

TRANSALTA RENEWABLES INC.

Management's Discussion and Analysis

First Quarter Report for 2023

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.

Table of Contents

M2	Forward-Looking Statements	M17	Financial Instruments
M4	Operations of the Company	M18	Other Consolidated Results
M5	Highlights	M19	Related-Party Transactions and Balances
M6	Discussion of Operating Results	M20	Material Accounting Policies and Critical Accounting Estimates
M8	Selected Quarterly Information	M20	Accounting Changes
M9	Additional IFRS Measures	M21	Strategy and Capability to Deliver Results
M9	Non-IFRS Measures	M23	2023 Outlook
M11	Reconciliation of Non-IFRS Measures	M24	Risk Management
M15	Liquidity and Capital Resources	M26	Disclosure Controls and Procedures



This MD&A should be read in conjunction with the unaudited interim condensed consolidated financial statements of TransAlta Renewables Inc. as at and for the three months ended March 31, 2023 and 2022 and should also be read in conjunction with the annual audited consolidated financial statements and MD&A for the year ended Dec. 31, 2022. In this MD&A, unless the context otherwise requires, 'we', 'our', 'us', 'TransAlta Renewables' and the 'Company' refer to TransAlta Renewables Inc. and its subsidiaries and 'TransAlta' refers to TransAlta Corporation and its subsidiaries. Capitalized terms not otherwise defined herein have the respective meanings set forth in the Glossary of Key Terms. All dollar amounts in the tables presented in this MD&A are in millions of Canadian dollars except per share amounts which are presented in whole dollars to the nearest two decimals, unless otherwise noted. The unaudited interim condensed consolidated financial statements have been prepared in accordance with International Financial Reporting Standard ("IFRS") International Accounting Standards ("IAS") 34 Interim Financial Reporting. This MD&A is dated May 4, 2023. Additional information in respect to the Company, including its Annual Information Form, is available on SEDAR at www.sedar.com and on our website at www.transaltarenewables.com. Information on or connected to our website is not incorporated by reference herein.

Forward-Looking Statements

This MD&A includes forward-looking statements within the meaning of applicable Canadian securities laws. 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", "could", "would", "can", "believe", "expect", "anticipate", "estimate", "intend", "plan", "foresee", "potential", "enable", "continue", "forecast" or other comparable terminology. These statements are not guarantees of our future performance, results or events and are subject to risks, uncertainties and other important factors that could cause our actual performance, results or events to be materially different from that set out in or implied by the forward-looking statements.

In particular, this MD&A contains forward-looking statements pertaining to our business and anticipated future financial performance including, but not limited to: our corporate strategy, including realizing growth opportunities; the Northern Goldfields solar project and Mount Keith expansion project, including the timing and associated construction capital; the ability to secure other growth opportunities with BHP (as defined below); our 2023 Outlook, including adjusted earnings before interest, taxes, depreciation and amortization ("adjusted EBITDA"), free cash flow ("FCF") and cash available for distribution ("CAFD") (each, as defined below), interest expense, and sustaining capital and productivity expenditures; the remediation of the Kent Hills 1 and 2 wind facilities, including timing and costs; the dividend amounts on the tracking preferred shares; foreign exchange exposure and risk management; the cash taxes payable by the Company and the timing and amount of such taxes; liquidity and capital resources, including our ability to secure borrowings on acceptable terms; principal sources of liquidity and our ability to draw on such liquidity; expectations in terms of the cost of operations and maintenance, including maintenance performed by third parties, and the variability of those costs; the payment of future dividends; expectations in respect of generation availability, including capacity⁽¹⁾ and production; actions to manage certain risks, including specific actions identified to manage liquidity risk, interest rate risk, project risks and reputation risk; expected governmental regulatory regimes, legislation, tax credits and programs; expectations regarding the dividend and paying out a significant amount of its CAFD in the form of dividends; expectations regarding seasonality of wind and hydro production and the resulting timing of carbon offset revenues; expectations on our ability to access capital markets on reasonable terms; ability to repay debt maturing in 2023; expectations regarding our decommissioning and restoration activities; and expectation regarding the portion of current income tax expenses reversing as construction projects in Australia are completed. The forward-looking statements contained in this MD&A are based on many assumptions including, but not limited to, the following: power and natural gas price forecasts; operational assumptions related to our 2023 Outlook, including sustaining capital expenditures and production; legal and regulatory developments not differing significantly from the regulations in effect or being proposed; and the Company being able to fund incremental growth on reasonable terms.

Forward-looking statements are subject to a number of significant risks, uncertainties and assumptions that could cause actual plans, performance, results or outcomes to differ materially from current expectations. Factors that may adversely impact what is expressed or implied by forward-looking statements contained in this MD&A include risks relating to: reduced labour availability impacting our ability to continue to staff our operations and facilities; our potential inability to identify accretive growth opportunities or to fund any such opportunities; our potential inability to acquire operating or development assets from TransAlta; restricted access to capital and increased borrowing costs; decreases in short-term and/or long-term electricity demand; any reduction to the value of environmental attributes; changes to commodity prices; reductions in production; disruptions to our supply chain; disruptions caused by force majeure claims; impairments and/or writedowns of assets; adverse impacts on our information technology systems and our internal control systems, including increased cybersecurity threats; changes in general economic conditions, including interest rates and inflation; fluctuations in the value of foreign currencies, including the Canadian, US and Australian dollars; operational risks involving our facilities, including unplanned outages at such facilities; disruptions in the transmission and distribution of electricity; the effects of weather and other climate-related risks, including natural disasters; equipment failure and our ability to carry out or have completed the repairs in a cost-effective or timely manner, or at all, including as it pertains to the Kent Hills 1 and 2 wind facilities;

¹ We measure capacity as net installed capacity, which is consistent with industry standards. Capacity figures represent capacity owned and in operation unless otherwise stated. The gross capacity reflects the basis of consolidation of underlying assets owned, plus those in which we hold an economic interest. Net capacity deducts capacity attributable to non-controlling interest in these assets. Megawatts are rounded to the nearest whole number.

counterparty credit risk; changes to our relationship with TransAlta Corporation; inadequacy or unavailability of insurance coverage; legal, regulatory and contractual disputes and proceedings involving the Company, including the ability to recover any damages related to the Kent Hills 1 and 2 remediation claims; the payout ratio remaining elevated and the ability to maintain the current dividend amount; disruptions in the source of water, wind, solar or gas resources required to operate our facilities; the need for additional financing and the ability to access financing at a reasonable cost; structural subordination of securities; counterparty credit risk; our provision for income taxes; contract expiries and the inability to re-contract facilities on favourable terms, or at all; reliance on key personnel and services provided by TransAlta, including growth opportunities through the expansion of existing assets and dropdowns from TransAlta; the regulatory and political environments in the jurisdictions in which we operate; changes to government incentives or grants for renewable energy production; and the risks associated with development projects and acquisitions. The foregoing risk factors, among others, are described in further detail in the "Risk Factors" section of our AIF for the year ended Dec. 31, 2022, which is available on SEDAR at www.sedar.com and on file with the Canadian provincial securities regulatory authorities. Further detail is also available under Risk Management in this MD&A.

Readers are urged to consider these factors carefully in evaluating the forward-looking statements and are cautioned not to place undue reliance on these forward-looking statements. The forward-looking statements included in this document are made only as of the date hereof and we do not undertake to publicly update these forward-looking statements to reflect new information, future events or otherwise, except as required by applicable laws. The purpose of the financial outlooks contained herein is to give the reader information about management's current expectations and plans and readers are cautioned that such information may not be appropriate for other purposes. In light of these risks, uncertainties and assumptions, the forward-looking events might occur to a different extent or at a different time than we have described, or might not occur at all. We cannot assure that projected performance results or events will be achieved.

Operations of the Company

TransAlta Renewables is one of the largest generators of wind power in Canada and is among the largest publicly traded renewable power generation companies in the country. Our asset platform is diversified in terms of geography, generation and counterparties.

Our operations span three countries: Canada, the United States and Australia. Our assets located in the United States and Australia are held through economic interests in those assets. As we have economic interests and not direct ownership, the operational results of these assets are not consolidated into our financial statement results. Instead, we receive finance income on the underlying investments, which is included in our consolidated net earnings.

Since the investments in these economic interests provide us with returns as though the assets were owned directly, presenting the operational information provides readers with information to assist them in assessing the financial performance of the assets that generate the finance income related to the economic interests. Please refer to the Discussion of Operating Results section of this MD&A for further information.

In total, we own, directly or through economic interests, an aggregate of 2,993 MW of gross installed capacity in operation. TransAlta manages and operates these facilities on our behalf under the terms of a Management, Administrative and Operational Services Agreement, as amended (the "Management Agreement").

As at March 31, 2023	Owned Assets			Economic Interests						Total		
	Canada			United States			Australia			Total		
	Gross installed capacity (MW)	Number of facilities	Weighted average contract life	Gross installed capacity (MW)	Number of facilities	Weighted average contract life	Gross installed capacity (MW)	Number of facilities	Weighted average contract life	Gross installed capacity (MW) ⁽¹⁾	Number of facilities	Weighted average contract life
Hydro	109	11	7	—	—	—	—	—	—	109	11	7
Wind & Solar ⁽²⁾	1,387	22	11	519	7	11	—	—	—	1,906	29	11
Gas	499	1	9	29	1	3	450	6	16	978	8	12
Total	1,995	34	11	548	8	10	450	6	16	2,993	48	11

(1) The total gross installed capacity reflects the basis of consolidation of underlying assets owned, plus those in which we hold an economic interest. Megawatts are rounded to the nearest whole number.

(2) Canadian Wind includes the 10 MW WindCharger wind battery storage facility. Canadian Wind gross installed capacity includes the 150 MW Kent Hills 1 and 2 wind facilities, which are currently not in operation. See the 2023 Outlook section of this MD&A for additional information.

Highlights

Consolidated Financial Highlights

	Three months ended March 31,	
	2023	2022
Renewable energy production (GWh) ⁽¹⁾	1,219	1,310
Revenues	119	143
Adjusted EBITDA ⁽²⁾	128	139
Earnings before income taxes	53	49
Net earnings attributable to common shareholders	45	41
Cash flow from operating activities	67	103
Free cash flow ⁽²⁾	93	108
Cash available for distribution ⁽²⁾	71	90
Net earnings per share attributable to common shareholders, basic and diluted	0.17	0.15
Dividends declared and paid per common share	0.23	0.23
Free cash flow per share ⁽²⁾⁽³⁾	0.35	0.40
Cash available for distribution per share ⁽²⁾⁽³⁾	0.27	0.34

(1) Includes production from Canadian Wind, Canadian Hydro and US Wind and Solar and excludes Canadian, US and Australian gas-fired generation. Production is not a key revenue driver for gas-fired facilities as most of their revenues are capacity-based.

(2) These items are not defined and have no standardized meaning under IFRS. Please refer to the Discussion of Operating Results, Non-IFRS Measures and Reconciliation of Non-IFRS Measures sections of this MD&A for further discussion of these items, including, where applicable, reconciliations to measures calculated in accordance with IFRS.

(3) Free cash flow per share and cash available for distribution per share are calculated as free cash flow and cash available for distribution, respectively, divided by the weighted average number of common shares outstanding during the period of 267 million shares for March 31, 2023 (March 31, 2022 - 267 million shares).

As at	March 31, 2023	Dec. 31, 2022
Gas installed capacity (MW) ⁽¹⁾	978	978
Renewables gross installed capacity (MW) ⁽²⁾	2,015	2,015
Total assets	3,235	3,229
Debt and lease obligations ⁽³⁾	800	790
Total long-term liabilities	1,137	1,118

(1) Includes Canadian, US and Australian gas-fired generation in which we hold an economic interest.

(2) Includes Canadian Wind, Canadian Hydro and US Wind and Solar capacity. The gross installed capacity reflects the basis of consolidation of underlying assets owned, plus those in which we hold an economic interest.

(3) Including current portion.

Renewable energy production for the three months ended March 31, 2023, decreased by 91 GWh compared to the same period in 2022. The decrease was mainly due to lower wind resources, higher unplanned outages in US Wind and Solar and lower water resources, partially offset by improved performance at the Windrise wind facility.

The Company's revenues for the three months ended March 31, 2023, decreased by \$24 million compared to the same period in 2022, primarily due to lower production and lower environmental credit revenues in Canadian Wind and lower revenues in Canadian Gas related to lower market demand and from customer-supplied natural gas which is offset by a lower cost of fuel.

The Company's adjusted EBITDA for the three months ended March 31, 2023, decreased by \$11 million compared to the same period in 2022. Adjusted EBITDA was lower in Canadian Wind due to lower revenues from lower production, the timing of environmental credit sales, lower liquidated damages at the Windrise wind facility and higher operations, maintenance and administration ("OM&A") expenses due to higher insurance and escalation of long term service agreement costs. US Wind and Solar had higher adjusted EBITDA due to higher environmental credit sales and Canadian Gas had higher adjusted EBITDA primarily from a new customer that was commissioned at the site during 2022.

Net earnings attributable to common shareholders for the three months ended March 31, 2023, increased by \$4 million compared to the same period in 2022, primarily due to asset impairment reversals due to favourable changes in estimated future cash flows, higher finance income related to subsidiaries of TransAlta, and lower depreciation. This was partially offset by lower revenues mainly from lower production, lower net other operating income from improved performance at the Windrise wind facility, higher OM&A expenses mainly from higher insurance and escalation of long term service agreement costs and higher income tax expense. Finance income related to subsidiaries of TransAlta was higher mainly due to higher dividends from Australia.

Overall, our cash flow from operating activities decreased by \$36 million compared to the same period in 2022, primarily due to lower revenues from lower production at Canadian Wind, higher current income tax expense due to the Company becoming taxable in Canada and unfavourable changes in working capital, partially offset by higher finance income related to subsidiaries of TransAlta.

Overall, our FCF and CAFD decreased by \$15 million and \$19 million, respectively, compared to the same period in 2022, primarily due to lower adjusted EBITDA and higher current income tax expense, partially offset by higher interest income and lower sustaining capital expenditures. The Company expects a portion of the current income tax expenses to reverse during the balance of the year as projects under construction are completed in Australia. In addition, CAFD was impacted by the scheduled principal repayment on the Windrise green bond, which commenced in the first quarter of 2023.

Our payout ratio of dividends to CAFD in three months ended March 31, 2023 (excluding the remediation capital associated with Kent Hills) was 89 per cent (2022 - 70 per cent), which is above our target range due to lower CAFD.

Discussion of Operating Results

The amounts discussed in this section include operational metrics and financial information related to our fuel types and include investments in the economic interests of TransAlta subsidiaries. Since the investments in these economic interests provide us with returns as if we owned the assets, presenting the operational information provides readers with information to assist them in assessing the financial performance of the assets that generate the finance income related to the economic interests. All the assets in the US Wind and Solar, US Gas and Australian Gas business segments are owned through investments in an economic interest.

The following table summarizes operational data and adjusted EBITDA by fuel type:

Three months ended March 31,	Long-term average renewable energy production (GWh) ⁽¹⁾	Production (GWh)		Adjusted EBITDA ⁽²⁾	
		2023	2022	2023	2022
Canadian Wind ⁽³⁾	1,071	858	909	50	63
Canadian Hydro ⁽⁴⁾	39	27	41	(1)	1
US Wind and Solar	352	334	360	27	25
Total – Renewable energy	1,462	1,219	1,310	76	89
Canadian Gas		325	453	22	20
US Gas		51	62	1	2
Australian Gas		426	420	35	34
Corporate		—	—	(6)	(6)
Total		2,021	2,245	128	139
Total earnings before income taxes				53	49

(1) Long-term average is calculated on an annualized basis from the average annual energy yield predicted by our simulation model, which uses historical resource data and is run using typical periods of 15 years for wind and 30 years for hydro.

(2) This item is not defined and has no standardized meaning under IFRS. Please refer to the Non-IFRS Measures and Reconciliation of Non-IFRS Measures sections of this MD&A for further discussion of these items, including, where applicable, reconciliations to measures calculated in accordance with IFRS.

(3) Canadian Wind long-term average renewable energy production (GWh), excluding Kent Hills 1 and 2 wind facilities which are currently not in operation, is 965 GWh for the three months ended March 31, 2023.

(4) During the fourth quarter of 2022, the Company closed the sale of two hydro facilities resulting in a reduction in capacity of 3 MW. The long-term average has been adjusted for the sale of these facilities.

Changes in production and adjusted EBITDA are discussed below for each of our business segments:

Canadian Wind

Production for the three months ended March 31, 2023, decreased by 51 GWh compared to the same period in 2022, mainly due to lower wind resources in both Eastern and Western Canada, partially offset by improved performance at the Windrise wind facility.

Adjusted EBITDA decreased by \$13 million compared to the same period in 2022, mainly due to lower production, lower liquidated damages at the Windrise wind facility, lower environmental credit revenues due to timing and higher OM&A costs resulting from higher insurance and escalation of long term service agreement costs.

Canadian Hydro

Production for the three months ended March 31, 2023, decreased by 14 GWh compared to the same period in 2022, mainly as a result of lower water resources across the fleet and the sale of the Appleton and Galetta facilities, completed in December 2022.

Adjusted EBITDA decreased by \$2 million compared to the same period in 2022, mainly due to lower production.

US Wind and Solar

Production for the three months ended March 31, 2023, decreased by 26 GWh compared to the same period in 2022, mainly due to higher unplanned outages and lower wind resources.

Adjusted EBITDA increased by \$2 million compared to the same period in 2022, mainly due to the timing of recognizing environmental credit revenues from solar facilities. Lower production did not have a significant impact on adjusted EBITDA as higher production at higher priced facilities offset lower production at lower priced facilities.

Canadian Gas

Canadian Gas is comprised solely of the Sarnia cogeneration facility.

Production for the three months ended March 31, 2023, decreased by 128 GWh compared to the same period in 2022, mainly due to lower market demand in Ontario. Due to the nature of our contracts, changes in production do not have a significant financial impact as our contracts are structured as capacity payments with customer-supplied fuel or a passthrough of fuel costs.

Adjusted EBITDA increased by \$2 million compared to the same period in 2022, mainly due to a new customer that was commissioned at the site during 2022.

US Gas

Production for the three months ended March 31, 2023, decreased by 11 GWh compared to the same period in 2022, mainly due to lower customer demand.

Adjusted EBITDA decreased by \$1 million compared to the same period in 2022, mainly due to higher fuel commodity costs.

Australian Gas

Production for the three months ended March 31, 2023, increased by 6 GWh compared to the same period in 2022, mainly as a result of changes in customer demand. The contracts in Australia are capacity contracts and our results are largely unaffected by generation.

Adjusted EBITDA increased by \$1 million compared to the same period in 2022, mainly due to liquidated damages paid in the first quarter of 2022 that did not reoccur within the current quarter.

Selected Quarterly Information

	Q2 2022	Q3 2022	Q4 2022	Q1 2023
Revenue	139	124	154	119
Net earnings (loss) attributable to common shareholders	13	(20)	40	45
Cash flow from operating activities	28	37	89	67
Net earnings (loss) per share attributable to common shareholders, basic and diluted ⁽¹⁾	0.05	(0.07)	0.15	0.17

	Q2 2021	Q3 2021	Q4 2021	Q1 2022
Revenue	92	114	138	143
Net earnings attributable to common shareholders	25	20	43	41
Cash flow from operating activities	79	83	71	103
Net earnings per share attributable to common shareholders, basic and diluted ⁽¹⁾	0.09	0.07	0.16	0.15

(1) Basic and diluted earnings per share attributable to common shareholders 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.

Our business results fluctuate with seasonal variations, with the first and fourth quarters seeing the largest wind volumes and the second and third quarters recording higher hydro volumes. As wind forms a larger part of our renewable fleet, higher revenues and earnings are expected in the first and fourth quarters.

Net earnings attributable to common shareholders over the prior eight quarters have been impacted by the following variations and events:

- Revenue related to the sale of Alberta carbon offsets and emissions performance credits to TransAlta occurred in the first, second and fourth quarters of 2022, and in the third and fourth quarters of 2021, respectively;
- Liquidated damages related to turbine availability at the Windrise wind facility in the first quarter of 2023 and the first, second, third and fourth quarter of 2022;
- Recognized insurance proceeds for the single tower failure at Kent Hills wind facilities in the second quarter of 2022;
- The acquisition of an economic interest in the North Carolina Solar facility in the fourth quarter of 2021;
- The commissioning of the Windrise wind facility in the fourth quarter of 2021;
- The continued extended outage of the Kent Hills 1 and 2 wind facilities from the fourth quarter of 2021 through the first quarter of 2023. The extended outage is expected to continue into the third quarter of 2023;
- The impact on depreciation in the fourth quarter of 2021 from accelerating the depreciation of the foundations related to Kent Hills 1 and 2 wind facilities;
- The effects of asset impairment reversals recognized in the first quarter of 2023 and asset impairments recognized in the second and third quarter of 2022 and the third and fourth quarter of 2021;
- The unplanned outages at the Sarnia cogeneration facility in the second quarter of 2021; and
- The acquisition of an economic interest in Skookumchuck wind facility and the Ada cogeneration facility on April 1, 2021.

Net earnings attributable to common shareholders also include various effects arising from our economic interest investments through financial instruments as follows:

- Dividends or return of capital can vary each quarter depending on the pre-tax earnings from our economic interest investments;
- Fluctuations in the strength of the Canadian dollar relative to the US dollar result in foreign exchange gains and losses on US dollar-denominated promissory notes. Foreign exchange losses were recognized in the fourth quarter of 2021 when it was repaid in full; and
- Fluctuations in the strength of the Canadian dollar relative to the Australian dollar result in foreign exchange gains and losses on the Australian dollar-denominated TEA Demand loan. In the fourth quarter of 2022 it was repaid in full.

Additional 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. Presenting these line items provides management and investors with a measure of ongoing operating performance that is readily comparable from period to period.

Non-IFRS Measures

We evaluate our performance using a variety of measures to provide management and investors with an understanding of our financial position and results. Certain of the measures discussed in this MD&A are not defined under IFRS and therefore should not be considered in isolation, as a substitute for, as an alternative to, or more meaningful than measures as determined in accordance with IFRS when assessing our financial performance or liquidity. These measures have no standardized meaning under IFRS and may not be comparable to similar measures presented by other issuers.

The Company's key non-IFRS measures are adjusted EBITDA, FCF and CAFD.

Adjusted EBITDA

Adjusted EBITDA is an important metric for management since it represents our core business profitability. Interest, taxes, depreciation and amortization are not included, as differences in accounting treatments may distort our core business results. We present adjusted EBITDA along with operational information of the assets in which we own an economic interest so that readers can better understand and evaluate the drivers of those assets in which we have an economic interest. Since the economic interests are designed to provide the Company with returns as if we owned the assets themselves, presenting the operational information and adjusted EBITDA provides a more complete picture for readers to understand the underlying nature of the investments and the resultant cash flows that would otherwise only be presented as finance income from the investments.

Adjusted EBITDA is composed of our reported EBITDA adjusted to exclude the impact of unrealized mark-to-market gains and losses, asset impairments and reversals and certain insurance recoveries, plus the adjusted EBITDA of the facilities in which we hold an economic interest, which is the facilities' reported EBITDA adjusted for: 1) finance lease income and the change in the finance lease receivable amount; 2) contractually fixed management costs; 3) interest earned on the prepayment of certain transmission costs; 4) the impact of unrealized mark-to-market gains and losses; 5) certain insurance recoveries; and 6) asset impairments and reversals.

Free Cash Flow

FCF represents the amount of cash that is available from operations and investments in subsidiaries of TransAlta in which we have an economic interest, to invest in growth initiatives, to make scheduled principal repayments on debt, repay maturing debt, pay common share dividends or repurchase common shares. Changes in working capital are excluded so that FCF is not distorted by changes that we consider temporary in nature, reflecting, among other things, the impact of seasonal factors and the timing of receipts and payments.

FCF is calculated as the cash flow from operating activities before changes in working capital, less sustaining capital expenditures, distributions paid to subsidiaries' non-controlling interest, finance income from economic interests and principal repayments on lease obligations, plus FCF of the assets owned through economic interests, which is calculated as adjusted EBITDA from the economic interests less interest expense, sustaining capital expenditures, current income tax expense, principal repayments on lease obligations and working capital and other timing. FCF per share is calculated using the weighted average number of common shares outstanding during the period.

Cash Available For Distribution

CAFD can be used as a proxy for the cash that will be available to common shareholders of the Company. CAFD is calculated as FCF less tax equity distributions and scheduled principal repayments of amortizing debt.

Presenting FCF and CAFD helps readers assess our cash flows in comparison to prior periods. See the Reconciliation of Non-IFRS Measures section's of this MD&A for additional information.

Reconciliation of Non-IFRS Measures

Reconciliation of Adjusted EBITDA to Earnings before Income Tax

Three months ended March 31, 2023	Owned Assets				Economic Interests			Total	Investments in economic interests and adjustments	IFRS financials
	Canadian Wind	Canadian Hydro	Canadian Gas	Corporate	US Wind and Solar	US Gas	Australian Gas			
Revenues ⁽¹⁾	63	3	53	—	33	6	44	202	(83)	119
Fuel, royalties and other costs ⁽²⁾	3	1	23	—	1	4	1	33	(6)	27
Gross margin	60	2	30	—	32	2	43	169	(77)	92
Operations, maintenance and administration ⁽³⁾	11	2	8	6	4	1	8	40	(13)	27
Taxes, other than income taxes	2	1	—	—	1	—	—	4	(1)	3
Net other operating income	(3)	—	—	—	—	—	—	(3)	—	(3)
Adjusted EBITDA ⁽⁴⁾	50	(1)	22	(6)	27	1	35	128		
Depreciation and amortization										(34)
Asset impairment reversals										10
Finance income related to subsidiaries of TransAlta										23
Interest income										1
Interest expense										(12)
Earnings before income tax										53

(1) Adjusted EBITDA excludes the impact of unrealized mark-to-market gains or losses. Amounts related to economic interests include finance lease income adjusted for change in finance lease receivable.

(2) Amounts related to economic interests include interest earned on the prepayment of certain transmission costs.

(3) Amounts related to economic interests include the effect of contractually fixed management costs.

(4) Adjusted EBITDA is a non-IFRS measure and has no standardized meaning under IFRS. Refer to the Additional IFRS Measures and Non-IFRS Measures sections for further details.

Three months ended March 31, 2022	Owned Assets				Economic Interests			Total	Investments in economic interests and adjustments	IFRS financials
	Canadian Wind	Canadian Hydro	Canadian Gas	Corporate	US Wind and Solar	US Gas	Australian Gas			
Revenues ⁽¹⁾	70	4	69	—	31	6	43	223	(80)	143
Fuel, royalties and other costs ⁽²⁾	4	1	40	—	1	3	2	51	(6)	45
Gross margin	66	3	29	—	30	3	41	172	(74)	98
Operations, maintenance and administration ⁽³⁾	9	2	8	6	4	1	7	37	(12)	25
Taxes, other than income taxes	1	—	1	—	1	—	—	3	(1)	2
Net other operating income	(7)	—	—	—	—	—	—	(7)	—	(7)
Adjusted EBITDA ⁽⁴⁾	63	1	20	(6)	25	2	34	139		
Depreciation and amortization										(37)
Finance income related to subsidiaries of TransAlta										19
Interest income										1
Interest expense										(13)
Foreign exchange gain										1
Earnings before income tax										49

(1) Adjusted EBITDA excludes the impact of unrealized mark-to-market gains or losses. Amounts related to economic interests include finance lease income adjusted for change in finance lease receivable.

(2) Amounts related to economic interests include interest earned on the prepayment of certain transmission costs.

(3) Amounts related to economic interests include the effect of contractually fixed management costs.

(4) Adjusted EBITDA is a non-IFRS measure and has no standardized meaning under IFRS. Refer to the Additional IFRS Measures and Non-IFRS Measures sections for further details.

Reconciliation of Reported Cash Flow from Operating Activities to FCF and CAFD

Three months ended March 31,	2023	2022
Cash flow from operating activities	67	103
Change in non-cash operating working capital balances	2	(17)
Cash flow from operations before changes in working capital	69	86
Adjustments:		
Sustaining capital expenditures – owned assets	(3)	(4)
Finance income – economic interests ⁽¹⁾	(23)	(19)
FCF – economic interests ⁽¹⁾	50	45
FCF⁽²⁾	93	108
Deduct:		
Tax equity distributions	(11)	(10)
Principal repayments of amortizing debt ⁽³⁾	(11)	(8)
CAFD⁽²⁾	71	90
Weighted average number of common shares outstanding in the period (millions)	267	267
FCF per share⁽²⁾	0.35	0.40
CAFD per share⁽²⁾	0.27	0.34

(1) Refer to the Reconciliation of FCF to Finance Income Related to Subsidiaries of TransAlta below in this MD&A.

(2) These items are non-IFRS measures and have no standardized meaning under IFRS. Refer to the Additional IFRS Measures and Non-IFRS Measures sections for further details.

(3) Includes owned assets and economic interests.

Reconciliation of FCF to Finance Income Related to Subsidiaries of TransAlta

The following table is a reconciliation of the finance income recognized on those assets we hold an economic interest in to the FCF from those assets.

Three months ended March 31,	2023	2022
Finance income related to subsidiaries of TransAlta	23	19
Tax equity distributions	11	10
Principal repayments of amortizing debt	5	5
Return of capital	15	18
Effects of changes in working capital and other timing	(4)	(7)
FCF – economic interests⁽¹⁾	50	45

(1) This item is a non-IFRS measure and has no standardized meaning under IFRS. Refer to the Additional IFRS Measures and Non-IFRS Measures sections for further details.

Reconciliation of Adjusted EBITDA to FCF and CAFD

Three months ended March 31, 2023	Owned Assets				Economic Interests			Total
	Canadian Wind	Canadian Hydro	Canadian Gas	Corporate	US Wind and Solar	US Gas	Australian Gas	
Adjusted EBITDA⁽¹⁾	50	(1)	22	(6)	27	1	35	128
Provisions and contract liabilities	(1)	—	—	—	—	—	—	(1)
Interest expense	—	—	—	(9)	(1)	—	(7)	(17)
Current income tax expense	(8)	(2)	—	—	—	—	(6)	(16)
Sustaining capital expenditures	(2)	—	(1)	—	—	—	(2)	(5)
Interest income	—	—	—	1	—	—	3	4
FCF⁽²⁾	39	(3)	21	(14)	26	1	23	93
Deduct:								
Tax equity distributions	—	—	—	—	(11)	—	—	(11)
Principal repayments of amortizing debt	(6)	—	—	—	—	—	(5)	(11)
CAFD⁽²⁾	33	(3)	21	(14)	15	1	18	71

(1) Adjusted EBITDA is defined in the Additional IFRS Measures and Non-IFRS Measures sections and reconciled to earnings before income taxes above.

(2) FCF and CAFD are defined in the Additional IFRS Measures and Non-IFRS Measures sections and reconciled to cash flow from operating activities above.

Three months ended March 31, 2022	Owned Assets				Economic Interests			Total
	Canadian Wind	Canadian Hydro	Canadian Gas	Corporate	US Wind and Solar	US Gas	Australian Gas	
Adjusted EBITDA⁽¹⁾	63	1	20	(6)	25	2	34	139
Provisions and contract liabilities	(1)	—	—	—	—	—	—	(1)
Interest expense	—	—	—	(11)	—	—	(6)	(17)
Current income tax expense	—	—	—	—	(1)	—	(5)	(6)
Sustaining capital expenditures	(3)	—	(1)	—	(1)	—	(3)	(8)
Interest income	—	—	—	1	—	—	—	1
FCF⁽²⁾	59	1	19	(16)	23	2	20	108
Deduct:								
Tax equity distributions	—	—	—	—	(10)	—	—	(10)
Principal repayments of amortizing debt	(3)	—	—	—	—	—	(5)	(8)
CAFD⁽²⁾	56	1	19	(16)	13	2	15	90

(1) Adjusted EBITDA is defined in the Additional IFRS Measures and Non-IFRS Measures sections and reconciled to earnings before income taxes above.

(2) FCF and CAFD are defined in the Additional IFRS Measures and Non-IFRS Measures sections and reconciled to cash flow from operating activities above.

Liquidity and Capital Resources

Liquidity risk arises from our ability to meet general funding needs to manage the assets, liabilities and capital structure of the Company and to engage in hedging activities. Liquidity risk is managed by maintaining sufficient liquid financial resources to fund obligations as they come due in the most cost-effective manner. See the Risk Management – Risk Factors – Liquidity Risk section of our 2022 Annual MD&A.

We seek to maintain adequate available liquidity to enable us to fund growth initiatives, operational expenses, capital expenditures, distributions to the non-controlling interest, interest and principal payments on debt and dividends. Principal sources of liquidity include cash generated from operations, capital markets and funding from our existing credit facility. The Company also requires future growth to support liquidity and to maintain the amount of cash available for distribution.

Financial Position

The following table highlights significant changes in the Condensed Consolidated Statements of Financial Position from Dec. 31, 2022 to March 31, 2023:

As at	March 31, 2023	Dec. 31, 2022	Increase/ (decrease)	Primary factors explaining change
Cash and cash equivalents	98	89	9	Increased due to the timing of receipts and payments.
Property, plant and equipment, net	1,778	1,766	12	Increased due to Kent Hills rehabilitation expenditures, asset impairment reversals in Canadian Wind and revised decommissioning provisions due to changes in discount rates, partially offset by depreciation.
Accounts payable and accrued liabilities	115	128	(13)	Decreased due to the timing of payments and accruals.
Income taxes payable	9	1	8	Increased due to the Company becoming taxable in Canada
Long-term debt (including current portion)	800	790	10	Increased due to drawings on the credit facility, partially offset by scheduled principal repayments on the Kent Hills bond and the Windrise green bond.
Decommissioning and other provisions (including current portion)	130	117	13	Increased due to decreases in discount rates and accretion.
Equity attributable to shareholders	1,748	1,756	(8)	Decreased due to dividends, partially offset by net earnings and other comprehensive income from favourable fair value changes.

Debt and Lease Obligations

As at March 31, 2023	Total facility limit	Utilized		
		Outstanding letters of credit ⁽¹⁾	Drawings	Available capacity
Committed credit facility	700	101	48	551

(1) Letters of credit that are issued from the Company's \$150 million non-committed demand facilities are backstopped and reduce the available capacity on the syndicated credit facility.

As at March 31, 2023, there was \$48 million (Dec. 31, 2022 - \$33 million) in drawings, and \$3 million (Dec. 31, 2022 - nil) of letters of credit issued, under the committed credit facility. The committed credit facility expires on June 30, 2026.

The Company has an uncommitted \$150 million demand letter of credit facility, under which \$98 million of letters of credit have been issued as at March 31, 2023 (Dec. 31, 2022 - \$98 million).

Debt and lease obligations, totaled \$800 million as at March 31, 2023, compared to \$790 million as at Dec. 31, 2022. The increase in debt is due to additional drawings made on the credit facility, offset by scheduled principal repayments on the Kent Hills bond and the Windrise green bond.

We are subject to customary positive and negative covenants related to debt and are not in violation of any of these covenants.

The Melancthon Wolfe Wind, Pingston, New Richmond Wind, Kent Hills Wind and Windrise green bonds are subject to customary financing conditions and covenants that may restrict the Company's ability to access funds generated by the facilities' operations. Upon meeting certain distribution tests, typically performed once per quarter, the funds are able to be distributed by the subsidiary entities to their respective parent entity. These conditions include meeting a debt service coverage ratio prior to distribution, which was met by these entities in the first quarter of 2023, with the exception of Kent Hills Wind LP. Funds held in these entities will remain there until the next debt service coverage ratio can be calculated in the second quarter of 2023. As at March 31, 2023, \$28 million of cash was subject to these financial restrictions (Dec. 31, 2022 – \$24 million).

In accordance with the supplemental indenture, Kent Hills Wind LP cannot make any distributions to its partners until the foundation replacement work has been completed. A foundation replacement reserve account was set up in accordance with the Kent Hills Wind bond supplemental indenture, with funds in the account being used to pay foundation replacement costs. The account is funded quarterly with the last planned funding requirement received on March 31, 2023. The balance in the account is \$64 million as at March 31, 2023 (\$65 million – Dec. 31, 2022). Refer to the 2023 Outlook section of this MD&A for information regarding the Kent Hills rehabilitation project.

The Company had no restricted cash as at March 31, 2023, and Dec. 31, 2022.

Share Capital

On March 31, 2023, we had approximately 266.9 million (Dec. 31, 2022 – 266.9 million) common shares issued and outstanding. As at May 4, 2023, there was no change in common shares issued and outstanding.

Commitments

Please refer to our Liquidity and Capital Resources section of the 2022 Annual Report for a complete listing of commitments we have incurred, either directly or through interests in joint operations and indirectly through economic interests. The Company has not entered into any additional material contractual commitments, as at March 31, 2023.

Contingencies

In the normal course of business, the Company may become party to litigation, proceedings or regulatory investigations. As at March 31, 2023, the Company had no material contingencies, except as discussed in the 2023 Outlook section of this MD&A.

Cash Flows

The following table highlights the changes in the Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2023, compared to the three months ended March 31, 2022:

Three months ended March 31	2023	2022	Increase (Decrease)	Primary factors explaining change
Cash and cash equivalents, beginning of period	89	244	(155)	
Provided by (used in):				
Operating activities	67	103	(36)	Cash flow from operating activities decreased due to lower revenues from lower production at Canadian Wind, higher current income tax expense and unfavourable changes in non-cash operating working capital, partially offset by higher finance income related to subsidiaries of TransAlta
Investing activities	(4)	3	(7)	Cash flow from investing activities decreased due to higher spend on the Kent Hills rehabilitation project and lower return of capital on investments in subsidiaries of TransAlta, partially offset by higher receipts on the loan receivable and favourable changes in non-cash investing working capital
Financing activities	(54)	(72)	18	Cash flow from financing activities increased due to higher borrowings under the credit facility and no repayments of the TEA demand loan in the quarter, partially offset by higher scheduled long-term debt repayments
Cash and cash equivalents, end of period	98	278	(180)	

Financial Instruments

Refer to Note 13 of our most recent annual audited consolidated financial statements and Note 7 of our unaudited interim condensed consolidated financial statements for the three months ended March 31, 2023, for details on financial instruments.

Our risk management profile and practices have not changed materially since Dec. 31, 2022.

At March 31, 2023, Level II financial instruments consisted of net risk management liabilities with a carrying value of \$1 million (Dec. 31, 2022 - \$2 million).

At March 31, 2023, Level III financial instruments were comprised of financial assets, the Economic Interest Investments, with a carrying value of \$1,032 million (Dec. 31, 2022 - \$1,037 million).

At March 31, 2023, the Economic Interest Investments decreased by \$5 million from Dec. 31, 2022. Of the decrease in fair value, \$12 million was related to the Preferred Shares Tracking Australia Cash Flows, and reflects the quarterly amortization of remaining cash flows and unfavourable foreign exchange impacts, partially offset by a decrease in the discount rate and changes to cash flow assumptions. An increase in fair value of \$22 million was related to the Preferred Shares Tracking Earnings and Distributions of US Wind and Solar Facilities, primarily due to a decrease in discount rates and favourable changes in cash flow assumptions, partially offset by the quarterly amortization of remaining cash flows. The Preferred Shares Tracking Earnings and Distributions of US Wind and Solar Facilities investment decreased due to the \$14 million return of capital. The fair value of the Preferred Shares Tracking Earnings and Distributions of US Gas decreased by \$1 million.

Refer to Notes 5 and 7 in the unaudited interim condensed consolidated financial statements for the three months ended March 31, 2023 for additional information on these investments and fair value measurements.

Other Consolidated Results

Other Comprehensive Income (Loss)

Other comprehensive income (loss) includes the changes in fair value of the Economic Interest Investments. These gains and losses are excluded from the Condensed Consolidated Statements of Earnings. To calculate the fair values of these investments, we use discounted cash flow models based on the underlying future cash flows of the related operations and make estimates and assumptions that are susceptible to change from period to period and often do impact the estimate of the fair values. Period-to-period fluctuations in fair value are generally attributed to changes in forward-looking cash flow assumptions, discount rates and foreign exchange rates.

During the three months ended March 31, 2023, we recognized a \$10 million increase in fair value in OCI (March 31, 2022 – \$111 million decrease). The increase during 2023 is attributable to the fair value changes in the Economic Interest Investments. Refer to the Financial Instruments section of this MD&A for further details.

See Note 5 of the unaudited interim condensed consolidated financial statements for the three months ended March 31, 2023 for additional information related to the investments for which changes in fair value are recognized in OCI.

Sustaining Capital Expenditures

Our sustaining capital is comprised of the ongoing capital costs associated with maintaining the existing generating capacity of our facilities. Sustaining capital expenditures for assets we directly own, as well as the facilities in which we own economic interests, are noted below:

Three months ended March 31,							
	Canadian Wind	Canadian Hydro	US Wind and Solar ⁽¹⁾	Canadian Gas	US Gas ⁽¹⁾	Australian Gas ⁽¹⁾	Total
2023 Total sustaining capital expenditures	2	—	—	1	—	2	5
2022 Total sustaining capital expenditures	3	—	1	1	—	3	8

(1) The facilities of TransAlta in which we own economic interests also incur sustaining capital expenditures. While we are not required to fund these expenditures, they reduce the finance income received from these investments.

Sustaining capital expenditures decreased compared to 2022 mainly due to lower wind turbine component failures and refurbishments in Canadian Wind in 2023 and lower planned major maintenance at our Australian Gas facilities in 2023.

The Kent Hills foundation rehabilitation capital expenditures have not been included as part of the sustaining capital expenditures due to the extraordinary and rare nature of this expenditure. During the three months ended March 31, 2023 and project to date, expenditures on the Kent Hills foundation rehabilitation were \$21 million, and \$98 million, respectively. Refer to the 2023 Outlook section of this MD&A for information regarding the Kent Hills rehabilitation project.

Related-Party Transactions and Balances

Related-Party Transactions

Amounts recognized from transactions with TransAlta or subsidiaries of TransAlta for the referenced periods, are as follows:

Three months ended March 31,	2023	2022
Revenue from TransAlta PPAs	12	13
Revenue from environmental attributes ⁽¹⁾	—	5
Finance income from investments in subsidiaries of TransAlta	23	19
G&A reimbursement fee	5	5
Natural gas purchases	2	8
Financial power swap sales – gain	—	(1)
Interest expense on TEA demand loan	—	2
Asset optimization fee ⁽²⁾	1	1

(1) The value of environmental attributes was determined by reference to market information for similar instruments, including historical transactions with third parties.

(2) A subsidiary of TransAlta provides asset management and optimization services for the Company's Sarnia cogeneration facility. The Sarnia cogeneration facility is charged a fixed fee of approximately \$0.125 million per quarter, plus a variable fee of 1.6 per cent of its gross margin.

Related-Party Balances

Related-party balances, with TransAlta or subsidiaries of TransAlta, include the following:

As at	March 31, 2023	Dec. 31, 2022
Trade and other receivables	34	38
Finance lease receivable ⁽¹⁾	7	7
Long-term prepaid – management fee	2	2
Investments in subsidiaries of TransAlta	1,032	1,037
Accounts payable and accrued liabilities	20	20
Dividends payable	38	38
Guarantees provided by TransAlta on behalf of the Company (I) ⁽²⁾	416	416
Indemnification guarantee provided by the Company to TransAlta (II) ⁽²⁾	493	497

(1) Finance lease receivable relates to the 10 MW WindCharger wind battery storage facility.

(2) Not recognized as a financial liability on the Condensed Consolidated Statements of Financial Position.

The TEA demand loan was repaid on Oct. 26, 2022 and the Company entered into an agreement requiring TEA to hold the funds in a segregated bank account to be used as directed by the Company for purposes of funding the Company's required contributions for the Australian growth projects the Company has opted to participate in. During the three months ended March 31, 2023, the Company funded \$32 million of growth expenditures. As at March 31, 2023, the balance available for future growth project funding is \$115 million. Refer to the 2023 Outlook section of this MD&A for information regarding the growth projects.

I. Guarantees

If the Company does not perform under the related agreements, the counterparty may present a claim for payment from TransAlta.

II. Indemnification Guarantee

As part of the acquisition of the economic interest in the Australian Assets, we entered into a Guarantee and Indemnification Agreement in favour of TransAlta related to certain guarantees it has provided to third parties in respect of certain obligations of TEA (the "TEA Guarantees"). We have agreed to indemnify TransAlta from and against all claims, actions, proceedings, liabilities, losses, costs, expenses or damages against or incurred by it arising out of or in connection with the TEA Guarantees and to reimburse TransAlta in full for the amount of any payment made by it under and in accordance with the TEA Guarantees, relating to actions, omissions, events and circumstances that occur on or after May 7, 2015. As consideration for this indemnity that we have provided, TransAlta is required to pay us the Canadian-dollar equivalent of the guarantor fees it receives from TEA in respect of any of the TEA Guarantees.

Material Accounting Policies and Critical Accounting Estimates

The preparation of unaudited interim condensed consolidated financial statements requires management to make judgments, estimates and assumptions that could affect the reported amounts of assets, liabilities, revenues, expenses and disclosures of contingent assets and liabilities during the period. These estimates are subject to uncertainty. The following were judgments and material changes in estimates in the quarter:

I. Judgment - Dividends as Income or Return of Capital

During the three months ended March 31, 2023 and 2022, the Company determined that a portion of the dividends earned on the Preferred Shares Tracking Earnings and Distributions of US Wind and Solar Facilities and the Preferred Shares Tracking Earnings and Distributions of US Gas constituted a return of capital. Distributions that were determined to be a return of capital for the three months ended March 31, 2023 were \$15 million (March 31, 2022 - \$18 million).

II. Provisions for Decommissioning Activities

The Company recognizes provisions for decommissioning obligations. Initial decommissioning provisions, and subsequent changes thereto, are determined using the Company's best estimate of the required cash expenditures, adjusted to reflect the risks and uncertainties inherent in the timing and amount of settlement. During the three months ended March 31, 2023, the provision for the decommissioning obligations increased by \$9 million as a result of lower discount rates, largely driven by decreases in market benchmark rates.

III. Reversals of Impairment of PP&E

An assessment is made at each reporting date as to whether there is any indication that an impairment loss may exist or that a previously recognized impairment loss may no longer exist or may have decreased. An impairment exists when the carrying amount of an asset exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. An impairment loss recognized in a prior period is reversed if there has been a change in the estimates used to determine the asset's recoverable amount.

During the three months ended March 31, 2023, the Company recognized asset impairment reversals of \$10 million in Canadian Wind, due to updated Ontario pricing forecasts that favourably impacted estimated future cash flows.

Accounting Changes

Current Accounting Changes

Amendments to IAS 12 Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction

On May 7, 2021, the IASB issued amendments to IAS 12 Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction. The amendments clarify that the initial recognition exemption under IAS 12 does not apply to transactions such as leases and decommissioning obligations. These transactions give rise to equal and offsetting temporary differences in which deferred tax should be recognized.

The amendments are effective for annual periods beginning on or after Jan. 1, 2023, and were adopted by the Company on that date. The Company's accounting aligns with the amendment and no financial impact arose upon adoption.

Future Accounting Changes

Please refer to Note 3 of the 2022 annual audited consolidated financial statements for future accounting policies impacting the Company. In the three months ended March 31, 2023, no additional future accounting policy changes impacting the Company were identified.

Strategy and Capability to Deliver Results

Strategy

Since its initial public offering in 2013, TransAlta Renewables has created shareholder value by focusing on owning and acquiring renewable and gas projects supported by long-term power purchase agreements that provide contracted cash flows. The Company remains committed to this objective and is focused on paying out a significant amount of its CAFD in the form of dividends.

The Company faces a number of changes to its competitive environment, including elevated interest rates. The Company is also subject to funding limitations due to the allocation of the majority of its CAFD to dividends, which limits the amount of capital that can be allocated to growth opportunities. The Company is focused on realizing incremental growth through the expansion of its existing assets, including through the execution of its right of first offer with TransAlta in respect of the Australian Assets and, potentially, through dropdowns from TransAlta that could partially offset the Company's tax horizon. Absent any growth, the Company's cash available for distribution is expected to decline after the next three quarters due to the increase in cash taxes payable and the step down in revenue under the Southern Cross PPA.

Growth

Pursuant to the Governance and Co-operation Agreement between the Company and TransAlta, TransAlta serves as the primary vehicle through which we will acquire and/or develop renewable power projects. Refer to the Related-Party Transactions and Balances section of our 2022 Annual MD&A for more details.

The Company's growth opportunities are focused on organic expansions of its existing assets through the execution of its rights of first offer with TransAlta and, potentially, through drop-downs from TransAlta that could partially offset the Company's tax horizon.

Projects under Construction

The Company has exercised its option to acquire an economic interest in the following projects, which are currently under construction by TransAlta.

Project	Type	Region	MW	Total project (millions)		Spent to date	Target completion date ⁽¹⁾	PPA Term	Average annual EBITDA ⁽²⁾	Status
				Estimated spend						
Australia										
Northern Goldfields	Hybrid Solar	WA	48	AU\$ 69	— AU\$73	AU\$63	H1 2023	16	AU\$9-AU\$10	<ul style="list-style-type: none"> All major equipment deliveries are complete Solar panel installation is complete On track to be completed in the first half of 2023
Mount Keith 132kV Expansion	Transmission	WA	n/a	AU\$ 50	— AU\$53	AU\$25	H2 2023	15	AU\$6-AU\$7	<ul style="list-style-type: none"> Engineering, procurement, and construction executed Construction activities have commenced On track to be completed on schedule
Total⁽³⁾			48	\$ 111	— \$ 117	\$ 81			\$14 - \$16	

(1) H1 or H2 is defined as the first or second half of the year.

(2) This item is not defined and has no standardized meaning under IFRS and is forward-looking. Refer to the Additional IFRS Measures and Non-IFRS Measures section of this MD&A for further discussion.

(3) Total expected spending and average annual EBITDA was converted using a Canadian dollar forward exchange rate for 2023. Total spend to date was converted based on Canadian dollar actual exchange rates when spend incurred.

Advanced-Stage Development

The following table shows the potential future growth projects currently under advanced-stage development at TransAlta. The Company has not yet exercised its option to acquire an economic interest in these expansion capability projects, for which it has a right of first refusal.

Project	Type	Region	Target completion date	MW	Estimated spend	Average annual EBITDA ⁽¹⁾
SCE Capacity Expansion	Gas	Western Australia	2025	94	AU\$180-AU\$200	AU\$24-AU\$28
Australia Transmission Expansion	Transmission	Western Australia	2024	n/a	AU\$70-AU\$75	AU\$7-AU\$8
Total MW and \$⁽²⁾				94	\$228 - \$250	\$28 - \$33

(1) This item is not defined, has no standardized meaning under IFRS and is forward-looking. Refer to the Additional IFRS Measures and Non-IFRS Measures section of this MD&A for further discussion.

(2) Total expected spending and average annual EBITDA was adjusted using a Canadian dollar forward exchange rate for 2023.

Early-Stage Development

The following table shows potential future growth projects currently under early-stage development at TransAlta. The Company has not yet exercised its option to acquire a direct ownership of, or an economic interest in, these expansion capability projects.

These TransAlta projects are in the early stages and may or may not move ahead. Generally, these projects will have:

- Collected meteorological data;
- Begun securing land control;
- Started environmental studies;
- Confirmed appropriate access to transmission; and
- Started preliminary permitting and other regulatory approval processes.

Project	Type	Region	Potential completion date	MW
Canada				
Willow Creek 1	Wind	Alberta	2027	70
Willow Creek 2	Wind	Alberta	2027	70
Canadian Battery opportunity	Battery	New Brunswick	2025	10
Total				150
United States				
Trapper Valley	Wind	Wyoming	2028	225
Big Timber	Wind	Pennsylvania	2027	50
Other Wind prospects	Wind	Various	2027+	40
Total				315
Australia				
Australian prospects	Gas, Solar, Wind	Western Australia	2025+	170
South Hedland Solar	Solar	Western Australia	2026	50
Total				220
Canada, United States and Australia				Total
				685

2023 Outlook

There have been no changes in our expectations on key financial targets for 2023. The following table outlines our expectations on key financial targets for 2023:

Measure	2023 Target	2022 Actuals
Adjusted EBITDA ⁽¹⁾	\$495 million to \$535 million	\$487 million
Free cash flow ⁽¹⁾	\$340 million to \$380 million	\$347 million
Cash available for distribution ⁽¹⁾	\$230 million to \$270 million	\$243 million

(1) These items are not defined and have no standardized meaning under IFRS. Refer to the Reconciliation of Non-IFRS Measures section of this MD&A for further discussion of these items, including, where applicable, reconciliations to measures calculated in accordance with IFRS. Refer also to the Additional IFRS Measures and Non-IFRS Measures sections of this MD&A.

The 2023 targets and forecasts are based on numerous assumptions including power and natural gas price forecasts. However, they do not include the effects of potential future acquisitions or development activities, or potential market and operational impacts relating to unplanned outages including outages at facilities of other market participants and the related impacts on market power prices. Our targets and forecast should be read in conjunction with the Forward-looking Information section of this MD&A, as well as the 2023 Outlook Section of the Company's 2022 Annual Report for information on key assumptions.

Operations

	Assumptions
Range of renewable energy production from wind, solar and hydro assets, including those owned through economic interests	4,900 GWh to 5,400 GWh
Weighted average remaining contractual life of PPA	11 years
Sustaining capital	\$50 million to \$60 million

Operating Costs

We have established long-term service agreements with suppliers to stabilize operations and maintenance costs. 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 purchase natural gas coincident with production and may also enter into fixed price hedges, thereby minimizing our exposure to changes in prices.

Kent Hills Rehabilitation

The Kent Hills 1 and 2 wind facilities are not currently in operation following the tower failure event that occurred in September 2021. This event has taken approximately 150 MW of gross production offline temporarily as the Company replaces all 50 turbine foundations at the Kent Hills 1 and 2 wind facilities. The extended outage is expected to result in foregone revenue of approximately \$3 million per month on an annualized basis (to the extent all 50 turbines at the Kent Hills 1 and 2 wind facilities are offline), based on average historical wind production, with revenue expected to be earned as the wind turbines are returned to service. Each turbine at Kent Hills 1 and 2 wind facilities will return to service as soon as its foundation is replaced and the turbine is reassembled and tested.

Rehabilitation of the Kent Hills 1 and 2 wind facilities is well underway. All of the towers have been fully disassembled with foundation demolition and removal nearing completion. Construction of new foundations is progressing well, with approximately two-thirds of foundations poured. Tower reassembly is also progressing with 13 turbines reassembled to date and associated commissioning activities commenced. We continue to target returning all turbines to service in the second half of 2023. The current estimate of the capital expenditures is approximately \$120 million, inclusive of insurance proceeds.

During the first quarter of 2023, the Company filed and served a statement of claim in the New Brunswick Court of King's Bench against certain defendants who the Company believes are responsible for, or contributed to, the failure of the turbine foundations at the Kent Hills 1 and 2 wind facilities. The claim seeks damages for lost profits, replacement costs, and other related costs to perform the remediation of Kent Hills 1 and 2, net of any insurance recoveries. The ability to recover any amounts is uncertain at this time.

Risk Management

Our business activities expose us to a variety of risks and uncertainties including, but not limited to, risks and uncertainties pertaining to: significant competition for growth, our relationship with TransAlta, increased regulatory changes, rapidly changing market dynamics, access to capital markets, ability to recontract assets, liquidity, declining cash flows and dividends. Refer to the Risk Management section and the Business Environment section of our 2022 Annual Report and the Risk Factors section of our Annual Information Form, which are both available electronically at www.sedar.com. Our risk management profile and practices have not changed materially from Dec. 31, 2022. The following factors may contribute to those risks and uncertainties:

Regulatory and Environmental Legislation

Environmental Legislation

We are subject to federal, provincial, state and local environmental laws, regulations and guidelines concerning the generation and transmission of electrical and thermal energy. We are committed to complying with legislative and regulatory requirements to minimize the environmental impact of our operations. We work with governments and the public to develop appropriate frameworks to protect the environment and to promote sustainable development.

Canadian Federal Government

Federal Climate Plan

In April 2021, the Government of Canada announced a revised national greenhouse gas ("GHG") emissions reduction target of 40 per cent to 45 per cent below 2005 levels by 2030.

In 2022, the Government of Canada's Department of Environment and Climate Change Canada ("ECCC") released the proposed framework for the Clean Electricity Regulation to achieve a net-zero electricity sector in Canada by 2035. ECCC continues to develop the proposed regulation with the publication of a draft regulation now expected late in the second quarter of 2023.

In the 2023 federal budget, the government announced additional investment tax credit ("ITC") categories and details aimed at supporting the net zero transition. The ITCs are expected to support investments in net zero technologies in the electricity sector.

Federal Carbon Pricing on Greenhouse Gas Emissions

On June 21, 2018, the Canadian federal Greenhouse Gas Pollution Pricing Act ("GGPPA") came into force. Under the GGPPA, the Canadian federal government implemented a national price on GHG emissions.

Amendments to Schedule 4 of the GGPPA were completed in October 2022. These amendments aligned facility emission charges with the government's updated carbon price trajectory of \$65 per tonne of CO₂ in 2023 with increases of \$15 per year to \$170 per tonne by 2030.

On April 12, 2023, the federal government published Regulations Amending Schedule 2 to the GGPPA, Amending the Fuel Charge Regulations and Repealing the Part 1 of the Greenhouse Gas Pollution Pricing Act Regulations (Alberta) under sections 166 and 168 of the GGPPA. The amending regulations add a new table to Schedule 2 to the GGPPA that specifies the fuel charge rates out to 2030. These rates reflect the annual increase in the price on carbon pollution of \$15 per tonne from 2023 to 2030 (from \$65 per tonne in 2023–2024 to \$170 per tonne in 2030–2031). This amendment is not expected to directly impact the Company in Ontario as it has received exemption certificates from the fuel charge due to coverage under the provincial Emission Reduction Standards program. Indirect impacts to the Company could arise through lower emissions crediting for new Alberta renewables projects and higher demands for emission credits from the Company's existing renewable facilities.

Alberta

On April 19, 2023, the Government of Alberta released the Emissions Reduction and Energy Development Plan, which commits to an aspiration to achieve a carbon neutral economy by 2050. The plan frames Alberta's approach to enhance the province's position as a global leader in emissions reductions, clean technology and innovation, while maintaining Alberta's competitiveness from a sustainable resource development perspective. The plan is guided by eight strategic principles and outlines the actions, opportunities and new commitments that will reduce emissions and maintain energy security.

United States

On March 21, 2022, the U.S. Securities and Exchange Commission ("SEC") released proposed rules to enhance and standardize climate-related disclosure for investors. The proposed rules cover climate risk governance and risk management, disclosure of material impacts over all time horizons, impacts on business models, and the impact of climate-related events. The SEC invited comments on the proposed rules before finalization and we anticipate the final rules will face legal challenges. Both the Canadian Securities Administrators and the SEC have signalled that they are likely to release their climate disclosure rules in 2023. The Company is prepared to assess our disclosures to ensure compliance once the new rules are in force.

On Aug. 16, 2022, the Inflation Reduction Act ("IRA") of 2022 was signed into law by President Biden. This Act will invest approximately US\$369 billion in Energy Security and Climate Change programs over the next 10 years. The administration estimates this funding will help reduce national carbon emissions by approximately 40 per cent by 2030, lower energy costs and increase clean energy production. The Treasury Department released a roadmap on March 22, 2023, to provide additional certainty regarding the timing for remaining guidance on the various components of the renewables and hydrogen tax incentives in the IRA. Over the coming months, the department is expected to release guidance relating to domestic content, direct pay and transferability of tax credits and prevailing wages and apprenticeship standards. Additional guidance on the IRA Energy Community Tax Credit Bonus (for ITC and PTC) for projects, facilities and technologies located in energy communities was released on April 4, 2023, with a searchable mapping tool that helps identify areas that may be eligible for the energy communities bonus. It includes areas that have significant employment or local tax revenues from fossil fuels and higher than average unemployment. The guidance process has lagged behind expectations and is expected to continue through 2023.

Australia

Since the Labour Party formed the government on May 21, 2022, Australia has increased its Nationally Determined Contribution commitment to increase the country's 2030 emissions reduction goal to 43 per cent below 2005 levels and confirmed its intent to boost renewable electricity production to 82 per cent of the electricity supply by 2030.

Prime Minister Anthony Albanese has worked quickly to implement one of his government's key energy policies, the Powering Australia Plan, which includes the Rewiring the Nation initiative that will provide AUD\$20 billion to support the Australian Energy Market Operator's integrated system plan to modernize the transmission system and enable additional renewable penetration; Powering the Regions Fund (\$1.9 billion) supporting industry to decarbonize, developing new clean energy industries, and supporting workforce development; and a \$15 billion National Reconstruction Fund to diversify and transform Australia's economy and industry, including investments in green metals, clean energy component manufacturing, and deployment of low-emissions technologies.

Disclosure Controls and Procedures

Management is responsible for establishing and maintaining adequate internal control over financial reporting ("ICFR") and disclosure controls and procedures ("DC&P"). Management has reviewed the changes as a result of changes implemented in response to COVID-19 and is reasonably assured that adjustments to process have not materially affected, or are reasonably likely to materially affect, our ICFR or DC&P.

ICFR is a framework designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of Consolidated Financial Statements for external purposes in accordance with IFRS. Management has used the Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) in order to assess the effectiveness of the Company's ICFR.

DC&P refer to controls and other procedures designed to ensure that information required to be disclosed in the reports we file or submit under securities legislation is recorded, processed, summarized and reported within the time frame specified in securities legislation. DC&P 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 securities legislation 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.

Together, the ICFR and DC&P frameworks provide internal control over financial reporting and disclosure. In designing and evaluating our ICFR and DC&P, 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 as such may not prevent or detect all misstatements, and management is required to apply its judgment in evaluating and implementing possible controls and procedures. Further, the effectiveness of ICFR is subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with policies or procedures may change.

Glossary of Key Terms

Australian Assets

TransAlta's 450 MW Australian gas-fired generation assets that are fully operational and contracted under long-term contracts, including the 150 MW South Hedland Power Station, as well as the 270-kilometre Fortescue River Gas pipeline, the Parkeston facility, the four natural-gas and diesel-fired generation facilities that comprise Southern Cross Energy, the Fortescue River Gas Pipeline and South Hedland.

Availability

A measure of 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.

Credit Facility

A \$700 million external syndicated credit facility that is fully committed for four years, expiring in 2026. The facility is subject to a number of customary covenants and restrictions in order to maintain access to the funding commitments.

Disclosure Controls and Procedures (DC&P)

Refers to controls and other procedures designed to ensure that information required to be disclosed in the reports filed by the Company or submitted under securities legislation is recorded, processed, summarized and reported within the time frame specified in applicable securities legislation. DC&P include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in its reports that it files or submits under applicable securities legislation is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Environmental Attributes

Renewable energy credits and carbon offset credits, or other tradable or sellable instruments that represent the property rights to the environmental, social and other non-power qualities of renewable electricity generation that can be sold separately from the underlying physical electricity. Carbon offsets can be voluntarily generated from any project that reduces greenhouse gas emissions and not limited to renewable energy.

G&A Reimbursement Fee

The fee payable to TransAlta under the Management, Administrative and Operational Services Agreement to compensate TransAlta for the provision of all the general administrative services as may be required or advisable for the management of the business and affairs of the Company.

Gigawatt (GW)

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 gases (GHG)

Gases having the potential to retain heat in the atmosphere, including water vapour, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons and perfluorocarbons.

IFRS

International Financial Reporting Standards.

ITC

The investment tax credit ("ITC") is a federal income tax credit for investments in certain types of qualifying clean electricity projects.

Management, Administrative and Operational Services Agreement

The agreement between TransAlta Corporation and TransAlta Renewables dated Aug. 9, 2013, as amended, that outlines the terms under which TransAlta manages and operates the facilities recognized as our economic interest. Under this agreement, TransAlta has been delegated broad discretion to administer and manage the business and operations of the Company.

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.

Merchant

A term used to describe assets that are not contracted and are exposed to market pricing.

Net Maximum Capacity

The maximum capacity or effective rating, modified for ambient limitations, that a generating unit or power plant can sustain over a specific period, less the capacity used to supply the demand of station service or auxiliary needs.

Offset Credit

The carbon emission credit in units of tonnes of CO₂e able to be used as an alternative carbon compliance mechanism to avoid carbon obligation costs from the large emitters GHG regulation. Credits are generated by completing an emission reduction project pursuant to a regulator-approved quantification methodology to identify the creditable GHG reductions.

Power Purchase Agreement (PPA)

A power purchase and sale agreement, or a long-term contract between a power generator and a third-party acquirer of electricity.

Preferred Shares Tracking Australia Cash Flows

Preferred shares of an Australian subsidiary of TransAlta, which provide cumulative variable dividends broadly equal to the underlying net distributable profits of TEA adjusted for management fees, currency hedges, cash income taxes paid, sustaining capital expenditures and other adjustments related to timing.

Preferred Shares Tracking US Wind and Solar Cash Flows

Preferred shares of subsidiaries of TransAlta, which provide cumulative variable dividends broadly equal to the underlying net distributable profits of each of the Wyoming, Lakeswind, Mass Solar, Big Level, Antrim, and 49% of Skookumchuk wind facilities and the Mass Solar and North Carolina Solar facilities (collectively, the "US Wind and Solar Assets").

Preferred Shares Tracking US Gas Cash Flows

Preferred shares of subsidiaries of TransAlta, which provide cumulative variable dividends broadly equal to the underlying net distributable profits of the 29 MW Ada gas facility.

Renewable Energy Credits (REC)

All right, title, interest and benefit in and to any credit, reduction right, offset, allocated pollution right, emission reduction allowance, renewable attribute or other proprietary or contractual right, whether or not tradable, resulting from the actual or assumed displacement or reduction of emissions, or other environmental characteristic, from the production of one megawatt hour (MWh) of electrical energy from a facility utilizing certified renewable energy technology.

Renewable Power

Power generated from renewable terrestrial mechanisms including wind, geothermal, solar and biomass with regeneration.

South Hedland or South Hedland Power Station

The 150 MW combined-cycle gas power station located in South Hedland, Western Australia.

TEA

TransAlta Energy (Australia) Pty Ltd., an Australian subsidiary of TransAlta.

TEA Demand Loan

The intercompany loan to the Company by TEA, issued in October 2020 as part of the South Hedland financing. The TEA loan is unsecured, due on demand.

TransAlta PPAs

PPAs between TransAlta and the Company providing for the purchase by TransAlta, for a fixed price, of all of the power produced by certain wind and hydro facilities. The initial price payable in 2013 by TransAlta for output was \$30.00/MWh for wind facilities and \$45.00/MWh for hydro facilities, and these amounts are adjusted annually for changes in the consumer price index.

Turbine

A machine for generating rotary mechanical power from the energy of a stream of fluid (such as water, steam or hot gas). Turbines convert the kinetic energy of fluids to mechanical energy through the principles of impulse and reaction or a mixture of the two.

Unplanned Outage

The shutdown of a generating unit due to an unanticipated breakdown.

US Wind and Solar Assets

TransAlta's wind and solar facilities that are fully operational and contracted under long-term contracts, including the 50 MW Lakeswind, 140 MW Wyoming, 90 MW Big Level, 29 MW Antrim wind facilities, the 21 MW Mass Solar project, the 21MW North Carolina Solar project, and 49% of the 137MW Skookumchuck wind facility .



TransAlta Renewables Inc.

110 - 12th Avenue SW
P.O. Box 1900, Station "M"
Calgary, Alberta
T2P 2M1

Phone

403.267.7110

Website

www.transaltarenewables.com

Transfer Agent

Computershare Trust Company of Canada
Suite 800, 324 - 8th Ave SW
Calgary, Alberta T2P 2Z2

Phone

North America:
1.800.564.6253 toll-free
Outside North America:
1.514.982.7555

Website

www.computershare.com

Additional Information

Requests can be directed to:

Investor Relations

Phone
1.800.387.3598 in Canada and United States
or 403.267.2520

E-mail

investor_relations@transalta.com

Media Inquiries

Toll-free 1.855.255.9184
or 403.267.2540

E-mail

TA_Media_Relations@transalta.com