TransAlta

Q4 and Annual 2021 Results

FEBRUARY 24, 2022



Forward-Looking Statements

This presentation includes "forward-looking information" within the meaning of applicable Canadian securities laws, and "forward-looking statements" within the meaning of applicable United States securities laws, including the United States Private Securities Litigation Reform Act of 1995 (collectively referred to herein as "forward-looking statements"). All forward-looking statements are based on the beliefs as well as assumptions of TransAlta Corporation (the "Corporation", "TransAlta", "we" or "our") based on information available at the time the assumption was 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", "can", "could", "would", "shall", "believe", "expect", "estimate", "intend", "plan", "forecast", "foresee", "potential", "enable", "continue" or other comparable terminology. These statements are not guarantees of our future performance, events or results and are subject to risks, uncertainties and other important factors that could cause our actual performance, events or results to be materially different from that set out in or implied by the forward-looking statements.

In particular, this presentation contains forward-looking statements including, but not limited to, statements relating to: our Clean Electricity Growth Plan and ability to achieve the target of 2 GW of incremental renewables capacity with an investment of \$3 billion by 2025; the Company's future growth pipeline, including the timing of commercial operations and the costs of the advanced and early-stage projects; the source of funding for the Clean Electricity Growth Plan; our transformation, growth, capital allocation and debt reduction strategies; growth opportunities from 2022 to 2030 and beyond; the White Rock East and White Rock West Wind Power Projects ("White Rock Wind Projects"), including the total construction costs, ability to secure tax equity financing, and the timing of commercial operation; the Garden Plain wind project, including construction capital; the Northern Goldfields Solar Project, including the total construction capital; the outage at Kent Hills 1 and 2 wind facilities and the extent of any remediation, the timing and cost of such remediation, the ability to secure waivers in respect of the Kent Hills bonds for any potential event of default; the expected impact and quantum of carbon compliance costs; the ability to realize future growth opportunities with BHP Billiton Nickel West; 2022 Alberta hedging price and volume; financial outlook for 202, including adjusted EBITDA, cash available for distribution and annual dividend; and our 2022 priorities, including as it pertains to our strategic initiatives and growth and commercial priorities. 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 presentation include, but are not limited to: the impact of COVID-19, including more restrictive directives of government and public health authorities; increased force majeure claims; reduced labour availability and ability to continue to staff our operations and facilities; disruptions to our supply chains, including our ability to secure necessary equipment and to obtain regulatory approvals on the expected timelines or at all in respect of our growth projects; restricted access to capital and increased borrowing costs; changes in short-term and/or long-term electricity supply and demand; fluctuations in market prices, including lower merchant pricing in Alberta. Ontario and Mid-Columbia; reductions in production; increased costs; a higher rate of losses on our accounts receivables due to credit defaults; impairments and/or write-downs of assets; increased cybersecurity threats; commodity risk management and energy trading risks, including the effectiveness of the Company's risk management tools associated with hedging and trading procedures to protect against significant losses; changes in demand for electricity and capacity and our ability to contract our electricity generation for prices that will provide expected returns and replace contracts as they expire; changes to the legislative, regulatory and political environments; reductions to our generating units' relative efficiency or capacity factors; disruptions in the source of fuels, including natural gas and coal, as well as the extent of water, solar or wind resources required to operate our facilities; general economic risks, including deterioration of equity markets, increasing inflation; failure to meet financial expectations; general domestic and international economic and political developments, including armed hostilities, the threat of terrorism, cyberattacks, diplomatic developments or other similar events; equipment failure and our ability to carry out or have completed the repairs in a cost-effective manner or timely manner or at all, including if the remediation at the Kent Hills wind facilities is more costly than expected; the holders of the Kent Hills bonds declaring the principal and interest on the Kent Hills bonds and all other amounts, together with any make-whole amount due thereunder, to be immediately due and payable; industry risk and competition; fluctuations in the value of foreign currencies; structural subordination of securities; counterparty credit risk; changes to our relationship with, or ownership of, TransAlta Renewables; changes in the payment or receipt of future dividends, including from TransAlta Renewables; risks associated with development projects and acquisitions, including capital costs, permitting, engineering risks, and delays in the construction or commissioning of projects; inadequacy or unavailability of insurance coverage; our provision for income taxes; legal, regulatory and contractual disputes and proceedings involving the Company; reliance on key personnel; and labour relations matters. The foregoing risk factors, among others, are described in further detail under the heading "Risk Factors" in our Annual Information Form and our Management's Discussion and Analysis for the year ended December 31, 2021. Readers are urged to consider these factors carefully in evaluating the forward-looking statements and are cautioned not to place undue reliance on them, which reflect the Company's expectations only as of the date hereof. 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. In light of these risks, uncertainties and assumptions, the forward-looking statements might occur to a different time than we have described or might not occur at all. We cannot assure that projected results or events will be achieved.

Certain financial information contained in this presentation, including Comparable EBITDA, Adjusted Funds from Operations ("FFO"), Free Cash Flow ("FCF") and cash available for distribution may not be standard measures defined under International Financial Reporting Standards ("IFRS") and may not be comparable to similar measures presented by other entities. These measures should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS. Please refer to the "Additional IFRS Measures" and "Reconciliation of Non-IFRS Measures" section of the Management Discussion & Analysis for the nine months and year ended December 31, 2021 for further discussion of these items, including, where applicable, reconciliations to measures calculated in accordance with IFRS. The purpose of the financial outlooks contained herein are 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 and is given as of the date of this presentation. The Corporation is not making any offer or invitation of any kind by communication of this document to the recipient and under no circumstances is it to be construed as a prospectus or an advertisement.

All amounts referenced in this presentation are in Canadian currency unless otherwise specified.

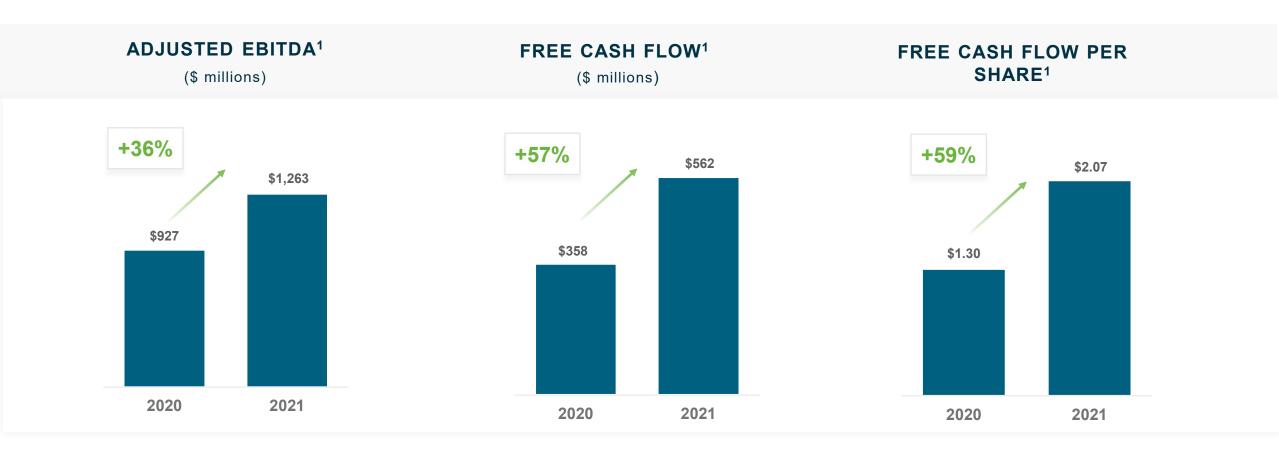
John Kousinioris

President and Chief Executive Officer



Full Year 2021 Financial Highlights

12 Months Ended December 31, 2021



Cash flow generation driven by Alberta Portfolio and Energy Marketing segment



2021 Achievements



2021 RESULTS AND FINANCIAL POSITION

- ✓ EBITDA¹ increase of 36%
- ✓ FCF¹ per share increase of 59% to \$2.07 per share
- ✓ Outstanding performance from Alberta Portfolio and Energy Marketing segment
- √ 11% increase in common share dividend
- ✓ Access to \$2.2 billion in liquidity, approximately \$950 million in cash



GROWTH AND CUSTOMER SOLUTIONS

- ✓ 600 MW of growth announced in 2021
 Expansion in all 3 operating regions
- √ 43% of generation EBITDA¹ from renewables and storage in 2021 versus 35% in 2020
- ✓ Construction underway at Northern Goldfields, Garden Plain, and White Rock
- Windrise COD and financing completed



STRATEGIC INITIATIVES

- ✓ Advanced Clean Electricity Growth Plan
- ✓ Achieved off-coal in Canada
- ✓ Reduced annual CO₂ emissions by 3.9 million tonnes, or 24% below 2020 levels
- ✓ Increased emissions reduction target to 75% by 2026 from 2015 levels
- ✓ Hydrogen investment in Ekona Power Inc.

Executing our strategy reset and evolution into renewables and storage

Clean Electricity Growth Plan Execution in 2021

30% of ~ \$1 billion 600 MW 5-year target total capacity across 5 investment secured projects announced in opportunity 2021 TECHNOLOGY BATTERY SOLAR

	Garden Plain	Northern Goldfields	White Rock Wind	North Carolina Solar
MW	130	48	300	122
Location	Hanna, AB	Western Australia	Caddo County, OK	North Carolina
Capital (\$ millions)	\$190 - \$200	AU\$69 - \$73	US\$460 -\$470	US\$99
PPA Term	18 years	16 years	Long-term	11 years
Customer	Pembina	ВНР	AA rated	Duke
EBITDA (S millions)	\$14 - \$18	AU\$9 - \$10	US\$42 - \$46	US\$9
COD	H2 2022	H2 2022	H2 2023	In service

30% of Clean Electricity Growth Plan secured in 2021

White Rock Wind

Project Highlights

Caddo County, OK Contracted 100%

Size 300 MW Customer AA rated

Technology Vestas **EBITDA** US\$42-46

million

COD H2 2023 Term Long-term

White Rock East and White Rock West will, collectively, be TransAlta's largest wind facility

Provides a significant step towards 2 GW target

Consists of 51 Vestas turbines between both sites

Our 6th and 7th wind facilities in the US

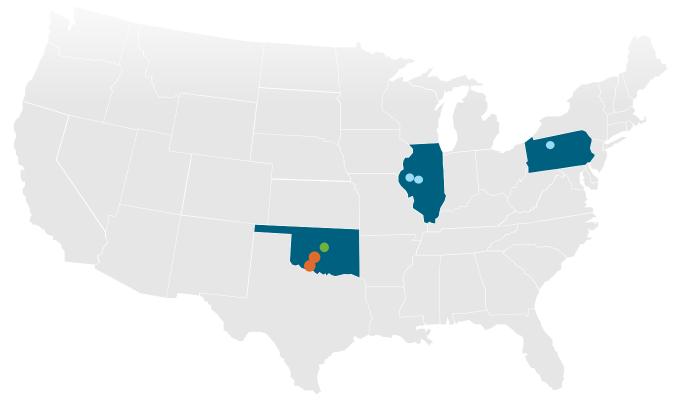




Location

Development Pipeline

UNITED STATES



LEGEND



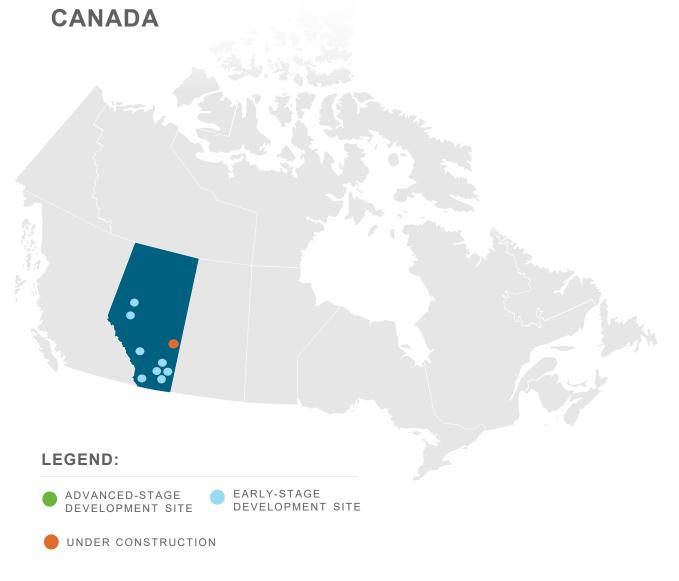
EARLY-STAGE DEVELOPMENT SITE

UNDER CONSTRUCTION

Total All Stages: 1,105 MW

PROJECT	MW	FUEL	LOCATION	STAGE	COD RANGE
White Rock West	100	Wind	OK		2023
White Rock East	200	Wind	OK		2023
Horizon Hill	200	Wind	OK		2023
Prairie Violet	130	Wind	IL		2026
Old Town	185	Wind	IL		2024-2025
Big Timber	50	Wind	PA		2026
Other US Wind Prospects	240	Wind	Various		TBD

Development Pipeline



Total All Stages: 1,470 – 2,070 MW

PROJECT	MW	FUEL	LOCATION	STAGE	COD RANGE
Garden Plain	130	Wind	AB		2022
Riplinger	300	Wind	AB		2025
Willow Creek 1	70	Wind	AB		2024-2025
Willow Creek 2	70	Wind	AB		2024-2025
Tempest	100	Wind	AB		2024
WaterCharger	180	Battery	AB		2023
SunHills Solar	85	Solar	AB		2024
Alberta Solar	35	Solar	AB		2024
Canadian Wind	200	Wind	Various		TBD
Brazeau Pumped Storage	300- 900	Hydro	AB		2032

Development Pipeline

AUSTRALIA



Total All Stages: 228 MW

PROJECT	MW	FUEL	LOCATION	STAGE	COD RANGE
Northern Goldfields Solar	48	Solar and Battery	WA	•	2022
Mt Keith 132kV Expansion	N/A	Transmission	WA	•	2023
Mt Keith Capacity Additions	40	Gas	WA	•	2023
Goldfields Expansions	90	Wind, Solar, Gas	WA		2024
South Hedland Solar	50	Solar	WA		2024

Todd Stack

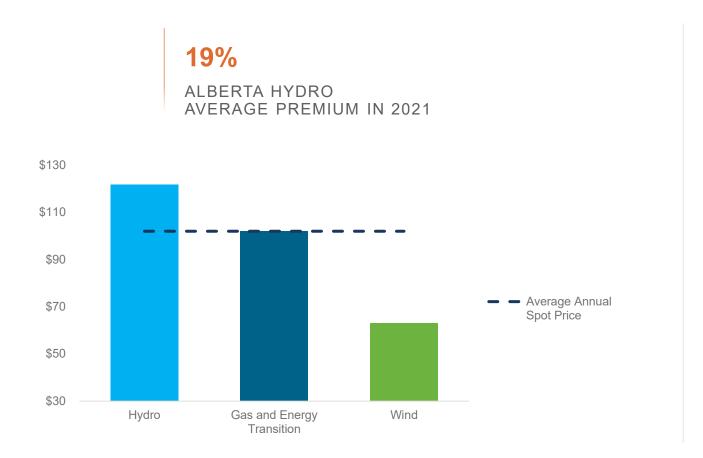
Executive Vice President, Finance and Chief Financial Officer

President, TransAlta Renewables Inc.



Alberta Electricity Portfolio

2021 Realized Prices and 2022 Hedging Assumptions



Hedging 2022 Full Year Assumptions					
Volume Average Hedge Price					
Energy	6,278 GWh ¹	\$75 / MWh			
Natural Gas	50 million GJ ²	\$2.75 / GJ			

¹Represents approximately 75% of expected Alberta Gas and Energy Transition production. ²Represents approximately 55% of expected Alberta Gas and Energy Transition requirements.

Demonstrating the value of our diversified fleet in Alberta

TransAlta Segmented Results

12 Months Ended December 31, 2021

	2021	2020	% Change
Hydro	322	105	207%
Wind and Solar	262	248	6%
Gas	494	367	35%
Energy Transition	133	175	(24)%
Energy Marketing	137	113	21%
Corporate	(85)	(81)	5%
Total Adjusted EBITDA ¹	1,263	927	36%

Diversified portfolio delivers exceptional results

TransAlta 2021 Year in Review and 2022 Guidance

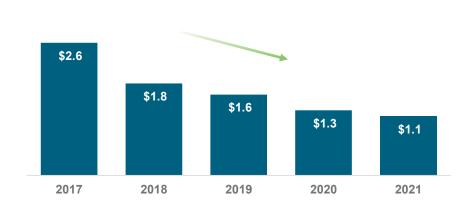
FCF¹ (\$MILLIONS)



ADJUSTED EBITDA¹ (\$MILLIONS)



SENIOR CORPORATE DEBT (\$BILLIONS)



LIQUIDITY (\$BILLIONS)



¹ Adjusted EBITDA, and Free Cash Flow are non-IFRS measures. Reconciliations to the nearest IFRS measures are included in the Q4 earnings release and other documents available at www.transalta.com.



TransAlta Renewables 2021 Highlights

12 Months Ended December 31, 2021

	2021	2020	% Change	2022 Outlook
Adjusted EBITDA ¹	463	462	~	485 - 525
CAFD ¹	275	304	(10)%	245 - 285
CAFD per share ¹	1.03	1.14	(10)%	0.92 - 1.07
Dividends per share	0.94	0.94	~	0.94
Payout ratio	91%	82%	10%	88%-102%

2022 Priorities



SAFETY, RELIABILITY AND AVAILABILITY



GROWTH AND COMMERCIAL



STRATEGIC INITIATIVES

- Achieve strong safety performance
- Achieve strong fleet availability

- Reach FID on 400 MW of additional clean energy projects
- Achieve COD on Garden Plain and Northern Goldfields Solar
- Commence construction on White Rock
- Expand growth pipeline

- Advance 75% CO₂ emissions reduction target by 2026 over 2015 levels
- Progress ESG efforts including reclamation activities at Alberta and Centralia mines
- Position company as thought leader in policy development for "net zero electricity"



COMPETITIVE



FINANCIAL FLEXIBILITY



HEALTH AND VALUES

- Finalize implementation of "One TransAlta" Operations and Shared Services model to drive further business efficiencies
- Deliver EBITDA of \$1.065 \$1.185 billion
- Deliver FCF of \$455 \$555 million
- Recontract Sarnia
- Rehabilitate Kent Hills for safe return to service in 2023
- Secure long-term contracts for AB merchant fleet
- Refinance ~US\$400 million senior notes

- Maintain effective response to COVID-19 and bringing employees back safely
- Continue progress towards 40% gender diversity targets
- Execute Indigenous Cultural Awareness Training





Diversified and resilient fleet



Clean power leader with ESG focus

~3 GW growth pipeline



Strong financial position



Questions & Answers

Visit us at: www.transalta.com

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