TransAlta Corporation

Second Quarter 2016 Results

Tuesday August 9, 2016

TransAlta™ CLEAN POWER TODAY AND TOMORROW

Forward Looking Statements

This presentation may include forward-looking statements or information (collectively referred to herein as "forward-looking statements") within the meaning of applicable securities legislation. All forward-looking statements are based on our beliefs as well as assumptions based on information available at the time the assumptions were made and on management's experience and perception of historical trends, current conditions, and expected future developments, as well as other factors deemed appropriate in the circumstances. Forward-looking statements are not facts, but only predictions and generally can be identified by the use of statements that include phrases such as "may", "will", "believe", "expect", "anticipate", "intend", "plan", "project", "forecast", "foresee", "potential", "enable", "continue", or other comparable terminology. These statements are not guarantees of our future performance and are subject to risks, uncertainties, and other important factors that could cause our actual performance to be materially different from that projected. In particular, this presentation contains forward-looking statements pertaining to our business strategy and goals; anticipated future financial performance; the timing and the completion and commissioning of projects under development, including the South Hedland power project and its associated costs and benefits; expectations related to future earnings and cash flow from operating and contracting activities, including estimates of comparable earnings before interest, taxes, depreciation, and amortization ("EBITDA"), comparable funds from operations ("FFO"), and comparable free cash flow; expectations in respect of financial ratios and targets, including adjusted comparable FFO to adjusted net debt, and adjusted net debt to comparable EBITDA; the Corporation's plans and strategies relating to repositioning its capital structure, including the ability to secure $400 million to $600 million in project-level financing; expected governmental regulatory regimes and legislation and their expected impact on TransAlta and the timing of the implementation of such regimes and regulations, as well as the cost of complying with resulting regulations and laws; the outcome of negotiations with the Government of Alberta in relation to coal-fired generation transition under the Climate Leadership Plan; and expectations regarding the future competitive environment within Alberta.

Factors that may adversely impact our forward-looking statements include risks relating to: fluctuations in market prices and the availability of fuel supplies required to generate electricity; our ability to contract our generation for prices that will provide expected returns; the regulatory and political environments in the jurisdictions in which we operate; environmental requirements and changes in, or liabilities under, these requirements; changes in general economic conditions, including interest rates; operational risks involving our facilities, including unplanned outages at such facilities; disruptions in the transmission and distribution of electricity; the effects of weather; disruptions in the source of fuels, water, or wind required to operate our facilities; natural or man-made disasters; the threat of domestic terrorism and cyberattacks; equipment failure and our ability to carry out, or have completed, repairs in a cost-effective manner or timely manner; commodity risk management; industry risk and competition; fluctuations in the value of foreign currencies and foreign political risks; the need for additional financing; structural subordination of securities; counterparty credit risk; insurance coverage; our provision for income taxes; legal, regulatory, and contractual proceedings involving the Corporation; outcomes of investigations and disputes; reliance on key personnel; labour relations matters; risks associated with the Keephills 1 arbitration; risks associated with development projects and acquisitions, including delays in the construction of or increased costs associated with the South Hedland power project; adverse regulatory developments, including our potential inability to secure a mutually beneficial coal transition arrangement with the Alberta Government in respect of the Alberta Climate Leadership Plan; and any market disruption or changes in market regulation, including any actions arising from the buyers' termination of the applicable power purchase arrangement. The foregoing risk factors, among others, are described in further detail in the Risk Management section of our Management Discussion and Analysis and under the heading "Risk Factors" in our Annual Information Form. Readers are urged to consider these factors carefully in evaluating the forward-looking statements and are cautioned not to place undue reliance on these forward-looking statements. The forward-looking statements included in this document are made only as of the date hereof and we do not undertake to publicly update these forward-looking statements to reflect new information, future events or otherwise, except as required by applicable laws. Readers are cautioned not to place undue reliance on forward-looking statements, which reflect the Corporation's expectations only as of the date of this news release. The purpose of the financial outlooks contained in this presentation is to give the reader information about management's current expectations and plans and readers are cautioned that such information may not be appropriate for other purposes. In light of these risks, uncertainties, and assumptions, the forward-looking events might occur to a different extent or at a different time than we have described, or might not occur at all. We cannot assure that projected results or events will be achieved.

Certain financial information contained in this presentation, including comparable FFO and comparable free cash flow, may not be standard measures defined under International Financial Reporting Standards ("IFRS") and may not be comparable to similar measures presented by other entities. These measures should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS. For further information on non-IFRS financial measures we use, see the section entitled "Non-IFRS Measures" contained in our Management Discussion and Analysis, filed with Canadian securities regulators on www.sedar.com.

Agenda

- Q2 Performance Highlights
- 2016 Goals and Priorities
- Financial Summary
- Questions and Answers

2016 Goals and Priorities

1. Achieve our operational, financial, and safety targets
2. Continue to reposition our capital structure
3. Grow our portfolio of contracted gas and renewable assets
4. Secure a mutually beneficial coal transition arrangement with the Alberta Government

Q2 2016 Performance Highlights

	3 months ended June 30		6 months ended June 30		2016 Outlook
(in $CAD millions)	2016	2015	2016	2015	
Comparable EBITDA	$248	$183	$525	$458	$990 - $1,100
Comparable FFO	$175	$160	$372	$371	$755 - $835
Comparable FCF	$62	$23	$149	$133	$250 - $300
Adjusted Availability[1]	86.5%	80.9%	89.1	86.1%	
Safety (IFR)		0.68		0.88	

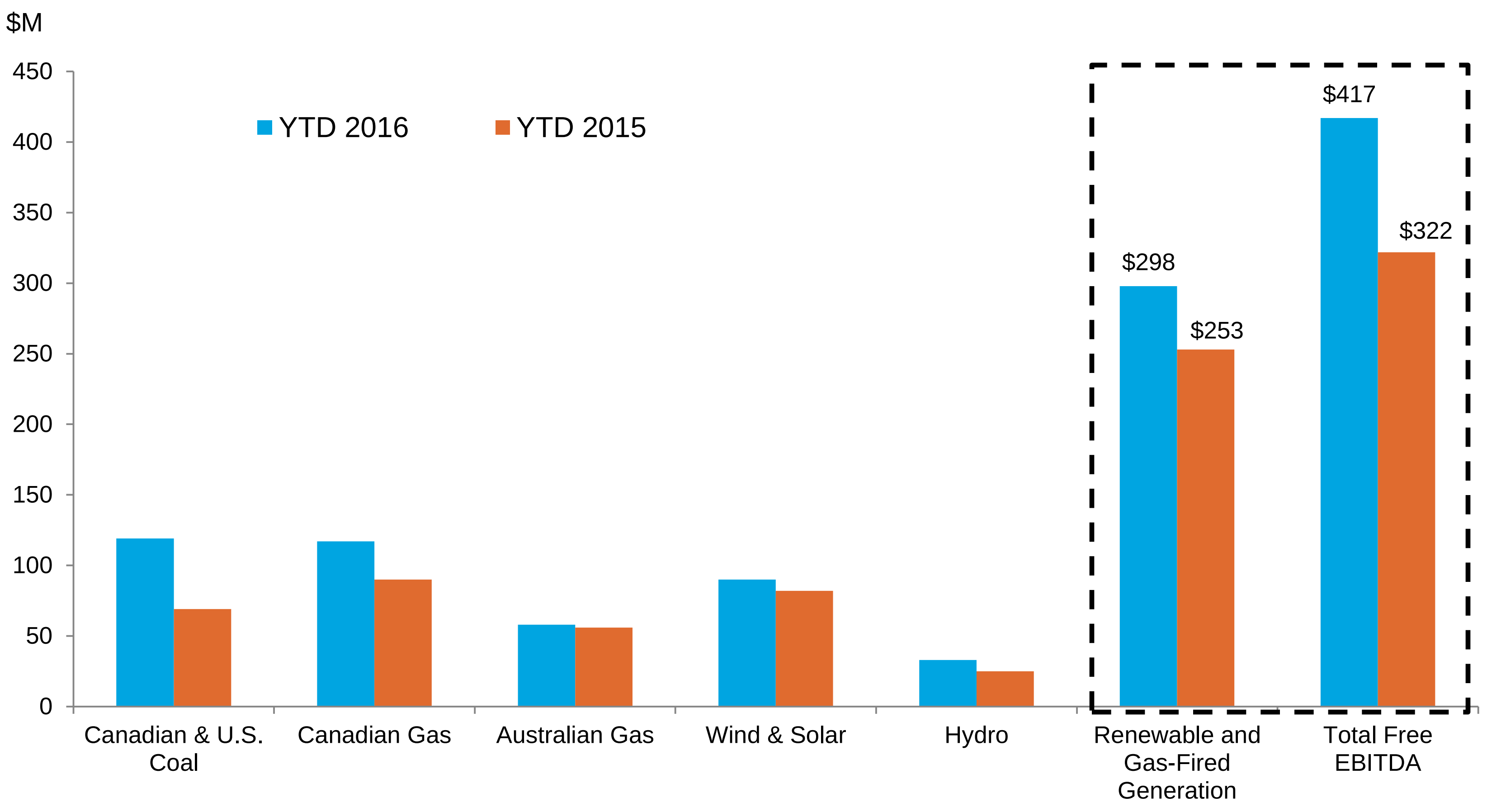
Q2 2016 Commentary

- All Q2 2016 financial metrics improved over same period 2015
- On track to achieve 2016 outlook
- Solid availability in the second quarter 2016
- Best IFR in first six months since 2012

1 *Adjusted for economic dispatching at U.S. Coal.*

Q2 2016 Free EBITDA – Gas & Renewables Driving Success

- Gas-fired and renewable generation has contributed $300 million of Free EBITDA(1) from operations in 2016



(1) Free EBITDA = Comparable EBITDA less Sustaining Capital, and excluding Energy Marketing and Corporate.

Executing Our 2016 Goals and Priorities

Continuing to reposition our capital structure	• Closed a $159 million project-level financing • Commitments on extension of syndicated credit facility and bilateral credit facilities • Committed to $400 - $600 million in project-level financing in 2016
Growing our portfolio of contracted gas and renewable assets	• Continue to expect South Hedland to be delivered on schedule in mid-2017 • Potential to re-invest free cash flow from TransAlta Renewables • “Tuck ins” will be the focus of growth for now

Execution Advantage – Walking the Talk

2016 Actions

- ~$12.5 million of EBITDA from new projects
- 30 year contract at Akolkolex with BC Hydro
- 5 year water management agreement with Alberta government on Bow
- Completed de-commissioning of Cowley Ridge
- Amended BNSF coal delivery agreement
- Implemented trading platform

Bottom line results

Second Quarter 2016 Review

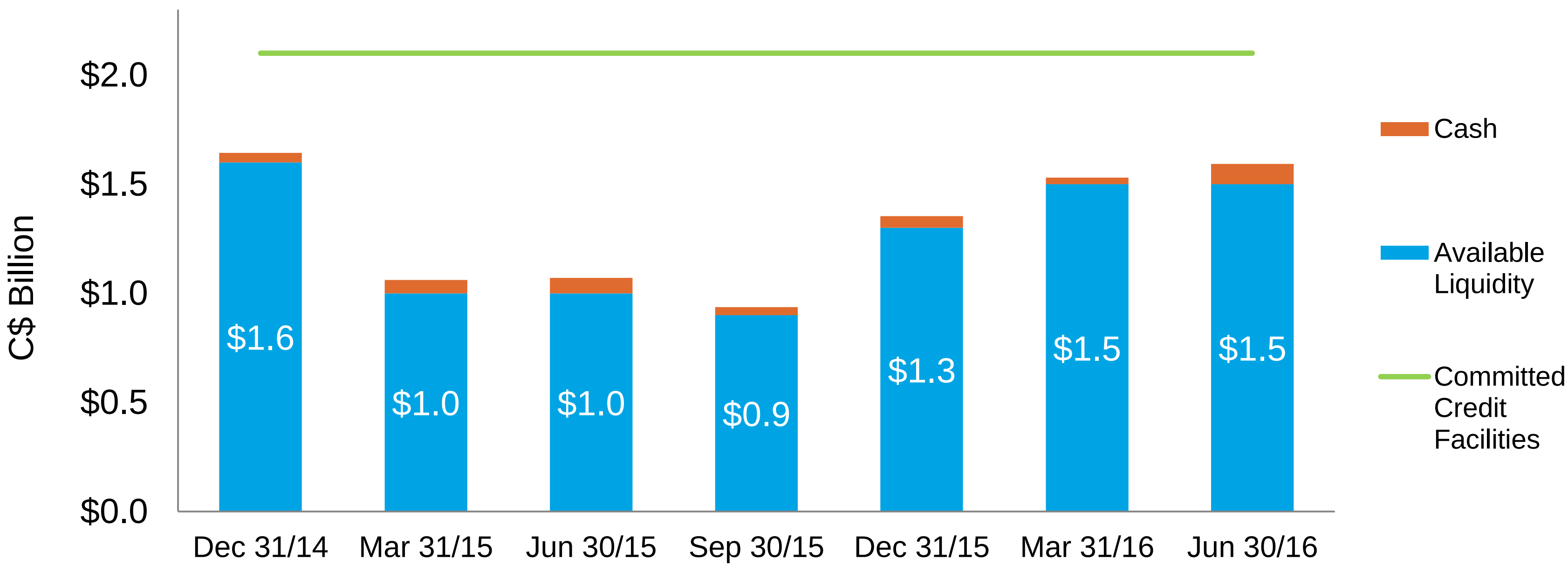
	3 Months Ended June 30		6 Months Ended June 30	
(in CAD$ millions)	2016	2015	2016	30, 2015
Adjusted Availability[1]	**86.5%**	80.9%	**89.4%**	86.1%
Canadian Coal	**93**	71	**196**	166
U.S. Coal[2]	**18**	10	**14**	32
Canadian Gas[2]	**56**	48	**121**	105
Australian Gas[2]	**33**	30	**64**	57
Wind and Solar	**36**	33	**97**	88
Hydro	**25**	25	**43**	39
Energy Marketing	**6**	(18)	**29**	5
Corporate	**(19)**	(16)	**(37)**	(34)
Total Comparable EBITDA	**248**	**183**	**527**	**458**

1 Adjusted for economic dispatching at U.S. Coal.
2 See the Accounting Changes section of this quarter's MD&A for information on changes in the presentation of the Gas reportable segment.

Adj. Availability	• Improvements due to reduced planned and unplanned outages
Canadian Coal	• Hedging strategies and cost reductions mitigated impact of low prices on Canadian Coal
Wind and Solar	• Contribution from assets added in 2015 and improved wind resource in the west offset by record low power prices in AB

Finance & Treasury Overview

Area of Focus	Execution
Credit Facilities	• Commitments to extend $1.5B syndicated facility and $240 million bi-lateral facility until 2020 and 2018, respectively
Financial Ratios	• Successive quarters of improvement including AFFO to Adjusted Net Debt and Adjusted Net Debt to Comparable EBITDA
Liquidity	• Stable over Q1 2016; $1.5B available against a $2.1B credit facility



Repositioning our Capital Structure (2016 to 2018)

Sources (C$M)	2016 to 2018
Project-level financing	$650 - $900
Cash flow from the business	$450 - $600
Total	**$1,100 - $1,500**

Uses (C$M)	2016 to 2018
Repayment of USD notes	~$1,000
Repayment of CHD bond	~$200
Construction of South Hedland	~$300
Total	**~$1,500**

South Hedland	• Financed by raising project-level debt at TransAlta Renewables
Comparable Free Cash Flow Per Share	• Comparable FCF per share of $0.52 per share year-to-date • Current dividend of $0.04 per share on a quarterly basis
TransAlta Renewables	• Approximately $30 million per quarter in dividends from ownership of TransAlta Renewables

It is critical that the transition arrangement achieve these three key outcomes:

1. Maintain system reliability
2. Provide stable prices for consumers
3. Minimize stranded capital

- The phase-out of emissions from coal-fired generation in AB by 2030;
- Replacement of two-thirds of the retiring coal-fired generation with renewables and one-third with gas;
- Phase-in of the Carbon Competitiveness Regulation (CCR) in 2018.

1. Expect Alberta's supply/demand fundamentals to remain relatively balanced until mid-2020
2. Existing plants expected to be more competitive than investments in new gas-fired plants
3. Minimize carbon cost through innovation
4. Identify the right investments in Alberta and utilize our competitive advantage

Second Quarter 2016 Key Takeaways

1. Solid Q2 2016 performance both financially and operationally
2. Progress made against all of our 2016 goals
3. Executing our plan to reposition our capital structure
4. Focused on our customers by being responsive, responsible and innovative

Question and Answer

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