

Our core businesses uniquely position us to excel in the North American power industry



We have a diverse portfolio anchored in our core markets

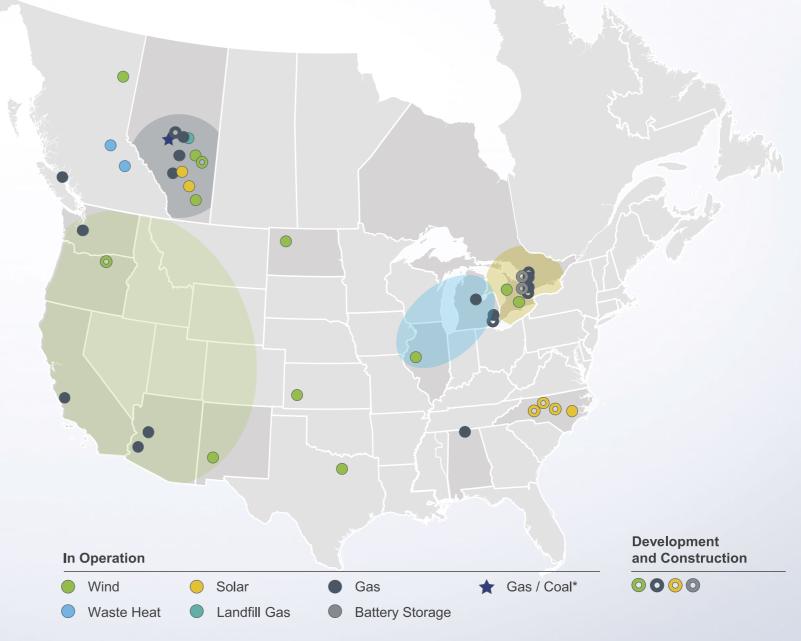
Geography | Capacity

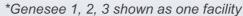


Canada | ~50%



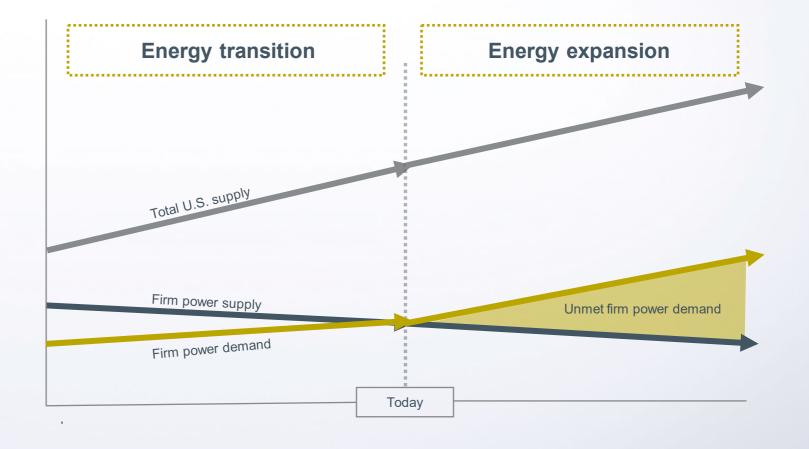
US | ~50%





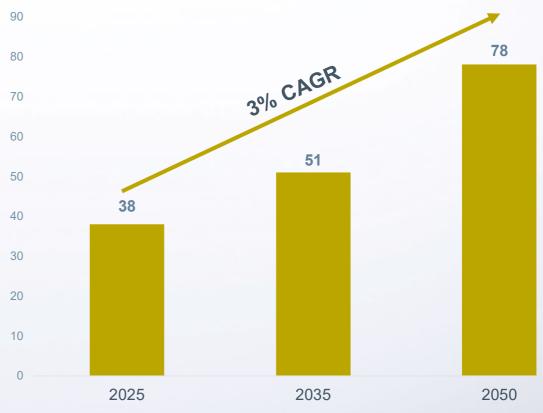


A focus on renewables growth has created a need for firm supply expansion



North American power demand will double by 2050

Annual energy consumption from electricity in North America (QBTU¹)



1. Quadrillion British Thermal Units Source: EIA, BCG Analysis



From 2.5% to 6-7.5%

Data centre share of U.S. electricity consumption

Generative AI is accelerating data center power demand growth in the U.S.

Data centre electricity consumption in the U.S., TWh (2022-30)





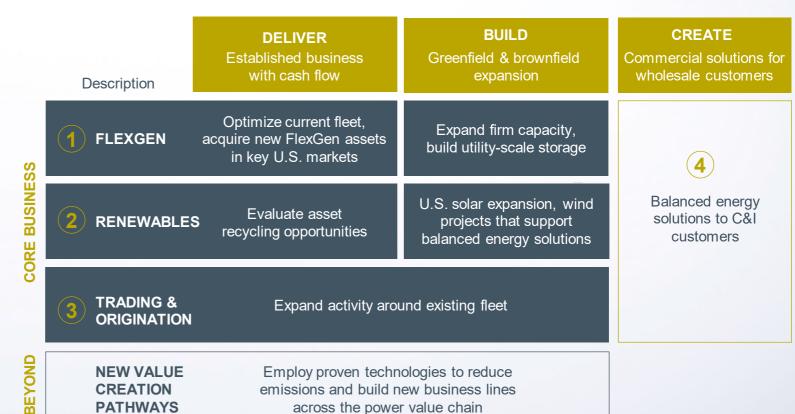
Renewables + battery resources required to replicate an efficient 1,000 MW gas plant:

Data centres
need firm
supply and
will challenge
the supply mix



Our Strategy

We have a
clear strategy
in a growing
market with an
established
business model



Our strategic priorities build on our existing capabilities

- 1) Expand our FlexGen fleet
- 2 Grow our renewables portfolio
- Enhance returns through trading
- 4 Create balanced energy solutions

Our core businesses underpin our balanced energy solutions



Our balanced energy solutions create a market-ready strategy

Resources

- Superior fleet
- Access to capital

Capabilities

- Operational excellence
- Asset optimization
- Deep commercial expertise



Market opportunity

 Long-term and growing need for grid-firming FlexGen supply



Market-ready strategy

 Delivering balanced energy solutions through deliver-build-create strategy



Operational excellence: Execute high standards for asset planning, performance and safety



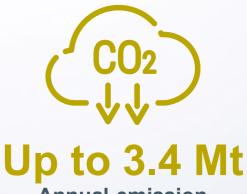
Building on our successful history: Genesee Repowering



Most efficient natural gas combined cycle plant in Canada



512 MW
Additional net capacity



Annual emission reduction

Value creation through increased efficiency, higher capacity and decarbonization

We have a proven track record of M&A value creation

6-9%
AFFO per share accretion

3-10 years
PPA extension

We are an **ESG leader** committed to clean power and active stakeholder engagement

Going Beyond | We are evolving our targets and going beyond carbon accounting to reach our 2045 net zero target

ESG achievements

40%

reduction in emission intensity¹ while growing our fleet

50%

women on our executive team²

1.06 HSE

performance index³



We are focused on markets we understand and with the right fundamentals



We are committed to growing our dividend per share, as we invest in growth

5-Year historical dividend growth

Historical

~7% growth CAGR

Average payout ratio: 36%1

Continued future dividend growth

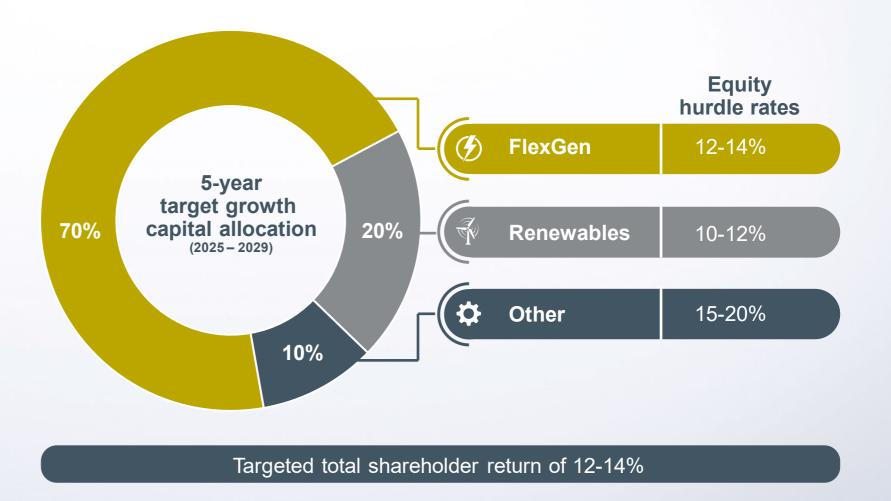
6% growth to 2025

Target payout ratio: 45-55%

2-4% growth beyond 2025

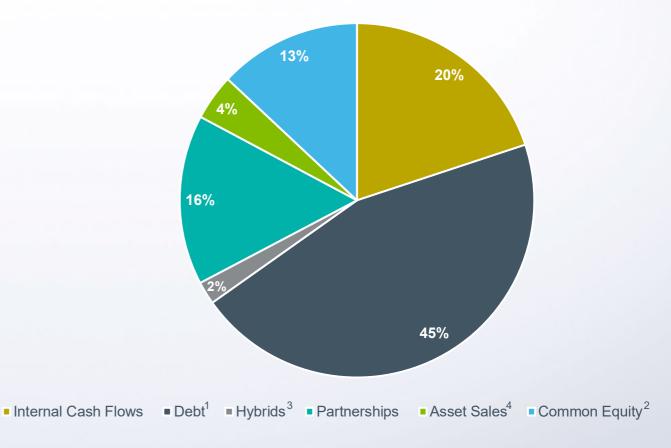
Target payout ratio: 30-50%

We have a disciplined approach to capital allocation



Our high-quality portfolio drives multiple sources of funding

- Internally generated cash flows
- Corporate and asset level debt
- Hybrids and preferred shares
- Partnerships
- Asset recycling
- Common equity





Capital Power is **best positioned** to lead the North American **energy expansion**

Strong foundation

We are market ready with a unique competitive advantage

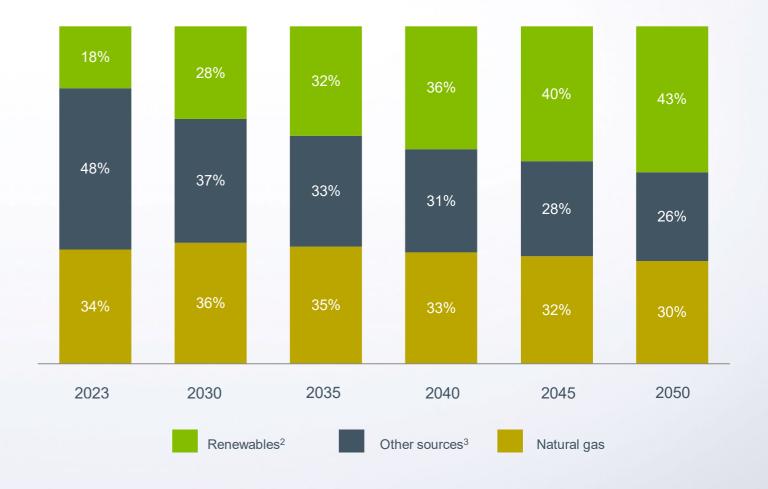
Market opportunity

Demand for grid firming supply

Market-ready strategy

Grow FlexGen and renewables

Renewable energy will play a larger role in the energy supply mix going forward



Forecasted NAMR¹ electricity net generation, by source (TWh, % share)

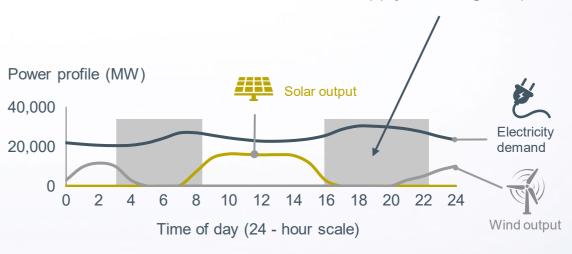
^{1.} North America (Canada + US); business as usual (BAU) estimates

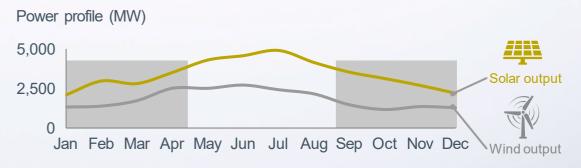
^{2.} Includes solar, wind, geothermal, biomass, solar thermal

^{3.} Includes hydro, nuclear, petroleum, and coal

Intermittent nature of solar and wind requires FlexGen to maintain reliability

Firm supply or storage required





Potential time blocks needing longer duration energy storage solutions

Source: BCG Analysis 24





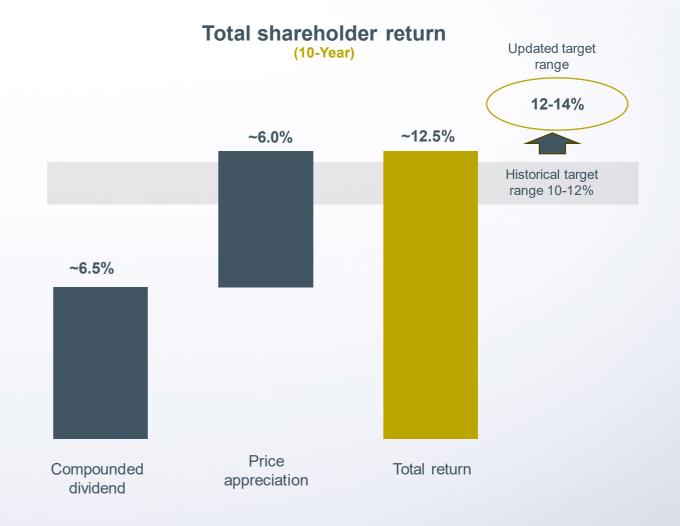
We are reliably delivering growth and contracting opportunities







We deliver superior total shareholder returns and are well positioned to enhance returns as we grow

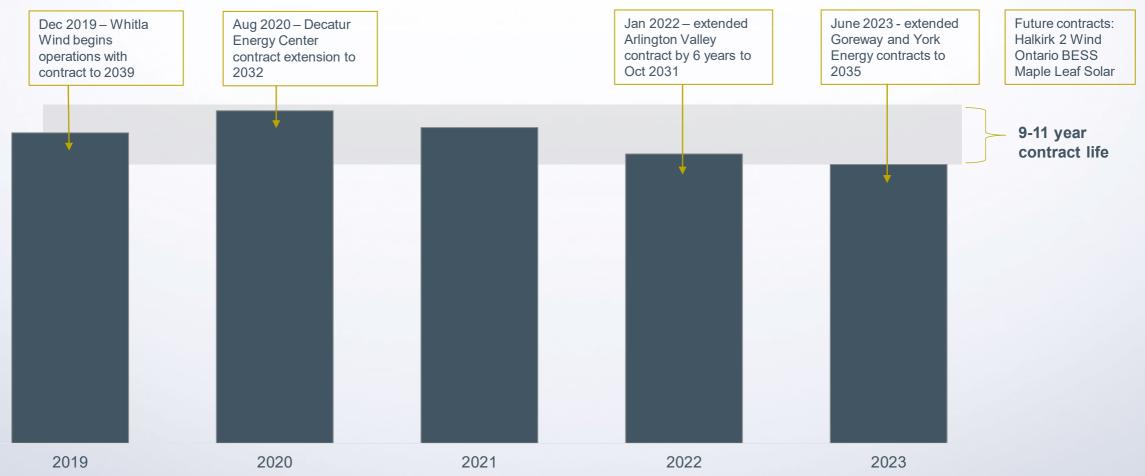


^{1.} Total shareholder return is comprised of share price appreciation and dividends paid, expressed 1) via indexing, and 2) as annualized percentage 2 As of December 31, 2023

Capital investment screening criteria



Stable weighted average contract life¹



Building balanced energy solutions: York and Goreway utility scale batteries

York

114 MW

Net capacity

22 years

Contracted cash flows

Goreway

48 **MW**

Net capacity

22 years

Contracted cash flows

Building **balanced** energy solutions: **Maple Leaf Solar**

73 MWNet capacity

2026
Expected completion

25 years Contracted cashflow

Forward-looking information

Forward-looking information or statements included in this presentation are provided to inform our 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 in this presentation 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 2024 performance targets including for facility availability, sustaining capital expenditures, hedged position, FFO to debt ratio, adjusted funds from operations (AFFO) and adjusted EBITDA;
- our plans to transition off-coal and commercial application of carbon conversion, capture and storage technologies;
- 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 from DRIP activation;
- the timing of, funding of, generation capacity of, operational performance and financial returns of, costs
 of technologies selected for, environmental and sustainability benefits including contributions to
 affordability, reliability, and decarbonization, commercial and partnership arrangements regarding
 existing, planned and potential development projects and acquisitions (including phase 2 of Halkirk
 Wind, the repowering of Genesee 1 and 2, the upgrade at Goreway and York Energy, Goreway Battery
 Energy Storage System (BESS), York Energy BESS, East Windsor expansion, and the Maple Leaf
 Solar project;
- the financing plans, transaction close timing, financial impacts, receipt of required regulatory approvals, and future development opportunities of Frederickson 1 Generating Station;
- future growth and emerging opportunities in our target markets;
- the impact of the regulatory developments on our projects and business;
- potential opportunities and partnerships with Indigenous communities;
- market and regulation designs and proposals and the impact thereof on the Company's core markets; and
- the impact of climate change.

These statements are based on certain assumptions and analyses made by Capital Power 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 and other energy and carbon prices;
- performance;
- business prospects (including potential re-contracting of facilities) and opportunities including expected growth and capital projects;
- status and impact of policy, legislation and regulations;
- effective tax rates;
- the development and performance of technology;
- foreign exchange rates; and
- other matters discussed under the Performance Overview, Outlook and Risks and Risk Management sections.

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

- changes in electricity, natural gas and carbon prices in markets in which we operate 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 our 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 our 2023 Integrated Annual Report 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. Capital Power 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 our expectations or any change in events, conditions or circumstances on which any such statement is based, except as required by law.

