



## Management's Discussion and Analysis

This Management's Discussion and Analysis ("MD&A") contains forward-looking statements. These statements are based on certain estimates and assumptions and involve risks and uncertainties. Actual results may differ materially. See the Forward-Looking Statements section of this MD&A for additional information.

This MD&A should be read in conjunction with the unaudited interim condensed consolidated financial statements of TransAlta Corporation as at and for the three and six months ended June 30, 2016 and 2015, and should also be read in conjunction with the audited annual consolidated financial statements and MD&A contained within our 2015 Annual Integrated Report. In this MD&A, unless the context otherwise requires, "we", "our", "us", the "Corporation", and "TransAlta" refers to TransAlta Corporation and its subsidiaries. Our condensed consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") International Accounting Standards ("IAS") 34 *Interim Financial Reporting* for Canadian publically accountable enterprises as issued by the International Accounting Standards Board ("IASB") and in effect at June 30, 2016. All tabular amounts in the following discussion are in millions of Canadian dollars unless otherwise noted. This MD&A is dated Aug. 8, 2016. Additional information respecting TransAlta, including its Annual Information Form, is available on SEDAR at [www.sedar.com](http://www.sedar.com), on EDGAR at [www.sec.gov](http://www.sec.gov), and on our website at [www.transalta.com](http://www.transalta.com). Information on or connected to our website is not incorporated by reference herein.

## Additional IFRS Measures and Non-IFRS Measures

An additional IFRS measure is a line item, heading, or subtotal that is relevant to an understanding of the financial statements but is not a minimum line item mandated under IFRS, or the presentation of a financial measure that is relevant to an understanding of the financial statements but is not presented elsewhere in the financial statements. We have included line items entitled gross margin and operating income in our Condensed Consolidated Statements of Earnings (Loss) for the three and six months ended June 30, 2016, and 2015. Presenting these line items provides management and investors with a measurement of ongoing operating performance that is readily comparable from period to period.

We evaluate our performance and the performance of our business segments using a variety of measures. Certain of the financial measures discussed in this MD&A are not defined under IFRS and, therefore, should not be considered in isolation or as an alternative to or to be more meaningful than net earnings attributable to common shareholders or cash flow from operating activities, as determined in accordance with IFRS, when assessing our financial performance or liquidity. These measures may not be comparable to similar measures presented by other issuers and should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS. See the Comparable Funds from Operations and Comparable Free Cash Flow, Discussion of Segmented Comparable Results, and Earnings and Other Measures on a Comparable Basis sections of this MD&A for additional information.

## Forward-Looking Statements

This MD&A, the documents incorporated herein by reference, and other reports and filings made with securities regulatory authorities include forward-looking statements or information (collectively referred to herein as “forward-looking statements”) within the meaning of applicable securities legislation. Forward-looking statements, including the 2016 Financial Outlook section of this MD&A, are presented for general information purposes only and not as specific investment advice. 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 MD&A contains forward-looking statements pertaining to our business and anticipated future financial performance; our success in executing on our growth projects; the timing of the construction and commissioning of projects under development, including major projects such as the South Hedland power project, and their attendant costs; spending on growth and sustaining capital and productivity projects; expectations in terms of the cost of operations, mining costs, fuel costs, capital spending, and maintenance, and the variability of these costs and spending; expected decommissioning costs; the impact of certain hedges on future reported earnings and cash flows, including future reversals of unrealized gains or losses; expectations related to future earnings and cash flow from operating and contracting activities (including estimates of full-year 2016 comparable earnings before interest, taxes, depreciation, and amortization (“EBITDA”), comparable funds from operations (“FFO”), comparable free cash flow (“FCF”), and expected sustaining capital expenditures for 2016); expectations in respect of financial ratios and targets (including comparable FFO before interest to adjusted interest coverage, adjusted comparable FFO to adjusted net debt, and adjusted net debt to comparable EBITDA); expectations regarding our ability to meet key financial ratios and targets; expected governmental regulatory regimes and legislation (including the Government of Alberta’s Climate Leadership Plan, the Government of Ontario’s greenhouse gas cap and trade program and the U.S. Clean Power Plan) 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 discussions with the Government of Alberta in relation to coal-fired generation transition under the Climate Leadership Plan; estimates of fuel supply and demand conditions and the costs of procuring fuel; expectations for demand for electricity in both the short term and long term; expectations in relation to electricity prices; expectations regarding contracted cash flows; the impact of load growth, increased capacity, and natural gas costs on power prices; expectations in respect of generation availability, capacity, and production; expected financing of our capital expenditures; expectations regarding the refinancing of debt maturities; expectations regarding the use of free cash flow to be primarily allocated to debt reduction; ability to execute on our de-leveraging strategy; our trading strategies and the risks involved in these strategies; estimates of future tax rates, future tax expense, and the adequacy of tax provisions; accounting estimates; our expectations regarding the outcome of existing or potential legal and contractual claims, regulatory investigations, and disputes; our expectations on dividend payments; expectations for the ability to access capital markets on reasonable terms; the estimated impact of changes in interest rates and the value of the Canadian dollar relative to the US dollar, the Australian dollar, and other currencies in which we do business; the estimated contribution of Energy Marketing activities to gross margin; expectations regarding our continued ownership of TransAlta Renewables Inc. (“TransAlta Renewables”); expectations on, the impact of, the potential transfer of the Alberta Power Purchase Arrangements (“PPA”) to the Balancing Pool; and expectations of the financial impact of our agreement with the Government of Alberta in respect of flood and drought mitigation.

Factors that may adversely impact our forward-looking statements include risks relating to: fluctuations in market prices; 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, including the outcome of our negotiations with the Government relating to the transition to gas and renewables from coal-fired generation increasingly stringent environmental requirements and changes in, or liabilities under, these requirements; changes in general economic conditions, including interest rates and credit markets; 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 terrorism and cyberattacks; equipment failure and our ability to carry out or have completed the repairs in a cost-effective 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 and the ability to access financing at a reasonable cost; our ability to fund our growth projects; our ability to maintain our credit ratings; structural subordination of securities; counterparty credit risk; our ability to recover our losses through our insurance coverage; our provision for income taxes; legal, regulatory, and contractual proceedings involving the Corporation; outcomes of investigations and disputes, including arbitrations under the PPAs; reliance on key personnel; labour relations matters; development projects and acquisitions, including delays or changes in costs in the construction of the South Hedland power project; and the satisfactory receipt of applicable regulatory approvals for existing and proposed operations and growth initiatives.

The foregoing risk factors, among others, are described in further detail in the Governance and Risk Management section of our 2015 Annual MD&A and under the heading "Risk Factors" in our Annual Information Form for the year ended Dec. 31, 2015.

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 have been approved and 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. 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. The purpose of the financial outlook contained herein is to provide readers with disclosure regarding our reasonable expectations as to the anticipated results of its proposed business activities for the periods indicated. Readers are cautioned that the financial outlook may not be appropriate for other reasons. We cannot assure that projected results or events, including our financial outlook, will be achieved.

# Highlights

## Consolidated Financial Highlights

|                                                                                                                         | 3 months ended June 30 |        | 6 months ended June 30 |        |
|-------------------------------------------------------------------------------------------------------------------------|------------------------|--------|------------------------|--------|
|                                                                                                                         | 2016                   | 2015   | 2016                   | 2015   |
| Revenues                                                                                                                | 492                    | 438    | 1,060                  | 1,031  |
| Comparable EBITDA <sup>(1)</sup>                                                                                        | 248                    | 183    | 527                    | 458    |
| Net earnings (loss) attributable to common shareholders ( <i>Restated</i> <sup>(2)</sup> )                              | 6                      | (131)  | 68                     | (171)  |
| Comparable net loss attributable to common shareholders <sup>(1)</sup>                                                  | (20)                   | (44)   | (6)                    | (18)   |
| Comparable FFO <sup>(1)</sup>                                                                                           | 175                    | 160    | 372                    | 371    |
| Cash flow from (used in) operating activities                                                                           | 119                    | (39)   | 394                    | 114    |
| Comparable FCF <sup>(1)</sup>                                                                                           | 62                     | 23     | 149                    | 133    |
| Net earnings (loss) per share attributable to common shareholders, basic and diluted ( <i>Restated</i> <sup>(2)</sup> ) | 0.02                   | (0.47) | 0.24                   | (0.62) |
| Comparable net loss per share <sup>(1)</sup>                                                                            | (0.07)                 | (0.16) | (0.02)                 | (0.06) |
| Comparable FFO per share <sup>(1)</sup>                                                                                 | 0.61                   | 0.57   | 1.29                   | 1.33   |
| Comparable FCF per share <sup>(1)</sup>                                                                                 | 0.22                   | 0.08   | 0.52                   | 0.48   |
| Dividends declared per common share                                                                                     | 0.04                   | 0.18   | 0.08                   | 0.36   |

| As at                                                                                                           | June 30, 2016 | Dec. 31, 2015 |
|-----------------------------------------------------------------------------------------------------------------|---------------|---------------|
| Total assets                                                                                                    | 10,544        | 10,947        |
| Total credit facilities, long-term debt, tax equity, and finance lease obligations <sup>(3)</sup> , net of cash | 4,021         | 4,441         |
| Total long-term liabilities                                                                                     | 4,817         | 5,704         |

- Comparable EBITDA for the three and six months ended June 30, 2016, increased by \$65 million and \$69 million to \$248 million and \$527 million, respectively, compared to the same periods in 2015. During the quarter, all segments delivered improved or similar results compared to last year, as was the case on a year-to-date basis except for U.S. Coal. Low prices in Alberta were largely mitigated through our hedging strategies, better availability, and cost reduction initiatives. Renewable assets acquired in the second half of 2015 contributed positively to our results in respect of both the three and six months ended June 30, 2016. Energy Marketing returned to a more normal performance after suffering a loss during the second quarter last year.
- Comparable FFO for the quarter increased by \$15 million to \$175 million compared to the same period in 2015. Last year, comparable EBITDA included higher unrealized mark-to-market losses from risk management activities in Energy Marketing which were excluded from comparable FFO.
- Comparable net loss attributable to common shareholders for the three months ended June 30, 2016 was \$20 million (\$0.07 net loss per share), up from a comparable net loss of \$44 million (\$0.16 net loss per share) during the three months ended June 30, 2015. The increase was a result of higher comparable EBITDA. Year-to-date, comparable net loss attributable to common shareholders was \$6 million (\$0.02 net loss per share), up from comparable net loss of \$18 million (\$0.06 net loss per share) in the same period in 2015. The improvement primarily related to higher comparable EBITDA, partially offset by higher depreciation as a result of asset acquisitions in 2015.

(1) These items are not defined under IFRS. Presenting these items from period to period provides management and investors with the ability to evaluate earnings trends more readily in comparison with prior periods' results. Refer to the Comparable FFO and Comparable FCF and Earnings and Other Measures on a Comparable Basis sections of this MD&A for further discussion of these items, including, where applicable, reconciliations to measures calculated in accordance with IFRS.

(2) 2015 restated to reflect prior period correction to tax. Refer to the Accounting Changes section of this MD&A.

(3) Includes current portion.

- Reported net earnings attributable to common shareholders was \$6 million (\$0.02 net earnings per share) compared to a net loss of \$131 million (\$0.47 net loss per share) for the same period in 2015. On a year-to-date basis, reported net earnings attributable to common shareholders was \$68 million (\$0.24 net earnings per share) compared to a net loss of \$171 million (\$0.62 net loss per share) for the same period in 2015. Second quarter and year-to-date net loss in 2015 was impacted by a \$40 million and \$95 million income tax charge, respectively, associated with the sale of an economic interest in our Australian business to TransAlta Renewables and a \$42 million (\$28 million after-tax) and \$73 million (\$48 million after-tax) negative change, respectively, in the fair value of de-designated and economic hedges at U.S. Coal, compared to \$13 million (\$8 million after-tax) and \$18 million (\$12 million after-tax) this year. Second quarter and year-to-date reported earnings in 2016 include \$12 million (2015 - \$4 million loss) and \$41 million (2015 - \$4 million loss), respectively, of non-comparable unrealized losses on intercompany financial instruments that are attributable only to the non-controlling interests.
- The decrease in credit facilities, long-term debt, and finance lease obligations is primarily due to the repayment of our credit facilities with cash received from the sale to TransAlta Renewables of economic interests in certain Canadian assets completed in January. The strengthening of the Canadian dollar at the end of June also contributed to the reduction in balances from December.

## Highlights

During the quarter, we continued to work on strengthening our financial condition and flexibility, improving our operating performance, and progressing our transition to clean power generation through the following initiatives:

- In August, we received commitments from our lenders to extend our syndicated credit facility and three bilateral credit facilities by one year to 2020 and 2018 respectively. All commitments are subject to finalizing loan documentation with key terms and covenants remaining unchanged. The extended facilities provide us financial flexibility to achieve our financial transition.
- On June 3, 2016, our indirect wholly-owned subsidiary New Richmond Wind L.P. issued non-recourse bonds in the amount of \$159 million, bearing interest at 3.963 per cent, with principal and interest payable semi-annually, and maturing on June 30, 2032. Proceeds were used to repay our credit facility, repay a maturing Canadian Hydro Developers, Inc. ("CHD") bond, and further finance the construction of the South Hedland power project.
- We continued to advance the construction of the South Hedland power project. The bulk of the major equipment has arrived at site. Installation of the new fuel gas interconnection and high voltage works progressed with the connection and energization of the new generator transformer. We continue to expect the project to be delivered on schedule and on budget in mid-2017.

Earlier this year, we also completed the following transactions:

- In January, we completed the sale to TransAlta Renewables of an economic interest in the Sarnia cogeneration facility and two renewable energy facilities for proceeds valued at \$540 million. Cash proceeds of this transaction were \$173 million. We also received 15.6 million common shares of TransAlta Renewables and a \$215 million convertible debenture.
- In March, our 12 million Series A Preferred Shares reached their first reset date. Approximately 10.2 million shares will now pay fixed dividends of nearly \$0.68 per share annually (2.7 per cent) until their next reset date in 2021 (down from \$1.15 per share prior to conversion) and approximately 1.8 million shares were converted into Series B Preferred Shares, which currently pay dividends of approximately \$0.64225 per share (down from \$1.15 per share) on an annualized basis (2.6 per cent), such rate being adjusted quarterly. Declaration of dividends remains subject to approval by the Board of Directors (the "Board").
- In January, we also announced we were reducing our dividend to \$0.16 per common share on an annualized basis from \$0.72 previously and suspended our dividend reinvestment and optional common share purchase plan. As a result, our annual dividend is approximately \$46 million, down from \$205 million, increasing our financial flexibility. Declaration of dividends is at the discretion of the Board.

In March and May, the buyers under the legislated Sundance, Sheerness, and Keephills PPAs announced their intention to transfer their respective obligations under the PPAs to the Balancing Pool as a result of a change in Alberta law. We do not expect this to impact our financial results. See the Significant and Subsequent events section of this MD&A.

## Segmented Operational Results

Comparable EBITDA and operational performance for the business is as follows:

|                                          | 3 months ended June 30 |            | 6 months ended June 30 |            |
|------------------------------------------|------------------------|------------|------------------------|------------|
|                                          | 2016                   | 2015       | 2016                   | 2015       |
| Availability (%)                         | 86.0                   | 81.0       | 89.1                   | 85.4       |
| Adjusted availability (%) <sup>(1)</sup> | 86.5                   | 80.9       | 89.4                   | 86.1       |
| Production (GWh)                         | 7,899                  | 8,820      | 16,766                 | 18,720     |
| <b>Comparable EBITDA</b>                 |                        |            |                        |            |
| Canadian Coal                            | 93                     | 71         | 196                    | 166        |
| U.S. Coal <sup>(2)</sup>                 | 18                     | 10         | 14                     | 32         |
| Canadian Gas <sup>(2)</sup>              | 56                     | 48         | 121                    | 105        |
| Australian Gas <sup>(2)</sup>            | 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)       |
| <b>Total comparable EBITDA</b>           | <b>248</b>             | <b>183</b> | <b>527</b>             | <b>458</b> |

- **Canadian Coal:** Comparable EBITDA during the second quarter and year-to-date improved by \$22 million and \$30 million, respectively, compared to the same periods in 2015. Cost reductions and effective hedging strategies have offset lower prices on uncontracted generation. During the second quarter, operational performance of the plants was also better than last year, with availability reaching almost 86 per cent compared to 75 per cent last year.
- **U.S. Coal:** Comparable EBITDA was up \$8 million for the quarter, compared to the same period in 2015, but \$18 million lower on a year-to-date basis compared to 2015. Market optimization resulted in stronger performance during the second quarter. The first half of 2015 benefited from higher price hedges entered into during a higher price environment in 2014.
- **Canadian Gas:** Comparable EBITDA for the three and six months ended June 30, 2016 was \$56 million and \$121 million compared to \$48 million and \$105 million, respectively, for the same periods in 2015, as result of a year over year change in mark-to-market on our gas position and lower operating costs from cost reduction initiatives.
- **Australian Gas:** Comparable EBITDA increased \$3 million during the second quarter, and increased \$7 million on a year-to-date basis compared to 2015. The increase to comparable EBITDA for the second quarter of 2016 was mainly due to the addition of capacity payments for the completed gas reticulation asset at our Solomon gas plant. Year-to-date we also benefited from increased comparable EBITDA from the natural gas pipeline commissioned in late March 2015.
- **Wind and Solar:** Comparable EBITDA is up \$3 million during the quarter, and \$9 million on a year-to-date basis, compared to the same periods in 2015, due to the contribution from assets with a combined capacity of 136 MW acquired during the second half of 2015. Lower prices in Alberta negatively impacted the revenue of our wind assets in Alberta. Higher generation partially offset the shortfall in Alberta prices.
- **Hydro:** Comparable EBITDA during the second quarter was similar to the same period in 2015. On a year-to-date basis, comparable EBITDA increased \$4 million to \$43 million, primarily due to a correction with a buyer of prior years' production volumes, and cost reduction initiatives.
- **Energy Marketing:** Comparable EBITDA increased by \$24 million during the second quarter and on a year-to-date basis due to a return to a normal level of gross margin from our short-term strategies. Last year's negative results and losses were largely attributable to volatile market conditions in the Alberta and Pacific Northwest regions.
- **Corporate:** Our Corporate overhead costs during the quarter and year-to-date were higher relative to 2015, as our cost reductions were offset by reduced allocations to our business segments.

(1) Adjusted for economic dispatching at U.S. Coal.

(2) See the Accounting Changes section of this MD&A for information on changes in the presentation of the Gas reportable segment.

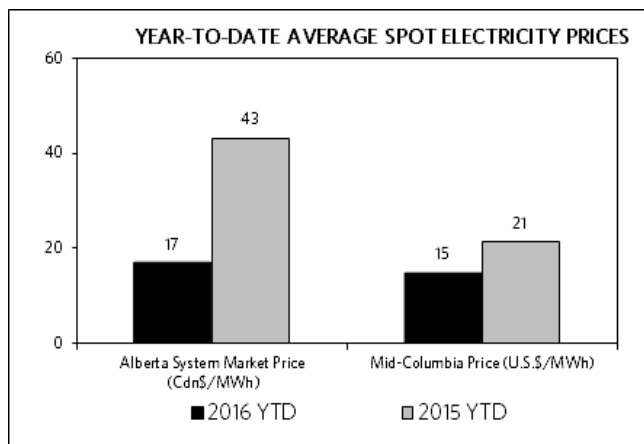
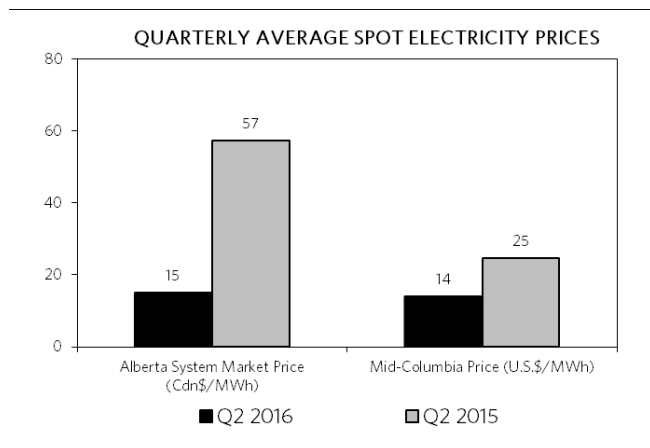
## Availability and Production

Availability for the three and six months ended June 30, 2016 improved over the same periods in 2015 primarily as a result of lower planned and unplanned outages at Canadian Coal.

Production for the three and six months ended June 30, 2016 decreased by 921 gigawatt hours (“GWh”) and 1,954 GWh, respectively, compared to the same periods in 2015, primarily due to the restructuring of our contractual arrangement at Poplar Creek in the third quarter of 2015, and low prices in Ontario and the Pacific Northwest. Also, higher availability in Alberta Coal did not translate into a significant increase in power generation as some units were economically dispatched as a result of lower prices.

## Electricity Prices

The average spot electricity prices for the three and six months ended June 30, 2016 decreased compared to the same periods in 2015 in both Alberta and the Pacific Northwest markets. Lower natural gas prices and seasonally low demand have muted volatility and depressed prices in both the Pacific Northwest and Alberta. We do not expect prices to increase significantly in Alberta during the balance of 2016 and expect Pacific Northwest prices to increase to seasonal norms.



## Comparable Funds from Operations and Comparable Free Cash Flow

Comparable FFO provides a proxy for the amount of cash generated from operating activities before changes in working capital, and provide the ability to evaluate cash flow trends more readily in comparison with results from prior periods. Comparable FCF represents the amount of cash generated by our business, before changes in working capital, that is available to invest in growth initiatives, make scheduled principal repayments on debt, pay additional common share dividends, or repurchase common shares. Changes in working capital are excluded so as to not distort comparable FFO and comparable FCF with changes that we consider temporary in nature, reflecting, among other things, the impact of seasonal factors and the timing of capital projects. Comparable FFO per share and comparable FCF per share are calculated using the weighted average number of common shares outstanding during the period.

|                                                                                    | 3 months ended June 30 |             | 6 months ended June 30 |             |
|------------------------------------------------------------------------------------|------------------------|-------------|------------------------|-------------|
|                                                                                    | 2016                   | 2015        | 2016                   | 2015        |
| Cash flow from (used in) operating activities                                      | 119                    | (39)        | 394                    | 114         |
| Change in non-cash operating working capital balances                              | 40                     | 198         | (54)                   | 247         |
| <b>Cash flow from operations before changes in working capital</b>                 | <b>159</b>             | <b>159</b>  | <b>340</b>             | <b>361</b>  |
| Adjustments                                                                        |                        |             |                        |             |
| Decrease in finance lease receivable                                               | 15                     | 1           | 29                     | 2           |
| Payment of restructuring costs                                                     | -                      | -           | -                      | 7           |
| Maintenance costs related to Alberta flood of 2013,<br>net of insurance recoveries | -                      | -           | -                      | 1           |
| Other                                                                              | 1                      | -           | 3                      | -           |
| <b>Comparable FFO</b>                                                              | <b>175</b>             | <b>160</b>  | <b>372</b>             | <b>371</b>  |
| Deduct:                                                                            |                        |             |                        |             |
| Sustaining capital                                                                 | (66)                   | (104)       | (125)                  | (174)       |
| Dividends paid on preferred shares                                                 | (10)                   | (11)        | (22)                   | (23)        |
| Distributions paid to subsidiaries' non-controlling interests                      | (37)                   | (22)        | (76)                   | (41)        |
| <b>Comparable FCF</b>                                                              | <b>62</b>              | <b>23</b>   | <b>149</b>             | <b>133</b>  |
| Weighted average number of common shares<br>outstanding in the period              | 288                    | 279         | 288                    | 278         |
| <b>Comparable FFO per share</b>                                                    | <b>0.61</b>            | <b>0.57</b> | <b>1.29</b>            | <b>1.33</b> |
| <b>Comparable FCF per share</b>                                                    | <b>0.22</b>            | <b>0.08</b> | <b>0.52</b>            | <b>0.48</b> |

Comparable FCF for the three and six months ended June 30, 2016 increased by \$39 million and \$16 million, respectively, compared to the same periods in 2015 as a result of lower sustaining capital spending, partially offset by higher distributions paid to non-controlling interests. Higher comparable FFO also contributed to the increase in the three month period. Higher distributions to non-controlling interests result from the additional shares issued to non-controlling interests by TransAlta in 2015 and 2016.



A reconciliation of comparable EBITDA to comparable FFO is as follows:

|                                                   | 3 months ended June 30 |            | 6 months ended June 30 |            |
|---------------------------------------------------|------------------------|------------|------------------------|------------|
|                                                   | 2016                   | 2015       | 2016                   | 2015       |
| Comparable EBITDA                                 | 248                    | 183        | 527                    | 458        |
| Interest expense                                  | (57)                   | (54)       | (115)                  | (109)      |
| Unrealized losses from risk management activities | 9                      | 31         | 2                      | 36         |
| Current income tax expense                        | (6)                    | (5)        | (11)                   | (11)       |
| Provisions                                        | (8)                    | 5          | (7)                    | (4)        |
| Decommissioning and restoration costs settled     | (5)                    | (8)        | (8)                    | (13)       |
| Realized foreign exchange gain (loss)             | -                      | 5          | (1)                    | 13         |
| Other non-cash items                              | (6)                    | 3          | (15)                   | 1          |
| <b>Comparable FFO</b>                             | <b>175</b>             | <b>160</b> | <b>372</b>             | <b>371</b> |

For the second quarter of 2016, comparable FFO totaled \$175 million, an increase of \$15 million compared to the second quarter of 2015. Although comparable EBITDA was \$65 million higher, prior period comparable EBITDA included higher unrealized mark-to-market losses from risk management activities which are excluded from comparable FFO.

### Key Financial Ratios

The methodologies and ratios used by rating agencies to assess our credit rating are not publicly disclosed. We have developed our own definitions of ratios and targets to help evaluate the strength of our financial position. These metrics and ratios are not defined under IFRS, and may not be comparable to those used by other entities or by rating agencies. We are focused on strengthening our financial position and flexibility and aim to meet all our target ranges by 2018.

### Comparable Funds from Operations before Interest to Adjusted Interest Coverage

| As at                                                                       | June 30, 2016 <sup>(1)</sup> | Dec. 31, 2015 |
|-----------------------------------------------------------------------------|------------------------------|---------------|
| Comparable FFO                                                              | 741                          | 740           |
| Add: Interest on debt net of capitalized interest                           | 227                          | 223           |
| <b>Comparable FFO before interest</b>                                       | <b>968</b>                   | <b>963</b>    |
| Interest on debt                                                            | 238                          | 232           |
| Add: 50 per cent of dividends paid on preferred shares                      | 22                           | 23            |
| <b>Adjusted interest</b>                                                    | <b>260</b>                   | <b>255</b>    |
| <b>Comparable FFO before interest to adjusted interest coverage (times)</b> | <b>3.7</b>                   | <b>3.8</b>    |

Our target for comparable FFO before interest to adjusted interest coverage is four to five times. The ratio was 3.7 for the last twelve months, a similar level compared to last year.

(1) Last 12 months. Our target range for comparable FFO in 2016 is \$755 million to \$835 million.

## Adjusted Comparable Funds from Operations to Adjusted Net Debt

| As at                                                                  | June 30, 2016 | Dec. 31, 2015 |
|------------------------------------------------------------------------|---------------|---------------|
| Comparable FFO <sup>(1)</sup>                                          | 741           | 740           |
| Less: 50 per cent of dividends paid on preferred shares <sup>(1)</sup> | (22)          | (23)          |
| <b>Adjusted comparable FFO<sup>(1)</sup></b>                           | <b>719</b>    | <b>717</b>    |
| Period-end long-term debt <sup>(2)</sup>                               | 4,114         | 4,495         |
| Add: 50 per cent of issued preferred shares                            | 471           | 471           |
| Less: Cash and cash equivalents                                        | (93)          | (54)          |
| Fair value asset of hedging instruments on debt <sup>(3)</sup>         | (128)         | (190)         |
| <b>Adjusted net debt</b>                                               | <b>4,364</b>  | <b>4,722</b>  |
| <b>Adjusted comparable FFO to adjusted net debt (%)</b>                | <b>16.5</b>   | <b>15.2</b>   |

Our comparable FFO to adjusted net debt ratio improved to 16.5 per cent, mostly due to the strengthening of the Canadian dollar in 2016 and debt reduction. Our target for adjusted comparable FFO to adjusted net debt is 20 to 25 per cent.

## Adjusted Net Debt to Comparable EBITDA

| As at                                                          | June 30, 2016 | Dec. 31, 2015 |
|----------------------------------------------------------------|---------------|---------------|
| Period-end long-term debt <sup>(2)</sup>                       | 4,114         | 4,495         |
| Less: Cash and cash equivalents                                | (93)          | (54)          |
| Add: 50 per cent of issued preferred shares                    | 471           | 471           |
| Fair value asset of hedging instruments on debt <sup>(3)</sup> | (128)         | (190)         |
| <b>Adjusted net debt</b>                                       | <b>4,364</b>  | <b>4,722</b>  |
| <b>Comparable EBITDA<sup>(1)</sup></b>                         | <b>1,014</b>  | <b>945</b>    |
| <b>Adjusted net debt to comparable EBITDA (times)</b>          | <b>4.3</b>    | <b>5.0</b>    |

Our target for adjusted net debt to comparable EBITDA is 3.0 to 3.5 times. During the second quarter, our ratio improved compared to Dec. 31, 2015, mainly as a result of a lower debt balance due to the strengthening of the Canadian dollar and debt reduction.

(1) Last 12 months. Our target range for comparable FFO in 2016 is \$755 million to \$835 million.

(2) Includes finance lease obligations and tax equity financing.

(3) Included in risk management assets and/or liabilities on the condensed consolidated financial statements as at June 30, 2016 and Dec. 31, 2015.

## Significant and Subsequent Events

### **\$159 Million Project Financing**

On June 3, 2016, TransAlta Renewables' indirect wholly-owned subsidiary, New Richmond Wind L.P. (the "Issuer"), closed a bond offering of approximately \$159 million which is secured by a first ranking charge over all assets of the Issuer. The bonds are amortizing and bear interest from their date of issue at a rate of 3.963 per cent, payable semi-annually, and mature on June 30, 2032. Net proceeds of the financing were used to reduce drawdowns on our credit facility during the second quarter, repay the CHD bond, and fund the construction of the South Hedland power project.

### **Sundance, Sheerness, and Keephills PPA Terminations**

In March and May 2016, the buyers under the legislated Sundance, Sheerness, and Keephills PPAs announced their intention to transfer their respective obligations under the PPAs to the Balancing Pool as a result of a change in Alberta law. The Balancing Pool is presently investigating whether these transfers are permitted by the terms of the PPAs in the current circumstances and, if so, when the transfers would become effective. The outcome remains uncertain. If the Balancing Pool confirms the transfers, it will assume the role of the buyers and carry out the responsibilities of the buyers under the PPAs, including dispatching the generating units and making the capacity and energy payments to TransAlta until the end of the PPA terms. Pursuant to the *Electric Utilities Act* (Alberta), it could also choose to terminate the PPAs after following the requirements of legislation, which would include paying TransAlta an amount equal to the applicable closing net book value of the generating units. TransAlta does not presently expect the transfer of the PPAs to the Balancing Pool to have a material impact on our business.

On July 25, 2016, the Attorney General for the Province of Alberta filed a claim against all buyers who have purported to transfer their respective obligations under the PPAs, the owner of the Battle River #5 PPA, the Alberta Utilities Commission, and Balancing Pool, challenging the basis on which the buyers have purported to transfer their PPA obligations to the Balancing Pool. The outcome of this claim is uncertain.

Notwithstanding the above, TransAlta continues to operate the PPA generating units in their ordinary course and receive the capacity and energy payments due to it under the PPAs.

### **Credit Facility Renewal**

In August, we received commitments from our lenders to extend our syndicated credit facility and three bilateral credit facilities by one year to 2020 and 2018 respectively. All commitments are subject to finalizing loan documentation with key terms and covenants remaining unchanged. The extended facilities provide us financial flexibility to achieve our financial transition.

### **Credit Ratings Outlook**

As at June 30, 2016, we maintain investment grade ratings from three credit rating agencies, but during the first quarter, DBRS and Fitch changed their outlooks from stable to negative. Their negative outlooks are a reflection of low energy prices and concerns over coal generation transition in Alberta. We remain focused on strengthening our financial position by de-leveraging our capital structure and securing a fair agreement with the Government of Alberta that assists them in their goal to transition the generation in the province to gas and renewables.

### **Conversion of Series A Preferred Shares to Series B Preferred Shares**

On March 17, 2016, 1,824,620 of our 12 million Series A Cumulative Redeemable Fixed Rate Reset Preferred Shares were tendered for conversion, on a one-for-one basis, into Series B Cumulative Redeemable Floating Rate Preferred Shares. For the next five years, the Series A Shares will pay a fixed cumulative preferential cash dividend of \$0.67725 per share annually (down from \$1.15 per share), subject to the Board's dividend declaration. The Series B Shares will pay quarterly floating rate cumulative preferential cash dividends set at the sum of the 90 day Government of Canada Treasury Bill rate plus 2.03 per cent. The annualized quarterly dividend rate for the Series B Shares for the 3-month floating rate period for the second quarter 2016 is \$0.623 per share.

### **South Hedland**

We continued to advance the construction of the South Hedland power project. The bulk of the major equipment has arrived at site. Installation of the new fuel gas interconnection and high voltage works progressed with the connection and energization of the new generator transformer. We continue to expect the project to be delivered on schedule and on budget in mid-2017.

## **Environmental Regulation Updates**

Refer to the Environmental and Local Communities Capital section of our 2015 Annual MD&A for further details that supplement the recent developments as discussed below.

### ***Alberta***

On Nov. 22, 2015, the Government of Alberta announced through the Climate Leadership Plan its intent, among other things, to phase out emissions from coal-fired generation by 2030, replace two-thirds of the retiring coal-fired generation with renewable generation, and impose a new carbon price of \$30 per tonne of CO<sub>2</sub> emissions based on an industry-wide performance standard. On March 16, 2016, the Government of Alberta announced the appointment of a Coal Phase-out Facilitator to work with coal-fired electricity generators, the Alberta Electric System Operator, and the Government of Alberta to develop options to phase out emissions from coal-fired generation by 2030. The Coal Phase-out Facilitator is tasked with presenting options to the government that will strive to maintain the reliability of Alberta's electricity grid, maintain stability of prices for consumers, and avoid unnecessarily stranding capital. Discussions with the coal-fired generators, including TransAlta, are now in progress.

On May 24, 2016 Alberta passed the *Climate Leadership Implementation Act* which establishes the carbon tax framework for its application to fuels. It is expected that additional regulations will be developed in later 2016 governing the treatment of large industrial emitters. The Climate Leadership Plan will be implemented for the electricity sector on January 1, 2018.

In March 2016, Alberta began development of its renewable energy procurement process design for the Alberta Electric System Operator to procure a first block of renewable generation projects to be in-service by mid-2019. A decision on the final design parameters is expected by the end of 2016.

### ***Ontario***

On Feb. 25, 2016, Ontario released draft regulations for its greenhouse gas cap and trade program which was finalized on May 19, 2016. The regulations are to become effective Jan. 1, 2017, and will apply to all fossil fuel used for electricity generation. The majority of our gas-fired generation in Ontario will not be significantly impacted by virtue of change-in-law provisions within existing power purchase agreements. Further details of the regulations are being developed with public consultation, in which we are participating.

### ***U.S. Federal and Pacific Northwest***

On Feb. 9, 2016, the U.S. Supreme Court stayed the implementation of the Clean Power Plan pending consideration as to whether the regulations are lawful. It is not clear yet how this may affect the future of the Clean Power Plan. As a result of our 2011 agreement for coal transition with the State of Washington, we do not expect the proposed regulations to significantly affect our U.S. operations.

## **Discussion of Segmented Comparable Results**

In January 2016, we began reporting Canadian Gas and Australian Gas as separate business segments. Previously these segments were reported as one business segment, Gas. The segment has now been differentiated geographically to provide additional information to our readers. See the Current Accounting Changes section of this MD&A for additional information.

Comparable figures are not defined under IFRS. Refer to the Earnings and Other Measures on a Comparable Basis section of this MD&A for further discussion of these items, including, where applicable, reconciliations to net earnings attributable to common shareholders.

## Canadian Coal

|                                             | 3 months ended June 30 |            | 6 months ended June 30 |            |
|---------------------------------------------|------------------------|------------|------------------------|------------|
|                                             | 2016                   | 2015       | 2016                   | 2015       |
| Availability (%)                            | 85.7                   | 74.6       | 86.1                   | 79.5       |
| Contract production (GWh)                   | 4,335                  | 4,265      | 9,254                  | 9,181      |
| Merchant production (GWh)                   | 986                    | 958        | 1,895                  | 1,979      |
| Total production (GWh)                      | 5,321                  | 5,223      | 11,149                 | 11,160     |
| Gross installed capacity (MW)               | 3,791                  | 3,771      | 3,791                  | 3,771      |
| Revenues                                    | 229                    | 205        | 463                    | 451        |
| Fuel and purchased power                    | 90                     | 83         | 173                    | 182        |
| <b>Comparable gross margin</b>              | <b>139</b>             | <b>122</b> | <b>290</b>             | <b>269</b> |
| Operations, maintenance, and administration | 43                     | 48         | 88                     | 97         |
| Taxes, other than income taxes              | 3                      | 3          | 6                      | 6          |
| <b>Comparable EBITDA</b>                    | <b>93</b>              | <b>71</b>  | <b>196</b>             | <b>166</b> |
| Depreciation and amortization               | 79                     | 75         | 155                    | 146        |
| <b>Comparable operating income</b>          | <b>14</b>              | <b>(4)</b> | <b>41</b>              | <b>20</b>  |

### Sustaining capital:

|                                              |           |           |           |            |
|----------------------------------------------|-----------|-----------|-----------|------------|
| Routine capital                              | 11        | 15        | 13        | 23         |
| Mine capital                                 | 7         | 8         | 7         | 12         |
| Finance leases                               | 3         | 3         | 6         | 6          |
| Planned major maintenance                    | 13        | 47        | 50        | 77         |
| <b>Total sustaining capital expenditures</b> | <b>34</b> | <b>73</b> | <b>76</b> | <b>118</b> |

Production for the three months ended June 30, 2016 increased 98 GWh compared to the same period in 2015, primarily due to lower derates and lower planned and unplanned outages, partially offset by higher paid curtailments and economic dispatching as a result of lower prices in Alberta. Production for the six months ended June 30, 2016 was in line with the same period in 2015.

Comparable EBITDA for the three and six months ended June 30, 2016 was up \$22 million and \$30 million, respectively, compared to the same periods in 2015, primarily due to better availability and lower operations, maintenance, and administration costs. Our hedging strategy mostly mitigated the impact of low power prices on uncontracted generation. On a year-to-date basis comparable EBITDA also benefited from lower gas consumption and cost of coal from the first quarter of 2016.

Depreciation and amortization for the three and six months ended June 30, 2016 increased \$4 million and \$9 million, respectively, compared to the same periods in 2015, mainly due to higher asset retirements and timing of capital expenditures.

Sustaining capital expenditures for the three and six months ended June 30, 2016 were lower by \$39 million and \$42 million, respectively, compared to the same periods in 2015 as there were no major overhauls initiated during the second quarter of 2016 with only a portion carried over from the first quarter.

## U.S. Coal

|                                             | 3 months ended June 30 |                     | 6 months ended June 30 |                     |
|---------------------------------------------|------------------------|---------------------|------------------------|---------------------|
|                                             | 2016                   | 2015 <sup>(2)</sup> | 2016                   | 2015 <sup>(2)</sup> |
| Availability (%)                            | 68.8                   | 70.4                | 84.4                   | 80.7                |
| Adjusted availability (%) <sup>(1)</sup>    | 72.1                   | 69.8                | 86.1                   | 84.8                |
| Contract sales volume (GWh)                 | 916                    | 696                 | 1,831                  | 1,385               |
| Merchant sales volume (GWh)                 | 186                    | 759                 | 588                    | 1,336               |
| Purchased power (GWh)                       | (923)                  | (738)               | (1,868)                | (1,449)             |
| Total production (GWh)                      | 179                    | 717                 | 551                    | 1,272               |
| Gross installed capacity (MW)               | 1,340                  | 1,340               | 1,340                  | 1,340               |
| Revenues                                    | 54                     | 65                  | 115                    | 147                 |
| Fuel and purchased power                    | 23                     | 44                  | 75                     | 91                  |
| <b>Comparable gross margin</b>              | <b>31</b>              | <b>21</b>           | <b>40</b>              | <b>56</b>           |
| Operations, maintenance, and administration | 12                     | 10                  | 24                     | 22                  |
| Taxes, other than income taxes              | 1                      | 1                   | 2                      | 2                   |
| <b>Comparable EBITDA</b>                    | <b>18</b>              | <b>10</b>           | <b>14</b>              | <b>32</b>           |
| Depreciation and amortization               | 27                     | 17                  | 24                     | 32                  |
| <b>Comparable operating loss</b>            | <b>(9)</b>             | <b>(7)</b>          | <b>(10)</b>            | <b>-</b>            |
| <b>Sustaining capital:</b>                  |                        |                     |                        |                     |
| Routine capital                             | 1                      | 1                   | 2                      | 1                   |
| Finance leases                              | 2                      | 1                   | 2                      | 1                   |
| Planned major maintenance                   | 8                      | 6                   | 11                     | 9                   |
| <b>Total</b>                                | <b>11</b>              | <b>8</b>            | <b>15</b>              | <b>11</b>           |

For the three and six months ended June 30, 2016, production decreased 538 GWh and 721 GWh, respectively, compared to the same periods in 2015, due mainly to increased economic dispatching. Lower prices during the first and second quarters of 2016 provided us the opportunity to shut down our generation earlier and supply our contractual obligation by buying cheaper power in the market. We used that time to execute planned major maintenance on both units.

Comparable EBITDA improved by \$8 million for the second quarter of 2016 compared to the same period in 2015 as a result of the favorable impact of economic dispatching which benefited from lower prices for purchased power and higher volumes of contracted production compared to the prior year. We also benefited from the favorable impacts of foreign exchange and mark-to-market on certain forward financial contracts that do not qualify for hedge accounting. These improvements were partially offset by reversals of coal inventory impairments from previous quarters and the consumption of previously impaired coal in 2015.

Comparable EBITDA decreased by \$18 million for the first six months of 2016 compared to the same period in 2015 as a result of the unfavorable impacts from economic dispatching in the first quarter of 2016 due to lower realized prices on contracted production, unfavorable impacts of mark-to-market on certain forward financial contracts that do not qualify for hedge accounting, higher consumption of previously impaired coal in 2015, and unfavorable impacts of foreign exchange.

Depreciation and amortization for the second quarter of 2016 was higher by \$10 million due to lower discount rates being applied to our decommissioning obligation for the Centralia mine, as opposed to in the first quarter of 2016, where higher discount rates triggered a recovery. As the mine is in the reclamation stage, the adjustment flows directly to earnings.

(1) Adjusted for economic dispatching.

(2) Restated to include non-operating legacy U.S. Gas costs. Refer to the Accounting Changes section of this MD&A.

## Canadian Gas

|                                              | 3 months ended June 30 |           | 6 months ended June 30 |            |
|----------------------------------------------|------------------------|-----------|------------------------|------------|
|                                              | 2016                   | 2015      | 2016                   | 2015       |
| Availability (%)                             | 95.5                   | 94.1      | 97.5                   | 96.9       |
| Contract production (GWh)                    | 712                    | 1,022     | 1,455                  | 2,049      |
| Merchant production (GWh)                    | 66                     | 360       | 66                     | 1,054      |
| Total production (GWh)                       | 778                    | 1,382     | 1,521                  | 3,103      |
| Gross installed capacity (MW) <sup>(1)</sup> | 1,057                  | 1,183     | 1,057                  | 1,183      |
| Revenues                                     | 105                    | 113       | 227                    | 256        |
| Fuel and purchased power                     | 35                     | 47        | 77                     | 114        |
| <b>Comparable gross margin</b>               | <b>70</b>              | <b>66</b> | <b>150</b>             | <b>142</b> |
| Operations, maintenance, and administration  | 14                     | 17        | 28                     | 35         |
| Taxes, other than income taxes               | -                      | 1         | 1                      | 2          |
| <b>Comparable EBITDA</b>                     | <b>56</b>              | <b>48</b> | <b>121</b>             | <b>105</b> |
| Depreciation and amortization                | 27                     | 22        | 55                     | 46         |
| <b>Comparable operating income</b>           | <b>29</b>              | <b>26</b> | <b>66</b>              | <b>59</b>  |
| <b>Sustaining capital:</b>                   |                        |           |                        |            |
| Routine capital                              | 2                      | 1         | 2                      | 3          |
| Planned major maintenance                    | -                      | 5         | 2                      | 12         |
| <b>Total</b>                                 | <b>2</b>               | <b>6</b>  | <b>4</b>               | <b>15</b>  |

Production for the three and six months ended June 30, 2016 decreased 604 GWh and 1,582 GWh, respectively, primarily due to the restructuring of our contract with Suncor at Poplar Creek in the third quarter of 2015 and unfavorable market conditions in Ontario.

Comparable EBITDA for the three and six months ended June 30, 2016 increased by \$8 million and \$16 million, respectively, compared to the same period in 2015, as result of a year over year change in mark-to-market on our gas position of \$2 million and \$10 million, respectively, and lower operating costs from cost reduction initiatives.

Depreciation and amortization for the three and six months ended June 30, 2016 increased \$5 million and \$9 million, respectively, compared to the same periods in 2015 due mainly to the Poplar Creek contract restructuring, which resulted in the derecognition of Poplar Creek from property, plant, and equipment and the recognition of a finance lease receivable. We record the decrease the finance lease receivable as a comparable increase in depreciation, as this amount, and the finance lease income, is included in comparable revenues as a proxy for capacity revenues from the plant.

Sustaining capital for the three and six months ended June 30, 2016, decreased \$4 million and \$11 million, respectively, compared to the same periods in 2015, primarily as a result of the refurbishment of a spare engine during the first quarter of 2015. Also, the obligation to maintain the Poplar Creek facility has been transferred to our customer as part of our new contract arrangement.

<sup>(1)</sup> Includes production capacity for the Fort Saskatchewan power station, which has been accounted for as a finance lease. During 2015, operational control of our Poplar Creek facility was transferred to Suncor. We continue to own a portion of the facility and have included our portion as a part of gross capacity measures. Poplar Creek has been removed from our availability and production metrics, effective Sept. 1, 2015.

## Australian Gas

|                                              | 3 months ended June 30 |      | 6 months ended June 30 |      |
|----------------------------------------------|------------------------|------|------------------------|------|
|                                              | 2016                   | 2015 | 2016                   | 2015 |
| Availability (%)                             | <b>94.3</b>            | 92.6 | <b>92.2</b>            | 90.6 |
| Contract production (GWh)                    | <b>371</b>             | 354  | <b>743</b>             | 657  |
| Gross installed capacity (MW) <sup>(1)</sup> | <b>425</b>             | 348  | <b>425</b>             | 348  |
| Revenues                                     | <b>45</b>              | 41   | <b>87</b>              | 79   |
| Fuel and purchased power                     | <b>6</b>               | 5    | <b>11</b>              | 10   |
| <b>Comparable gross margin</b>               | <b>39</b>              | 36   | <b>76</b>              | 69   |
| Operations, maintenance, and administration  | <b>6</b>               | 6    | <b>12</b>              | 12   |
| <b>Comparable EBITDA</b>                     | <b>33</b>              | 30   | <b>64</b>              | 57   |
| Depreciation and amortization                | <b>3</b>               | 5    | <b>8</b>               | 9    |
| <b>Comparable operating income</b>           | <b>30</b>              | 25   | <b>56</b>              | 48   |

### Sustaining capital:

|                           |          |   |          |   |
|---------------------------|----------|---|----------|---|
| Routine capital           | -        | 1 | 1        | 1 |
| Planned major maintenance | <b>5</b> | - | <b>5</b> | - |
| <b>Total</b>              | <b>5</b> | 1 | <b>6</b> | 1 |

Production for the three months ended June 30, 2016 increased 17 GWh compared to the same period in 2015 due to higher customer demand. The production increase on a year-to-date basis of 86 GWh compared to 2015 related mostly to a change in the power import regime at one of our customer's locations. Due to the nature of our contract, the change did not have a significant financial impact.

Comparable EBITDA increased by \$3 million during the second quarter of 2016 to \$33 million compared to the same period in 2015, mainly due to the addition of capacity payments for the gas reticulation asset at our Solomon gas plant that was completed in May. On a year-to-date basis, we also benefited from increased comparable EBITDA from the natural gas pipeline that was commissioned in late March 2015.

Sustaining capital for the three and six months ended June 30, 2016 increased by \$4 million and \$5 million, respectively, compared to the same periods in 2015 as a result of timing of planned major maintenance.

(1) Includes production capacity for the Solomon power station, which has been accounted for as a finance lease.



## Wind and Solar

|                                              | 3 months ended June 30 |           | 6 months ended June 30 |            |
|----------------------------------------------|------------------------|-----------|------------------------|------------|
|                                              | 2016                   | 2015      | 2016                   | 2015       |
| Availability (%)                             | 95.0                   | 95.2      | 95.9                   | 95.1       |
| Contract production (GWh)                    | 486                    | 451       | 1,197                  | 1,088      |
| Merchant production (GWh)                    | 245                    | 157       | 665                    | 497        |
| Total production (GWh)                       | 731                    | 608       | 1,862                  | 1,585      |
| Gross installed capacity (MW) <sup>(1)</sup> | 1,408                  | 1,289     | 1,408                  | 1,289      |
| Revenues                                     | 55                     | 49        | 139                    | 122        |
| Fuel and purchased power                     | 3                      | 2         | 12                     | 6          |
| <b>Comparable gross margin</b>               | <b>52</b>              | <b>47</b> | <b>127</b>             | <b>116</b> |
| Operations, maintenance, and administration  | 14                     | 12        | 26                     | 24         |
| Taxes, other than income taxes               | 2                      | 2         | 4                      | 4          |
| <b>Comparable EBITDA</b>                     | <b>36</b>              | <b>33</b> | <b>97</b>              | <b>88</b>  |
| Depreciation and amortization                | 29                     | 22        | 59                     | 44         |
| <b>Comparable operating income</b>           | <b>7</b>               | <b>11</b> | <b>38</b>              | <b>44</b>  |
| <b>Sustaining capital:</b>                   |                        |           |                        |            |
| Routine capital                              | 1                      | -         | 1                      | -          |
| Planned major maintenance                    | 4                      | 4         | 6                      | 6          |
| <b>Total</b>                                 | <b>5</b>               | <b>4</b>  | <b>7</b>               | <b>6</b>   |

Production for the three and six months ended June 30, 2016, increased by 123 GWh and 277 GWh compared to the same periods in 2015, mainly due to the contribution from assets acquired during the second half of 2015 and higher wind volumes across our Western Canada and US wind fleet, partially offset by lower wind resources in Eastern Canada.

Comparable EBITDA for the three and six months ended June 30, 2016 increased \$3 million and \$9 million respectively, compared to the same periods in 2015, mainly due to the contribution of \$7 million and \$13 million, respectively, from assets acquired in 2015. Higher generation from our portfolio partially reduced the impact of lower merchant prices in Alberta for the second quarter and year-to-date periods, respectively.

Depreciation and amortization increased by \$7 million and \$15 million for the three and six months ended June 30, 2016, respectively, compared to the same periods in 2015, primarily due to the addition of assets acquired during the second half of 2015.

(1) Our 2015 capacity excludes acquisitions completed during the second half of 2015.

## Hydro

|                                                 | 3 months ended June 30 |           | 6 months ended June 30 |           |
|-------------------------------------------------|------------------------|-----------|------------------------|-----------|
|                                                 | 2016                   | 2015      | 2016                   | 2015      |
| Contract production (GWh)                       | 482                    | 507       | 899                    | 905       |
| Merchant production (GWh)                       | 37                     | 29        | 41                     | 38        |
| Total production (GWh)                          | 519                    | 536       | 940                    | 943       |
| Gross installed capacity (MW)                   | 926                    | 913       | 926                    | 913       |
| Revenues                                        | 38                     | 38        | 66                     | 63        |
| Fuel and purchased power                        | 2                      | 3         | 4                      | 4         |
| <b>Comparable gross margin</b>                  | <b>36</b>              | <b>35</b> | <b>62</b>              | <b>59</b> |
| Operations, maintenance, and administration     | 10                     | 9         | 17                     | 19        |
| Taxes, other than income taxes                  | 1                      | 1         | 2                      | 1         |
| <b>Comparable EBITDA</b>                        | <b>25</b>              | <b>25</b> | <b>43</b>              | <b>39</b> |
| Depreciation and amortization                   | 6                      | 6         | 13                     | 12        |
| <b>Comparable operating income</b>              | <b>19</b>              | <b>19</b> | <b>30</b>              | <b>27</b> |
| <b>Sustaining capital:</b>                      |                        |           |                        |           |
| Routine capital, excluding hydro life extension | 2                      | -         | 2                      | -         |
| Hydro life extension                            | 3                      | 5         | 6                      | 11        |
| Planned major maintenance                       | -                      | 2         | 2                      | 3         |
| <b>Total</b>                                    | <b>5</b>               | <b>7</b>  | <b>10</b>              | <b>14</b> |

Production for the three and six months ended June 30, 2016 decreased by 17 GWh and 3 GWh compared to the same periods in 2015, primarily due to changes in our reservoir levels to accommodate scheduled maintenance outages.

Comparable EBITDA during the second quarter of 2016 remained consistent with 2015. The first half of 2016 benefited from cost reduction initiatives achieved during the first quarter of 2016.

## Energy Marketing

|                                             | 3 months ended June 30 |             | 6 months ended June 30 |          |
|---------------------------------------------|------------------------|-------------|------------------------|----------|
|                                             | 2016                   | 2015        | 2016                   | 2015     |
| Revenues and comparable gross margin        | 11                     | (17)        | 43                     | 14       |
| Operations, maintenance, and administration | 5                      | 1           | 14                     | 9        |
| <b>Comparable EBITDA</b>                    | <b>6</b>               | <b>(18)</b> | <b>29</b>              | <b>5</b> |
| Depreciation and amortization               | -                      | -           | 1                      | -        |
| <b>Comparable operating income</b>          | <b>6</b>               | <b>(18)</b> | <b>28</b>              | <b>5</b> |

For the three and six months ended June 30, 2016, comparable EBITDA increased \$24 million compared to the same periods in 2015 due to a return to normal level of gross margin from our short-term strategies and solid performance in our natural gas and Alberta trading portfolios. During the second quarter of 2015, unexpectedly volatile markets in Alberta and the Pacific Northwest negatively impacted gross margin.

## Corporate

The expenses incurred by the Corporate Segment are as follows:

|                                                                                  | 3 months ended June 30 |           | 6 months ended June 30 |           |
|----------------------------------------------------------------------------------|------------------------|-----------|------------------------|-----------|
|                                                                                  | 2016                   | 2015      | 2016                   | 2015      |
| Operations, maintenance, and administration<br>and taxes other than income taxes | 19                     | 16        | 37                     | 34        |
| Depreciation and amortization                                                    | 6                      | 7         | 13                     | 13        |
| <b>Comparable operating loss</b>                                                 | <b>25</b>              | <b>23</b> | <b>50</b>              | <b>47</b> |
| <b>Sustaining capital:</b>                                                       |                        |           |                        |           |
| Routine capital                                                                  | 4                      | 5         | 7                      | 9         |

Our Corporate overhead costs increased by \$3 million during the three and six months ended June 30, 2016 compared to the same periods in 2015 due to a change in allocation methodologies with business units.

## Other Consolidated Analysis

### Income Taxes

A reconciliation of income taxes and effective tax rates on earnings, excluding non-comparable items, is presented below:

|                                                                                                                                                           | 3 months ended June 30 |             | 6 months ended June 30 |            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------|------------------------|------------|
|                                                                                                                                                           | 2016                   | 2015        | 2016                   | 2015       |
| Earnings (loss) before income taxes                                                                                                                       | (4)                    | (73)        | 49                     | (44)       |
| Comparable adjustments:                                                                                                                                   |                        |             |                        |            |
| Impacts associated with certain de-designated and economic hedges                                                                                         | 13                     | 42          | 18                     | 73         |
| Economic hedges of non-controlling interest in intercompany foreign exchange contracts                                                                    | (2)                    | 1           | (4)                    | 1          |
| Asset impairment charges (reversals)                                                                                                                      | -                      | (1)         | -                      | (1)        |
| Restructuring expense                                                                                                                                     | -                      | -           | -                      | 7          |
| Flood-related maintenance costs, net of insurance recovery                                                                                                | -                      | -           | -                      | 1          |
| Comparable earnings (loss) before tax                                                                                                                     | 7                      | (31)        | 63                     | 37         |
| Comparable earnings attributable to non-controlling interests before tax                                                                                  | (18)                   | (18)        | (45)                   | (34)       |
| <b>Comparable earnings (loss) attributable to TransAlta shareholders subject to tax</b>                                                                   | <b>(11)</b>            | <b>(49)</b> | <b>18</b>              | <b>3</b>   |
| Income tax expense (recovery) ( <i>Restated</i> <sup>(1)</sup> )                                                                                          | (24)                   | 35          | (42)                   | 78         |
| Comparable income tax expense adjustments:                                                                                                                |                        |             |                        |            |
| Income tax recovery related to impacts associated with certain de-designated and economic hedges                                                          | 5                      | 14          | 6                      | 25         |
| Income tax recovery related to restructuring provision                                                                                                    | -                      | -           | -                      | 2          |
| Income tax (expense) recovery related to (writedown) reversal of a writedown of deferred income tax assets                                                | 23                     | (3)         | 46                     | 12         |
| Income tax expense related to investment in subsidiary ( <i>Restated</i> <sup>(1)</sup> )                                                                 | (3)                    | (40)        | (3)                    | (95)       |
| Income tax expense related to changes in corporate income tax rates                                                                                       | -                      | (20)        | (1)                    | (20)       |
| Income tax expense related to non-comparable items attributable to economic hedges of non-controlling interest in intercompany foreign exchange contracts | -                      | -           | (1)                    | -          |
| <b>Comparable income tax expense (recovery)</b>                                                                                                           | <b>1</b>               | <b>(14)</b> | <b>5</b>               | <b>2</b>   |
| Comparable income tax expense attributable to non-controlling interests                                                                                   | (2)                    | (2)         | (3)                    | (4)        |
| <b>Comparable income tax expense (recovery) attributable to TransAlta shareholders</b>                                                                    | <b>(1)</b>             | <b>(16)</b> | <b>2</b>               | <b>(2)</b> |
| <b>Comparable effective tax rate on earnings attributable to TransAlta shareholders (%)</b>                                                               | <b>9</b>               | <b>33</b>   | <b>11</b>              | <b>67</b>  |

(1) 2015 restated to reflect prior period correction. Refer to the Accounting Changes section of this MD&A.

The comparable income tax expense attributable to TransAlta shareholders for the three and six months ended June 30, 2016 increased compared to the same periods in 2015, primarily due to higher comparable earnings.

The comparable effective tax rate on earnings attributable to TransAlta shareholders decreased for the three and six months ended June 30, 2016, compared to the same period in 2015, primarily due to the effect of certain deductions that do not fluctuate with earnings and changes in the amount of earnings between the jurisdictions in which the pre-tax income was earned.

As disclosed in previous periods, we had written certain deferred tax assets off as it was no longer considered probable that sufficient future taxable income would be available to utilize the underlying tax losses. In the second quarter of 2016, our views on the ability to utilize the underlying tax losses improved based on unrealized gains on investments and hedging instruments, such that a reversal of the previous writedowns were warranted. As a result, for the three months ended June 30, 2016 we recorded a recovery of \$23 million (June 30, 2015 - \$3 million writedown) and for the six months ended June 30, 2016, we recorded a recovery of \$46 million (June 30, 2015 - \$12 million).

In order to give effect to the sale of an economic interest in the Australian assets to TransAlta Renewables, a reorganization of certain TransAlta subsidiaries was completed. The reorganization resulted in the recognition of a \$40 million and \$95 million deferred tax liability on TransAlta's investment in a subsidiary for the three and six months ended June 30, 2015, respectively. The deferred tax liability had not been recognized previously, since prior to the reorganization, the taxable temporary difference was not expected to reverse in the foreseeable future.

## Capital Structure and Liquidity

Our capital structure consisted of the following components as shown below:

| As at                                                                    | June 30, 2016 |            | Dec. 31, 2015 |            |
|--------------------------------------------------------------------------|---------------|------------|---------------|------------|
|                                                                          | \$            | %          | \$            | %          |
| Recourse debt - CAD debentures                                           | 1,045         | 12         | 1,044         | 12         |
| Recourse debt - U.S. senior notes                                        | 2,077         | 25         | 2,221         | 26         |
| Credit facilities                                                        | -             | -          | 315           | 4          |
| U.S. tax equity financing                                                | 43            | 1          | 50            | 1          |
| Other                                                                    | 16            | -          | 17            | -          |
| Less: cash and cash equivalents                                          | (93)          | (1)        | (54)          | (1)        |
| Less: fair value asset of hedging instruments on debt                    | (128)         | (2)        | (190)         | (2)        |
| Net recourse debt                                                        | 2,960         | 35         | 3,403         | 40         |
| Non-recourse debt                                                        | 857           | 10         | 766           | 9          |
| Finance lease obligations                                                | 76            | 1          | 82            | 1          |
| Total net debt                                                           | 3,893         | 46         | 4,251         | 50         |
| Non-controlling interests                                                | 1,125         | 13         | 1,029         | 12         |
| Equity attributable to shareholders                                      |               |            |               |            |
| Common shares                                                            | 3,093         | 37         | 3,075         | 35         |
| Preferred shares                                                         | 942           | 11         | 942           | 11         |
| Contributed surplus, deficit, and accumulated other comprehensive income | (610)         | (7)        | (656)         | (8)        |
| <b>Total capital</b>                                                     | <b>8,443</b>  | <b>100</b> | <b>8,641</b>  | <b>100</b> |

During the second quarter:

- New Richmond Wind L.P., our indirect subsidiary, issued a non-recourse bond in the amount of \$159 million; and
- CHD, an indirect subsidiary, repaid a \$27 million 5.69 per cent non-recourse debenture at maturity, and early redeemed \$10 million of non-recourse bonds, maturing in 2018 with coupon rates of 5.77 per cent and 7.03 per cent.

During the first quarter, we paid out the credit facilities balance of approximately \$315 million through a combination of cash flows from operations and cash proceeds of \$173 million received from the sale to TransAlta Renewables of an economic interest in the 506 MW Sarnia cogeneration facility and two renewable energy facilities.

The weakening of the US dollar decreased our long-term debt balances by \$151 million since Dec. 31, 2015. Almost all of our U.S.-denominated debt is hedged either through financial contracts or net investments in our U.S. operations. During the period, these changes in our U.S.-denominated debt were offset as follows:

| <b>6 months ended June 30</b>                                                                                             | <b>2016</b>  |
|---------------------------------------------------------------------------------------------------------------------------|--------------|
| Effects of foreign exchange on carrying amounts of U.S. operations<br>(net investment hedge) and finance lease receivable | <b>(79)</b>  |
| Foreign currency cash flow hedges on debt                                                                                 | <b>(66)</b>  |
| Economic hedges and other                                                                                                 | <b>(6)</b>   |
| <b>Total</b>                                                                                                              | <b>(151)</b> |

During the period through Dec. 31, 2018, we have approximately \$1.5 billion of recourse and non-recourse debt maturing. We expect to refinance some of these upcoming debt maturities by raising debt secured by certain contracted assets in Canada and the U.S. and using cash generated by our business. In January, we announced our decision to reduce our dividend to increase our financial flexibility.

#### **Credit Facilities**

Our credit facilities provide us with significant liquidity. At June 30, 2016, we had a total of \$2.1 billion (Dec. 31, 2015 - \$2.2 billion) of committed credit facilities, of which \$1.5 billion (Dec. 31, 2015 - \$1.3 billion) was available. We are in compliance with the terms of the credit facilities. At June 30, 2016, the \$0.6 billion (Dec. 31, 2015 - \$0.9 billion) of credit utilized under these facilities was comprised of actual drawings of nil (Dec. 31, 2015 - \$0.3 billion) and letters of credit of \$0.6 billion (Dec. 31, 2015 - \$0.6 billion). These facilities are comprised of a \$1.5 billion committed syndicated bank facility expiring in 2019, and four bilateral credit facilities expiring in 2017. In August 2016, we received commitments from our lenders to extend our syndicated credit facility and three bilateral credit facilities by one year.

#### **Share Capital**

On March 17, 2016, we announced that 1,824,620 of our 12 million Series A Cumulative Fixed Redeemable Rate Reset Preferred Shares were tendered for conversion, on a one-for-one basis, into the Series B Cumulative Redeemable Floating Rate Preferred Shares. Refer to the Highlights and Significant and Subsequent Events sections of this MD&A for further details.

The following table outlines the common and preferred shares issued and outstanding:

| <b>As at</b>                                                  | <b>Aug. 8, 2016</b>                | <b>June 30, 2016</b> | <b>Dec. 31, 2015</b> |
|---------------------------------------------------------------|------------------------------------|----------------------|----------------------|
|                                                               | <b>Number of shares (millions)</b> |                      |                      |
| <b>Common shares issued and outstanding, end of period</b>    | <b>287.9</b>                       | <b>287.9</b>         | <b>284.0</b>         |
| Preferred shares                                              |                                    |                      |                      |
| Series A                                                      | 10.2                               | 10.2                 | 12.0                 |
| Series B                                                      | 1.8                                | 1.8                  | -                    |
| Series C                                                      | 11.0                               | 11.0                 | 11.0                 |
| Series E                                                      | 9.0                                | 9.0                  | 9.0                  |
| Series G                                                      | 6.6                                | 6.6                  | 6.6                  |
| <b>Preferred shares issued and outstanding, end of period</b> | <b>38.6</b>                        | <b>38.6</b>          | <b>38.6</b>          |

## Non-Controlling Interests

As of June 30, 2016, we own 64.0 per cent (Dec. 31, 2015 – 66.6 per cent) of TransAlta Renewables. On Jan. 6, 2016, we completed the sale of an economic interest based on the cash flows of the 506 MW Sarnia cogeneration facility and two renewable energy facilities with total capacity of 105 MW to TransAlta Renewables for \$540 million.

We remain committed to maintaining our position as the majority shareholder and sponsor of TransAlta Renewables with a stated goal of maintaining our interest between 60 to 80 per cent.

## Returns to Providers of Capital

### Net Interest Expense

The components of net interest expense are shown below:

|                                       | 3 months ended June 30 |           | 6 months ended June 30 |            |
|---------------------------------------|------------------------|-----------|------------------------|------------|
|                                       | 2016                   | 2015      | 2016                   | 2015       |
| Interest on debt                      | 58                     | 56        | 118                    | 113        |
| Capitalized interest                  | (4)                    | (2)       | (7)                    | (5)        |
| Loss on redemption of bonds           | 1                      | -         | 1                      | -          |
| Interest on finance lease obligations | 1                      | -         | 2                      | 1          |
| Other                                 | 1                      | -         | 1                      | -          |
| Accretion of provisions               | 5                      | 5         | 11                     | 10         |
| <b>Net interest expense</b>           | <b>62</b>              | <b>59</b> | <b>126</b>             | <b>119</b> |

For the three and six months ended June 30, 2016, net interest expense increased compared to the same periods in 2015, primarily due to higher interest expense on foreign-denominated debt due to the stronger US dollar relative to the same periods last year, a slight increase in the cost of our bank facilities due to the Moody's Investor Services downgrade that occurred in the fourth quarter of 2015, as well as higher amounts of letters of credits outstanding during the periods, partially offset by higher capitalized interest.

### Dividends to Shareholders

On Jan. 14, 2016, we announced a reduction of our common share dividend from \$0.72 annually to \$0.16 annually and the suspension of the Premium Dividend<sup>TM</sup>, Dividend Reinvestment and Optional Common Share Purchase Plan. These actions were taken as part of a plan to maximize our long-term financial flexibility. The declaration of dividends is at the discretion of the Board.

On July 19, 2016, we declared a quarterly dividend of \$0.04 per share on common shares, payable on Oct. 1, 2016 and a quarterly dividend of \$0.16931 per share on the Series A preferred shares, \$0.16144 per share on the Series B preferred shares, \$0.2875 per share on the Series C preferred shares, \$0.3125 per share on the Series E preferred shares, and \$0.33125 per share on the Series G preferred shares, all payable on Sept. 30, 2016.

On April 21, 2016, we declared a quarterly dividend of \$0.04 per share on common shares, payable on July 1, 2016, and a quarterly dividend of \$0.16931 per share on the Series A preferred shares, \$0.15490 per share on the Series B preferred shares, \$0.2875 per share on the Series C preferred shares, \$0.3125 per share on the Series E preferred shares, and \$0.33125 per share on the Series G preferred shares, all payable on June 30, 2016.

### Non-Controlling Interests

Comparable earnings attributable to non-controlling interests for the three months ended June 30, 2016 was consistent with the same period in 2015. Despite higher non-controlling interest ownership of TransAlta Renewables relative to the prior period, higher foreign exchange losses offset higher operating income. On a year-to-date basis, comparable earnings attributable to non-controlling interests increased by \$12 million to \$42 million, primarily due to the Australian and Canadian portfolio dropdowns contributing to higher earnings in TransAlta Renewables, partially offset by unrealized foreign exchange losses on some of the financial interests in the Australian Assets.

## Financial Position

The following charts highlight significant changes in the Condensed Consolidated Statements of Financial Position from Dec. 31, 2015 to June 30, 2016:

|                                                                                              | Increase/<br>(decrease) | Primary factors explaining change                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cash and cash equivalents                                                                    | 39                      | Timing of receipts and payments, repayment of credit facilities and long-term debt, and bond offering                                                                                                                                                                                                                              |
| Trade and other receivables                                                                  | (115)                   | Timing of customer receipts and seasonality of revenue                                                                                                                                                                                                                                                                             |
| Prepaid expenses                                                                             | 20                      | Prepayment of property taxes                                                                                                                                                                                                                                                                                                       |
| Inventory                                                                                    | 19                      | Increase in coal inventory following lower production in the US, partially offset by the use of emissions inventory                                                                                                                                                                                                                |
| Finance lease receivables (long-term)                                                        | (42)                    | Unfavourable changes in foreign exchange rates (\$25 million) and scheduled receipts from our Poplar Creek restructuring (\$25 million), partially offset by an increased balance due to completion of gas reticulation work at the Solomon Power station (\$14 million)                                                           |
| Property, plant, and equipment, net                                                          | (225)                   | Depreciation for the period (\$274 million), unfavourable changes in foreign exchange rates (\$77 million), and revisions to decommissioning and restoration costs (\$13 million), partially offset by additions (\$163 million)                                                                                                   |
| Intangible assets                                                                            | (11)                    | Amortization (\$19 million) and unfavourable changes in foreign exchange rates (\$2 million), partially offset by additions (\$11 million)                                                                                                                                                                                         |
| Risk management assets (current and long-term)                                               | (95)                    | Unfavourable changes in foreign exchange rates and contract settlements, partially offset by favourable market price movements.                                                                                                                                                                                                    |
| Other                                                                                        | 7                       |                                                                                                                                                                                                                                                                                                                                    |
| <b>Total decrease in assets</b>                                                              | <b>(403)</b>            |                                                                                                                                                                                                                                                                                                                                    |
|                                                                                              | Increase/<br>(decrease) | Primary factors explaining change                                                                                                                                                                                                                                                                                                  |
| Accounts payable and accrued liabilities                                                     | (35)                    | Timing of payments and accruals                                                                                                                                                                                                                                                                                                    |
| Dividends payable                                                                            | (37)                    | Reduction of quarterly dividend                                                                                                                                                                                                                                                                                                    |
| Credit facilities, long-term debt, and finance lease obligations (including current portion) | (381)                   | Credit facility repayment (\$315 million), repayment of long-term debt (\$64 million), and favourable effects of changes in foreign exchange rates (\$151 million), partially offset by a bond issuance (\$159 million)                                                                                                            |
| Decommissioning and other provisions (current and long-term)                                 | (32)                    | Increase in risk-adjusted discount rates                                                                                                                                                                                                                                                                                           |
| Defined benefit obligation and other long-term liabilities                                   | 48                      | Decrease in risk free discount rates and actuarial losses                                                                                                                                                                                                                                                                          |
| Risk management liabilities (current and long-term)                                          | (129)                   | Favourable market price movements and contract settlements, partially offset with favourable market price movements                                                                                                                                                                                                                |
| Equity attributable to shareholders                                                          | 64                      | Net earnings (\$91 million), issuance of common shares (\$18 million), gains on cash flow hedges (\$103 million), partially offset by net losses on translating net assets of foreign operations (\$67 million), actuarial losses on defined benefit plans (\$36 million), and common and preferred share dividends (\$45 million) |
| Non-controlling interests                                                                    | 96                      | Sale of economic interests to TransAlta Renewables, partially offset by distributions paid and payable to non-controlling interests                                                                                                                                                                                                |
| Other                                                                                        | 3                       |                                                                                                                                                                                                                                                                                                                                    |
| <b>Total decrease in liabilities and equity</b>                                              | <b>(403)</b>            |                                                                                                                                                                                                                                                                                                                                    |



## Cash Flows

The following chart highlights significant changes in the Condensed Consolidated Statements of Cash Flows for the three and six months ended June 30, 2016 compared to the same periods in 2015:

| <b>3 months ended June 30</b>                  | <b>2016</b> | <b>2015</b> | <b>Primary factors explaining change</b>                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------|-------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cash and cash equivalents, beginning of period | 30          | 61          |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Provided by (used in):                         |             |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating activities                           | 119         | (39)        | Favourable change in non-cash working capital of \$158 million                                                                                                                                                                                                                                                                                                                                                                                        |
| Investing activities                           | (76)        | (116)       | Lower additions to property, plant, and equipment (\$47 million) and a higher decrease in finance lease receivables (\$14 million), partially offset by unfavourable change in non-cash working capital (\$25 million)                                                                                                                                                                                                                                |
| Financing activities                           | 20          | 165         | Decreased borrowings under credit facilities (\$22 million), higher repayments of long-term debt (\$73 million), and a decrease in proceeds on sale of non-controlling interest in a subsidiary (\$211 million), partially offset by the issuance of a bond (\$159 million)                                                                                                                                                                           |
| Cash and cash equivalents, end of period       | 93          | 71          |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>6 months ended June 30</b>                  | <b>2016</b> | <b>2015</b> | <b>Primary factors explaining change</b>                                                                                                                                                                                                                                                                                                                                                                                                              |
| Cash and cash equivalents, beginning of year   | 54          | 43          |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Provided by (used in):                         |             |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating activities                           | 394         | 114         | Favourable change in non-cash working capital (\$301 million), partially offset by a decrease in cash earnings (\$21 million)                                                                                                                                                                                                                                                                                                                         |
| Investing activities                           | (143)       | (259)       | Lower additions to property, plant, and equipment (\$86 million) and a higher decrease in finance lease receivables (\$27 million), partially offset by an unfavourable change in non-cash investing working capital (\$16 million)                                                                                                                                                                                                                   |
| Financing activities                           | (210)       | 172         | An increase in repayments of borrowings under credit facilities (\$920 million), higher distributions paid to subsidiaries' non-controlling interest (\$35 million), decrease in proceeds on sale of non-controlling interest in subsidiary (\$49 million), and lower realized gains on financial instruments (\$77 million), partially offset by lower repayment of long-term debt (\$570 million) and issuance of non-recourse bond (\$159 million) |
| Translation of foreign currency cash           | (2)         | 1           |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Cash and cash equivalents, end of period       | 93          | 71          |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## **Unconsolidated Structured Entities or Arrangements**

Disclosure is required of all unconsolidated structured entities or arrangements such as transactions, agreements, or contractual arrangements with unconsolidated entities, structured finance entities, special purpose entities, or variable interest entities that are reasonably likely to materially affect liquidity or the availability of, or requirements for, capital resources. We currently have no such unconsolidated structured entities or arrangements.

## **Guarantee Contracts**

We have obligations to issue letters of credit and cash collateral to secure potential liabilities to certain parties, including those related to potential environmental obligations, commodity risk management and hedging activities, construction projects, and purchase obligations. At June 30, 2016, we provided letters of credit totalling \$607 million (Dec. 31, 2015 - \$575 million) and cash collateral of \$82 million (Dec. 31, 2015 - \$74 million). These letters of credit and cash collateral secure certain amounts included on our Condensed Consolidated Statements of Financial Position under risk management liabilities and decommissioning and other provisions.

## **Commitments**

On July 5, 2016, we renewed one ten-year and two five-year long-term service agreements with three of our wind facilities to provide on-going maintenance. Total committed expenditures under the agreements are approximately \$30 million.

## **Earnings and Other Measures on a Comparable Basis**

We evaluate our performance and the performance of our business segments using a variety of measures. Those measures discussed below, and certain other measures referenced elsewhere in this MD&A, are not defined under IFRS and, therefore, should not be considered in isolation or as an alternative to or to be more meaningful than net earnings attributable to common shareholders or cash flow from operating activities, as determined in accordance with IFRS, when assessing our financial performance or liquidity. These measures are not necessarily comparable to a similarly titled measure of another company.

Each business segment assumes responsibility for its operating results measured by gross margin and operating income. Operating income and gross margin provides management and investors with a measurement of operating performance that is readily comparable from period to period.

In calculating these items, we exclude certain items as management believes these transactions are not representative of our business operations. Earnings on a comparable basis per share are calculated using the weighted average common shares outstanding during the period.

During 2016, prior period restatements were made to the 2015 period. Refer to the Accounting Changes section of this MD&A for a description of these items.

The adjustments made to calculate comparable EBITDA and comparable earnings for the three and six months ended June 30, 2016 and the same period in 2015 are as follows. References are to the reconciliation presented on the following pages.

| Reference number                                                                       | Adjustment                                                                                          | Segment        | 3 months ended June 30 |      | 6 months ended June 30 |      |
|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------|------------------------|------|------------------------|------|
|                                                                                        |                                                                                                     |                | 2016                   | 2015 | 2016                   | 2015 |
| <b>Reclassifications:</b>                                                              |                                                                                                     |                |                        |      |                        |      |
| 1                                                                                      | Finance lease income used as a proxy for operating revenue                                          | Australian Gas | 13                     | 11   | 26                     | 23   |
|                                                                                        |                                                                                                     | Canadian Gas   | 4                      | 2    | 7                      | 3    |
| 2                                                                                      | Decrease in finance lease receivable used as a proxy for operating revenue and depreciation         | Canadian Gas   | 13                     | 1    | 27                     | 2    |
|                                                                                        |                                                                                                     | Australian Gas | 2                      | -    | 2                      | -    |
| 3                                                                                      | Reclassification of mine depreciation from fuel and purchased power                                 | Canadian Coal  | 15                     | 16   | 30                     | 30   |
| <b>Adjustments (increasing (decreasing) earnings to arrive at comparable results):</b> |                                                                                                     |                |                        |      |                        |      |
| 4                                                                                      | Impacts to revenue associated with certain de-designated and economic hedges                        | U.S. Coal      | 13                     | 42   | 18                     | 73   |
| 5                                                                                      | Maintenance costs related to the Alberta flood of 2013, net of insurance recoveries                 | Hydro          | -                      | -    | -                      | 1    |
| 6                                                                                      | Asset impairment reversals                                                                          | U.S. Coal      | -                      | (1)  | -                      | (1)  |
| 7                                                                                      | Restructuring expense                                                                               | Canadian Coal  | -                      | -    | -                      | 7    |
| 8                                                                                      | Economic hedges of non-controlling interest in intercompany foreign exchange contracts              | Unassigned     | (2)                    | 1    | (4)                    | 1    |
| 9                                                                                      | Net tax effect on comparable adjustments subject to tax                                             | Unassigned     | (5)                    | (14) | (5)                    | (27) |
| 10                                                                                     | Deferred income tax rate adjustment                                                                 | Unassigned     | -                      | 20   | 1                      | 20   |
| 11                                                                                     | Reversal (accrual) of a writedown of deferred income tax assets                                     | Unassigned     | (23)                   | 3    | (46)                   | (12) |
| 12                                                                                     | Income tax expense related to temporary difference on investment in subsidiary ( <i>Restated</i> )* | Unassigned     | 3                      | 40   | 3                      | 95   |
| 13                                                                                     | Non-comparable items attributable to non-controlling interests                                      | Unassigned     | (12)                   | (4)  | (41)                   | (4)  |

\* 2015 restated to reflect prior period correction. Refer to the Accounting Changes section of this MD&A.

A reconciliation of comparable results to reported results for the three and six months ended June 30, 2016 and the same periods in 2015 is as follows:

|                                                                          | 3 months ended June 30, 2016 |                              |                        |                  | 3 months ended June 30, 2015 |                              |                              |                  |
|--------------------------------------------------------------------------|------------------------------|------------------------------|------------------------|------------------|------------------------------|------------------------------|------------------------------|------------------|
|                                                                          | Reported                     | Comparable reclassifications | Comparable adjustments | Comparable total | Reported                     | Comparable reclassifications | Comparable adjustments       | Comparable total |
| Revenues                                                                 | 492                          | 32 <sup>(1,2)</sup>          | 13 <sup>(4)</sup>      | 537              | 438                          | 14 <sup>(1,2)</sup>          | 42 <sup>(4)</sup>            | 494              |
| Fuel and purchased power                                                 | 174                          | (15) <sup>(3)</sup>          | -                      | 159              | 200                          | (16) <sup>(3)</sup>          | -                            | 184              |
| <b>Gross margin</b>                                                      | <b>318</b>                   | <b>47</b>                    | <b>13</b>              | <b>378</b>       | <b>238</b>                   | <b>30</b>                    | <b>42</b>                    | <b>310</b>       |
| Operations, maintenance, and administration                              | 122                          | -                            | -                      | 122              | 119                          | -                            | -                            | 119              |
| Asset impairment reversals                                               | -                            | -                            | -                      | -                | (1)                          | -                            | 1 <sup>(6)</sup>             | -                |
| Taxes, other than income taxes                                           | 8                            | -                            | -                      | 8                | 8                            | -                            | -                            | 8                |
| <b>EBITDA</b>                                                            | <b>188</b>                   | <b>47</b>                    | <b>13</b>              | <b>248</b>       | <b>112</b>                   | <b>30</b>                    | <b>41</b>                    | <b>183</b>       |
| Depreciation and amortization                                            | 147                          | 30 <sup>(2,3)</sup>          | -                      | 177              | 137                          | 17 <sup>(2,3)</sup>          | -                            | 154              |
| <b>Operating income (loss)</b>                                           | <b>41</b>                    | <b>17</b>                    | <b>13</b>              | <b>71</b>        | <b>(25)</b>                  | <b>13</b>                    | <b>41</b>                    | <b>29</b>        |
| Finance lease income                                                     | 17                           | (17) <sup>(1)</sup>          | -                      | -                | 13                           | (13) <sup>(1)</sup>          | -                            | -                |
| Foreign exchange gain (loss)                                             | -                            | -                            | (2) <sup>(8)</sup>     | (2)              | (2)                          | -                            | 1 <sup>(8)</sup>             | (1)              |
| <b>Earnings before interest and taxes</b>                                | <b>58</b>                    | <b>-</b>                     | <b>11</b>              | <b>69</b>        | <b>(14)</b>                  | <b>-</b>                     | <b>42</b>                    | <b>28</b>        |
| Net interest expense                                                     | 62                           | -                            | -                      | 62               | 59                           | -                            | -                            | 59               |
| Income tax expense (recovery)                                            | (24)                         | -                            | 25 <sup>(9,10)</sup>   | 1                | 35                           | -                            | (49) <sup>(9,10,11,12)</sup> | (14)             |
| <b>Net earnings (loss)</b>                                               | <b>20</b>                    | <b>-</b>                     | <b>(14)</b>            | <b>6</b>         | <b>(108)</b>                 | <b>-</b>                     | <b>91</b>                    | <b>(17)</b>      |
| Non-controlling interests                                                | 4                            | -                            | 12 <sup>(13)</sup>     | 16               | 12                           | -                            | 4 <sup>(13)</sup>            | 16               |
| <b>Net earnings (loss) attributable to TransAlta shareholders</b>        | <b>16</b>                    | <b>-</b>                     | <b>(26)</b>            | <b>(10)</b>      | <b>(120)</b>                 | <b>-</b>                     | <b>87</b>                    | <b>(33)</b>      |
| Preferred share dividends                                                | 10                           | -                            | -                      | 10               | 11                           | -                            | -                            | 11               |
| <b>Net earnings (loss) attributable to common shareholders</b>           | <b>6</b>                     | <b>-</b>                     | <b>(26)</b>            | <b>(20)</b>      | <b>(131)</b>                 | <b>-</b>                     | <b>87</b>                    | <b>(44)</b>      |
| Weighted average number of common shares outstanding in the period       | 288                          | -                            | -                      | 288              | 279                          | -                            | -                            | 279              |
| <b>Net earnings (loss) per share attributable to common shareholders</b> | <b>0.02</b>                  |                              |                        | <b>(0.07)</b>    | <b>(0.47)</b>                |                              |                              | <b>(0.16)</b>    |

|                                                                          | 6 months ended June 30, 2016 |                              |                         |                  | 6 months ended June 30, 2015 |                              |                              |                  |
|--------------------------------------------------------------------------|------------------------------|------------------------------|-------------------------|------------------|------------------------------|------------------------------|------------------------------|------------------|
|                                                                          | Reported                     | Comparable reclassifications | Comparable adjustments  | Comparable total | Reported                     | Comparable reclassifications | Comparable adjustments       | Comparable total |
| Revenues                                                                 | 1,060                        | 62 <sup>(1,2)</sup>          | 18 <sup>(4)</sup>       | 1,140            | 1,031                        | 28 <sup>(1,2)</sup>          | 73 <sup>(4)</sup>            | 1,132            |
| Fuel and purchased power                                                 | 382                          | (30) <sup>(3)</sup>          | -                       | 352              | 437                          | (30) <sup>(3)</sup>          | -                            | 407              |
| <b>Gross margin</b>                                                      | <b>678</b>                   | <b>92</b>                    | <b>18</b>               | <b>788</b>       | <b>594</b>                   | <b>58</b>                    | <b>73</b>                    | <b>725</b>       |
| Operations, maintenance, and administration                              | 245                          | -                            | -                       | 245              | 253                          | -                            | (1) <sup>(5)</sup>           | 252              |
| Asset impairment charges (reversals)                                     | -                            | -                            | -                       | -                | (1)                          | -                            | 1 <sup>(6)</sup>             | -                |
| Restructuring provision                                                  | -                            | -                            | -                       | -                | 7                            | -                            | (7) <sup>(7)</sup>           | -                |
| Taxes, other than income taxes                                           | 16                           | -                            | -                       | 16               | 15                           | -                            | -                            | 15               |
| <b>EBITDA</b>                                                            | <b>417</b>                   | <b>92</b>                    | <b>18</b>               | <b>527</b>       | <b>320</b>                   | <b>58</b>                    | <b>80</b>                    | <b>458</b>       |
| Depreciation and amortization                                            | 269                          | 59 <sup>(2,3)</sup>          | -                       | 328              | 270                          | 32 <sup>(2,3)</sup>          | -                            | 302              |
| <b>Operating income</b>                                                  | <b>148</b>                   | <b>33</b>                    | <b>18</b>               | <b>199</b>       | <b>50</b>                    | <b>26</b>                    | <b>80</b>                    | <b>156</b>       |
| Finance lease income                                                     | 33                           | (33) <sup>(1)</sup>          | -                       | -                | 26                           | (26) <sup>(1)</sup>          | -                            | -                |
| Foreign exchange gain (loss)                                             | (6)                          | -                            | (4) <sup>(8)</sup>      | (10)             | (1)                          | -                            | 1 <sup>(8)</sup>             | -                |
| <b>Earnings before interest and taxes</b>                                | <b>175</b>                   | <b>-</b>                     | <b>14</b>               | <b>189</b>       | <b>75</b>                    | <b>-</b>                     | <b>81</b>                    | <b>156</b>       |
| Net interest expense                                                     | 126                          | -                            | -                       | 126              | 119                          | -                            | -                            | 119              |
| Income tax expense (recovery)                                            | (42)                         | -                            | 47 <sup>(9,10,11)</sup> | 5                | 78                           | -                            | (76) <sup>(9,10,11,12)</sup> | 2                |
| <b>Net earnings (loss)</b>                                               | <b>91</b>                    | <b>-</b>                     | <b>(33)</b>             | <b>58</b>        | <b>(122)</b>                 | <b>-</b>                     | <b>157</b>                   | <b>35</b>        |
| Non-controlling interests                                                | 1                            | -                            | 41 <sup>(13)</sup>      | 42               | 26                           | -                            | 4 <sup>(13)</sup>            | 30               |
| <b>Net earnings (loss) attributable to TransAlta shareholders</b>        | <b>90</b>                    | <b>-</b>                     | <b>(74)</b>             | <b>16</b>        | <b>(148)</b>                 | <b>-</b>                     | <b>153</b>                   | <b>5</b>         |
| Preferred share dividends                                                | 22                           | -                            | -                       | 22               | 23                           | -                            | -                            | 23               |
| <b>Net earnings (loss) attributable to common shareholders</b>           | <b>68</b>                    | <b>-</b>                     | <b>(74)</b>             | <b>(6)</b>       | <b>(171)</b>                 | <b>-</b>                     | <b>153</b>                   | <b>(18)</b>      |
| Weighted average number of common shares outstanding in the period       | 288                          | -                            | -                       | 288              | 278                          | -                            | -                            | 278              |
| <b>Net earnings (loss) per share attributable to common shareholders</b> | <b>0.24</b>                  |                              |                         | <b>(0.02)</b>    | <b>(0.62)</b>                |                              |                              | <b>(0.06)</b>    |

## Financial Instruments

Refer to Note 13 of the notes to the audited annual consolidated financial statements within our 2015 Annual Integrated Report and Note 7 of our unaudited interim condensed consolidated financial statements as at and for the three and six months ended June 30, 2016 for details on Financial Instruments. Refer to the Governance and Risk Management section of our 2015 Annual Integrated Report and Note 8 of our unaudited interim condensed consolidated financial statements for further details on our risks and how we manage them. Our risk management profile and practices have not changed materially from Dec. 31, 2015.

We may enter into commodity transactions involving non-standard features for which observable market data is not available. These are defined under IFRS as Level III financial instruments. Level III financial instruments are not traded in an active market and fair value is, therefore, developed using valuation models based upon internally developed assumptions or inputs. Our Level III fair values are determined using data such as unit availability, transmission congestion, or demand profiles. Fair values are validated on a quarterly basis by using reasonably possible alternative assumptions as inputs to valuation techniques, and any material differences are disclosed in the notes to the financial statements.

We may also have various contracts with terms that extend beyond a liquid trading period. As forward market prices are not available for the full period of these contracts, the value of these contracts must be derived by reference to a forecast that is based on a combination of external and internal fundamental modeling, including discounting. As a result, these contracts are classified in Level III. These contracts are for specified prices with counterparties that we believe to be creditworthy.

As at June 30, 2016, total Level III financial instruments had a net asset carrying value of \$740 million (Dec. 31, 2015 - \$542 million net asset). The increase during the period is attributable to a decrease in estimated long-term power prices on a long-term power sale contract designated as an all-in-one cash flow hedge, for which changes in fair value are recognized in other comprehensive income, and maturities of unit contingent power purchase contracts, partially offset by unfavourable changes in foreign exchange rates due to the weakening of the US dollar relative to the Canadian dollar.

## 2016 Financial Outlook

Despite continuing low prices in Alberta and the Pacific Northwest, our expected key financial target ranges for 2016 remain as previously disclosed:

| <b>Measure</b>    | <b>Target</b>                                                |
|-------------------|--------------------------------------------------------------|
| Comparable EBITDA | \$990 million to \$1,100 million                             |
| Comparable FFO    | \$755 million to \$835 million                               |
| Comparable FCF    | \$250 million to \$300 million                               |
| Dividend          | \$0.16 per share, 15 to 18 per cent payout of Comparable FCF |

### Market

For 2016, power prices in Alberta are expected to be substantially lower than 2015 as a result of persistent low natural gas prices, low demand growth, the current level of supply, and virtually no strategic offer behavior by market participants. However, prices can vary based on supply and weather conditions. In the Pacific Northwest, prices have been lower in 2016 due to low natural gas prices and increased hydro generation, however, we expect prices will be comparable to last year for the remainder of 2016. We do not have significant uncontracted positions in other jurisdictions.

### Operations

#### Availability and Operating Costs

Availability of our coal fleet in Canada is expected to be in the range of 87 to 89 per cent in 2016. Availability of our other generating assets (gas, renewables) generally exceeds 95 per cent. All of our businesses are sustaining cost reduction initiatives completed in 2015. We continue to explore ways to further reduce our costs and be more competitive.

#### Contracted Cash Flows

As a result of Alberta PPAs and long-term contracts, approximately 75 per cent of our capacity is contracted over the next two years. This is reduced to 65 per cent when our Alberta PPAs for Sundance units 1 and 2 expire in 2017. More than half of our non-contracted generation is sold forward 12 to 18 months ahead of time using short-term physical or financial contracts, such that on an aggregated portfolio basis, depending on market conditions, we target being up to 90 per cent contracted for the upcoming calendar year. As at the end of the second quarter, approximately 88 per cent of our 2016 capacity was contracted. The average prices of our short-term physical and financial contracts for 2016 are approximately \$50 per MWh in Alberta and approximately US\$40 per MWh in the Pacific Northwest.

#### Fuel Costs

Mining costs at our Alberta coal mine are expected to decrease in 2016 due to improved efficiency, lower diesel costs, and production improvements. Seasonal variations in coal costs at our Alberta mine are minimized through the application of standard costing. Coal costs for 2016, on a standard cost per tonne basis, are expected to be one to two per cent lower than 2015 unit costs.

In the Pacific Northwest, our U.S. Coal mine, adjacent to our power plant, is in the reclamation stage. Fuel at U.S. Coal is purchased primarily from external suppliers in the Powder River Basin and delivered by rail. The delivered cost of fuel per MWh for the remainder of 2016 is expected to decrease by approximately 14 per cent due primarily to favourable renegotiations to reduce costs with our suppliers.

The value of coal inventories is assessed for impairment at the end of each reporting period.

Most of our generation from gas is sold under contracts with pass-through provisions for fuel. For gas generation with no pass-through provision, we typically purchase natural gas from outside companies coincident with production, thereby minimizing our risk to changes in prices.

We closely monitor the risks associated with changes in electricity and input fuel prices on our future operations and, where we consider it appropriate, use various physical and financial instruments to hedge our assets and operations from such price risks.

## Energy Marketing

EBITDA from our Energy Marketing Segment is affected by prices and volatility in the market, overall strategies adopted, and changes in regulation and legislation. We continuously monitor both the market and our exposure to maximize earnings while still maintaining an acceptable risk profile. Our 2016 objective for Energy Marketing is to contribute between \$70 million to \$90 million in gross margin for the year.

## Exposure to Fluctuations in Foreign Currencies

Our strategy is to minimize the impact of fluctuations in the Canadian dollar against the US dollar and Australian dollar by offsetting foreign-denominated assets with foreign-denominated liabilities and by entering into foreign exchange contracts. We also have foreign-denominated expenses, including interest charges, which partly offset our net foreign-denominated revenues.

## Interest Expense

Interest expense on debt for 2016 is expected to be in-line with 2015. However, changes in interest rates and in the value of the Canadian dollar relative to the US dollar can affect the amount of net interest expense incurred. Most of our debt is at fixed interest rates.

## Liquidity and Capital Resources

We expect to maintain adequate available liquidity under our committed credit facilities.

## Income Taxes

The effective tax rate on earnings, excluding non-comparable items for 2016, is expected to be approximately 10 to 15 per cent, which is lower than the statutory tax rate of 27 per cent, due to changes in the amount of earnings between the jurisdictions in which pre-tax income is earned and the effect of certain deductions that do not fluctuate with earnings.

## Capital Expenditures

Our major projects are focused on sustaining our current operations and supporting our growth strategy.

## Growth and Major Project Expenditures

A summary of the significant growth and major projects that are in progress is outlined below:

| Project                                    | Total Project                 |                              | 2016            | Target          | Details                                                                                                |
|--------------------------------------------|-------------------------------|------------------------------|-----------------|-----------------|--------------------------------------------------------------------------------------------------------|
|                                            | Estimated spend               | Spent to date <sup>(1)</sup> | Estimated spend | completion date |                                                                                                        |
| South Hedland power project <sup>(2)</sup> | 593                           | 289                          | 117             | Q2 2017         | 150 MW combined cycle power plant                                                                      |
| Solomon load bank facility                 | 5                             | 2                            | 3               | Q4 2016         | Installation of 20MW load bank facility required to support the operation of the Solomon power station |
| Transmission                               | Not applicable <sup>(3)</sup> |                              | 13              | Ongoing         | Regulated transmission that receives a return on investment                                            |
| <b>Total</b>                               | <b>598</b>                    | <b>291</b>                   | <b>133</b>      |                 |                                                                                                        |

Cash required to fund the construction of the South Hedland power project is expected to be partially funded by proceeds from project financing and cash generated by our business.

(1) As at June 30, 2016.

(2) Estimated project spend is AUD\$570 million. Total estimated project spend is stated in CAD\$ and includes estimated capital interest costs. The total estimated project spend may change due to fluctuation in foreign exchange rates.

(3) Transmission projects are aggregated and develop on an ongoing basis. Consequently, discrete project spend is not available.

## Sustaining and Productivity Expenditures

A significant portion of our sustaining and productivity capital is planned major maintenance, which includes inspection, repair and maintenance of existing components, and the replacement of existing components. Planned major maintenance costs are capitalized as part of property, plant, and equipment and are amortized on a straight-line basis over the term until the next major maintenance event. Excluded are amounts for day-to-day routine maintenance, unplanned maintenance activities, and minor inspections and overhauls, which are expensed as incurred.

Our estimate for total sustaining and productivity capital is allocated among the following:

| Category                                                         | Description                                                                           | Spent to date <sup>(1)</sup> | Expected spend in 2016 |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------|------------------------|
| Routine capital <sup>(2)</sup>                                   | Capital required to maintain our existing generating capacity                         | 34                           | 90 - 95                |
| Planned major maintenance                                        | Regularly scheduled major maintenance                                                 | 76                           | 155 - 165              |
| Mine capital                                                     | Capital related to mining equipment and land purchases                                | 7                            | 30 - 35                |
| Finance leases                                                   | Payments on finance leases                                                            | 8                            | 15 - 20                |
| <b>Total sustaining capital excluding flood-recovery capital</b> |                                                                                       | <b>125</b>                   | <b>290- 315</b>        |
| Flood-recovery capital                                           | Capital arising from the 2013 Alberta flood                                           | -                            | 5                      |
| <b>Total sustaining capital</b>                                  |                                                                                       | <b>125</b>                   | <b>295 - 320</b>       |
| Productivity capital                                             | Projects to improve power production efficiency and corporate improvement initiatives | 4                            | 10 - 15                |
| <b>Total sustaining and productivity capital</b>                 |                                                                                       | <b>129</b>                   | <b>305 - 345</b>       |

Planned major outages for 2016 include full major turnarounds of two Canadian Coal units that we operate, and two that our partners operate. Our revised plan also included two limited scope turnarounds on units we operate. Our planned outages also include significant work at our hydro facilities, including a stator/generator replacement.

One of our partners completed a major turnaround of one Canadian Coal unit that we do not operate in the first quarter of 2016, and in April we completed the planned outage of one unit that we operate. The two limited scope turnaround projects were also completed in the first quarter. As a result, we now have only one more planned major outage at the Canadian Coal facilities that we operate for the rest of this year, and one at units that our partners operate.

Since the beginning of the year, we reduced our estimate of planned major maintenance by approximately \$35 million, to reflect the reduced scope of a major turnaround, deferral of the Ghost river diversion project to a subsequent year, the deferral of an inspection of a gas turbine in Sarnia, and discretionary projects.

Lost production as a result of planned major maintenance, excluding planned major maintenance for U.S. Coal, which is scheduled during a period of economic dispatching, and limited-scope major maintenance projects executed during unplanned outages, is estimated as follows for 2016:

|          | Coal      | Gas and Renewables | Total     | Lost to date <sup>(1)</sup> |
|----------|-----------|--------------------|-----------|-----------------------------|
| GWh lost | 855 - 865 | 50 - 60            | 905 - 925 | 481                         |

In the first quarter, we reduced our estimate of lost production for Coal as compared to our estimates disclosed in our Annual MD&A due to reduced maintenance activities. In the second quarter, lower than expected production was lost during an outage. As a result, our full year 2016 estimate for Coal continues to be lower than the estimate disclosed in our Annual MD&A. The lower lost production estimates for Gas and Renewables compared to Dec. 31, 2015 is due to the deferral of major inspection work.

Funding for these capital expenditures is expected to be provided by cash flow from operating activities.

(1) As at June 30, 2016.

(2) Includes hydro life extension spend.



# Accounting Changes

## A. Current Accounting Changes

### I. Operating and Reportable Segments

At the beginning of the first quarter, we have chosen to disaggregate presentation of the Gas reportable segment into its two operating segments, Canadian Gas and Australian Gas. Previously included legacy costs of the non-operating U.S. Gas function have been re-allocated to U.S. Coal to align with management's internal monitoring practices. Comparative segmented results for 2015 have been restated to align with separate reporting of the two segments and the reallocation of the non-operating costs.

### II. Restatement of a Prior Quarter

During the fourth quarter of 2015, we restated the statement of earnings of the first quarter of 2015 to increase non-comparable deferred tax expense by \$47 million. As a result, net earnings attributable to common shareholders of the first quarter of 2015 and the six months ended June 30, 2015 decreased from \$7 million to a net loss of \$40 million and decreased from \$75 million to a net loss of \$122 million, respectively. The adjustment is due to the correction of the tax basis of an internally transferred asset as part of the reorganization of companies giving effect to the sale of an economic interest in Australian assets to TransAlta Renewables, which closed during the second quarter of 2015. Comparative information for the six months ended June 30, 2015 presented in this document has been adjusted accordingly.

## B. Future Accounting Changes

Accounting standards that have been previously issued by the IASB but are not yet effective and have not been applied include IFRS 9 *Financial Instruments*, IFRS 15 *Revenue from Contracts with Customers*, and IFRS 16 *Leases*. Refer to Note 3 of the most recent annual consolidated financial statements for information regarding the requirements of IFRS 9, IFRS 15, and IFRS 16.

In April 2016, the IASB issued an amendment to IFRS 15 to clarify the identification of performance obligations, principal versus agent considerations, licenses of intellectual property, and transition practical expedients. Amendments are effective for annual periods beginning on or after Jan. 1, 2018, consistent with IFRS 15.

The Corporation continues to assess the impact of adopting these standards on its consolidated financial statements.

## Selected Quarterly Information

Our results are seasonal due to the nature of the electricity market and related fuel costs. Higher maintenance costs are usually incurred in the spring and fall when electricity prices are expected to be lower, as electricity prices generally increase in the peak winter and summer months in our main markets due to increased heating and cooling loads. Margins are also typically impacted in the second quarter due to the volume of hydro production resulting from spring runoff and rainfall in the Pacific Northwest, which impacts production at U.S. Coal. Typically, hydro facilities generate most of their electricity and revenues during the spring months when melting snow starts feeding watersheds and rivers. Inversely, wind speeds are historically greater during the cold winter months and lower in the warm summer months.

|                                                                                                     | Q3 2015 | Q4 2015 | Q1 2016 | Q2 2016       |
|-----------------------------------------------------------------------------------------------------|---------|---------|---------|---------------|
| Revenues                                                                                            | 641     | 595     | 568     | <b>492</b>    |
| Comparable EBITDA                                                                                   | 219     | 268     | 279     | <b>248</b>    |
| Comparable FFO                                                                                      | 126     | 243     | 196     | <b>175</b>    |
| Net earnings (loss) attributable to common shareholders                                             | 154     | (7)     | 62      | <b>6</b>      |
| Comparable net earnings (loss) attributable to common shareholders                                  | (33)    | 3       | 14      | <b>(20)</b>   |
| Net earnings (loss) per share attributable to common shareholders, basic and diluted <sup>(1)</sup> | 0.55    | (0.02)  | 0.22    | <b>0.02</b>   |
| Comparable net earnings (loss) per share, basic and diluted <sup>(1)</sup>                          | (0.12)  | 0.01    | 0.05    | <b>(0.07)</b> |

|                                                                                                     | Q3 2014 | Q4 2014 | Q1 2015          | Q2 2015 |
|-----------------------------------------------------------------------------------------------------|---------|---------|------------------|---------|
|                                                                                                     |         |         | <i>*Restated</i> |         |
| Revenues                                                                                            | 639     | 718     | 593              | 438     |
| Comparable EBITDA                                                                                   | 212     | 301     | 275              | 183     |
| Comparable FFO                                                                                      | 145     | 225     | 211              | 160     |
| Net earnings (loss) attributable to common shareholders                                             | (6)     | 148     | (40)             | (131)   |
| Comparable net earnings (loss) attributable to common shareholders                                  | (13)    | 46      | 26               | (44)    |
| Net earnings (loss) per share attributable to common shareholders, basic and diluted <sup>(1)</sup> | (0.03)  | 0.54    | (0.14)           | (0.47)  |
| Comparable net earnings (loss) per share, basic and diluted <sup>(1)</sup>                          | (0.05)  | 0.17    | 0.09             | (0.16)  |

\* See Accounting Changes for restatement.

(1) Basic and diluted earnings per share attributable to common shareholders and comparable earnings per share are calculated each period using the weighted average common shares outstanding during the period. As a result, the sum of the earnings per share for the four quarters making up the calendar year may sometimes differ from the annual earnings per share.

Comparable net earnings, comparable EBITDA, and comparable FFO are generally higher in the first and fourth quarters due to higher demand associated with winter cold in the markets in which we operate and lower planned outages. Market volatility can also impact quarterly contributions from our Energy Marketing Segment. Following sales of non-controlling interest in TransAlta Renewables in the second quarter of 2015, the fourth quarter of 2015, and the first quarter of 2016, an increasing portion of earnings is attributable to non-controlling interests.

Revenues are impacted by market and operational factors listed above, and by changes in future power prices in the Pacific Northwest, which cause de-designated and economic hedges in the region to fluctuate in value. These hedges significantly depreciated in the second quarter of 2014 and first half of 2015, and significantly increased in value in the second half of 2014 over the third quarter of 2015. Revenues in the fourth quarter of 2015 were also impacted by a significant increase to a provision related to Force Majeure events associated mostly to prior years.

Net earnings attributable to common shareholders has also been impacted by the following variations and events:

- gain on disposal of assets, following the Poplar Creek contract restructuring in the third quarter of 2015;
- Market Surveillance Administrator provision in the third quarter of 2015;
- a recovery of a writedown of deferred tax assets in the fourth quarter of 2014, a recovery in the third quarter of 2014, and a recovery in the first quarter of 2016;
- change in income tax rates in Alberta in the second quarter of 2015;
- deferred income tax impacts of the sale of an economic interest in Australian assets to TransAlta Renewables transaction in the first and second quarters of 2015; and
- effects of non-comparable unrealized losses on intercompany financial instruments that are attributable only to the non-controlling interests in the first and second quarters of 2016.

## Disclosure Controls and Procedures

Management has evaluated, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Disclosure controls and procedures refer to controls and other procedures designed to ensure that information required to be disclosed in the reports we file or submit under the Securities Exchange Act of 1934, as amended (“Exchange Act”) are recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the U.S. Securities and Exchange Commission. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in our reports that we file or submit under the Exchange Act is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding our required disclosure. In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating and implementing possible controls and procedures.

During the first quarter of 2016, we completed the implementation of a new energy trading and risk management system. In connection with the implementation, we updated the processes that constitute our internal control over financial reporting, as necessary, to accommodate related changes to our business processes and accounting procedures.

Except as otherwise described above, there have been no other changes in our internal control over financial reporting during the six months ended June 30, 2016 that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting. Based on the foregoing evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of June 30, 2016, the end of the period covered by this report, our disclosure controls and procedures were effective.

## Supplemental Information

|                                                                                          |      | June 30, 2016 | Dec. 31, 2015 |
|------------------------------------------------------------------------------------------|------|---------------|---------------|
| Closing market price (TSX) (\$)                                                          |      | 6.72          | 4.91          |
| Price range for the last 12 months (TSX) (\$)                                            | High | 9.74          | 12.34         |
|                                                                                          | Low  | 3.76          | 4.13          |
| Adjusted net debt to invested capital <sup>(1)</sup> (%)                                 |      | 51.7          | 54.6          |
| Adjusted net debt to invested capital excluding non-recourse debt <sup>(1)</sup> (%)     |      | 46.2          | 50.2          |
| Adjusted net debt to comparable EBITDA <sup>(1, 2)</sup> (times)                         |      | 4.3           | 5.0           |
| Return on equity attributable to common shareholders <sup>(2)</sup> (%)                  |      | 10.2          | (1.2)         |
| Comparable return on equity attributable to common shareholders <sup>(1, 2)</sup> (%)    |      | (1.7)         | (2.3)         |
| Return on capital employed <sup>(2)</sup> (%)                                            |      | 6.2           | 4.6           |
| Comparable return on capital employed <sup>(1, 2)</sup> (%)                              |      | 3.3           | 3.0           |
| Earnings coverage <sup>(2)</sup> (times)                                                 |      | 1.9           | 1.5           |
| Dividend payout ratio based on comparable funds from operations <sup>(1, 2, 3)</sup> (%) |      | 17.5          | 28.3          |
| Dividend coverage <sup>(2, 3)</sup> (times)                                              |      | 6.9           | 3.6           |
| Dividend yield <sup>(2, 3)</sup>                                                         |      | 8.6           | 14.7          |
| Adjusted comparable FFO to adjusted net debt <sup>(2)</sup> (%)                          |      | 16.5          | 15.2          |
| Comparable FFO before interest to adjusted interest coverage <sup>(2)</sup> (times)      |      | 3.7           | 3.8           |

## Ratio Formulas

**Adjusted net debt to invested capital** = long-term debt and finance lease obligations including current portion and fair value (asset) liability of hedging instruments on debt + 50 per cent issued preferred shares - cash and cash equivalents / adjusted net debt + non-controlling interests + equity attributable to shareholders - 50 per cent issued preferred shares

**Adjusted net debt to comparable EBITDA** = long-term debt and finance lease obligations including current portion and fair value (asset) liability of hedging instruments on debt - cash and cash equivalents + 50 per cent issued preferred shares / comparable EBITDA

**Return on equity attributable to common shareholders** = net earnings attributable to common shareholders or earnings on a comparable basis / equity attributable to common shareholders excluding Accumulated Other Comprehensive Income ("AOCI")

(1) These ratios incorporate items that are not defined under IFRS. None of these measurements should be used in isolation or as a substitute for the Corporation's reported financial performance or position as presented in accordance with IFRS. These ratios are useful complementary measurements for assessing the Corporation's financial performance, efficiency, and liquidity and are common in the reports of other companies but may differ by definition and application. For a reconciliation of the Non-IFRS measures used in these calculations, refer to the Non-IFRS Measures section of this MD&A.

(2) Last 12 months.

(3) On Jan. 14, 2016, we revised our dividend to \$0.16 per common share on an annualized basis from \$0.72 previously. The effect of the change is not reflected in these historical ratios.

**Return on capital employed** = earnings before non-controlling interests and income taxes + net interest expense or comparable earnings before non-controlling interests and income taxes + net interest expense / invested capital excluding AOCI

**Earnings coverage** = net earnings attributable to shareholders + income taxes + net interest expense / interest on debt + 50 per cent dividends paid on preferred shares - interest income

**Dividend payout ratio** = dividends declared per common / funds from operations - 50 per cent dividends paid on preferred shares

**Dividend coverage ratio** = comparable cash flow from operating activities / cash dividends paid on common shares

**Dividend yield** = dividend paid per common share / current period's closing market price

**Adjusted comparable funds from operations to adjusted net debt** = comparable funds from operations - 50 per cent dividends paid on preferred shares / period end long-term debt and finance lease obligations including fair value (asset) liability of hedging instruments on debt + 50 per cent issued preferred shares - cash and cash equivalents

**Comparable funds from operations before interest to adjusted interest coverage** = comparable funds from operations + interest on debt - interest income - capitalized interest / interest on debt + 50 per cent dividends paid on preferred shares - interest income

## Glossary of Key Terms

**Availability** - A measure of the time, expressed as a percentage of continuous operation 24 hours a day, 365 days a year that a generating unit is capable of generating electricity, regardless of whether or not it is actually generating electricity.

**Capacity** - The rated continuous load-carrying ability, expressed in megawatts, of generation equipment.

**Force Majeure** - Literally means "greater force". These clauses excuse a party from liability if some unforeseen event beyond the control of that party prevents it from performing its obligations under the contract.

**Gigawatt** - A measure of electric power equal to 1,000 megawatts.

**Gigawatt Hour (GWh)** - A measure of electricity consumption equivalent to the use of 1,000 megawatts of power over a period of one hour.

**Greenhouse Gas (GHG)** - Gases having potential to retain heat in the atmosphere, including water vapour, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, and perfluorocarbons.

**Megawatt (MW)** - A measure of electric power equal to 1,000,000 watts.

**Megawatt Hour (MWh)** - A measure of electricity consumption equivalent to the use of 1,000,000 watts of power over a period of one hour.

**Power Purchase Arrangement (PPA)** - A long-term arrangement established by regulation for the sale of electric energy from formerly regulated generating units to buyers.

**Unplanned Outage** - The shut down of a generating unit due to an unanticipated breakdown.



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