

Investor Presentation

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Growth-oriented North American energy transition company

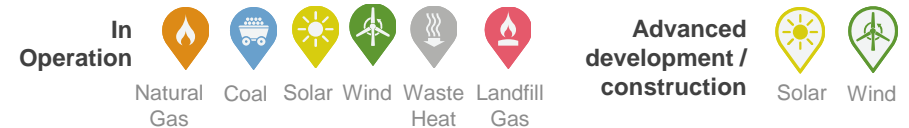
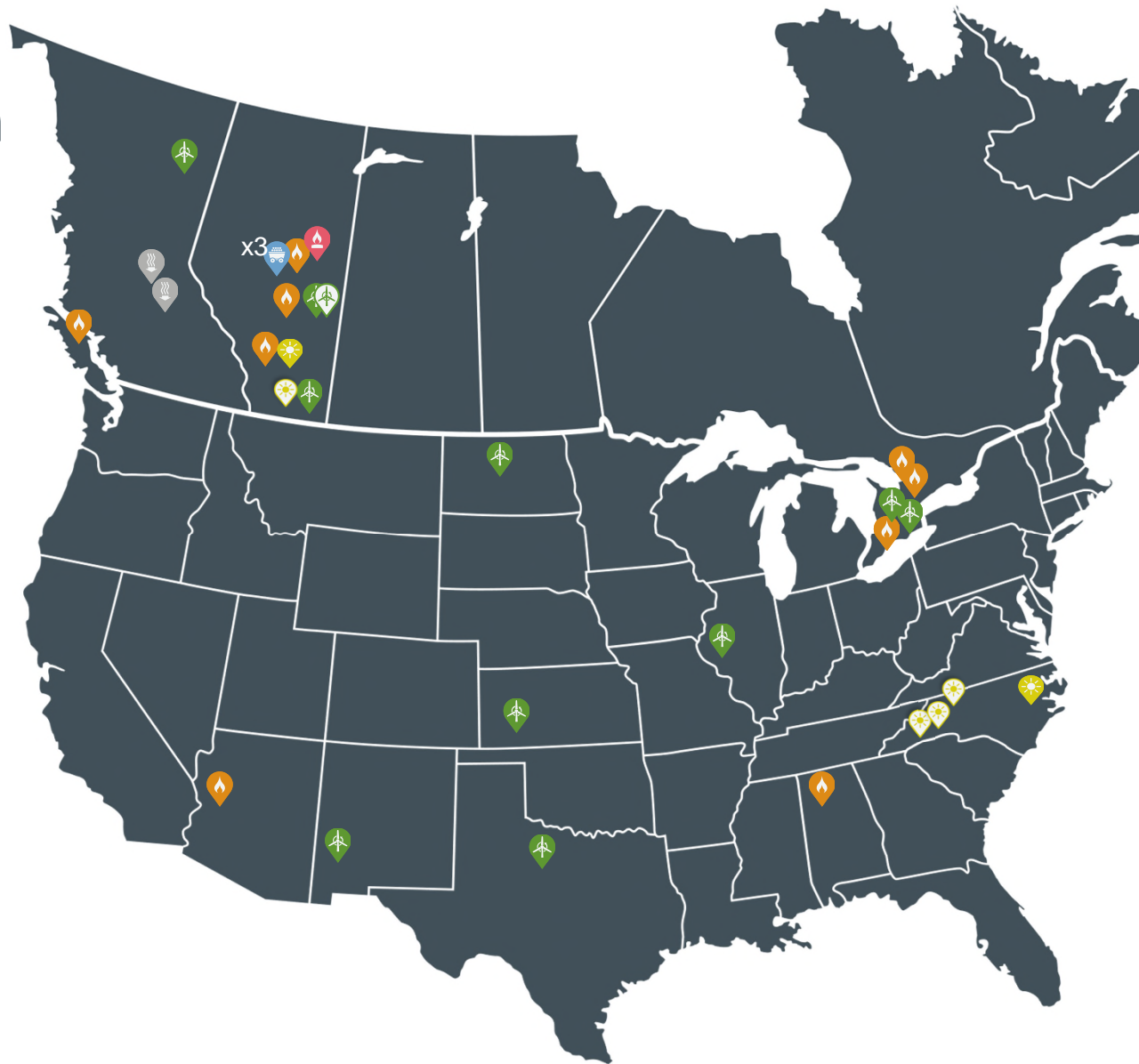
- Highly-contracted, young and diversified portfolio
- Targeting 10-12% total shareholder return; 18% average annual TSR in past 5 years
- Off coal in 2023 and targeting net carbon neutral before 2050

Operational facilities

- 27 facilities, ~6,600 MW

Projects under development

- ~900 MW
- 5 renewable projects and Genesee 1&2 repowering



Our strategy and path to net carbon neutral by 2050



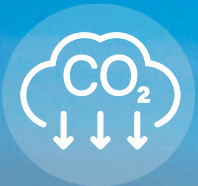
Investing in emissions
free renewables



Building and acquiring
facilities in Canada and the
U.S.



Integration of
storage technologies



Investing in critical
natural gas generation



Acquiring key facilities
in Canada and the U.S.



Reduce emissions profile
through decarbonization
technologies

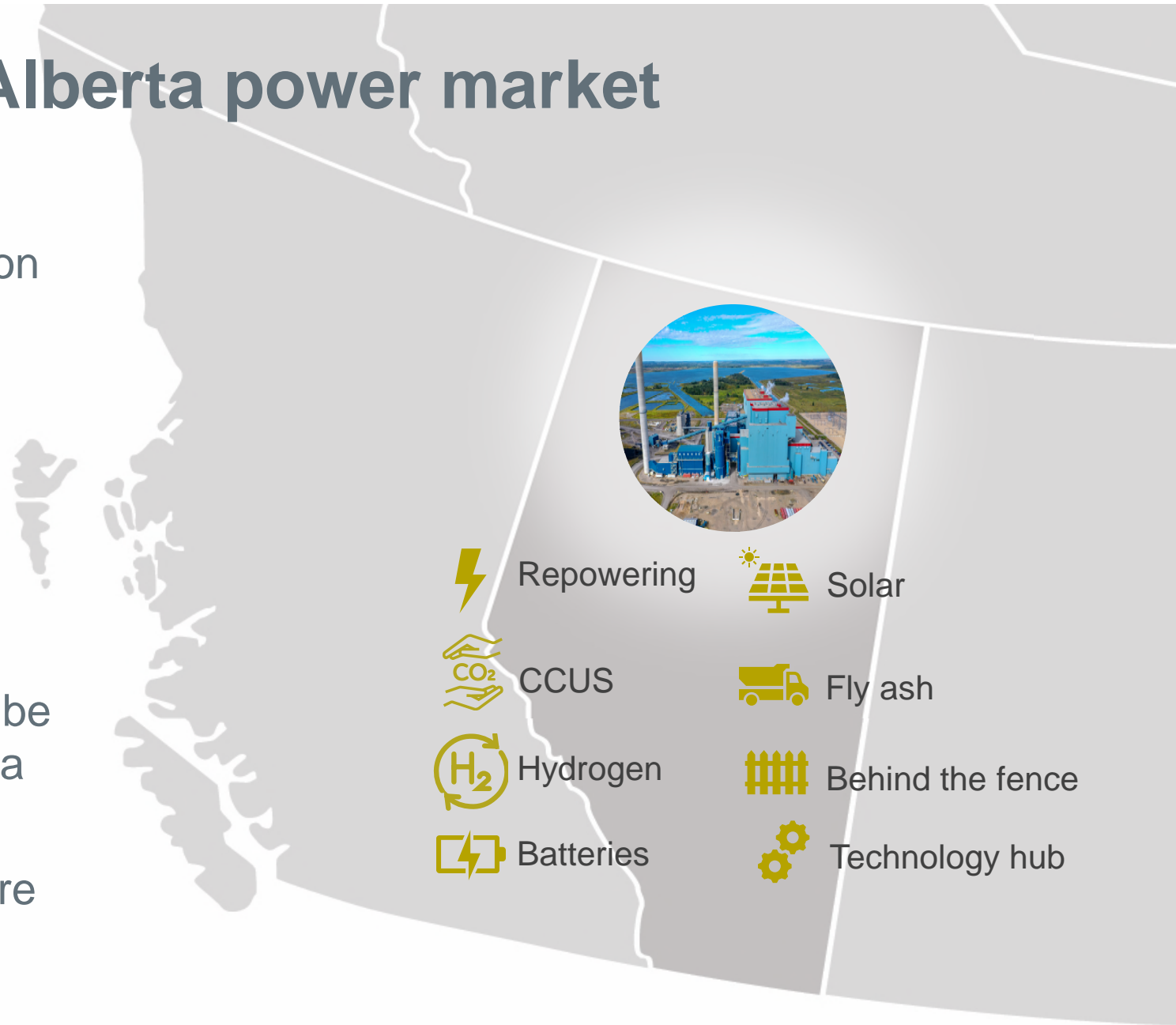


Repower coal units to
100% natural gas capability



A market leader in the Alberta power market

- Continue to reposition and optimize assets to maintain leadership position
- Largest provider of new generation over the last 20 years
- Leading developer and owner of renewables in the province
- Leading efforts to decarbonize thermal generation in the province
- Repowered Genesee 1&2 units will be most efficient NGCC units in Canada
- Genesee Energy Centre will be the heart of Alberta's decarbonized future



Renewable and storage acceleration



COD of Whitla Wind 2 in Dec/21 and 100% contracted as of Apr/22.



Halkirk Wind phase 2 commencing



Secured 1,298 MW of U.S. solar sites with battery potential



COD of Strathmore Solar in Q1/22, Enchant Solar expected in Q4/22



North Carolina solar projects commencing construction in 2022



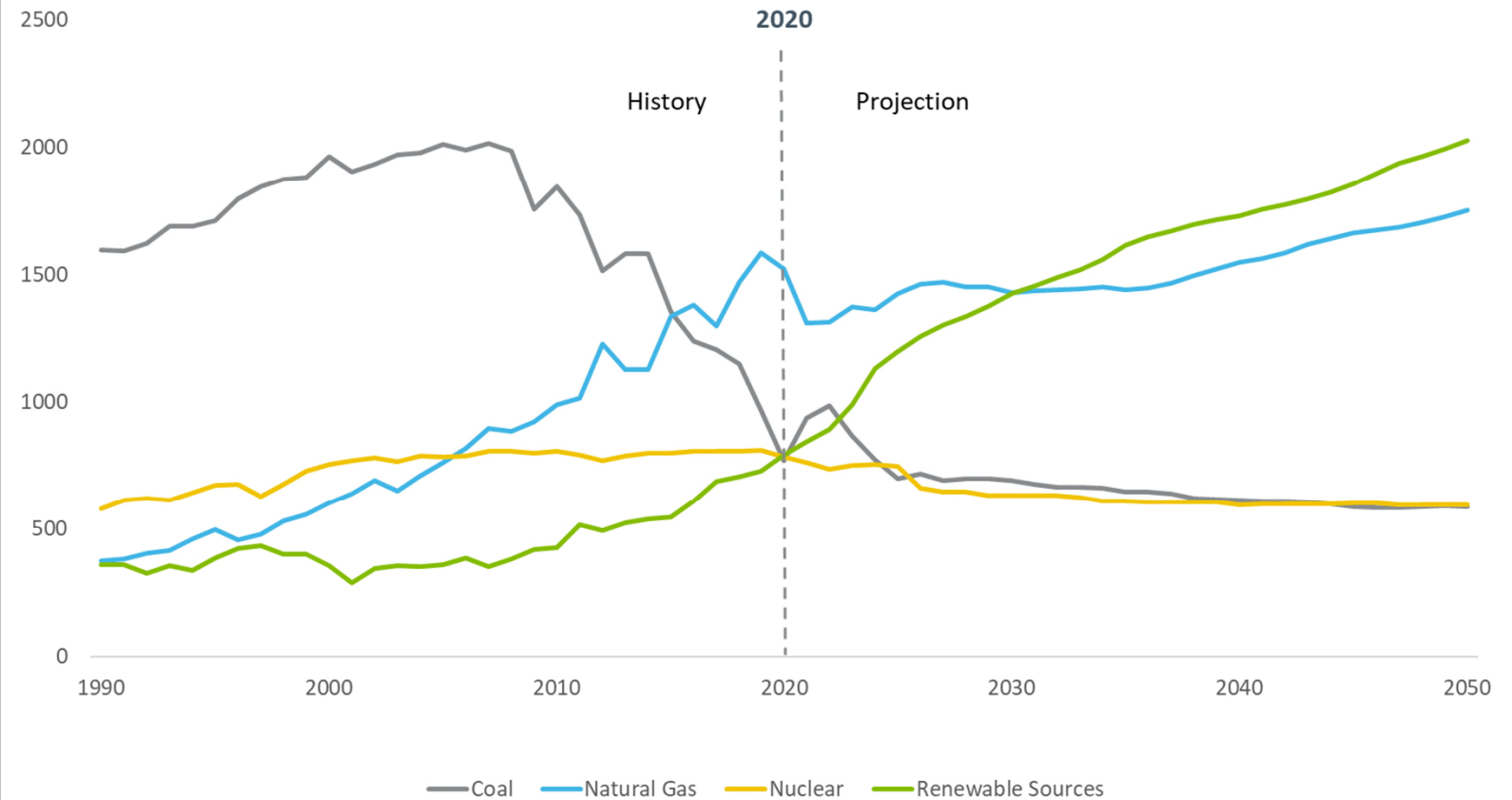
Long-term contracting of renewables in Alberta continues to be strong



Natural gas – necessary long-term role in power

- Natural gas essential to maintain system reliability and integrate renewables
- Decarbonization will be essential to long term resiliency
- Role of natural gas will transition from serving baseload energy requirements to serving capacity
- Well positioned natural gas sites are excellent future energy storage sites
- Responsible investments in strategic natural gas assets essential to long term decarbonization

U.S. Electricity Generation by Fuel Type
Generation (BkWh)



Source: US Energy Information Administration, Annual Energy Outlook 2021



Substantial progress on advancement of CCUS



Alberta CCUS hub

- Collaboration with Enbridge for “Open Access Wabamun Carbon Hub” progressing well
- Final stages of pre-FEED study
- Genesee CCS project expected to capture up to 3 million tonnes of CO₂ annually
- FID expected mid-2023 subject to government support and regulatory risks



CCS financial support

- \$1.8 - \$2.0B project cost for carbon capture
- Expect sufficient Federal and Provincial government support
- Direct Pay option that provides value of credit immediately is essential
- Ongoing discussions with Canada Infrastructure Bank on framework for financing
- Expect First Nations participation
- Other potential partnerships



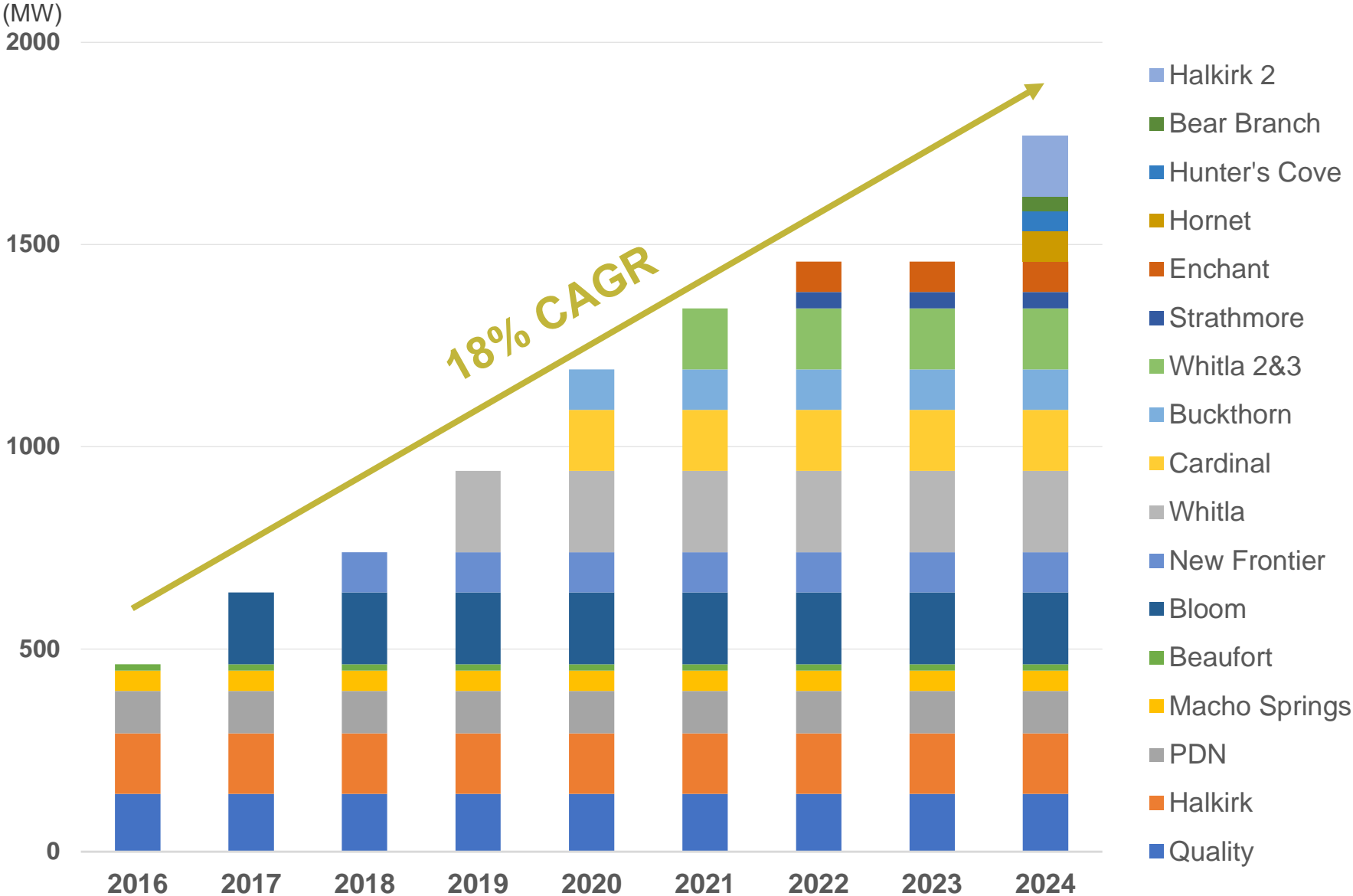
Carbon policy de-risking

- Required for Genesee CCS to advance
- General appreciation by governments that long-term policy uncertainty presents unique risks to investments in CCS
- Discussion of potential mechanisms and approaches to mitigate adverse impacts in event of carbon policy-related changes

Growth strategy

- Growth strategy aligns with our sustainability goals
- Decarbonization is an immense opportunity for gas and renewables technologies
- Strong renewable growth pipeline in Alberta and the U.S.
- Demonstrating success in recontracting natural gas assets

Consistent substantial growth in renewables



Development pipeline supports sustainable growth

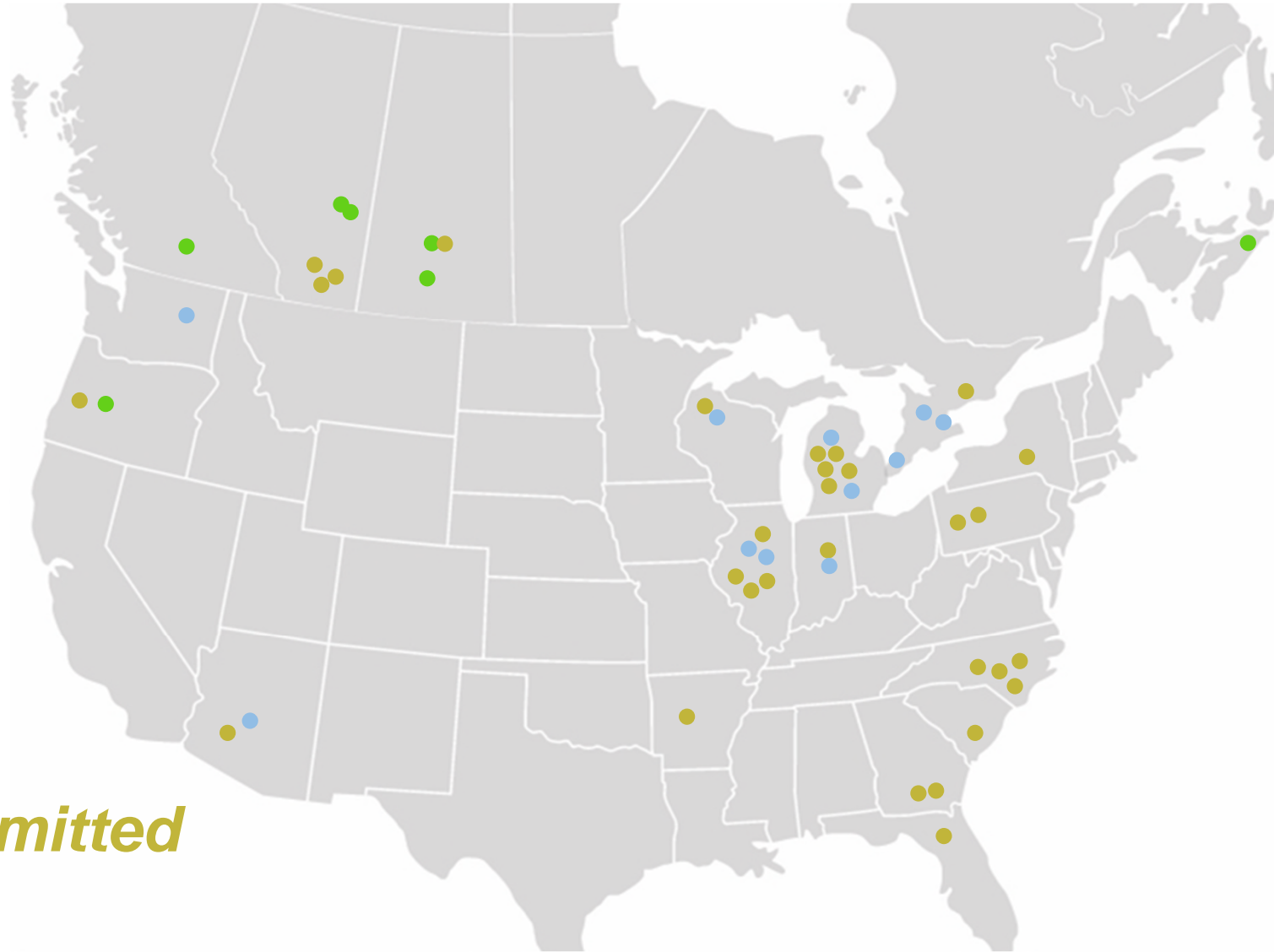
**3,300+ MW
generation**

- Wind (~1000 MW)
- Solar (~2300 MW)

**3,350 MWh
battery storage**

- Battery Storage

***Targeting \$500M of committed
capital for growth***



Recontracting of natural gas assets



Securing long term PPAs provide stable cash flows



Decatur (Alabama)

Extended enhanced Decatur contract by 10 years to 2032.



Arlington (Arizona)

Extended tolling agreement by 6 years to 2031 with materially higher AFFO over extended term.



Island Generation (BC)

Current PPA expires Apr/22. Discussion on extension for medium term promising. Further extension potentially after BCUC IRP process.



Goreway (ON)

Developments in Ontario very positive for recontracting in 2030. Current PPA expires in 2029.

Next contract expiry not until 2029 at Goreway



Alberta power market

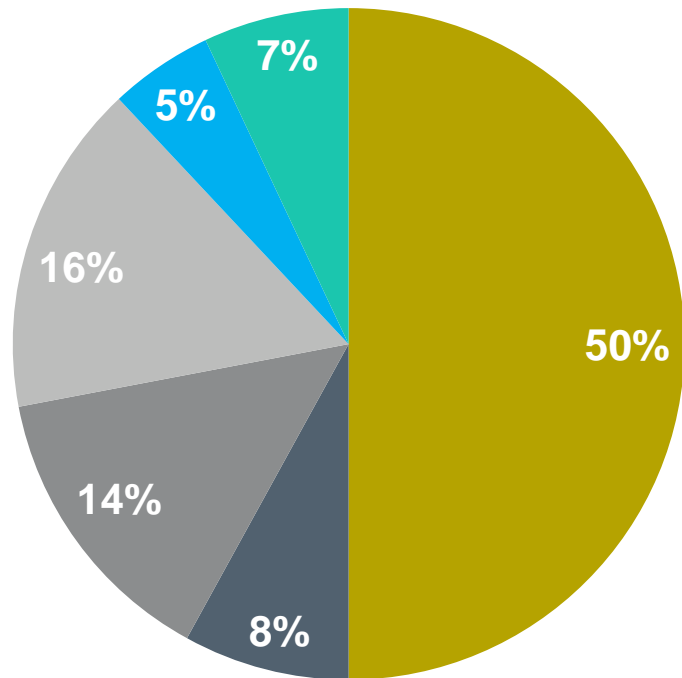
- Demand fully recovered from COVID-19 and low oil prices
- All-time summer and winter record demand set in 2021
- Demand expected to increase modestly year-over-year
- Robust market with average power price of \$102/MWh in 2021; 2022 forward prices ~\$90/MWh

Alberta power market

Need for reliable, flexible natural gas capacity

AESO capacity by technology

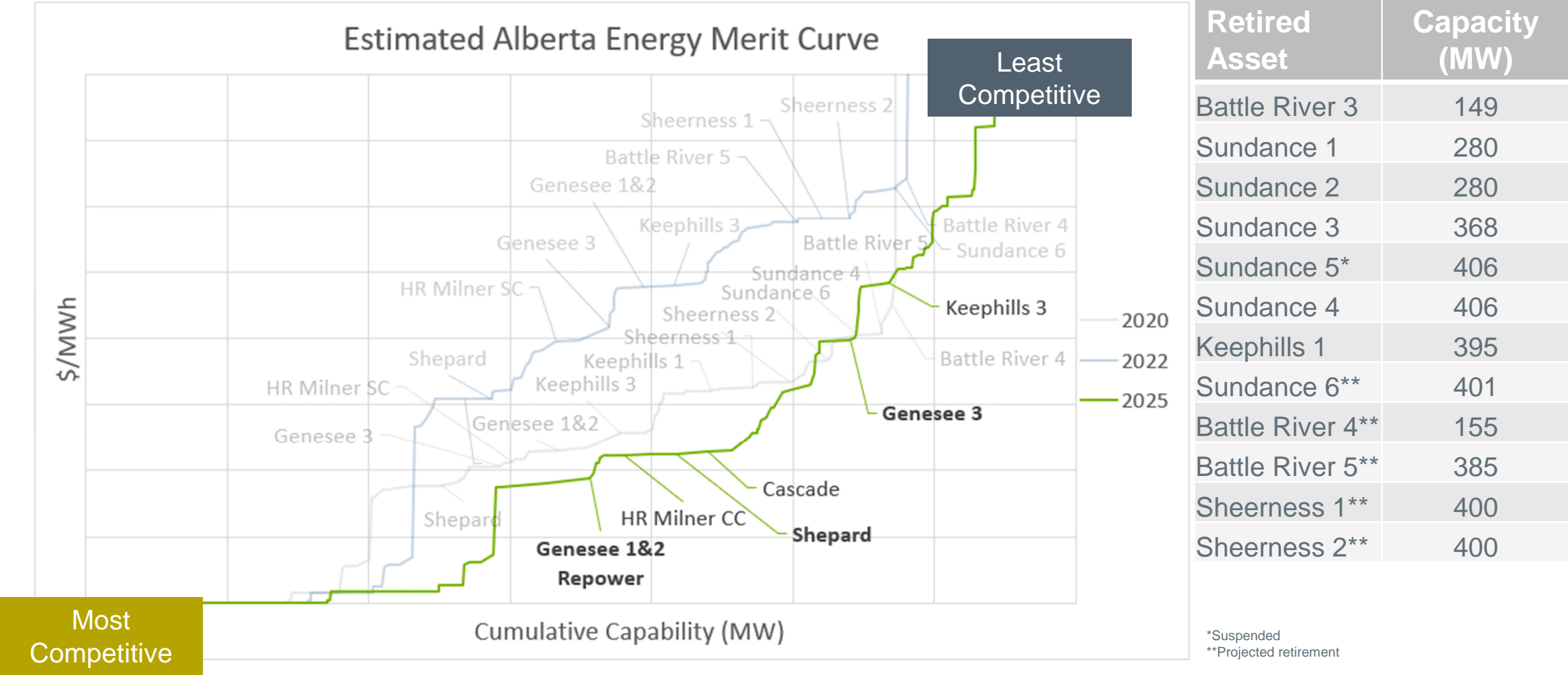
■ Gas ■ Coal ■ Wind ■ Converted Gas ■ Hydro ■ Other



- Today there is still **4,000 MW** of inefficient coal, converted coal, or dual fuel capacity
- Peak winter and summer load hours in 2021 saw **~85% of load being met with coal and gas**
- Peak winter and summer load hours saw wind and solar operating at **only 12% and 19%** of their respective capacities
- System can accommodate higher renewable penetration, but lower capacity factors will still result in the **need for reliable, flexible natural gas capacity**



Repositioning Genesee 1&2



Repowering Genesee 1&2 delivers long term value

Lower operating costs, useful asset life extension, long-term cash flow growth



Favourable economics – \$1.2B capital cost including \$195M for 210 MW battery storage. 20%+ levered returns



512 MW net capacity increase (total 1,372 MW)



Best-in-class NGCC technology with heat rate (6.6-6.7 GJ/MWh) advantage over all current and announced natural gas facilities



Significant environmental benefits – intensity of 0.35t/MWh; below Alberta's TIER regulation benchmark of 0.37t/MWh



Pursuing carbon capture and storage



Alberta portfolio optimization of short- and medium-term commodity price risk

(All data as of Dec 31/21)	2022	2023	2024
Power			
% Sold forward ⁽¹⁾	72%	47%	32%
Contracted power prices ⁽²⁾ (\$/MWh)	High-\$60s	Low-\$60s	High-\$50s
Forward power prices (\$/MWh)	\$94	\$72	\$61
Natural gas			
% Bought forward ⁽³⁾	100%	99%	85%
Weighted avg cost of gas contracts ⁽²⁾ (\$/GJ)	\$2.00-\$2.50	\$2.00-\$2.50	\$2.00-\$2.50
Forward gas prices (\$/GJ)	\$3.44	\$3.05	\$2.88

Managing risk through long-term power and natural gas contracts

1) Based on the Alberta baseload plants, including Joffre and Shepard

2) Forecasted average contracted prices may differ significantly from future average realized prices as future realized prices are driven by a combination of previously contracted prices and settled prices. When long-term forward portfolio optimization hedges are transacted, they reflect the market's expectations for future period pricing.

3) Includes gas burn for all baseload plants, and estimated gas requirements to supply fixed retail contracts



Financial strategy

- Deploying capital to advance progress towards our sustainability targets including the repowering of Genesee 1&2 and growing renewables portfolio
- Executing on \$1.5B in growth capex without the need for additional common equity
- Resilient cashflows supported by risk mitigation strategies deliver extension of 5% annual dividend growth to 2025
- Maintain investment grade credit rating
- Targeting 10-12% total shareholder return over the long term

Overview of financial strategy



Maintain financial stability and strength

- Strong liquidity
- Risk mitigation by stabilizing cash flows through hedging activities
- Invest in sustainable projects with stable cash flows



Funding a low carbon future

- Cost-effective funding of growth
- Innovative and diverse capital sources
- Well-laddered debt maturities



Maintain investment grade credit rating

- Access to capital markets through business cycles
- Competitive cost of capital



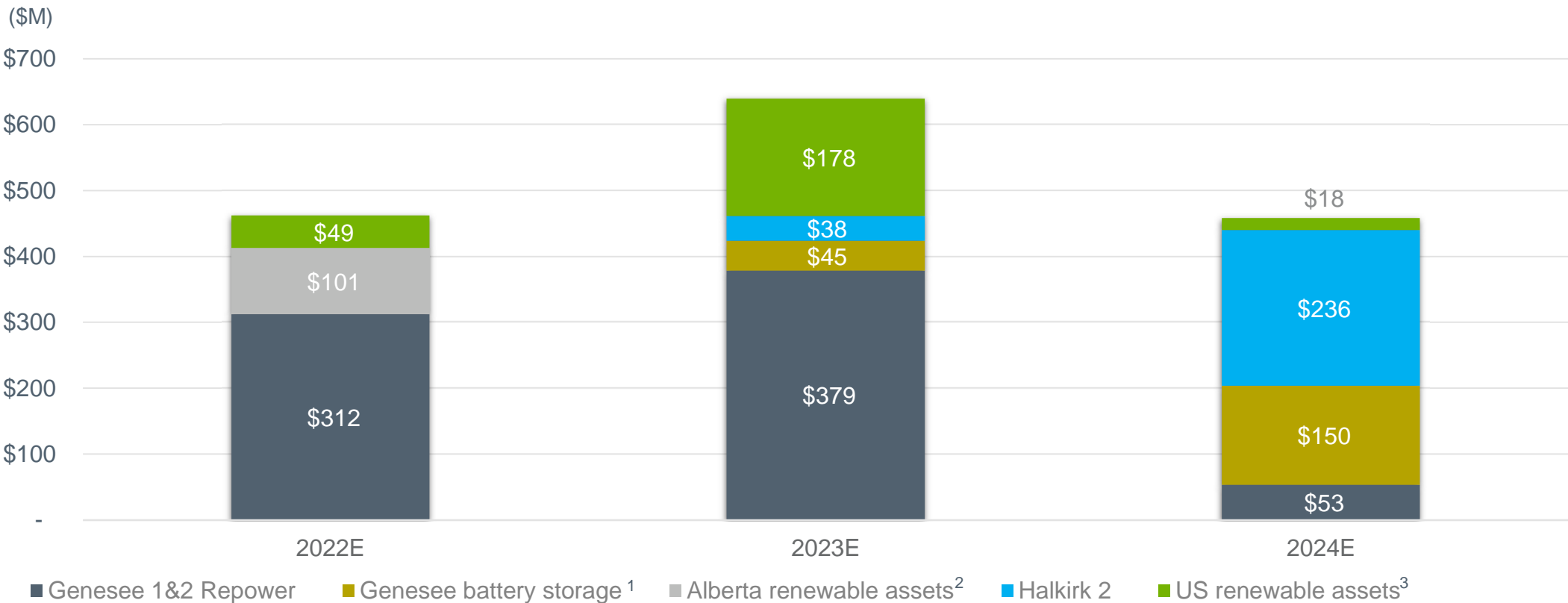
Deliver annual dividend growth

- Dividend stability through contracted cash flows
- Dividend growth within long term AFFO payout ratio of 45% to 55%



Executing on ~\$1.5 billion of growth capex

Proceeding with phase 2 of Halkirk Wind and Genesee battery storage

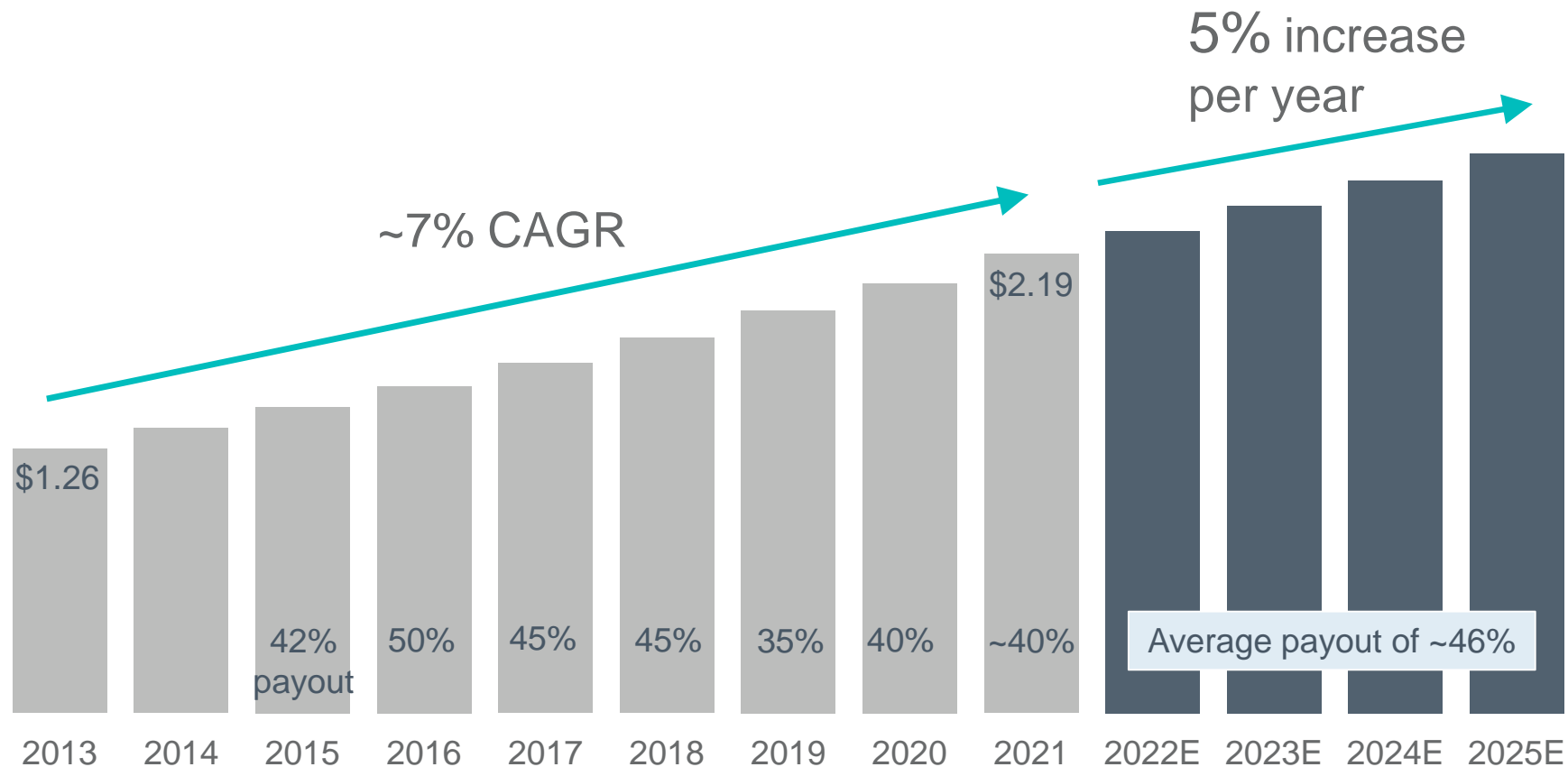


Halkirk 2 expected to contribute average annual AFFO of ~\$27M in first 5 years

1) Genesee battery storage of 210 MWs
2) Alberta renewables consist of Enchant Solar and Strathmore Solar
3) US renewables assets excludes Tax Equity contributions

Dividend growth outlook

Annualized dividend per share (1,2)



Forecast to be within AFFO payout ratio target range of 45% to 55% through 2025

1) Subject to market conditions, economic outlook, cash flow forecast, and Board approval at the time
2) 2013 to 2021 annualized dividend based on year-end quarterly common shares dividend declared



Sustainability / investment opportunity

- Corporate purpose – to power a sustainable future for people and planet
- Advancing a low carbon future with a clear path to net carbon neutral before 2050
- Natural gas generation has a necessary long-term role in power
- Accelerating ESG initiatives



Sustainability commitments – integral to Capital Power

- Broad compensation linked to ESG targets
 - Diversity targets
 - 30% carbon reduction by 2024
 - Employee well being
- Successful implementation of sustainable sourcing plan and water management strategy
- On track to be off coal in 2023
- Sustainability-linked credit facilities tied to emission intensity targets
- Collaboration with Enbridge for carbon capture & storage solution



On track to meet our sustainability targets

Path to net neutral by 2025



- Genesee efficiency program - 12% decrease in GHG by 2021
- Over \$3B invested in/committed to renewables
- C2CNT interest increased to 40%
- Over \$40M invested in carbon capture research
- Completed two CCUS FEED studies (2007/2011)

- Complete repowering and off coal
- Genesee Battery Energy Storage System
- CCUS FEED study at Genesee
- Invest in renewables, strategic natural gas
- Pair renewables with storage
- CCU: C2CNT and beyond
- Explore commercial / physical Direct Air Capture (DAC) solutions

- Genesee CCS project
- Expand CCU
- Exploring carbon mitigation technologies on ex-Alberta fleet
- Add DAC to carbon compliance portfolio

- Net carbon neutral via physical solutions on natural gas assets, DAC and “offsets”
- Invest in DAC facility
- Renewables + storage as baseload

- Physical decarbonization



Attractive investment opportunity

Resilient strategy drives growth & accelerates net carbon neutral by 2050

Success in renewables

- Contracts for renewable projects affirm competitiveness
- Continued wind project execution in Alberta
- Very substantial renewable development opportunity set

Strong position in the robust Alberta power market

- Repowering capitalizes on strong Alberta market
- Medium term risks greatly reduced

Strong long term cashflow from contracted assets including natural gas assets

- Strategy of recontracting natural gas assets proving out

Investing in optimization and innovation

- Genesee Carbon Conversion Centre
- Carbon capture and storage for Genesee 1 & 2
- Ops 2030 investment to increase EBITDA by \$50 million

ESG commitments are significant early steps in our journey



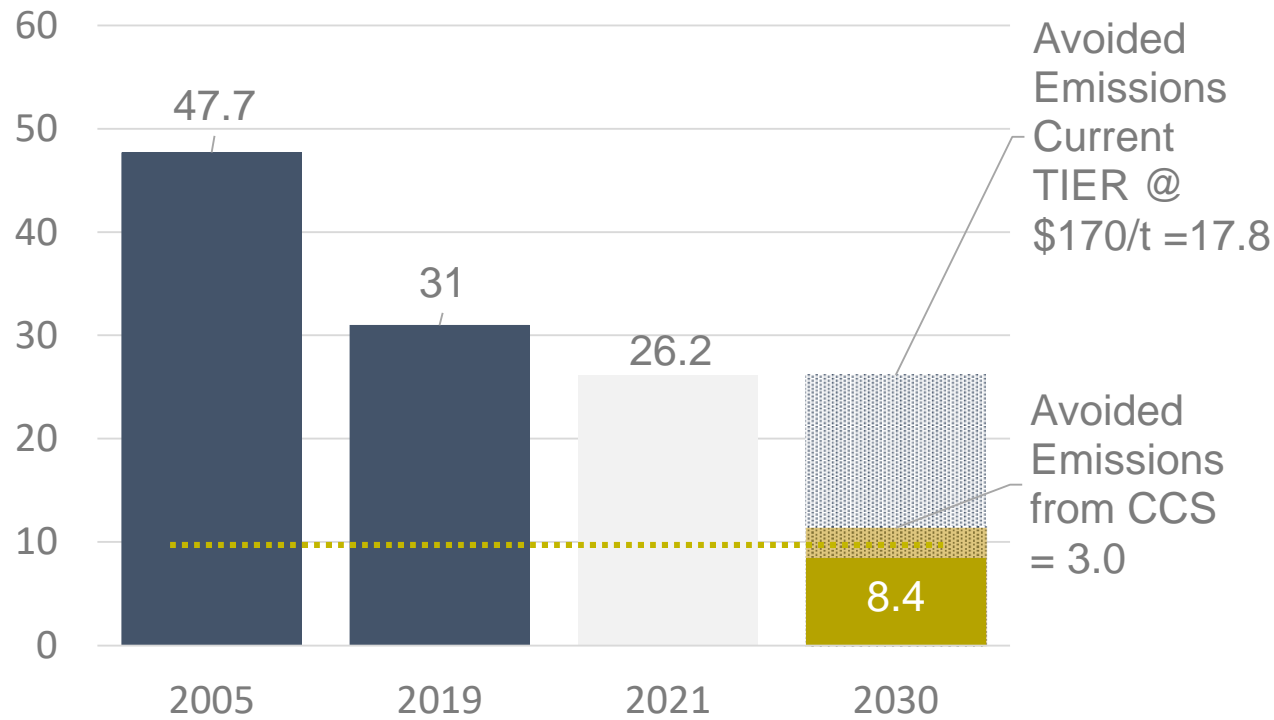
Appendices

- Alberta TIER program
- Managing Alberta carbon exposure
- Credit rating metrics
- Debt maturity schedule
- 2022 Targets

Alberta TIER⁽¹⁾ program

Significantly reducing carbon emissions

AB electricity sector emissions (MT)⁽²⁾



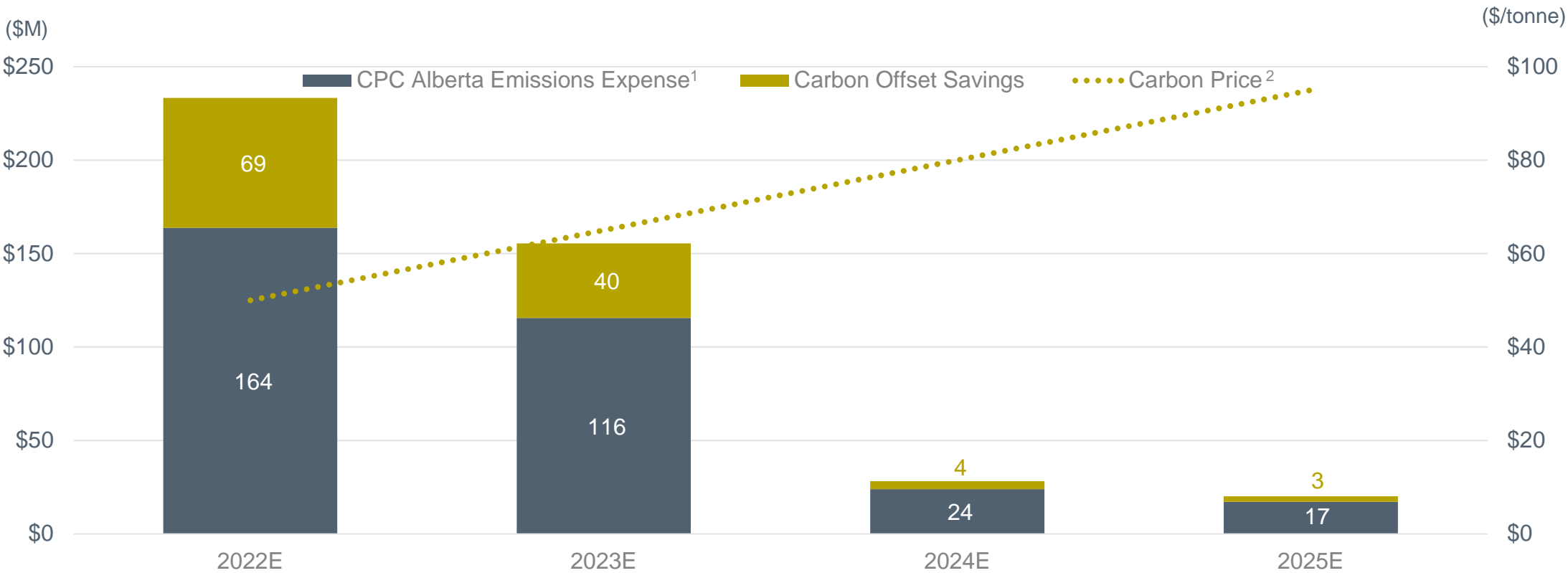
- TIER program driving down carbon emissions in a **meaningful** way
- Alberta government **supportive** of TIER program
- Carbon prices per tonne will rise annually and post-2030, intensity standards will also tighten
- Genesee 1 and 2 repowering projects are **robust and resilient** to increasingly stringent carbon pricing frameworks

(1) Technology Innovation and Emissions Reduction Regulation

(2) Capital Power projections



Managing Alberta carbon exposure



Physically reducing emissions supplemented with low-cost offsets protect and enhance asset value

1) Assumes TIER regulation maintained, federal benchmark stringency requirements (under the Greenhouse Gas Pollution Pricing Act) maintained through 2025 at 0.37 tCO₂e/MWh
2) Assumes carbon price of \$50/tonne in 2022 and increasing by \$15/tonne each year thereafter to \$170/tonne in 2030

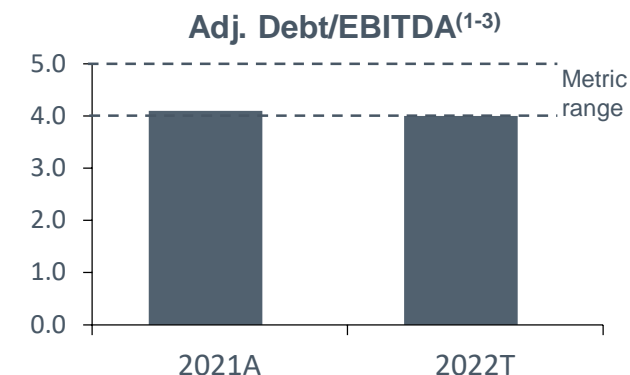
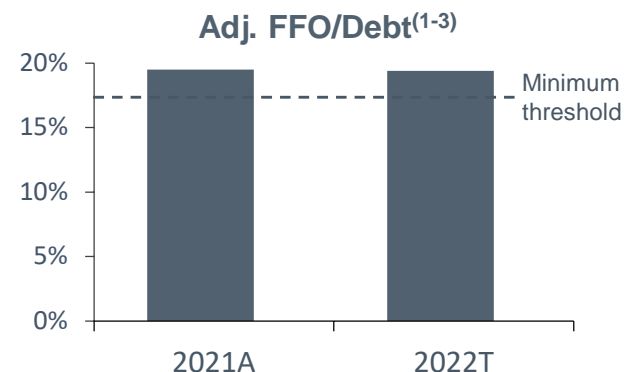
Financial stability and strength

Strong balance sheet and commitment to investment grade credit ratings

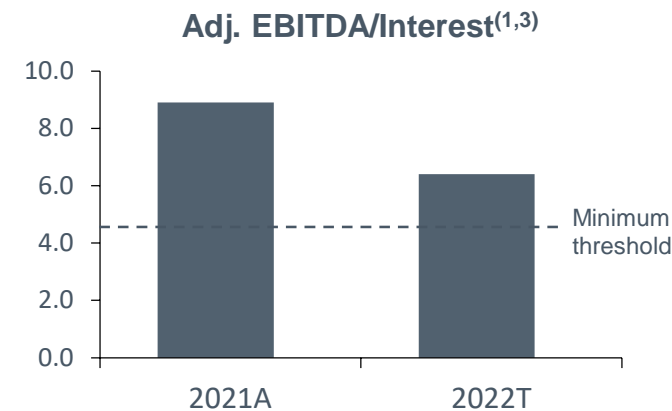
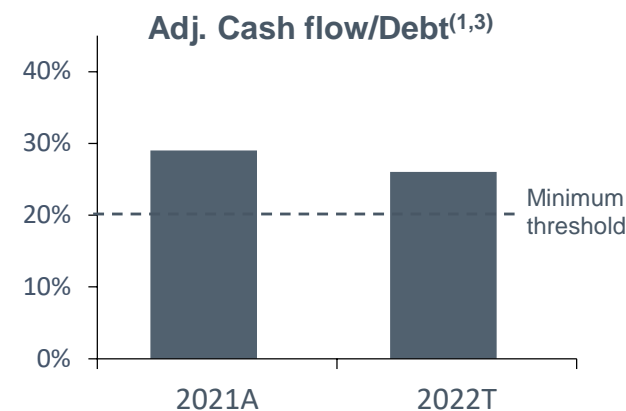
Agency	Ratings	Outlook
S&P	BBB- / P-3	Stable
DBRS	BBB(low) / Pfd-3 (low)	Stable

- Strong liquidity from operating cash flow and \$1B of committed sustainability-linked credit facilities to 2026
- 2022 forecast to be another strong year with credit metrics well above current ratings threshold

S&P financial metrics



DBRS financial metrics



1) Cash flow and adjusted EBITDA amounts include off-coal compensation.

2) Based on S&P's weighted average ratings methodology.

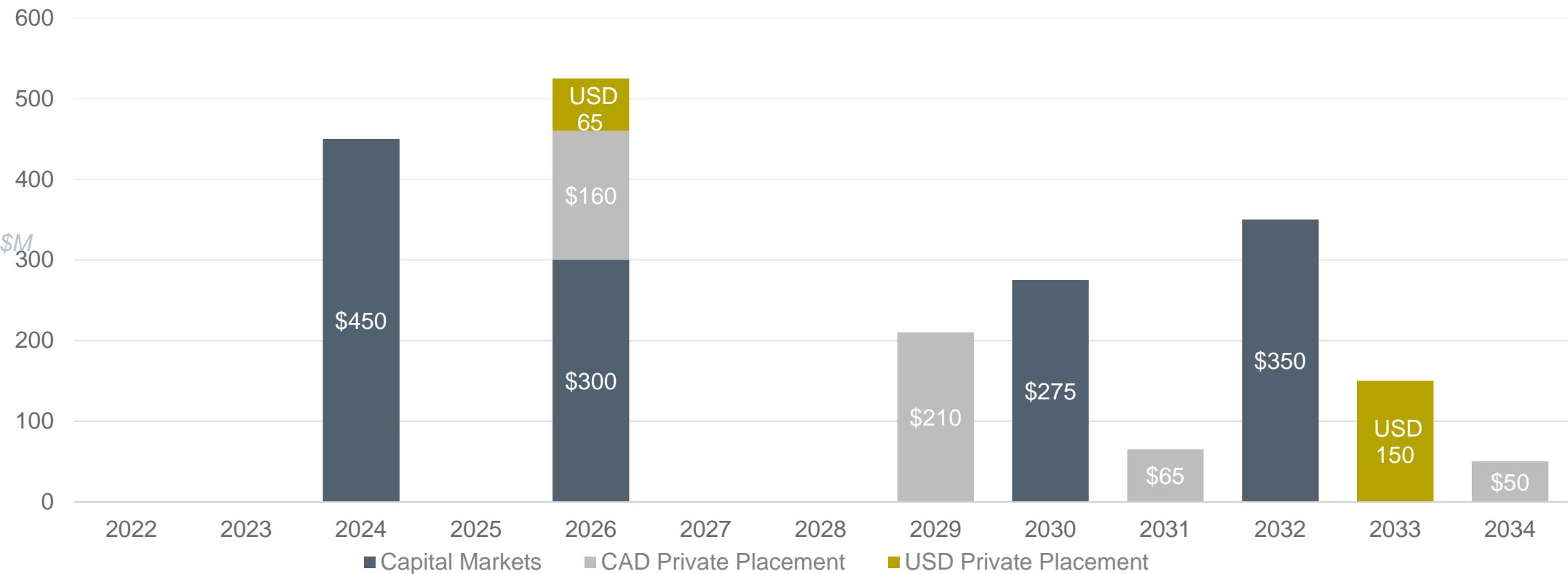
3) 2021A means 2021 actual, 2022T means 2022 target.



Debt maturity profile⁽¹⁾

Well spread-out debt maturities supported by long asset lives

- Longer term debt reflects increased confidence in our business profile
- Strong liquidity from cash flow from operations, cash-on-hand, and credit facilities

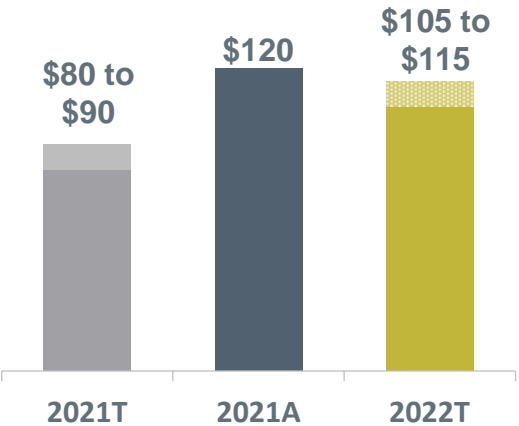


1) Debt amounts as of December 31, 2021. Schedule excludes non-recourse debt, credit facility debt, and tax-equity financing.

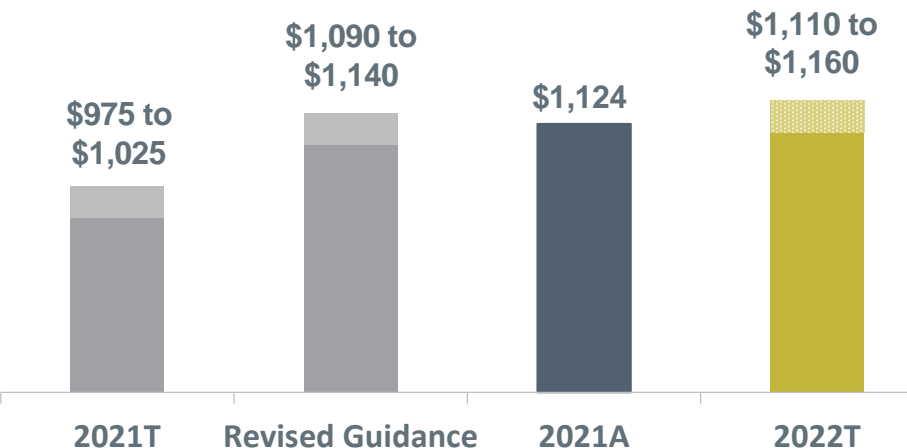


2022 targets – guidance reaffirmed

Sustaining capex (\$M)



Adjusted EBITDA (\$M)



2022 sensitivities

Inflationary pressure

- Modest unmitigated exposure on operating results
- Managing construction exposure

Interest rate uncertainty

- Fixed-rate debt
- Hedges in place for medium-term financings

Capex

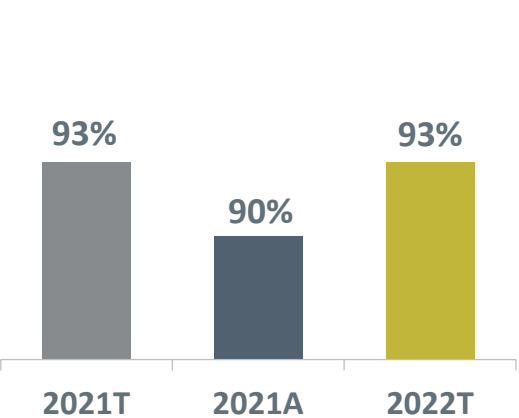
- Significant planned outage year with both Genesee 1 and 3

Current taxes

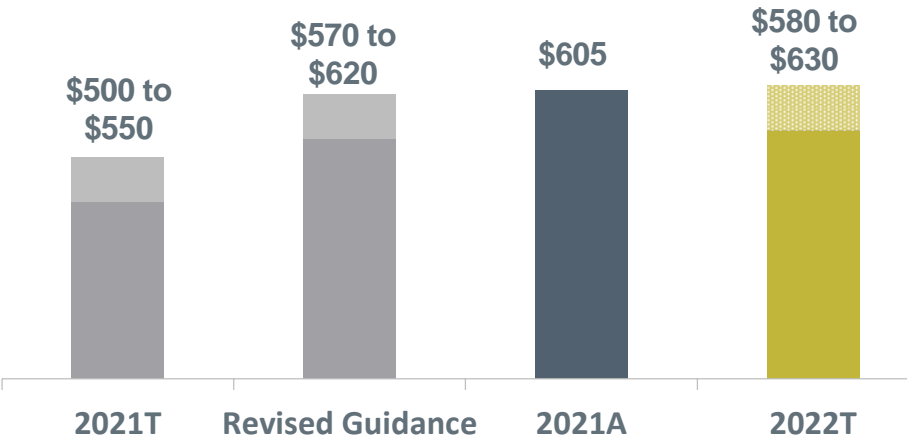
Internally generated cash flow

- Strong Alberta price outlook

Facility availability



AFFO (\$M)



\$500M target of committed capital for growth



Non-GAAP financial measures and ratios

The Company uses (i) earnings before net finance expense, income tax expense, depreciation and amortization, impairments, foreign exchange gains or losses, finance expense and depreciation expense from its joint venture interests, gains or losses on disposals and unrealized changes in fair value of commodity derivatives and emission credits (adjusted EBITDA), (ii) adjusted funds from operations (AFFO), (iii) normalized earnings attributable to common shareholders as financial performance measures.

The Company also uses AFFO per share and normalized earnings per share as performance measures. These measures are non-GAAP ratios determined by applying AFFO and normalized earnings attributable to common shareholders, respectively, to the weighted average number of common shares used in the calculation of basic and diluted earnings per share.

These terms are not defined financial measures according to GAAP and do not have standardized meanings prescribed by GAAP and, therefore, are unlikely to be comparable to similar measures used by other enterprises. These measures should not be considered alternatives to net income, net income attributable to shareholders of the Company, net cash flows from operating activities or other measures of financial performance calculated in accordance with GAAP. Rather, these measures are provided to complement GAAP measures in the analysis of the Company's results of operations from management's perspective.

Reconciliations of these non-GAAP financial measures are disclosed in the Company's Integrated Annual Report prepared as of February 23, 2022 for 2021, which is available under the Company's profile on SEDAR at [SEDAR.com](https://www.sedar.com) and on the Company's website at capitalpower.com.



Forward-looking information

Forward-looking information or statements included in this presentation are provided to inform the Company's shareholders and potential investors about management's assessment of Capital Power's future plans and operations. This information may not be appropriate for other purposes. The forward-looking information is generally identified by words such as will, anticipate, believe, plan, intend, target, and expect or similar words that suggest future outcomes.

Material forward-looking information includes expectations regarding:

- our priorities and long term-strategies, including our corporate, sustainability, renewables and digitalization strategies;
- our company-wide targets specific to climate-related performance, including reduction of emissions and emissions intensity and being net carbon neutral by 2050, repowering of Genesee 1 and 2 with addition of battery storage and conversion of Genesee 3, completion of the Genesee Carbon Conversion Centre and commercial application of carbon conversion, capture and storage technologies;
- the implementation of Ops 2030, our Road to Decarbonization and our road map to 2050 and the expected reduction in carbon from our operations;
- our efforts to create a more equitable workplace and our goals for diversity of our workforce;
- our goals for long-term Total Shareholder Return, annual capital growth and future dividend growth;
- our 2022 performance targets, including for facility availability, sustaining capital expenditures, AFFO and adjusted EBITDA;
- our plans to add renewables generation to our fleet;
- expectations around timing and costs associated with our upgrades, projects and repowering plans at our Genesee facility, including being off coal in 2023;
- future revenues, expenses, earnings, adjusted EBITDA and AFFO;
- the future pricing of electricity and market fundamentals in existing and target markets;
- future dividend growth;
- our future cash requirements including interest and principal repayments, capital expenditures, dividends and distributions;
- our sources of funding, adequacy and availability of committed bank credit facilities and future borrowings;
- future growth and emerging opportunities in our target markets including the focus on certain technologies;
- the timing, funding, costs of and financial impacts (including impacts to adjusted EBITDA and AFFO) related to existing, planned and potential development projects and acquisitions (including the acquisition of portfolio of solar development sites, phase 2 of Halkirk Wind, the repowering of Genesee 1 and 2 (including being hydrogen ready and battery storage), phases 2 and 3 of Whitla Wind, Strathmore Solar, Bear Branch Solar, Hornet Solar, Hunter's Cove Solar and Enchant Solar;
- impacts of the Arlington Valley tolling agreement extension on adjusted EBITDA and AFFO in the years the executed agreement becomes effective;
- facility availability and planned outages;
- capital expenditures for facility maintenance and other (sustaining capital, future growth projects, commercial initiatives);
- discussion of our risks and strategies and plans for risk management and mitigation;
- the impacts of market designs in our core markets;
- the resolution of the pricing dispute on the Buckthorn Wind offtake and commodity swaps;
- matters related to the LLR Proceeding recovery of invoices from appropriate parties and potential impacts to the Company arising from the foregoing; and
- the impact of climate change and the COVID-19 pandemic.

These statements are based on certain assumptions and analyses made by the Company considering its experience and perception of historical and future trends, current conditions, expected future developments, and other factors it believes are appropriate including its review of purchased businesses and assets. The material factors and assumptions used to develop these forward-looking statements relate to:

- electricity, other energy and carbon prices;
- performance;
- business prospects (including potential re-contracting of facilities) and opportunities including expected growth and capital projects;
- status of and impact of policy, legislation and regulations;
- effective tax rates;
- the development and performance of technology;
- foreign exchange rates;
- matters relating to the LLR Proceeding, including the recovery and timing thereof from appropriate parties; and
- other matters discussed under the Our Strategy section pertaining to Performance Targets for 2022.

Whether actual results, performance or achievements will conform to the Company's expectations and predictions is subject to several known and unknown risks and uncertainties which could cause actual results and experience to differ materially from the Company's expectations. Such material risks and uncertainties are:

- changes in electricity, natural gas and carbon prices in markets in which the Company operates and the use of derivatives;
- regulatory and political environments including changes to environmental, climate, financial reporting, market structure and tax legislation;
- disruptions, or price volatility within the Company's supply chains;
- generation facility availability, wind capacity factor and performance including maintenance expenditures;
- ability to fund current and future capital and working capital needs;
- acquisitions and developments including timing and costs of regulatory approvals and construction;
- changes in the availability of fuel;
- ability to realize the anticipated benefits of acquisitions;
- limitations inherent in the Company's review of acquired assets;
- changes in general economic and competitive conditions;
- changes in the performance and cost of technologies and the development of new technologies, new energy efficient products, services and programs; and
- risks and uncertainties discussed under the Risks and Risk Management section.

See Risks and Risk Management in the Company's 2021 Integrated Annual Report and Risks and Risk Management, for further discussion of these and other risks. Readers are cautioned not to place undue reliance on any such forward-looking statements, which speak only as of the date made. The Company does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements to reflect any change in the Company's expectations or any change in events, conditions or circumstances on which any such statement is based, except as required by law.



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