 368 Bcf of storage capacity
 - 14 Bcf/d or 20% of continental demand
- Premier Liquids Pipeline System
 - 4,250 km (2,600 mi) of pipeline
 - 530,000 bbl/d or 18% of Western Canadian production
- Largest Private Sector Power Generator in Canada
 - 19 power plants, 10,900 MW
- Total Assets ~ \$64 billion

Track Record of Delivering Long-Term Shareholder Value





15% Average Annual Total Shareholder Return Since 2000

Prince Rupert Gas Transmission NGTL - Northern Courier **Grand Rapids Coastal GasLink** Heartland & TC Terminals **Keystone Hardisty Terminal Energy East Upland Eastern Mainline** Napanee Project **Keystone XL Topolobampo Natural Gas Pipeline Houston Lateral** & Terminal **Liquids Pipeline** Mazatlan **Power Plants Terminal Facilities** Existing Assets * Certain projects are subject to various conditions including corporate and regulatory approvals.

\$46 Billion Portfolio of Commercially Secured Projects*

- Industry-leading growth portfolio
 - \$25 billion of liquids pipelines
 - \$20 billion of natural gas pipelines
 - \$1 billion of power generation facilities
- All backed by long-term contracts or a regulated cost-of-service business model



Our Priorities



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









Maximize Value of Asset Base - Canadian Mainline



- NEB approval of LDC Settlement creates long-term stability
- Flexibility to source gas from various supply regions by developing new infrastructure in the Eastern Triangle while providing reasonable cost recovery
- 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%

Maximize Value of Asset Base - ANR Re-contracting





- Secured approximately 2.0 Bcf/d of long-term contracts at maximum rates on Southeast Mainline
 - ~1.25 Bcf/d will commence in 2014;
 remainder of volume commencing in 2015
 - Average term of 23 years
- Connecting Marcellus/Utica supply; half to northern delivery points and half south towards the Gulf Coast
- US\$300 million of EBITDA expected by 2016
- Assessing further potential system enhancement & expansion opportunities

TC PipeLines, LP (NYSE: TCP) - A Critical Funding Lever





• Low-Risk Energy Infrastructure Assets

- Interest in six interstate natural gas pipelines backed by long-term contracts
- Track record of stable & growing cash distributions
 - 6% increase in quarterly distribution expected in July/15
 - Expect distribution to grow at 6% for at least the next 2-3 years
- Playing critical role in financing TransCanada's capital program
 - Interest in four remaining gas pipelines expected to generate approximately US\$450 million of EBITDA in 2016
 - Capacity to complete drop downs in excess of US\$1 billion per year

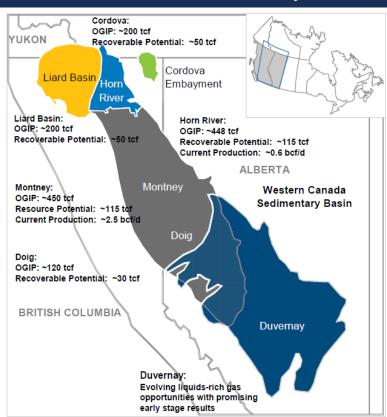
• TransCanada

- Operates assets, owns general partner and 28% interest
- Expected Q2/15 distribution increase moves GP to high IDR split (25%)

WCSB Gas Supply Potential

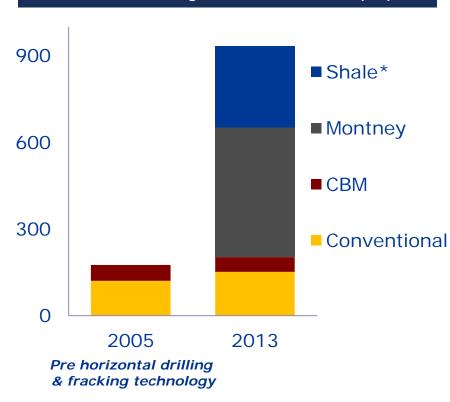


West Coast Natural Gas Plays

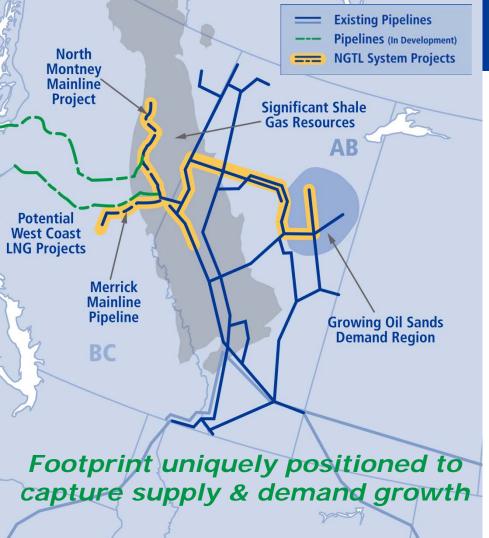


Source: BMO Capital Markets / Wood Mackenzie OGIP = Oil & Gas in Place





^{*} Shale includes Horn River, Cordova, Liard & Duvernay Conventional includes tight gas



NGTL System's Unparalleled Position

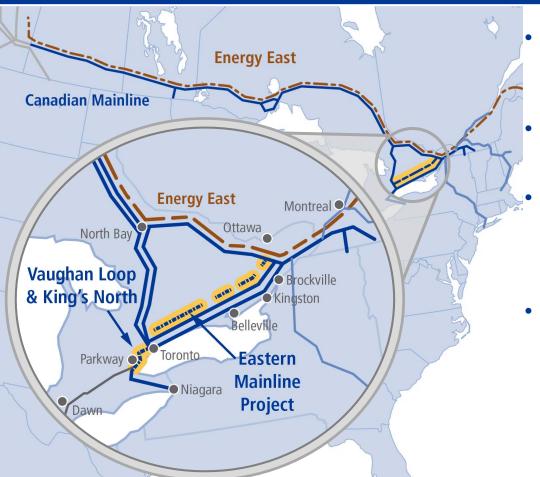
- Primary transporter of WCSB supply with NIT hub providing optionality & liquidity
- 10.7 Bcf/d average in 2014; peak intra-basin demand of 6.5 Bcf/d
- \$6.7 billion of new investments
 - \$4.8 billion of projects expected in-service between 2015-2018, includes \$1.7 billion for North Montney
 - \$1.9 billion Merrick Pipeline project tied to Chevron/Woodside's West Coast LNG terminal

Significant Rate Base Growth (\$Billions)



Canadian Mainline Expansions 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 November 2015 to November 2016, subject to regulatory approvals
- \$1.5 billion Eastern Mainline Project ensures existing and new firm transportation commitments are met as part of Energy East

Mexico Natural Gas Pipeline Assets





- US\$2.6 billion of operating pipelines and projects
 - Secured by 25-year contracts with CFE
 - US\$1.2 billion invested
 - US\$1.4 billion of projects
- Future opportunities to expand the natural gas network
 - Strong demand for power generation and industrial use



\$12 Billion of Small to Medium-Sized Projects



Project	Expected In-Service Date*	Capital Cost*	Amount Spent		EBITDA Growth* 2013A – 2017E
NGTL System	2015-2018	4.8	0.2	\$Billions	~8% CAGR
Houston Lateral	2015	US0.6	US0.4	7	
Canadian Mainline	2015-2016	0.4		6	Mexico Napanee 21%
Topolobampo & Mazatlan	2016	US1.4	US0.9		NGTL and Canadian Mainline Liquids Pipelines and 20%
Heartland & TC Terminals	2017	0.9	0.1	4 = 07	Mainline Terminals Expansions
Grand Rapids	2016-2017	1.5	0.3	3 15%	
Northern Courier	2017	1.0	0.3	2 59% !	Energy & Corporate 59% ■ Liquids Pipelines
Napanee	2017-2018	1.0	0.1	Natural Gas Pipelines 0	
Total		11.6	2.3		014A 2017E

~8% CAGR in EBITDA through 2017

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

Dividend Growth Poised to Accelerate



Growth Rate Expected to Double Through 2017...
Supported by Base Business and Small to Medium-Sized Projects...



Large-Scale Project Success Augments Growth Through 2018 and Beyond

Prince Rupert Gas Transmission Project





- \$5 billion investment underpinned by long-term contract; costs re-based prior to construction
- Serves proposed Petronas LNG facility
- Advancing project agreements with First Nations along pipeline route
- Received environmental permit in November, facilities permits expected in second quarter 2015
- No development cost risk and minimal capital cost risk
- Final Investment Decision expected in 2015

Coastal GasLink Project

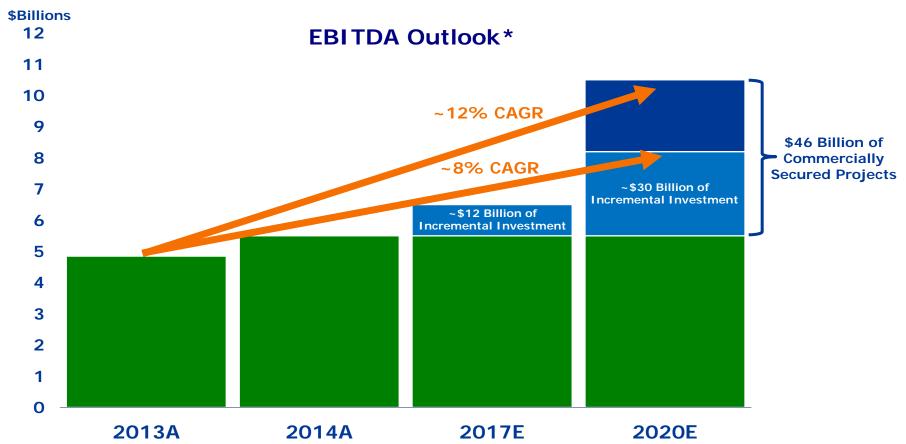




- \$4.8 billion investment underpinned by long-term contracts; costs re-based prior to construction
- Serves LNG facility proposed by Shell Canada, Korea Gas, Mitsubishi and PetroChina
- Ongoing consultation with First Nations and other stakeholders
- Received environmental permit in October, facilities permits expected in second quarter 2015
- No development cost risk and minimal capital cost risk
- Final Investment Decision expected in early 2016

Deliver Significant Growth





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

Key Takeaways



- Transformational enhancements made to maximize value of our natural gas pipeline assets
- \$7 billion of natural gas pipeline growth projects expected in-service by
 2017; \$12 billion in total company wide
- MLP drop down strategy progressing
- Advancing portfolio of low-risk growth opportunities, including
 \$34 billion of large-scale commercially secured projects

Deliver Superior Long-Term Returns to Shareholders



TransCanada

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