TransAlta

Investor Presentation

MAY 13, 2022



Disclaimer and 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 "Company", "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 satisfaction of conditions in respect of the contract extensions with the Sarnia industrial customers: the Northern Goldfields Solar Project, including the total construction capital: the Mount Keith Transmission Expansion with BHP, including the annual EBITDA and commercial operation date: the ability to realize future growth opportunities with BHP Billiton Nickel West: the Horizon Hill wind project including the anticipated EBITDA and commercial operation date: the outage at Kent Hills 1 and 2 wind facilities and the extent of any remediation, the timing and cost of such remediation, and 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; 2022 Alberta hedging price and volume; financial outlook for 2022, 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 interest rates or rising inflation; failure to meet financial expectations; general domestic and international economic and political developments, including escalation of armed hostilities at Ukraine, 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 amounts 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 extent or at a different time than we have described or might not occur at all. We cannot assure that projected results or events will be achieved.

Certain financial information contained in this presentation, including EBITDA or Adjusted EBITDA, 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 Non-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 Company 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.



TransAlta at a Glance



\$9.5 billion

ENTERPRISE VALUE

Strong balance sheet and capital discipline

110 Years

GENERATION EXPERIENCE

The foundation of our focused strategy

~8,000 MW DIVERSIFIED PORTFOLIO

74 generating facilities in Canada, the United States and Australia

\$455 - \$555 million 2022 EXPECTED FREE CASH FLOW Continued strong performance

\$3.8 billion MARKET CAPITALIZATION

Listed on the TSX and NYSE

1,300

EMPLOYEES

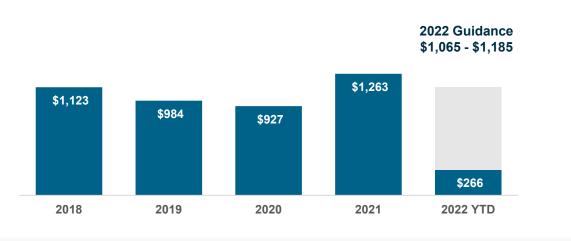
Central to value creation

29 million tonnes

ANNUAL EMISSIONS REDUCTIONS SINCE 2005

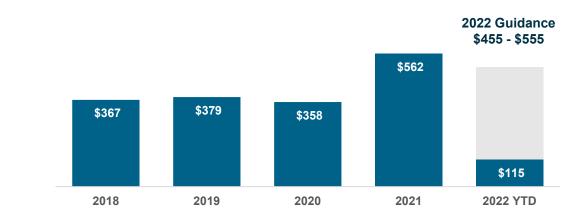
8% of Canada's emissions reduction target

Financial Strength



ADJUSTED EBITDA¹ (\$MILLIONS)





FCF PER SHARE¹



~\$2 Billion

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CASH AND AVAILABLE CREDIT FACILITY

¹ EBITDA and Adjusted EBITDA, Free Cash Flow, and Free Cash Flow per share are non-IFRS measures. Reconciliations to the nearest IFRS measures are included in the Q1 earnings release and other documents available at <u>www.transalta.com</u>.

2022 Outlook

(\$millions)	2022 Target
Adjusted EBITDA	\$1,065 - \$1,185
FCF	\$455 - \$555
Sustaining Capital ⁽¹⁾	\$150 - \$170
Market	2022 Prices (Updated as at Q1)
Alberta Spot	\$90 to \$100
AECO Gas Price (\$/GJ)	\$4.50 to \$5.50
Alberta Hedging	BOY 2022 Assumptions (Updated as at Q1)
Hedged Production (GWh)	4,890
Hedge Price (\$/MWh)	~\$73

40 million

~\$3.00

Hedged Gas Volume (GJ) Hedge Gas Price (\$/GJ)

Continuing Strong Cash Flow for 2022

Who We Are

A Customer-Centred Clean Energy Leader

Our Vision

A leader in clean electricity – committed to a sustainable future



OUR STRATEGY

Customer Needs Operational Excellence People Shareholder Value OUR VALUES

Safety Innovation

Sustainability

Respect

Integrity

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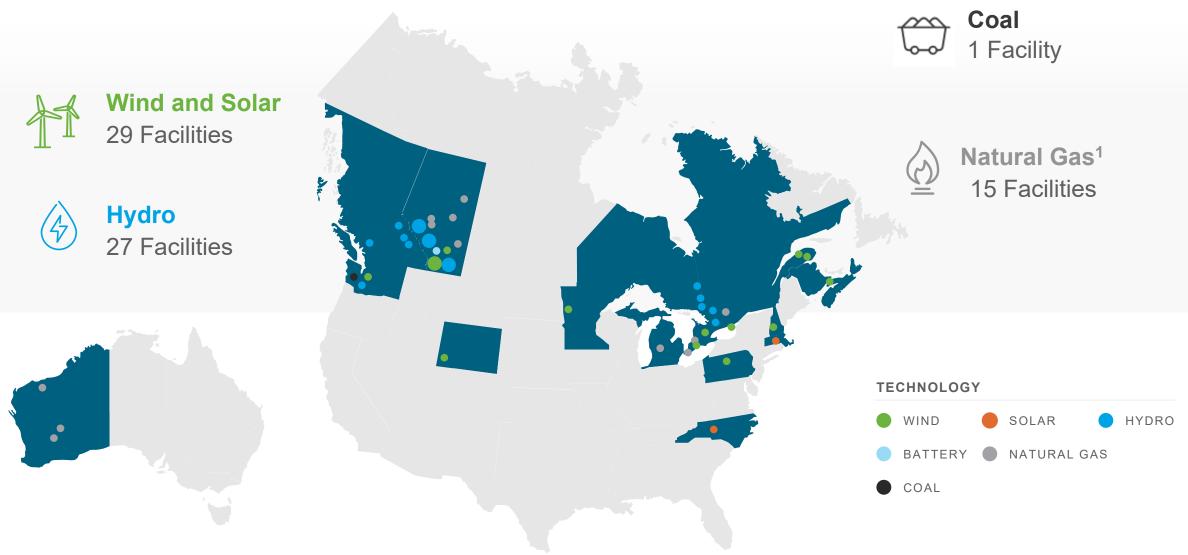
TransAlta's Core Businesses





Diversified and reliable generation with world-class trading and business development teams

Fleet Overview



Clean Energy Transition Ahead of Plan

CLEAN ENERGY GROWTH

- ✓ Over 400 MW of renewables and storage added, including first utility-scale storage
- ✓ Established ~3 GW wind and solar pipeline
- ✓ Established Canadian, US and Australian growth teams

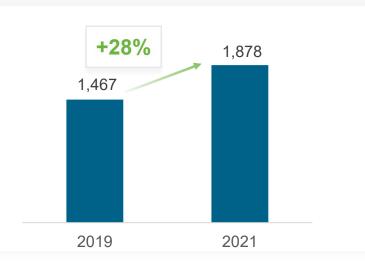
CARBON TRANSITION

- ✓ 1,600 MW of coal generation retired by end of 2021
- ✓ 1,660 MW of conversions completed by end of 2021
- ✓ Ceased active mining operations by end of 2021
- ✓ Pioneer gas pipeline completed and sold

EMISSIONS REDUCTIONS

- \checkmark CO₂ emissions reduced by 61% from 2005
- ✓ Targeting 75% below 2015 levels by 2026
- ✓ Carbon neutrality by 2050

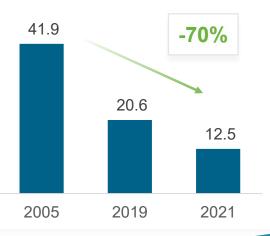
RENEWABLE CAPACITY (MW)



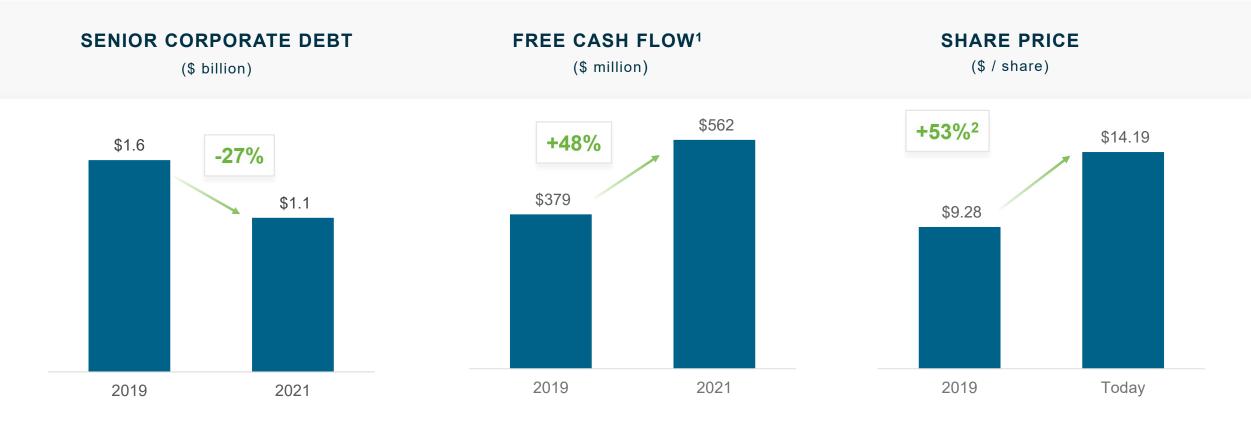
ALBERTA THERMAL CAPACITY (MW)

EMISSIONS REDUCTIONS (MM T CO₂)





Strategic Accomplishments Led to Dramatic Evolution



8% annual dividend increase since 2019

¹ Free Cash Flow is a non-IFRS measures. Reconciliations to the nearest IFRS measures are included in the Q1 earnings release and other documents available at <u>www.transalta.com</u>. ²As of closing on May 10, 2022

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The Global Race to Decarbonize is On



Global efforts to **decarbonize** are accelerating at a rapid pace

Strong **political support** gaining momentum with explicit net zero goals



Technology cost of renewables and energy storage declining rapidly and competing with fossil fuel generation



Corporations are **delivering leadership** by committing to net zero goals Investors are **ramping up** clean investments towards net zero push

SIGNIFICANT INVESTMENT REQUIRED TO MEET THE CHALLENGE

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\$0.8 trillion – \$1.8 trillion per year **2.5x to 6x** higher than today

505 GW OF NEW WIND PER YEAR

455 GW OF NEW SOLAR PER YEAR

245 GW

OF NEW STORAGE PER YEAR

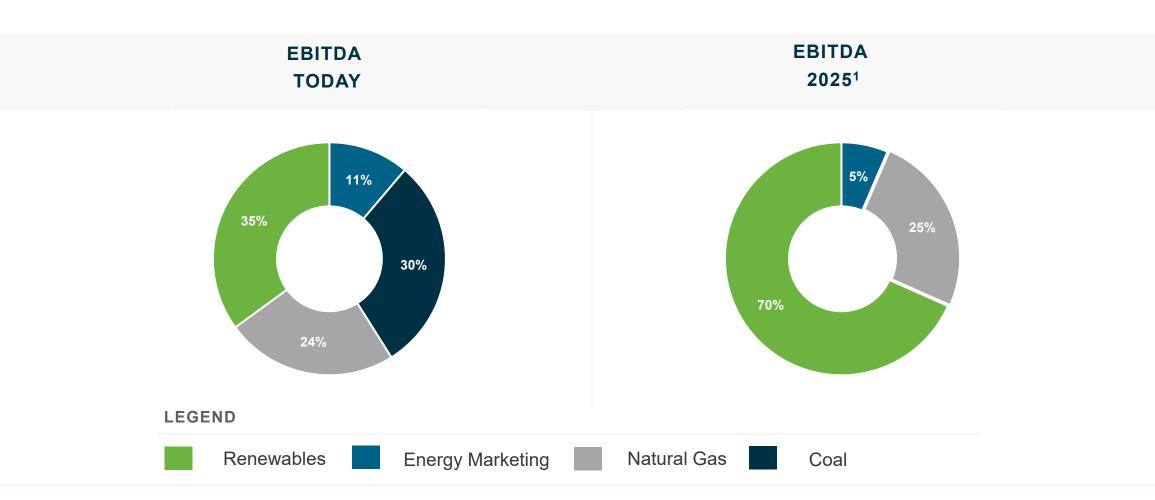
Accelerating Renewables Growth: 2021 to 2030



2025

\$3 billion \$250 million 2 GW OF GROWTH CAPEX NEW ANNUAL EBITDA OF RENEWABLES GROWTH 2025 2030 **INCREASE IN 2X 5 GW** OF GROWTH PIPELINE RENEWABLES FLEET

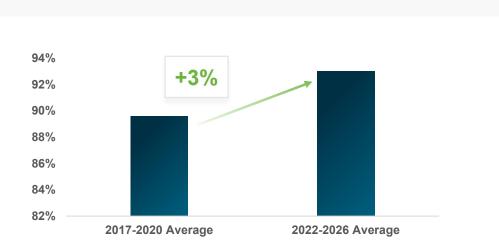
Our Clean Energy Evolution



EBITDA attributable to renewables will reach 70% by end of 2025

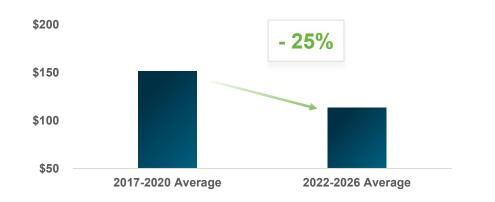
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Operational Excellence: Where We Are Going

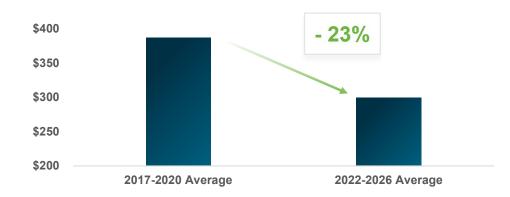


AVAILABILITY

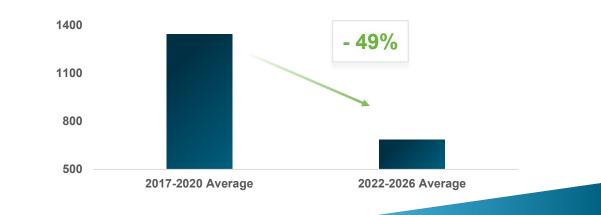
SUSTAINING CAPEX



GENERATION OM&A



GENERATION STAFFING LEVELS



Our Investment Focus: 2021 to 2025



RENEWABLES AND STORAGE

- Expand core focus of onshore wind in North America with customer-centred greenfield development
- Establish position in solar targeting the United States, Canada and Australia markets through acquisition
- Establish position in storage, targeting Alberta to meet future grid stability requirements
- Establish position in hybrid solutions in Alberta and Australia with customercentred focus
- Optimize legacy Alberta Hydro assets and maximize cash flow from fleet

GAS GENERATION

 Optimize existing gas generation to maximize value and cash flows to support renewables and storage growth



- Assess parallel ESG or new industry sectors such as water treatment, transmission/distribution and car charging
- Monitor new technologies such as storage, hydrogen and carbon capture technologies for deployment post-2025

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~3 GW of development and three advanced-stage wind projects

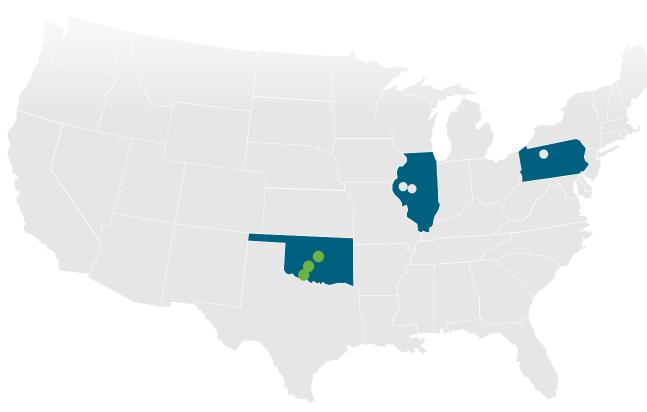
Our Competitive Advantage: Foundations for Growth

- **Extensive** North American renewables fleet
- Extensive full lifecycle development, optimization and operational **excellence**
- Robust balance sheet and competitive cost of capital with TransAlta Renewables



Development Pipeline

UNITED STATES



Total All Stages: 1,275 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	\bigcirc	2023
Prairie Violet	130	Wind	IL	\bigcirc	2026
Old Town	185	Wind	IL	\bigcirc	2024-2025
Big Timber	50	Wind	PA	\bigcirc	2026
Other US Wind Prospects	410	Wind	Various	0	TBD

LEGEND

ADVANCED-STAGE DEVELOPMENT SITE EARLY-STAGE DEVELOPMENT SITE



Development Pipeline

CANADA



LEGEND:

ADVANCED-STAGE DEVELOPMENT SITE EARLY-STAGE DEVELOPMENT SITE

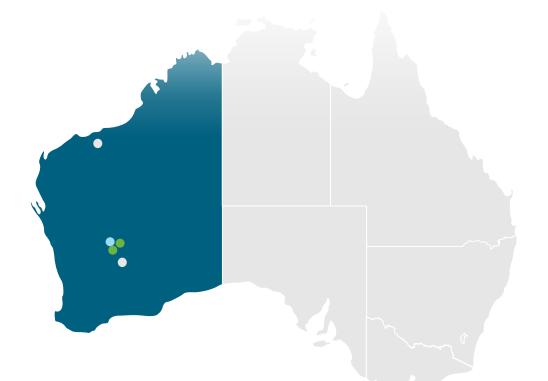


Total All Stages: 1,520 – 2,120 MW

PROJECT	MW	FUEL	LOCATION	STAGE	COD RANGE
Garden Plain	130	Wind	AB	•	2022
Tempest	100	Wind	AB		2024
Riplinger	300	Wind	AB	\bigcirc	2025
Willow Creek 1	70	Wind	AB	\bigcirc	2024-2025
Willow Creek 2	70	Wind	AB	\bigcirc	2024-2025
WaterCharger	180	Battery	AB	\bigcirc	2023
SunHills Solar	80	Solar	AB	\bigcirc	2024
Alberta Solar	40	Solar	AB	0	2024
Canadian Wind	250	Wind	Various	0	TBD
Brazeau Pumped Storage	300- 900	Hydro	AB	0	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
SCE Capacity Expansion	40	Gas	WA	•	2023
Goldfields Expansions	90	Wind, Solar, Gas	WA	0	2024
South Hedland Solar	50	Solar	WA	0	2024

LEGEND

ADVANCED-STAGE DEVELOPMENT SITE EARLY-STAGE DEVELOPMENT SITE



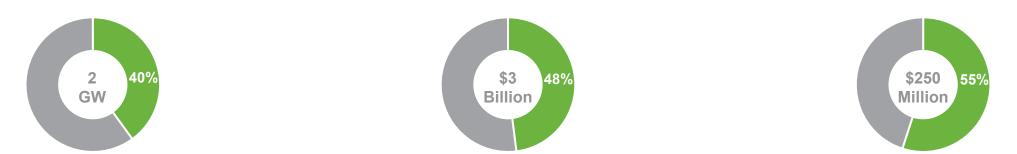
Clean Electricity Growth Plan Execution

	MW	Location	Capital (\$ millions)	PPA Term	Customer	EBITDA (\$ millions)	COD
Garden Plain Wind	130	Hanna, AB	\$190 - \$200	17 years ¹	Pembina and investment-grade customer	\$14 - \$18	H2 2022
Northern Goldfields Solar	48	Western Australia	AU\$69 - \$73	16 years	BHP	AU\$9 - \$10	H2 2022
White Rock Wind	300	Caddo County, OK	US\$460\$470	Long-term	Amazon	US\$42 – \$46	H2 2023
North Carolina Solar	122	North Carolina	US\$99	11 years	Duke	US\$9	In service
Horizon Hill Wind	200	Logan County, OK	US\$290-\$310	Long-term	Meta	US\$27-\$30	H2 2023
Mt Keith Transmission Expansion	NA	Western Australia	AU\$50 - \$53	15 years	BHP	AU\$6 -\$7	H2 2023

Capacity Target



Incremental EBITDA Target



40% of Clean Electricity Growth Plan secured with over 3 years remaining in plan

Windrise

Project Highlights

Location	Ft Macleod, Alberta	Contracted
Size	206 MW	Customer
Technology	SiemensGamesa	Term
COD	November 2021	EBITDA

100%
AESO
20 years
\$20-\$22 million

All turbines commissioned and now in operation

Transmission interconnection fully complete and commissioned

Work successfully competed through the pandemic

Our 10th wind facility in Alberta



Now in commercial operations



Garden Plain

	Project Highlights					
Location	Hanna, Alberta	Contracted	100%			
Size	130 MW	Customer	Pembina and Investment -grade			
Technology	Siemens Gamesa	Term	17 years			
COD	H2 2022	EBITDA	\$14-\$18 million			

Alberta Utilities Commission permits have been secured for the wind and interconnection facilities

Detailed engineering ongoing with full geotechnical complete

Fully contracted

Our 11th wind facility in Alberta



Construction activities now underway



Northern Goldfields

Project Highlights

Location	Western Australia	Contracted	100%
Size	48 MW	Customer	BHP
Technology	Solar PV & Battery	Term	16.3 years
COD	H2 2022	EBITDA	\$8-\$9 million

Reduces BHP's Scope 2 emissions by up to 12% at Mount Keith and Leinster

Comprised of 38 MW solar portfolio and 10 MW/5 MWh battery energy storage system

First major growth project under extended PPA executed in 2020

Our 1st renewable project in Australia





North Carolina Solar

	Portfol	io Highligh	nts
Location	North Carolina	Contracted	100%
Size	122 MW	Customer	Duke Ene
Technology	Solar PV	Term	12 years
Acquisition	November 5, 2021	EBITDA	US\$9 mil

Acquisition cost of US\$99 million

Expected production of approximately 195,000 MWh per year

Long term contracted cashflows with investment grade counterparties

20 operating facilities across North Carolina ranging in size from 3.2 MW to 6.7 MW

Our 2nd solar portfolio in the US



COD dates ranging from Nov. 2019 to May 2021



White Rock East and West

Project Highlights

Location	Caddo County, OK	Contracted	100%
Size	300 MW	Customer	Amazon
Technology	Vestas	Term	Long-term
COD	H2 2023	EBITDA	US\$44 million

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



On-site construction to begin in later 2022



Horizon Hill Wind

Project Highlights

Location	Logan County, OK	Contracted	100%
Size	200 MW	Customer	Meta
Technology	Vestas	EBITDA	US\$27
COD	H2 2023	Term	Long-te

/leta JS\$27-30 million ong-term

~90% of project capital fixed

Provides a significant step towards 2 GW target

Consists of 34 Vestas turbines

Our 8th wind facility in the US



On-site construction to begin in Q4 2022



Mt. Keith Transmission Expansion

	Project Highlights			
Location	W. Australia	Contracted	100%	
Customer	BHP	EBITDA	AU\$6-7 millior	
COD	H2 2023	Term	15 years	

Supports BHP's operations

Facilitates the connection of additional generating capacity to our network

Building our relationship with BHP



On-site construction underway

Alberta Business

MAXIMIZE

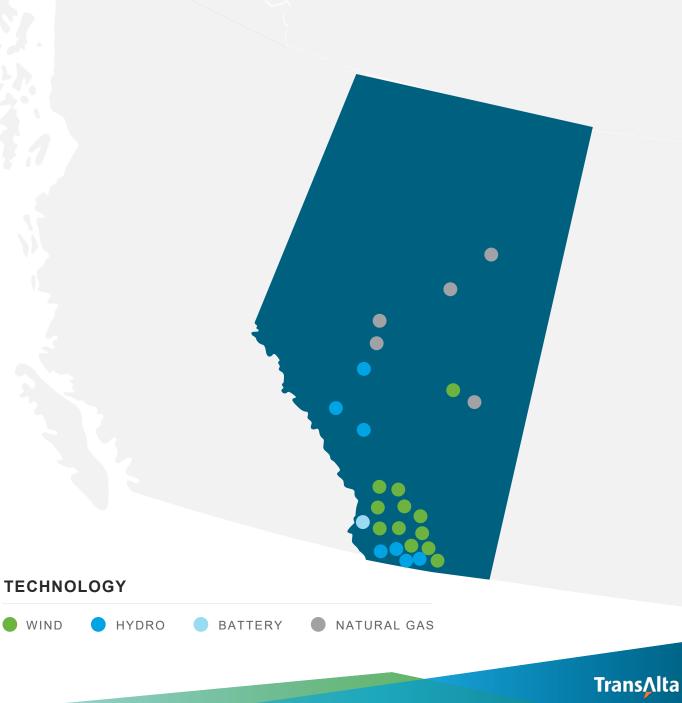
shareholder returns through active management of our diversified merchant portfolio

PROVIDE

dynamic, cost-effective and low carbon **solutions** to meet **customer power demand** and **ESG** goals

IDENTIFY

and evaluate market and technological sources for **long-term growth**



Alberta Merchant Market is Evolving

- Load growth moderating
- Strong customer demand for renewables and storage
- Cost of carbon emissions increasing
- CCS/CCUS solutions costly and uncertain

• Significant supply additions

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- ~8,500 MW of gas, wind and solar planned or under construction
- ~2,500 MW of storage planned or under construction

2021	2022	2023	2024	2030	
\rangle					
	HIGHER AVERAGE PRICIN	G	LOWER AVE	ERAGE PRICING	
	Moderate Volatility		Higher	Higher Volatility	
	Baseload Generation		Fleet div	versity > Low carbon footprint	
	Merchant exposure		Peaking	generation > Hedging and optimization	
	Optimization		Ancillary	v services	

Price Volatility Expected to Increase

FORECASTED POWER PRICE LEVELS (\$ / MWH)



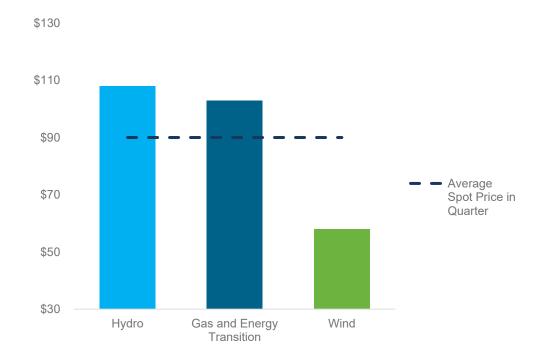
• Number of \$0 hours expected to increase

TransAlta well-positioned to compete
in \$50+ zone



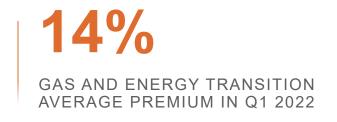
Alberta Electricity Portfolio

Q1 2022 Realized Prices





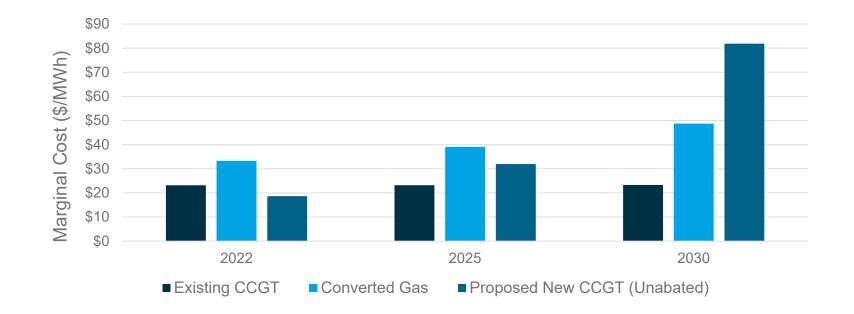
ALBERTA HYDRO AVERAGE PREMIUM IN Q1 2022



Demonstrating the value of our diversified fleet in Alberta

Performance Standard Change Makes CTG More Competitive

MARGINAL COST UNDER EVOLVING PERFORMANCE STANDARD



Converted gas (CTG) to have lower variable costs under more stringent policy

Our Evolving Position in the Alberta Market



Well-positioned to perform in energy-only market

¹Growth includes Windrise, Garden Plain, Riplinger, SunHills Solar and Watercharger

³³ ²Includes the suspension of Sundance Unit 5 and the retirements of Sundance Unit 4 and Keephills Unit 1

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Disciplined Capital Allocation

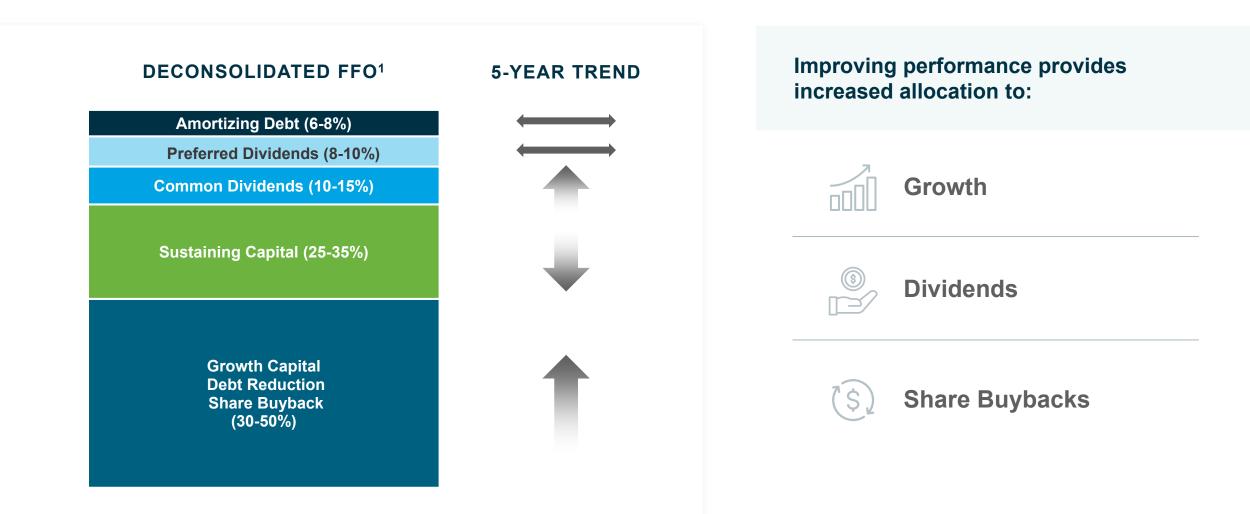
Factors Impacting Risk Premium

Project Development Technology Economies of Scale Future Business Synergies Operational Synergies Counterparty Quality Contract Tenor Merchant Exposure Geography Regulatory Exposure Inflation Exposure Capital Recovery

Future Optimizations and Synergies Tax Optimization Operational and Platform Commercial Financing **Power Marketing** . **Drop-downs to RNW Merchant Optimization** . Portfolio Return **Project Return**

Our ability to identify and capture value drives enhanced portfolio returns

Prudent Capital Allocation



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Growth Plan is Fully Funded

CONSOLIDATED SOURCES AND USES 2021-2025



Sources

Uses

2 GW growth plan fully funded with cash flow and asset-level financing

¹Adjusted FFO is equal to FFO, less sustaining capital, lease obligations and distributions to NCI (excluding RNW public NCI).

²Net Cash is equal to cash less credit facility as of December 31, 2020

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³Includes common share dividend, dividend on preferred shares and share buybacks

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Sustainability Target Highlights



- End coal generation by 2021 in Canada and 2025 in US
- Reduce GHG emissions by 75% from 2015 levels by 2026
- Carbon neutral by 2050



- Support Indigenous communities
- Reduce safety incidents
- Reclaim mined land in Alberta and Washington State



GOVERNANCE GOALS

- 50% female representation on the Board by 2030
- 40% female employment across the company by 2030
- Equal pay for women in equivalent roles as men
- Remove systemic barriers across the organization
- Demonstrate leadership on ESG reporting within financial disclosures

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Our sustainability goals and targets support the long-term success of our business

Strategic Priorities to 2025

Clean Electricity Growth Plan

- 1 Accelerate growth into customer-centred renewables and storage
- **2**) Targeted approach to diversification

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- Maintain financial strength and capital allocation discipline
- Define next generation of power solutions
- Lead in ESG policy development
- Successfully navigate through COVID-19 pandemic





Clean power leader with ESG focus

growth pipeline

Strong financial position



Questions & Answers

Visit us at: <u>www.transalta.com</u> Investor_Relations@TransAlta.com

