

Investor Presentation August 2022

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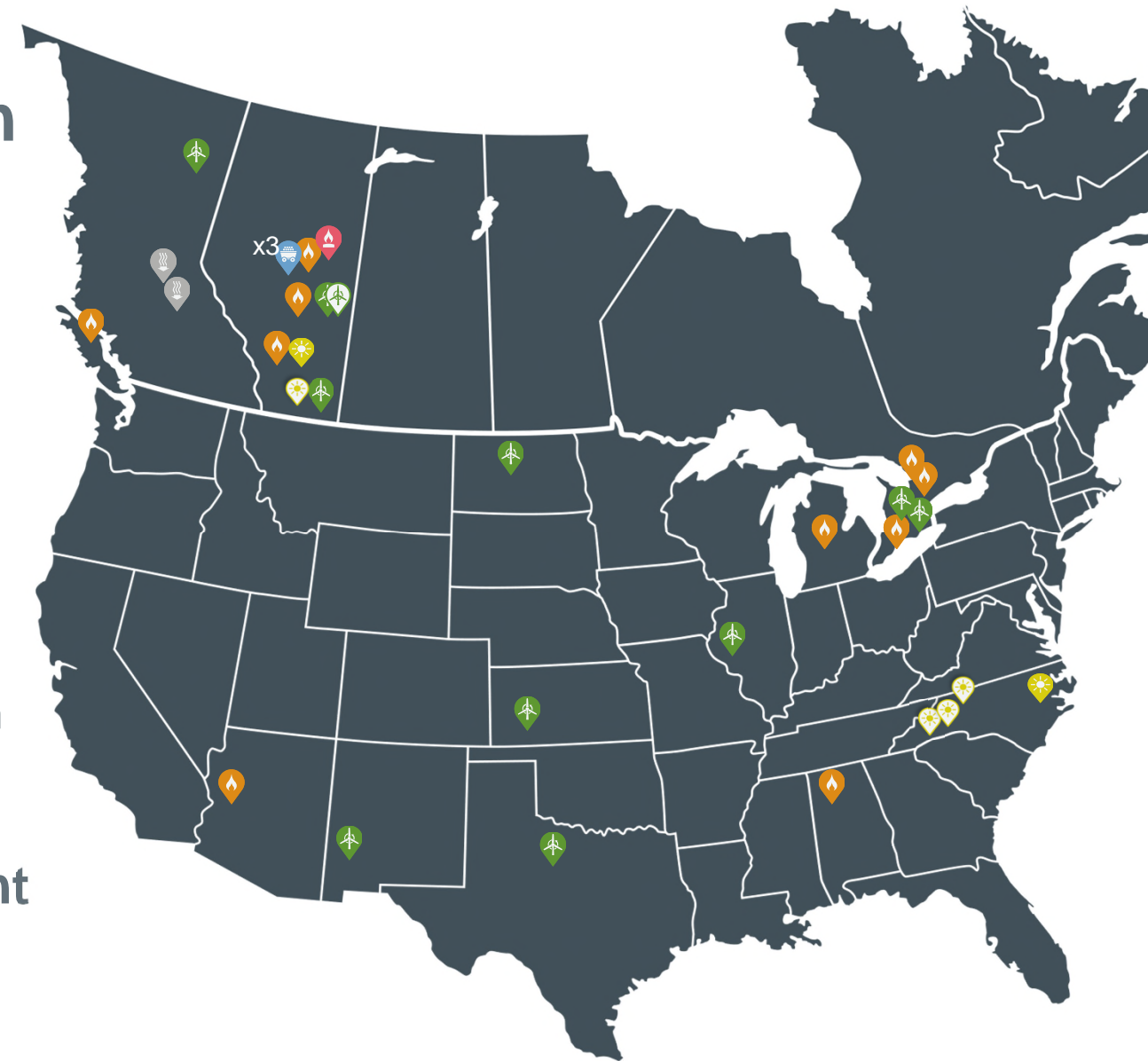


Growth-oriented North American energy transition company

- Highly-contracted, young and diversified portfolio
- Well-positioned assets and trading expertise in the attractive Alberta power market
- Recently announced acquisition of 50% interest in Midland Cogen facility; closing in Q3/22
- Off coal in 2023 and targeting net carbon neutral before 2050
- Delivered 9 consecutive years of dividend growth with a 6% annual dividend guidance to 2025

Operations & projects under development

- 28* operating facilities totaling ~7,460 MW*
- 5 renewable projects and Genesee 1&2 repowering project adding ~900 MW by 2024



* Includes Midland Cogen facility; acquisition expected to close in Q3/22.



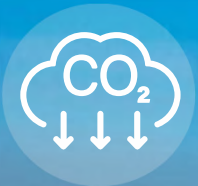
Our strategy and path to net carbon neutral by 2050



Investing in emissions free renewables

Building and acquiring facilities

Integration of storage technologies



Investing in critical natural gas generation

Acquiring / evolving key facilities including storage

Reduce emissions profile through decarbonization technologies



Our roadmap to 2050

2009–TODAY

- Genesee efficiency program – 12% decrease in greenhouse gas (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)

TODAY–2024

- 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

2024 –2030

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

2030–2050

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

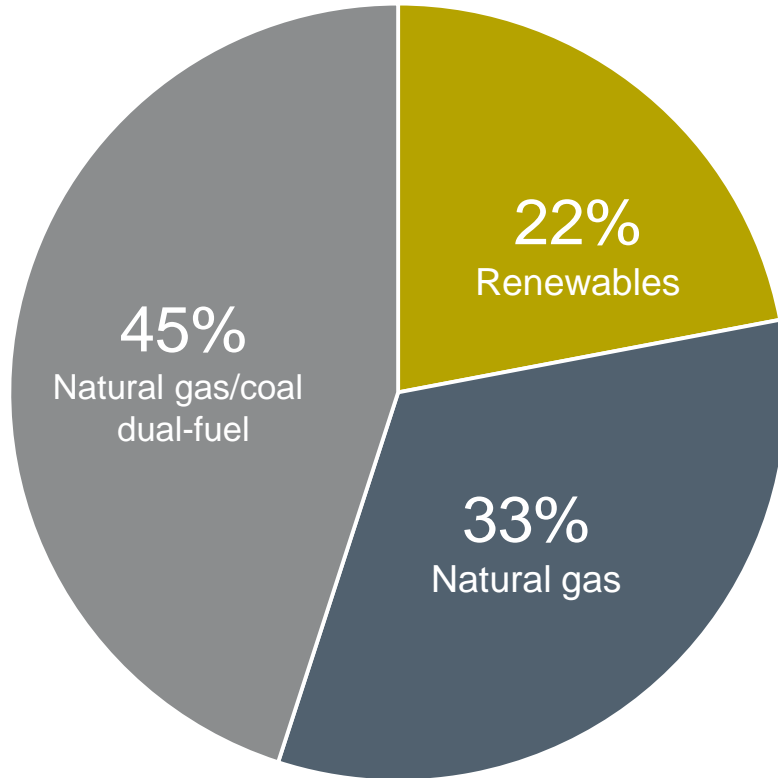
2050–2070

- Physical decarbonization



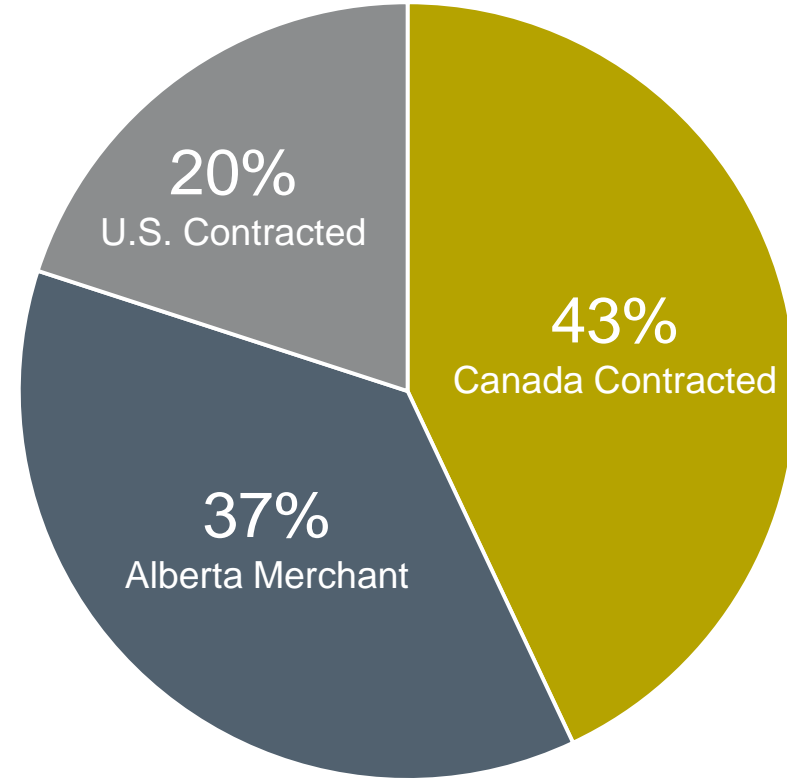
Business mix overview

Fuel Type⁽¹⁾



Clean natural gas and renewable projects in development will replace dual-fuel in 2024

Contracted versus Merchant⁽¹⁾



Average PPA term remaining of ~9.7 years⁽²⁾

1) Percentage breakdown based on the midpoint of the revised 2022 adjusted EBITDA guidance range of \$1.24 billion to \$1.28 billion.

2) Based on megawatt weighting.

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
- Ontario represents significant opportunity
- Increasing M&A opportunities

Renewable and storage acceleration

Developing 5 renewables projects with positive outlook for growth



Enchant Solar (75 MW) COD expected in Q4/22



Halkirk Wind phase 2 (151 MW) COD expected in Q4/24



3 North Carolina solar projects (160 MW) COD expected in Q4/24



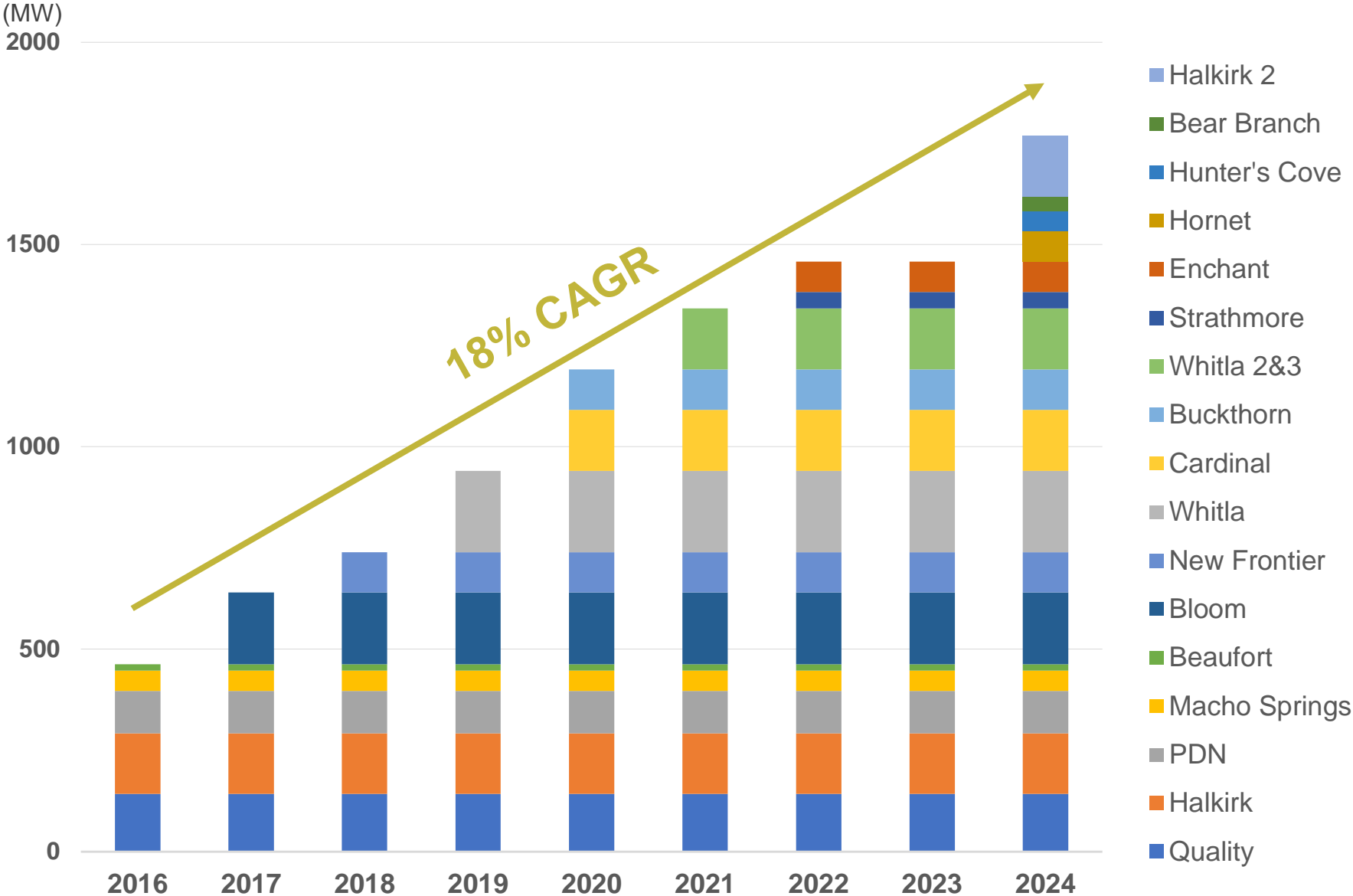
~400 MWs of new renewable capacity in AB under long-term contracts



Secured 1,850 MW of U.S. solar sites with battery potential



Consistent substantial growth in renewables



Development pipeline supports sustainable growth

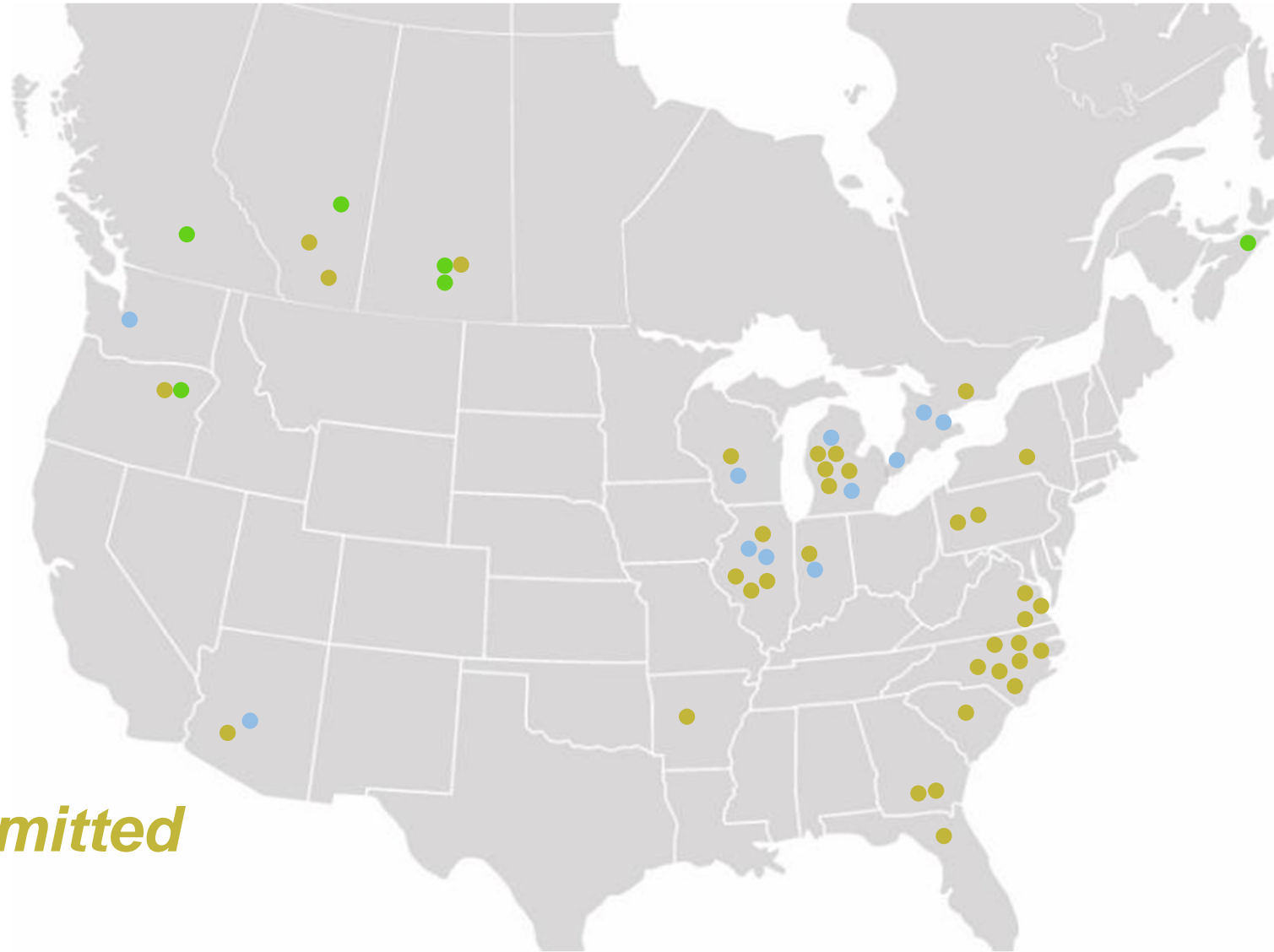
**3,650 MW
generation**

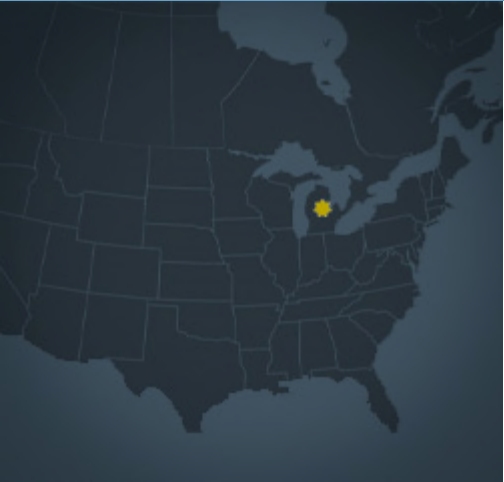
- Wind (~1100 MW)
- Solar (~2600 MW)

**3,350 MWh
battery storage**

- Battery Storage

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





Continued execution of midlife natural gas strategy

Acquisition of Midland Cogeneration Venture (Midland Cogen)

- 1,633 MW natural gas combined-cycle cogen facility located in Midland, Michigan
- Partnered with Manulife Investment Management to acquire Midland Cogen for a total of US\$894M, including US\$521M of project level debt
- Each partner to contribute ~US\$186M
- Closing expected in Q3/22

Financial highlights

- Financing with cash on hand and credit facilities; no equity required
- ~85% of capacity under long-term contracts with high quality counterparties with contract expiries in 2030 and 2035
- Accretive transaction: 5-year average AFFO accretion of US\$0.30 (7%)
- 5-year average annual adjusted EBITDA of US\$59M and AFFO of US\$35M (our portion)

Recontracting outlook

- Critical asset to support grid reliability during transition to renewables and extremely well-positioned for recontracting beyond 2030



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



Solid track record of recontracted natural gas assets

Securing long term PPAs provide stable cash flows



Decatur (Alabama)

Acquired: Jun/17
Original PPA Expiry: Dec/22
Recontracting: 10-year extension to Dec/32; includes enhancements for immediate additional capacity when extension announced in Aug/20.



Arlington (Arizona)

Acquired: Nov/18
Original PPA Expiry: Oct/25
Recontracting: 6-year extension to Oct/31 with materially higher AFFO over extended term.



Island Generation (BC)

Acquired: Oct/10
Original PPA Expiry: Apr/22
Recontracting: 4.5-year renewal to Oct/26. Continue to advocate for longer-term recontracting as part of BCUC's IRP review process.



Goreway (ON)

Acquired: Jun/19
Original PPA Expiry: Jun/29
Recontracting: Goreway, York Energy and East Windsor are well positioned to participate in IESO's upcoming procurement process. IESO has identified significant incremental capacity needs as early as 2025.

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 and \$121/MWh in 2022 (based on July YTD actuals & forward prices)
- Current forward prices of \$95/MWh (2023) and \$73/MWh (2024)

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



Repowering



Solar



CCUS



Fly ash



Direct Air
Capture



Behind the fence



Batteries

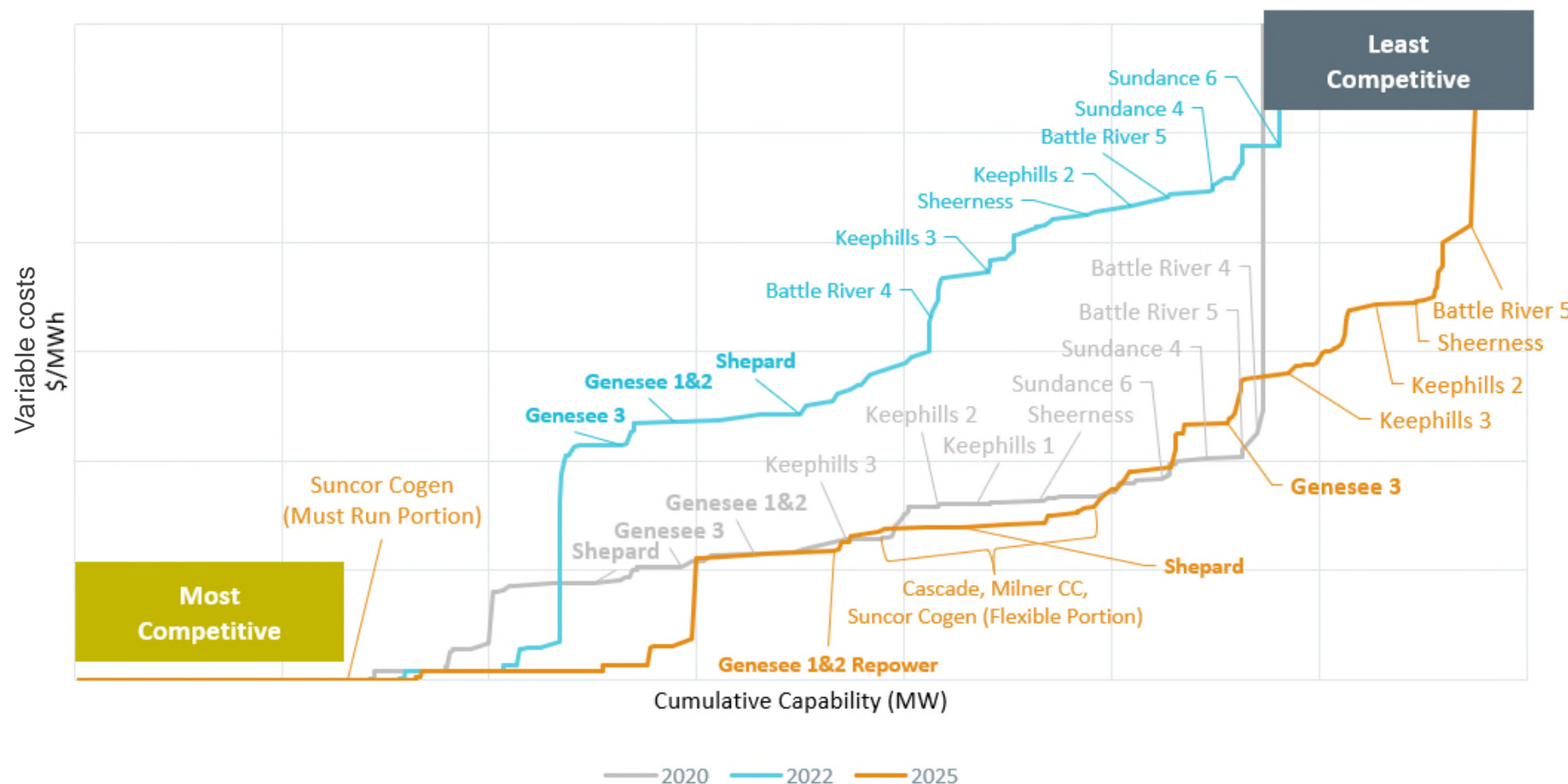


Technology hub



Repositioning Genesee 1&2

Estimated Alberta Merit Curve



Retired Asset	Capacity (MW)
Battle River 3	149
Keephills 1	395
Sundance 1	280
Sundance 2	280
Sundance 3	368
Sundance 4	406
Sundance 5*	406
Sundance 6**	401
Battle River 4**	155
Battle River 5**	385
Sheerness 1**	400
Sheerness 2**	400
Keephills 2**	395

*Suspended
**Projected retirement

Clean Electricity Standard (CES) update

March 2022

- Federal consultations on CES design principles and considerations
- Government commitment to manage transition to maintain reliability and affordability



July 26, 2022

- Released Proposed Frame for Clean Electricity Regulation (CER)
- Recognizes continued role for natural gas generation in supporting reliability and integrating renewables
- “Near-zero” intensity-based performance standard
- New units (post-2024 COD) must comply with standard effective Jan/35
- Existing units (pre-2025 COD) compliance with standard either 2035 or linked to “end-of-life”



Next steps

- Proposed Frame provides basis for workable framework
- Environment & Climate Change Canada (ECCC) targeting end of 2022 for release of draft CES regulation

Notable impacts to Capital Power

- Our Canadian thermal fleet, including Genesee repowering, would qualify as existing units
- Framework would accommodate regional differences and mitigate potential for market disruption
- Affirms a continued role for natural gas generation within a net-zero framework

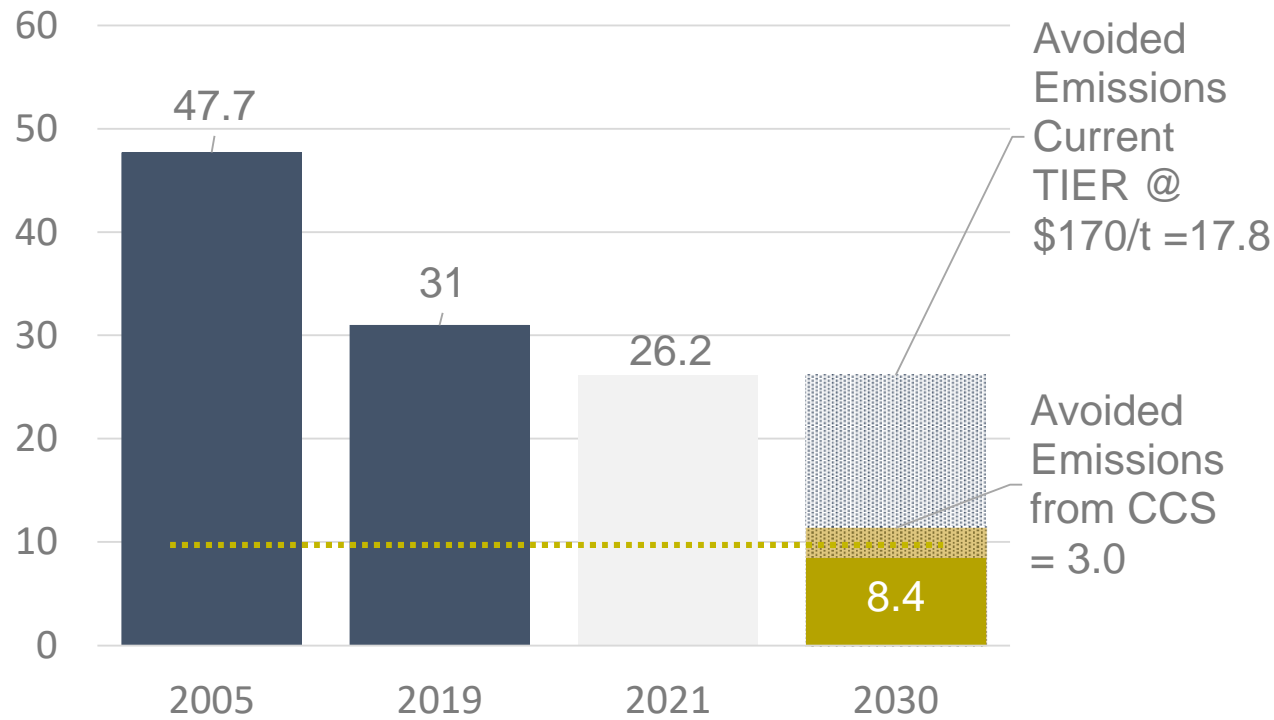
Proposed Frame preserves value for our natural gas fleet



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.



Alberta portfolio optimization of commodity price risk

(All data as of Jun 30/22)	2023	2024	2025
Power			
% Sold forward ⁽¹⁾	70%	45%	27%
Contracted power prices ⁽²⁾ (\$/MWh)	High-\$60s	Low-\$60s	Low-\$60s
Forward power prices (\$/MWh)	\$95	\$69	\$65
Natural gas			
% Bought forward ⁽³⁾	Over 80%	Over 80%	Over 50%
Weighted avg cost of gas contracts ⁽²⁾ (\$/GJ)	\$2.00-\$2.50	\$2.00-\$2.50	\$2.00-\$2.50
Forward Alberta gas prices (\$/GJ)	\$4.37	\$4.10	\$4.08

Successfully de-risking variable costs and locking in higher margins

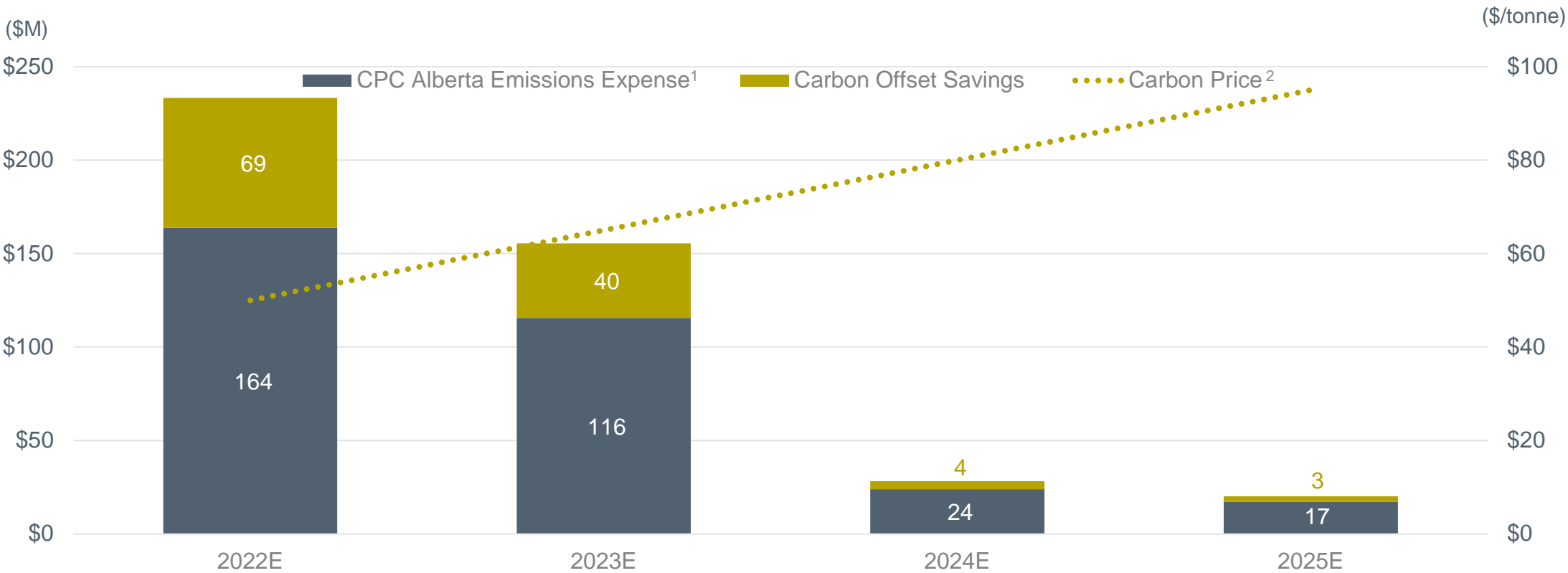
1) Based on the Alberta baseload plants, including Joffre and Shepard.

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.



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 strategy

- Deploying capital to advance progress towards our sustainability targets including the repowering of Genesee 1&2 and growing renewables portfolio
- Executing on \$1.8B in growth capex without the need for additional common equity
- Resilient cashflows supported by risk mitigation strategies support 6% 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

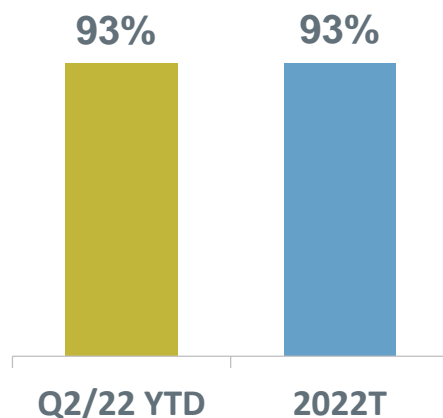
- Dividend stability through contracted cash flows
- Dividend growth within long term AFFO payout ratio of 45% to 55%



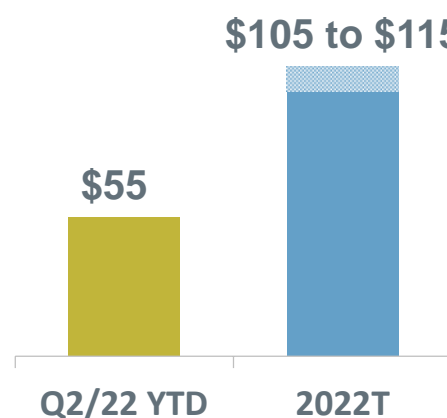
2022 targets

Higher financial guidance reflects YTD results and positive outlook

Facility availability⁽¹⁾



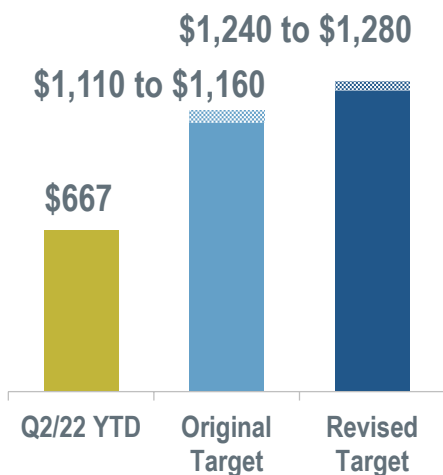
Sustaining capex⁽¹⁾ (\$M)



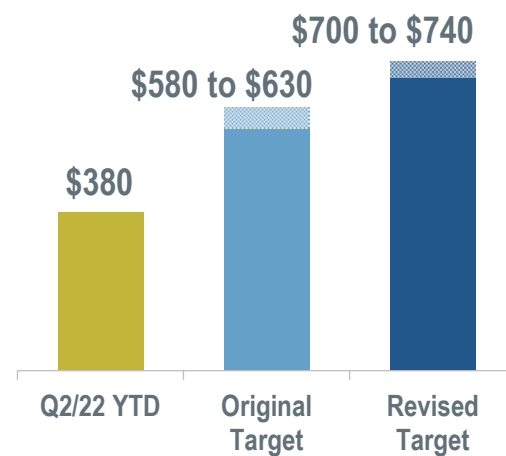
Higher revised financial guidance

- 11% and 19% increases to the midpoints of guidance ranges for adjusted EBITDA and AFFO, respectively
- Driven by stronger AB Commercial performance, higher contributions from contracted Ontario and US facilities and acquisition of Midland Cogen

Adjusted EBITDA (\$M)



AFFO (\$M)



Sustaining capex

- Expected to be above target range due to increased work planned for remainder of the year and timing of work

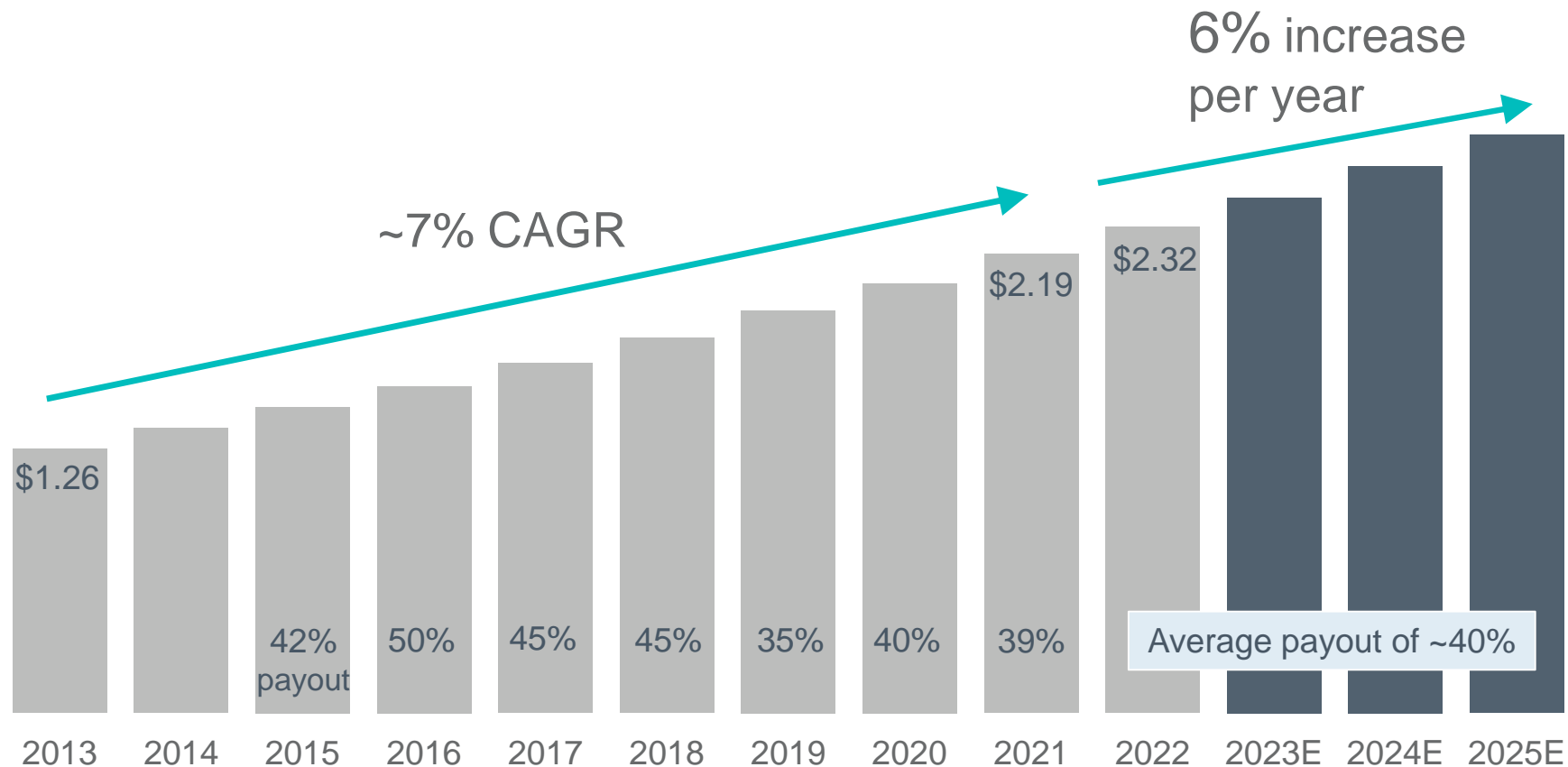
Exceeded \$500M target of committed capital for growth with Midland Cogen acquisition

1) 2022 targets for Facility availability and Sustaining capex does not reflect the impact from the acquisition of the Midland Cogeneration facility.



Delivering 9 consecutive years of dividend growth

Increased annual dividend guidance to 2025 from 5% to 6%

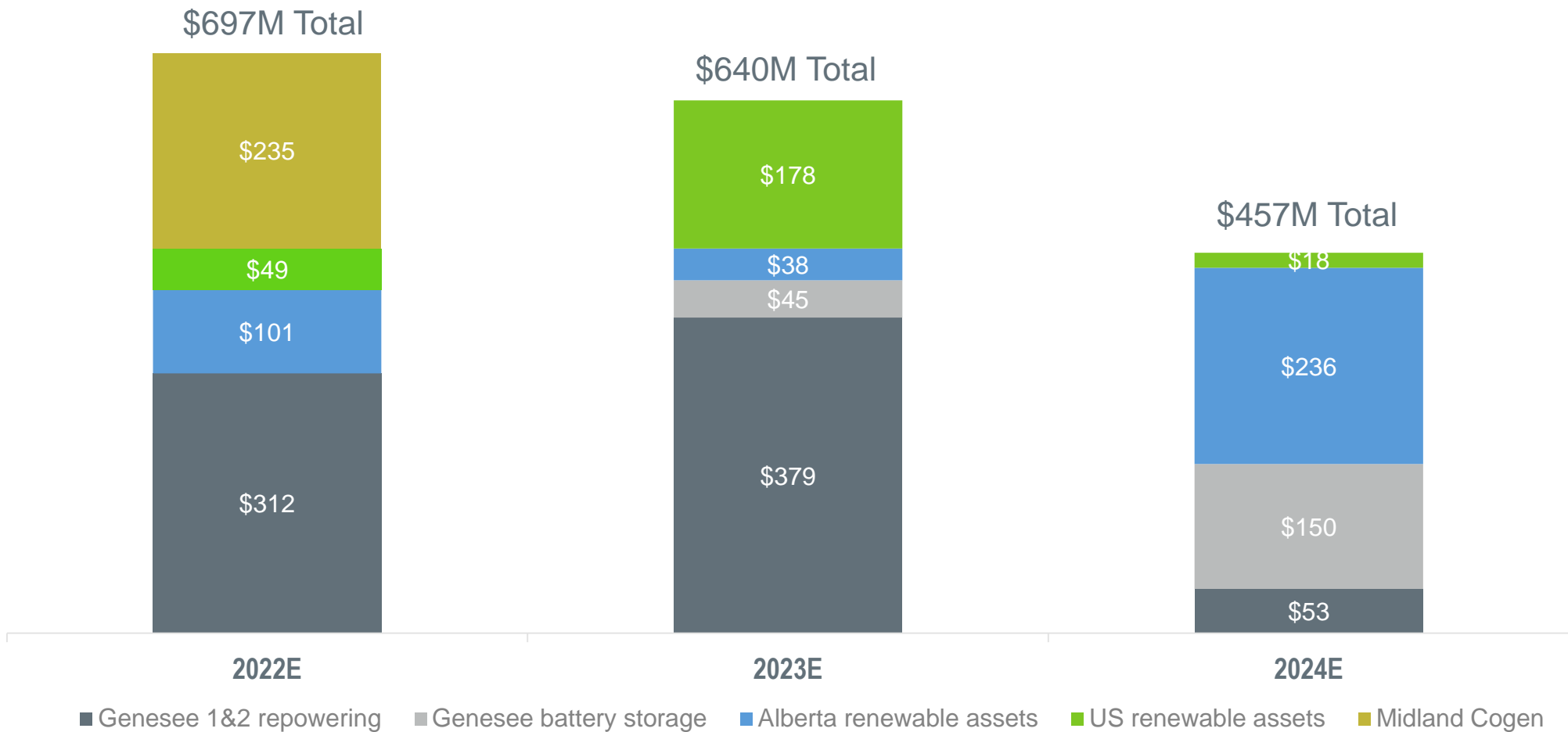


Forecast to be below AFFO payout ratio target range of 45% to 55% through 2025

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.

Executing on ~\$1.8 billion of growth capex

Additional common equity not required to fund current growth projects



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

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 and progress

- Executive and Leadership compensation linked to environment and social targets including
 - 10% growth in women leaders by 2024
 - 30% reduction in fleet emission intensity by 2024
 - 9% increase in workforce diversity by 2024
- 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



Significant progress on Genesee CCS Project

Increasing policy certainty to proceed



Alberta CCUS hub

- ✓ Government of Alberta selected Enbridge's "Open Access Wabamun Carbon Hub"
- ✓ Completed pre-FEED study
- ✓ FEED study activities proceeding
- Genesee CCS Project expected to capture up to 3 million tonnes of CO₂ annually
- FID expected by mid-2023



CCS financial support

- \$1.8 - \$2.0B project cost
- ✓ 2022 Federal Budget proposed refundable CCUS investment tax credits (ITC)
- 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
- "2030 Emissions Reduction Plan" noted Federal Government intention to explore measures to provide greater certainty regarding carbon pricing to de-risk private sector investments





Attractive investment opportunity

Resilient strategy drives growth and accelerates net carbon neutral by 2050

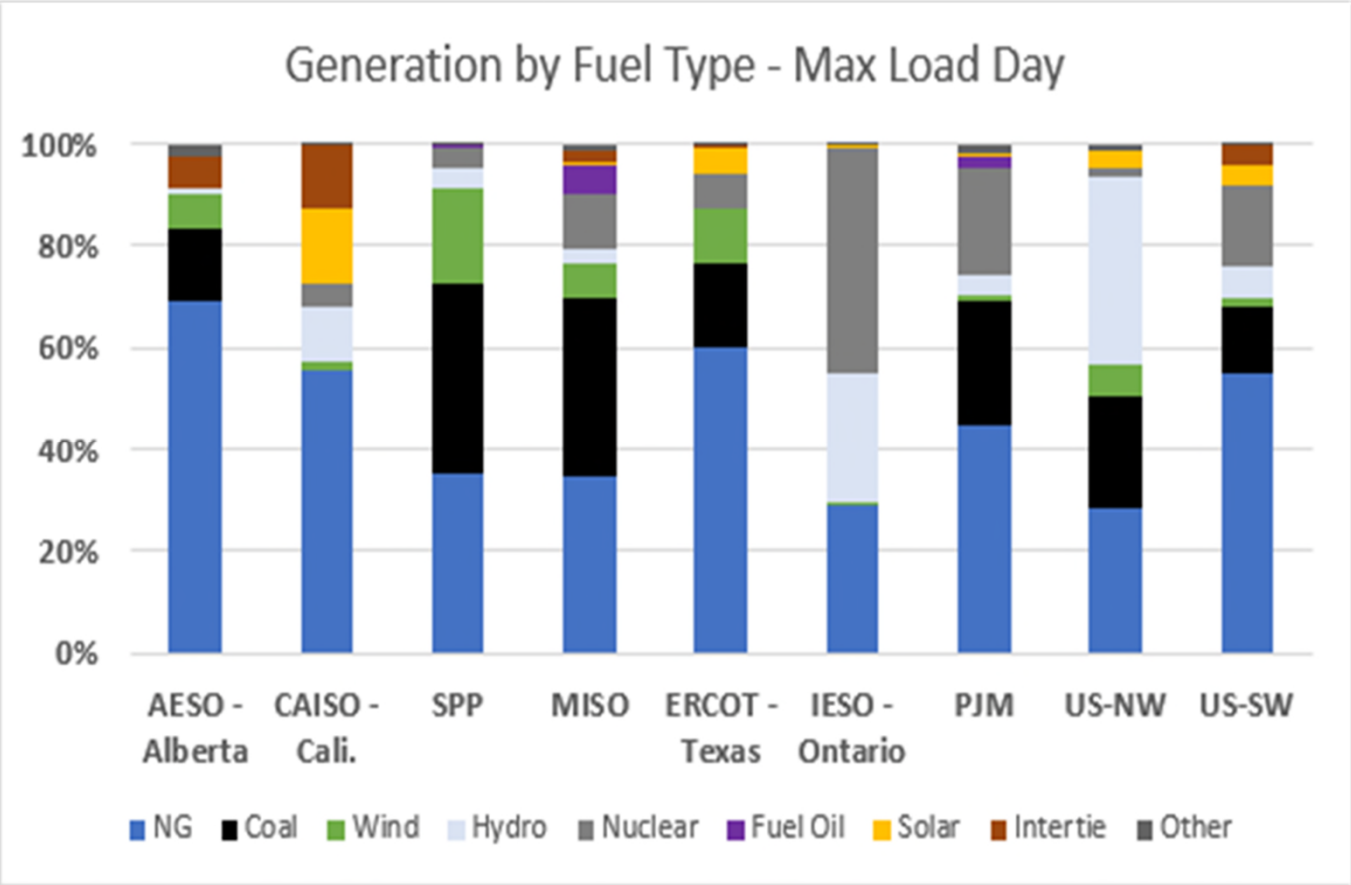
- Successful track record in developing renewable projects and contracting
- Executing on resilient natural gas strategy
- Leading position in the robust Alberta power market
- Generating strong cashflows from long-term contracted assets
- Investing in asset optimization and innovation
- ESG commitments are significant early steps in our journey



Appendices

- Natural gas critical to North American reliability
- Managing inflationary and supply chain cost pressures
- Credit rating metrics
- Debt maturity schedule

Natural gas critical to North American reliability





Managing inflationary & supply chain cost pressures

Operating costs

- Expect modest increase of ~\$2 million on operations in 2022 from LTSA and PPAs (largely escalate with CPI)

Genesee 1&2 repowering project

- ~90% of \$997M repowering project cost locked in; no major commitment on \$195M for 210 MW battery energy storage system
- Balance of costs forecast to be on budget and project remains on schedule

4 solar projects (Enchant in Alberta, 3 in North Carolina)

- Cost pressures mostly from higher transportation costs for freight
- Expect current high costs to alleviate to more reasonable levels in the future – COD for 3 North Carolina solar projects not expected until Q4/24
- Future renewable projects (including Halkirk Wind 2) to reflect higher costs in offtake agreements as it impacts all developers

Impacts on project returns isolated to two solar projects in development



Financial stability and strength

Strong balance sheet and commitment to investment grade credit ratings

S&P Global
Ratings

BBB- / Stable

- Target FFO to Debt > 20%
- Target Debt to EBITDA < 4x

MORNINGSTAR | **DBRS**

BBB(low) / Stable

- Target cashflow to debt > 20%
- Target EBITDA / Interest > 4.5x

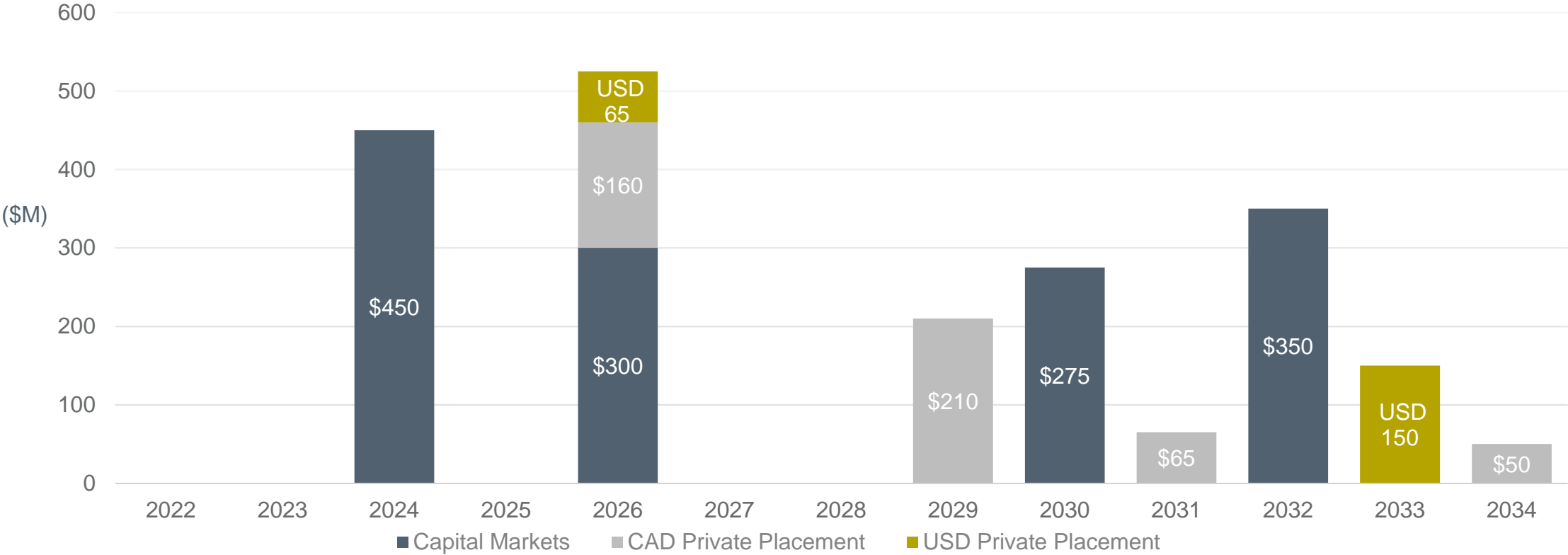
- Both rating agencies affirmed ratings in April 2022
- 2022 forecast to be another strong year with credit metrics well above current ratings threshold
- Continued strong liquidity from operating cash flow and \$1B of committed sustainability-linked credit facilities to 2027



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
- Hedged underlying on refinancings out to 2026



1) Debt amounts as of June 30, 2022. Schedule excludes non-recourse debt, credit facility debt, and tax-equity financing.

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), and (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 Management's Discussion and Analysis prepared as of July 29, 2022 for the second quarter of 2022, 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 in this presentation includes expectations regarding:

- our 2022 performance targets and current period updates to our expectations, including for facility availability, sustaining capital expenditures, adjusted funds from operations (AFFO) and adjusted EBITDA;
- our company-wide targets specific to climate-related performance, including reduction of emissions and emissions intensity, repowering of Genesee 1 and Genesee 2 with the addition of battery storage and conversion of Genesee 3, completion of the Genesee Carbon Conversion Centre, commercial application of carbon conversion technologies and plans to be 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;
- the Company's future cash requirements including interest and principal repayments, capital expenditures, dividends and distributions;
- the Company's sources of funding, adequacy and availability of committed bank credit facilities and future borrowings;
- expectations pertaining to the financial impacts of the acquisition of Midland Cogeneration Venture (Midland Cogen), including the impacts to AFFO, AFFO per share and adjusted EBITDA, transaction close timing, financing plans, positioning for potential re-contracting following contract expiries in 2030 and 2035, and future site development opportunities;
- the timing of, funding of and costs of existing, planned and potential development projects and acquisitions (including phase 2 of Halkirk Wind, the repowering of Genesee 1 and 2 (including being hydrogen ready and battery storage), Bear Branch Solar, Hornet Solar, Hunter's Cove Solar and Enchant Solar;
- facility availability and planned outages;
- capital expenditures for facility maintenance and other (sustaining capital, future growth projects, commercial initiatives);
- market and regulation designs and the impact thereof on the Company's core markets; and
- the impacts of climate change and the Russia-Ukraine conflict.

These statements are based on certain assumptions and analyses made by the Company in light of its experience and perception of historical 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 and other energy prices 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 timing and recovery from appropriate parties; and
- other matters discussed under the Performance Overview, Outlook and Risks and Risk Management sections.

Whether actual results, performance or achievements will conform to the Company's expectations and predictions is subject to a number of 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, including inflation;
- 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 in the Company's second quarter 2022 MD&A 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.

Capital Power Common Shares

- Listed on the Toronto Stock Exchange (symbol: CPX)
- 52-week low/high share price (\$36.65 / \$49.87)
- Shares outstanding: 116 million
- Market cap: ~\$5.7 billion
- Avg daily trading volume (trailing 12 months): 496,000 shares
- Dividend yield: ~4.4%

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