transalta

Investor Presentation

October 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", "anticipate", "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; financial outlook for 2022, including adjusted EBITDA, free cash flow; the Company's 2022 priorities, including as it pertains to our strategic initiatives, growth and commercial priorities, and financial flexibility priorities; the Clean Electricity Growth Plan and ability to achieve the target of 2 gigawatts ("GW") of incremental renewables capacity with an estimated capital investment of \$3 billion that is expected to deliver incremental average annual EBITDA of \$250 million; the 2021 to 2025 investment focus; the early-stage development in the United States, Australia and Canada, including the size, cost, expected EBITDA and funding of such projects; projects under construction, including the timing of commercial operations, expected annual EBITDA and the costs thereof; remediation of the Kent Hills wind facilities, including the timing and cost of the rehabilitation and foundation replacements; 2022 Alberta hedging price and volume; gross margin target in 2022 for the Energy Marketing segment; future optimizations and synergies for disciplined capital allocation; and strategic priorities to 2025. The forward-looking statements contained herein are based on current expectations, estimates, projections and assumptions, having regard to the Corporation's experience and its perception of historical trends, and includes, but is not limited to, expectations, estimates, projections and assumptions relating to: Alberta and Mid-Columbia power prices; production and availability; the demand of renewable energy not decreasing significantly; regulatory approvals being obtained in respect of the Company's development and construction projects; foreign exchange rates; the availability and cost of labour, services and infrastructure; and the satisfaction by third parties of their obligations, including under power purchase agreements. 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: supply chain disruptions, including due to the impact of COVID-19 and 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 operating costs; higher market volatility causing elevated collateral and impacting accounts receivables and accounts payables; a higher rate of losses on our accounts receivables due to credit defaults; 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 failures and our ability to carry out or have completed the repairs in a cost-effective manner or timely manner or at all, including the remediation and foundation replacement at the Kent Hills wind facilities is more time consuming or costly than expected; 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, and Free Cash Flow ("FCF") 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 "Neconciliation 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



\$9.0 billion

ENTERPRISE VALUE

Strong balance sheet and capital discipline



111 Years

GENERATION EXPERIENCE

The foundation of our focused strategy



\$3.3 billion

MARKET CAPITALIZATION

Listed on the TSX and NYSE



1,300

EMPLOYEES

Central to value creation

~6,600 MW

DIVERSIFIED PORTFOLIO

74 generating facilities in Canada, the United States and Australia

\$455 - \$555 million

2022 expected Free Cash Flow

Continued strong performance

29 million tonnes

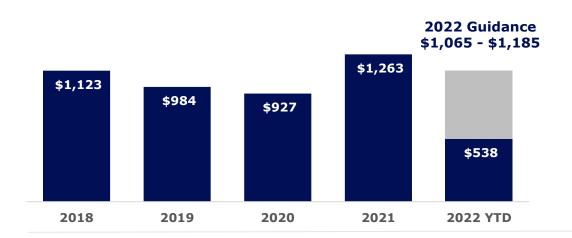
Annual emissions reductions since 2005

8% of Canada's emissions reduction target



Financial Strength



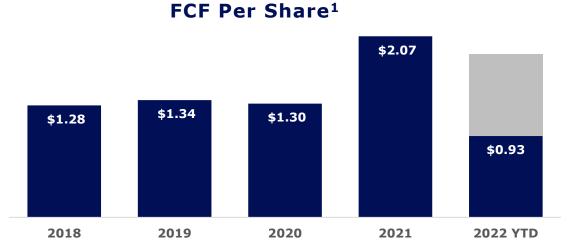


FCF¹ (\$millions)



~\$1.9 Billion

Cash and available credit facility



TM TM

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 Q2)
Alberta Spot (\$/MWh)	\$115 - \$125
AECO Gas Price (\$/GJ)	\$6.50 - \$7.50
Alberta Hedging	BOY 2022 Assumptions (Updated as at Q2)
Hedged Production	3,063 GWh
Hedge Price	~\$76 / MWh
Hedged Gas Volume	31 million GJ
Hege Gas Price	~\$3.72 / GJ

Continuing Strong Cash Flow for 2022



Q2 2022 Achievements



Growth and Customer Solutions



Strategic Initiatives



Adjusted EBITDA¹ of **\$279 million**

FCF of \$145 million or \$0.54 per share

Q2 2022 Results and

Financial Position

Access to **\$1.9 billion** in liquidity, ~ **\$0.9 billion** in cash

58% of generation EBITDA¹ from renewables and storage in Q2 2022 versus **35%** in 2020

200 MW of growth announced in Oklahoma at Horizon Hill wind facility

Mount Keith Transmission Expansion project with BHP

Added **325 MW** to renewables development pipeline across Canada and the US

Executed contract extensions with 3 industrial customers at Sarnia

Advanced rehabilitation of Kent Hills and extended contracts with NB Power for **10 years**

Advanced Clean Electricity Growth Plan

Entered commitment to invest **US\$25 million** over the 4 years in Energy Impact Partners Deep Decarbonization Frontier Fund

Court of Appeal upholds favourable force majeure arbitration decision

Launched new visual identity



2022 Priorities

Safety, Reliability and Availability



Growth and Commercial



Strategic Initiatives

Achieve strong safety performance

Achieve strong fleet availability

Competitive

Secure 400 MW of growth

Complete Garden Plain and Northern Goldfields Solar

Advance White Rock, Horizon Hill and Mount Keith construction

Expand growth pipeline

Accelerate CO2 emissions reduction to 75% from 2015 levels by 2026

Progress ESG efforts including mine reclamation

Position company as thought leader in "net zero electricity" policy



Financial Flexibility



Health and Values



0

Finalize "One TransAlta" model to drive further business efficiencies

Deliver Adjusted EBITDA of \$1.065 - \$1.185 billion

Deliver FCF of \$455 - \$555 million

Recontract Sarnia

Rehabilitate Kent Hills

Secure long-term contracts for Alberta merchant fleet

Refinance ~US\$400 million senior notes

Execute Indigenous Cultural Awareness Training

Continue progress towards 40% gender diversity target





Who We Are

A Customer-Centred Clean Electricity Leader

Our Vision

A leader in clean electricity – committed to a sustainable future

Our Strategy	Our Values		
Customer Needs	Safety		
Operational Excellence	Innovation		
People	Sustainability		
Shareholder Value	Respect		
	Integrity		



TransAlta's Core Businesses

transdita

Merchant Hydro



Thermal Generation



Energy Marketing and Trading



Business Development







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



Fleet Overview



Wind, Solar and Storage

29 Facilities



Hydro

27 Facilities



Natural Gas

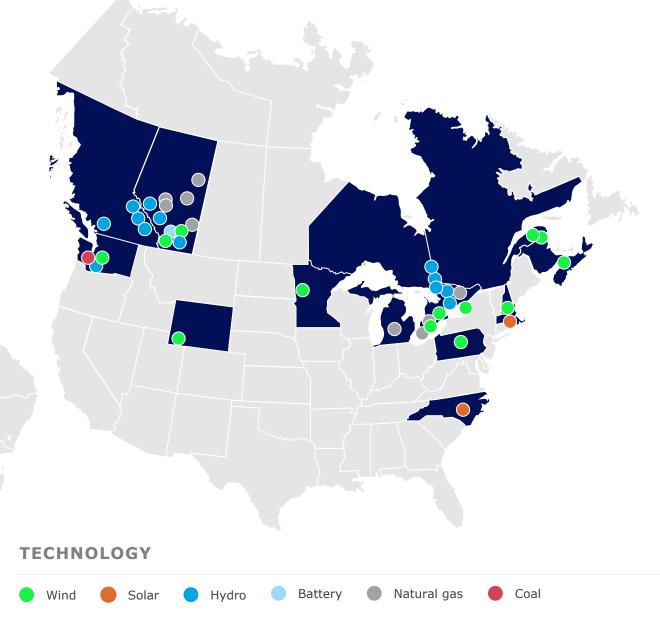
17 Facilities





Coal

1 Facility



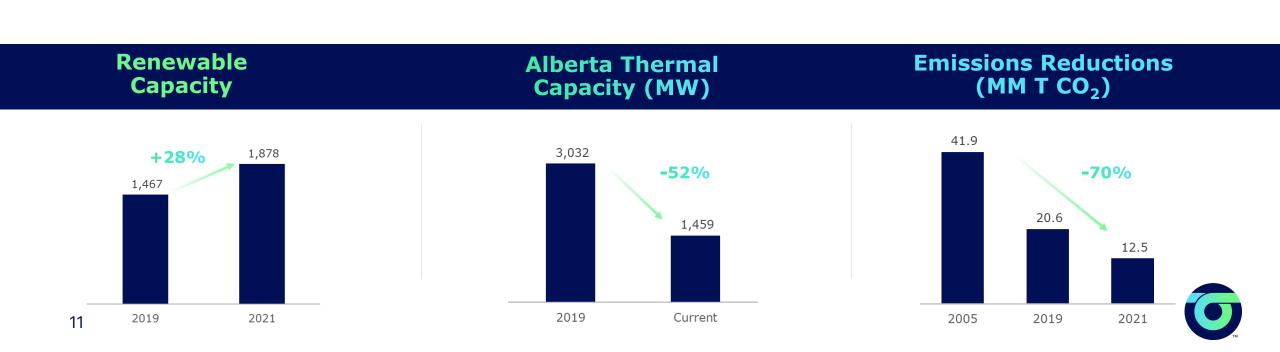


Clean Energy Transition Ahead of Plan

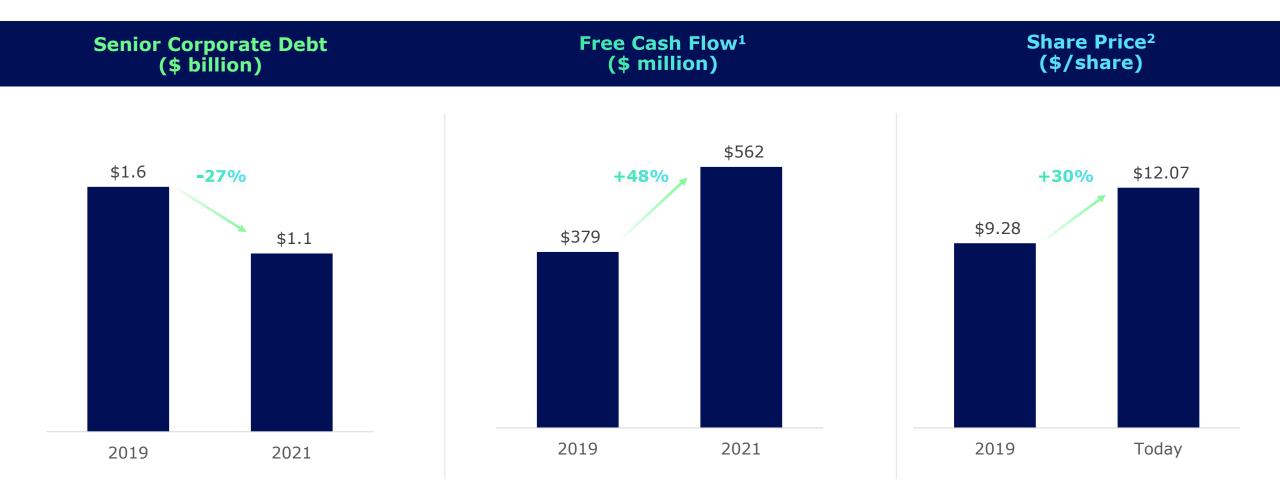
growth teams

Emissions Clean Energy Carbon Transition Reductions Growth ✓ Over 400 MW of renewables and storage ✓ 1,600 MW of coal generation retired by ✓ CO₂ emissions reduced by 61% added, including first utility-scale end of 2021 from 2015 storage ✓ 1,660 MW of conversions completed by ✓ Targeting 75% below 2015 levels √ Established ~3 GW wind and solar end of 2021 by 2026 pipeline ✓ Ceased active mining operations by end of ✓ Carbon neutrality by 2050 ✓ Established Canadian, US and Australian 2021

✓ Pioneer gas pipeline completed and sold



Strategic Accomplishments Led to Dramatic Evolution





¹ Free Cash Flow is a non-IFRS measures. Reconciliations to the nearest IFRS measures are included in the Q2 earnings release and other documents available at www.transalta.com.

² As of closing on September 7, 2022

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

\$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

2021 2025

2 GW

Of Renewables Growth

\$3 billion

Of Growth CapEx

\$250 million

New Annual EBITDA

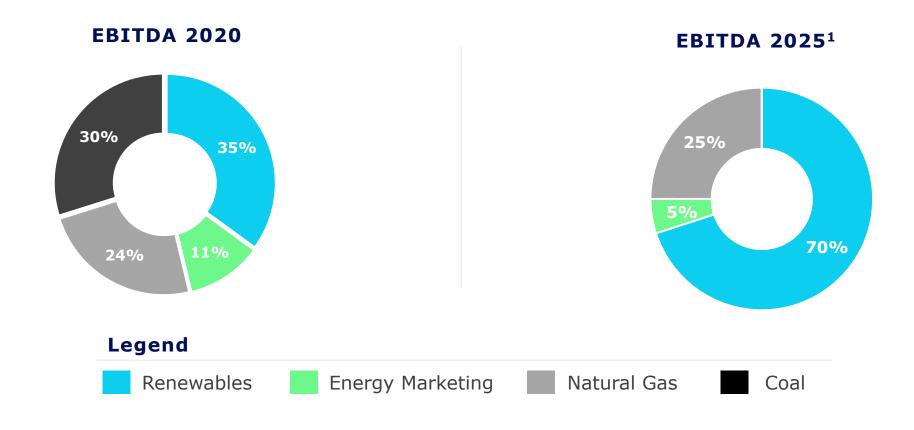
2025 2030

5 GW Of Growth Pipeline

2X Increase in Renewables Fleet



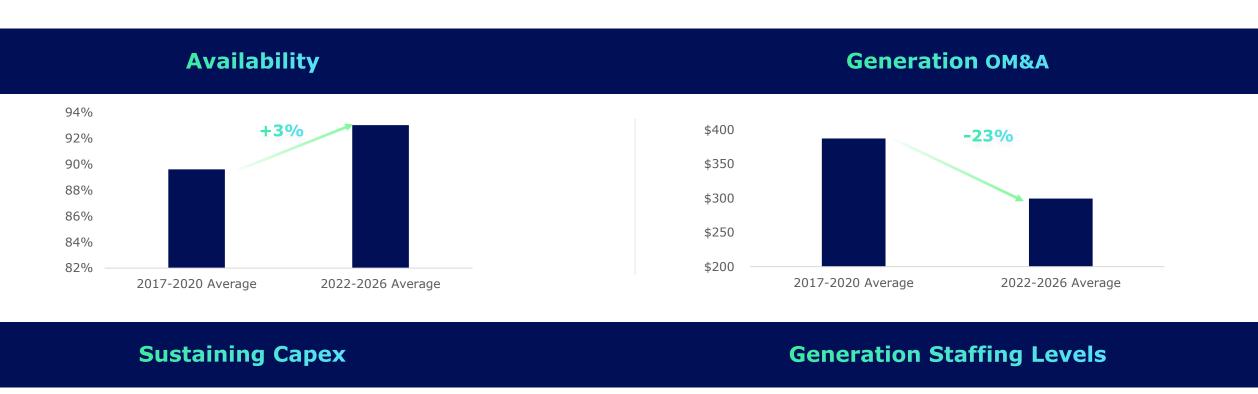
Our Clean Energy Evolution

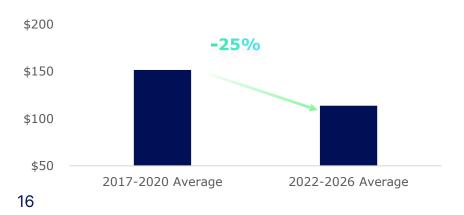


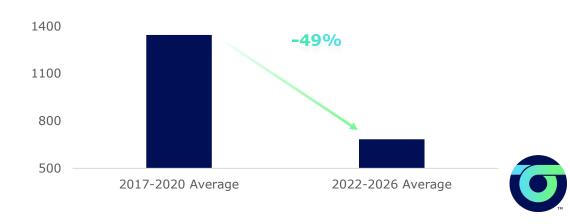
EBITDA attributable to renewables will reach 70% by end of 2025



Operational Excellence: Where We Are Going







Accelerating Clean Growth Strategy





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 customer-centred 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



Parallel New Investments

- 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



Our Competitive Advantage: Foundations for Growth

Extensive North American renewables fleet

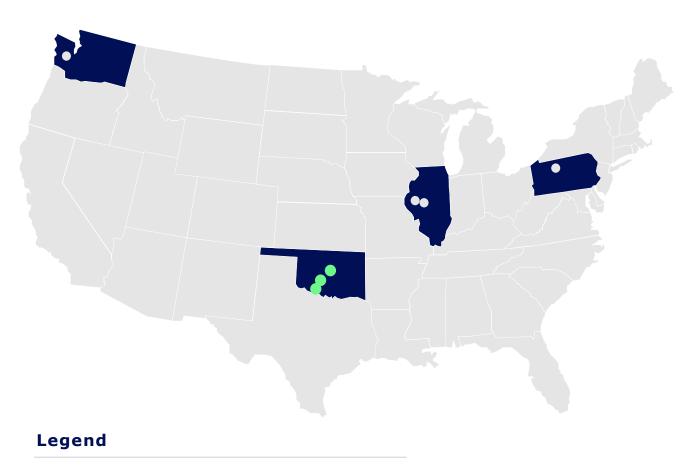
Extensive full lifecycle development optimization and operational **excellence**

Robust balance sheet and **competitive** cost of capital with TransAlta Renewables





Development Pipeline: United States



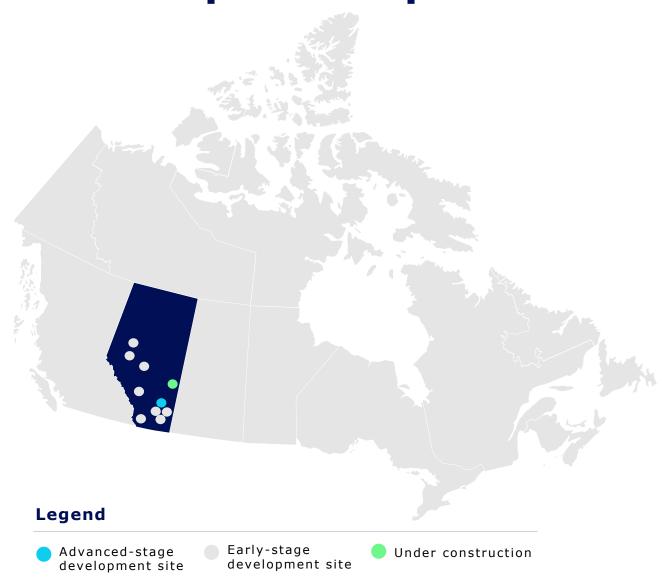
Project	MW	Fuel	Location	Stage	COD Range
White Rock West	100	Wind	OK		2023
White Rock East	200	Wind	OK		2023
Horizon Hill	200	Wind	OK		2023
Prairie Violet	130	Wind	IL	0	2026
Old Town	185	Wind	IL	0	2024-2025
Big Timber	50	Wind	PA	0	2026
Other US Wind Prospects	535	Wind	Various	0	2025+
Centralia Site Redevelopment	250 - 500	Gas, Solar, Storage	WA	0	TBD

Early-stage development site

Under construction



Development Pipeline: Canada

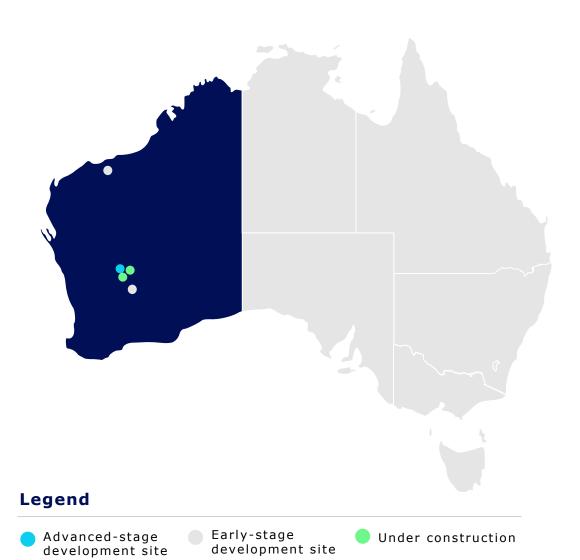


Total All Stages: 1,820		· 2,0/U	IYI VV
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Project	MW	Fuel	Location	Stage	COD Range
Garden Plain	130	Wind	АВ	•	2022
Tempest	100	Wind	AB		2024
Riplinger	300	Wind	AB	0	2025
Willow Creek 1	70	Wind	AB	0	2024-2025
Willow Creek 2	70	Wind	АВ	0	2024-2025
WaterCharger	180	Battery	AB	0	2023
SunHills Solar	80	Solar	АВ	0	2024
McNeil Solar	40	Solar	AB	0	2024
Canadian Wind	300	Wind	Various	0	2025+
Brazeau Pumped Storage	300- 900	Hydro	AB	0	2032
Alberta Thermal Redevelopment	250- 500	Gas, Solar, Storage	АВ	0	TBD



Development Pipeline: Australia



Total All Stages: 298 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	160	Wind, Solar, Gas	WA	0	2024	
South Hedland Solar	50	Solar	WA	0	2024	

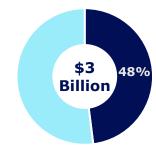


Clean Electricity Growth Plan Execution

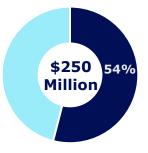
	MW	Location	Capital (\$ millions)	PPA Term	Customer	EBITDA (\$ millions)	COD
North Carolina Solar	122	North Carolina	US\$99	11 years	Duke	US\$9	In service
Garden Plain Wind	130	Hanna, AB	\$190 - \$200	17 years¹	Pembina and investment-grade customer	\$14 - \$15	H2 2022
Northern Goldfields Solar	48	Western Australia	AU\$69 - \$73	16 years	ВНР	AU\$9 - \$10	H2 2022
White Rock Wind	300	Caddo County, OK	US\$460 -\$470	Long-term	Amazon	US\$42 - \$46	H2 2023
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	ВНР	AU\$6 -\$7	H2 2023







Incremental EBITDA Target



Projects under construction totaling ~\$1.3 Billion





Windrise

Project Highlights

Location Ft Macleod, Alberta **Contracted** 100% Size 206 MW Customer **AESO Technology** SiemensGamesa 20 years Term COD November 2021 **EBITDA** \$20-\$22 million



All turbines commissioned and now in operation



Transmission interconnection fully complete and commissioned



Work successfully competed through the pandemic



Our **10**th 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 SiemensGamesa **Term** 17 years

COD H2 2022 **EBITDA** \$14-\$15 million



Turbine deliveries commenced in July



Fully contracted



On track to be completed on schedule



Our **11**th wind facility in Alberta – construction activities now underway





Northern Goldfields

Project Highlights

Location Western Australia

Size 48 MW

Technology Solar PV & Battery

COD H2 2022

Contracted

Customer BP

Term 16 years

EBITDA AU\$9-\$10 million

100%



Racking and panels have been delivered and battery is in transit to site



Construction underway and on track to be completed on schedule



Our 1st renewable project in Australia





North Carolina Solar

Project Highlights

Location North Carolina **Contracted** 100%

Size 122 MW Customer Duke Energy

Technology Solar PV **Term** 12 years

COD November 5, 2021 **EBITDA** US\$9 million



Expected production of ~195,000 MWh per year



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



Long term contracted cashflows with investment grade counterparties



Our 2nd solar portfolio in the US





White Rock East and West

Project Highlights

Caddo County, OK Location Contracted 100% Size 300 MW Customer Amazon **Technology** Vestas **Term** Long-term COD H2 2023 US\$42-\$46 million **EBITDA**



All major equipment and EPC agreements executed, detailed design and final permitting on track



Provides a significant step towards 2 GW target



On track to be completed on schedule



Our 6th and 7th wind facility in the US





Horizon Hill

Project Highlights

Location Logan County, OK

200 MW

Technology Vestas

COD H2 2023 **Contracted**

100%

Customer Meta

Term Long-term

EBITDA US\$27-\$30 million



Size

All major equipment and EPC agreements executed



Provides a significant step towards 2 GW target



On track to be completed on schedule



Our 8th wind facility in the US





Mt. Keith Transmission Expansion

Project Highlights

Location	Western Australia	Contracted	100%
Term	15 years	Customer	ВНР
COD	H2 2023	EBITDA	AU\$6-\$7 million



EPC agreement executed



Facilitates the connection of additional generating capacity to our network



On track to be completed on schedule



Building our relationship with BHP



Optimizing and maintaining Competitive Advantage in Alberta



Alberta Business

MAXIMIZE

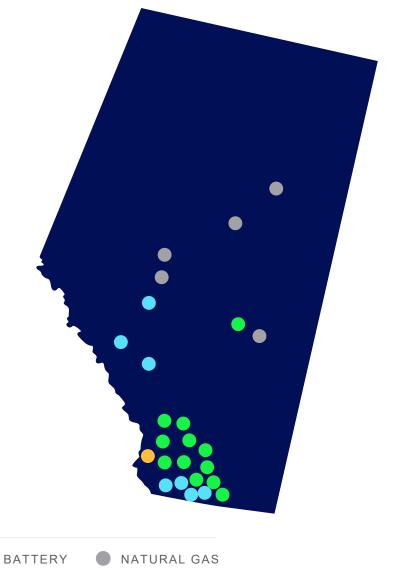
shareholder returns through active management of our diversified merchant portfolio

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
 - ~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

HIGHER AVERAGE PRICING

Moderate Volatility

- Baseload Generation
- Merchant exposure
- Optimization

LOWER AVERAGE PRICING

Higher Volatility

- Fleet diversity
 Low carbon footprint
- Peaking generation > Hedging and optimization
- Ancillary services



Price Volatility Expected to Increase

Forecasted Power Price Levels (\$/MWh)



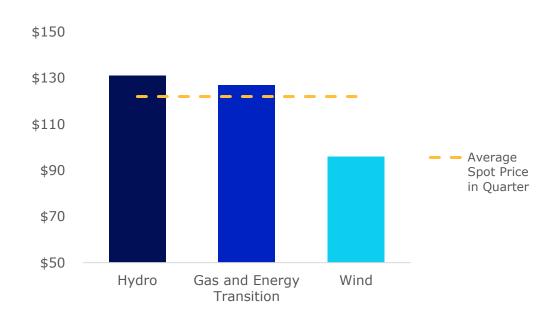
Number of \$0 hours expected to increase

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



Alberta Electricity Portfolio

Q2 2022 Realized Prices



7%

Alberta Hydro average premium in Q2 2022

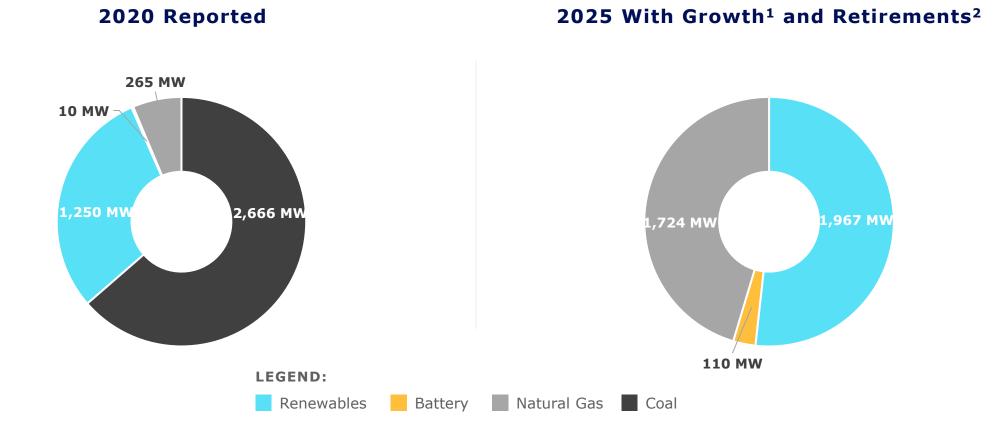
4%

Gas and Energy Transition average premium in Q2 2022¹





Our Evolving Position in the Alberta Market



Well-positioned to perform in energy-only market



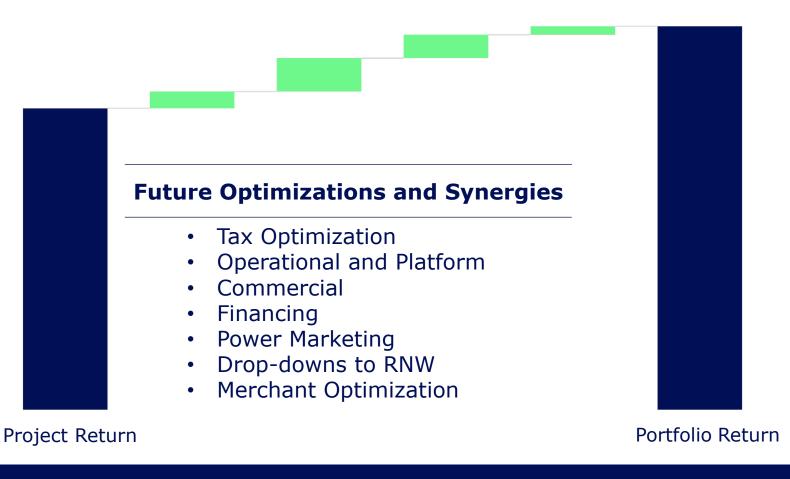
Financial Strategy and Plan



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



Our ability to identify and capture value drives enhanced portfolio returns



Prudent Capital Allocation

Deconsolidated FFO¹

Amortizing Debt (6-8%

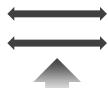
Preferred Dividends (8-10%)

Common Dividends (10-15%)

Sustaining Capital (25-35%)

Growth Capital Debt Reduction Share Buyback (30-50%)

5-Year Trend







Improving performance provides increased allocation to:



Growth



Dividends

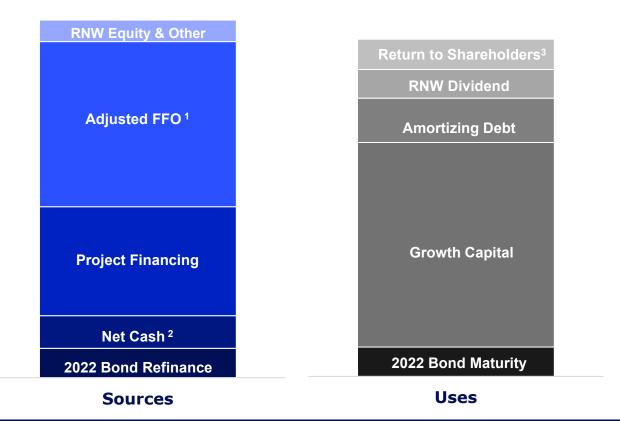


Share Buybacks



Growth Plan is Fully Funded

Consolidated Sources and Uses 2021-2025



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



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

Sustainability Target Highlights

Environmental Goals







Governance Goals



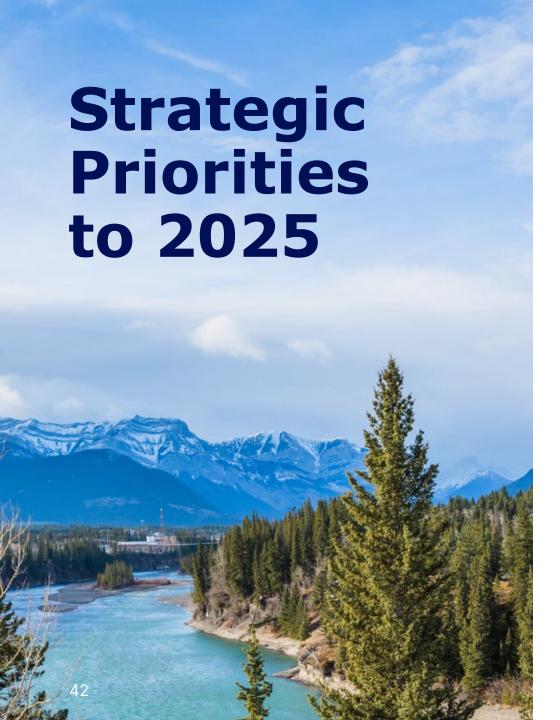
- End coal generation by 2021 in Canada and 2025 in US
- Reduce GHG emissions by 75% from 2015 levels by 2026
- Carbon neutral by 2050

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

- 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

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





Clean Electricity Growth Plan

- 1 Accelerate growth into customer-centred renewables and storage
- 2 Targeted approach to diversification
- Maintain financial strength and capital allocation discipline
- 4 Define next generation of power solutions
- 5 Lead in ESG policy development
- 6 Successfully navigate through COVID-19 pandemic







Diversified and resilient fleet



Clean electricity leader with ESG focus

3+ GW growth pipeline



Strong financial position





transalta

Questions and Answers

Visit us at: www.transalta.com Investor_relations@transalta.com