Investor Presentation

September 2026

Forward-looking information

Cautionary statement

Additional information about the material factors and risks that could cause actual results to differ materially from the conclusions, forecasts or projections in the forward-looking information and the material factors or assumptions that were applied in drawing a conclusion or making a forecast or projection as reflected in the forward-looking information are disclosed on slide 19 of this presentation and in Capital Power Corporation's (Capital Power or the Company) second quarter Management's Discussion and Analysis (MD&A) prepared as of July 29, 2026, which is available under the Company's profile on SEDAR+ at sedarplus.ca and on the Company's website at capitalpower.com.

Non-GAAP financial measures and ratios

Capital Power uses (i) earnings before income tax expense, depreciation and amortization, net finance expense, foreign exchange gains or losses, gains or losses on disposals and other transactions, unrealized changes in fair value of commodity derivatives and emission credits, other expenses from our equity-accounted investments, acquisition and integration costs, and other items that are not reflective of the Company's facility operating performance (adjusted EBITDA), and (ii) AFFO as specified financial measures. Adjusted EBITDA and AFFO are both non-GAAP financial measures.

Capital Power also uses AFFO per share as a specified performance measure. This measure is a non-GAAP ratio determined by applying AFFO 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 Capital Power, 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 our results of operations from management's perspective.

Reconciliations of these non-GAAP financial measures and further discussion of these items are disclosed in the Company's MD&A prepared as of July 29, 2026, for the second quarter of 2026, under the “Non-GAAP Financial Measures and Ratios” section, which is incorporated by reference into this presentation and is available under the Company's profile on SEDAR+ at sedarplus.ca and on the Company's website at capitalpower.com.

Our Platform

Leading North American Power Producer

12 GW
Generating capacity
~90% natural gas-fired

60%
U.S. Generating capacity

$10 B / $17 B[1]
Market cap / Enterprise Value

Visible and Durable Cash Flows

75%[2]
Long-term contracted EBITDA

9 – 11 Years
Weighted average contract life

90%
Revenue from A-rated counterparties

Significant Embedded Upside with Financial Flexibility

$1.25 Billion[3]
Embedded upside

~$2 Billion[4]
Strong liquidity

BBB- / BBB (low)[5]
Investment grade credit ratings

Balanced Total Return Proposition

8 – 10%[6]
AFFO per share CAGR target

2 - 4%[6]
Dividend growth target

13 – 15%[6]
Total shareholder return target

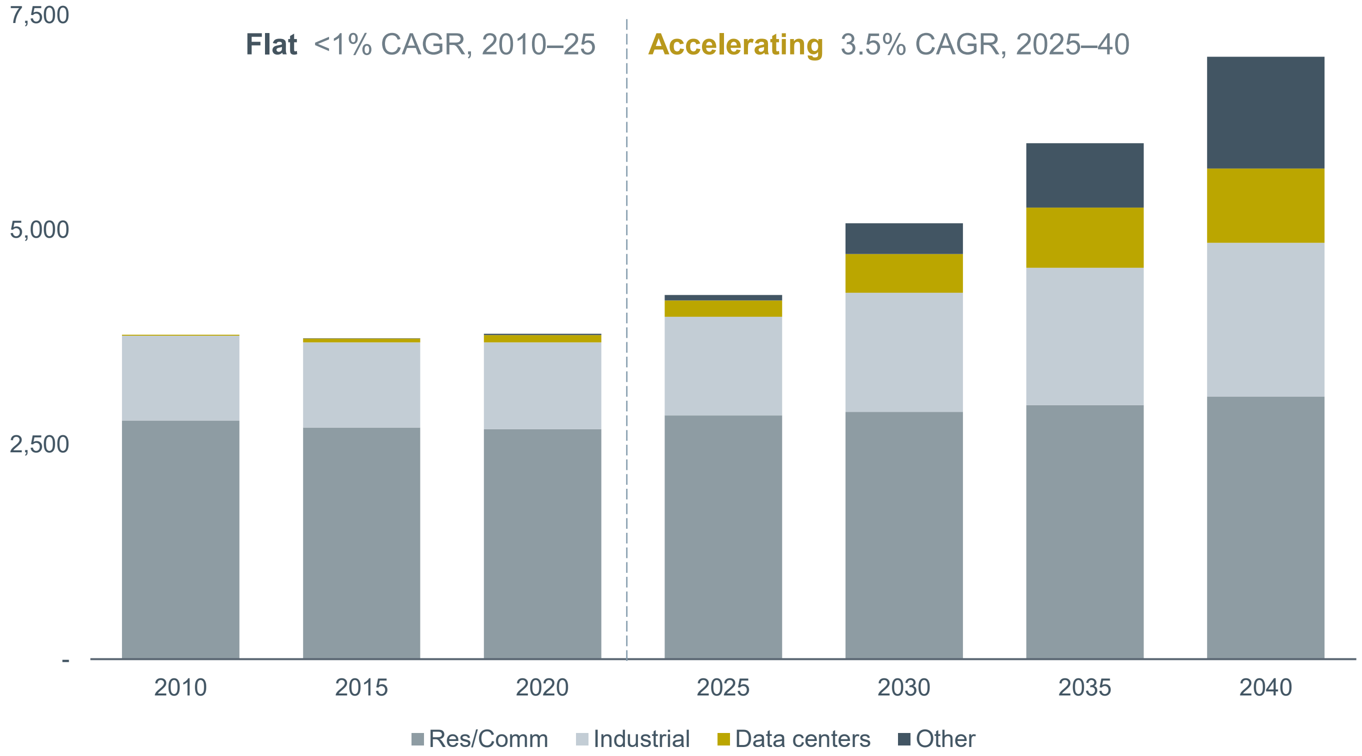
1. As of September 1, 2026.
2. Based on 2026 guidance range (midpoint). Inclusive of long-term hedges.
3. See slide 9 for details.
4. Represents committed credit facilities
5. Investment Grade Credit Ratings – S&P (BBB-), Fitch (BBB-) and DBRS (BBB low).
6. 2026 base year for growth outlook through 2030. AFFO per share is a Non-GAAP ratio.

Why invest in Capital Power?

1. North America needs more power. Natural gas is the best positioned technology
2. Capital Power has a proven strategy and scalable platform
3. Our existing assets offer significant incremental upside
4. We are diversified across multiple core power markets
5. Compelling and balanced total return proposition

An Era of Accelerating Electricity Demand

U.S. electricity demand by end use (TWh)[1]



25 – 30 %

of new demand from **data centers**, underpinned by surging hyperscaler capex (70% CAGR, ‘24 – ’27E[2])

+6% CAGR

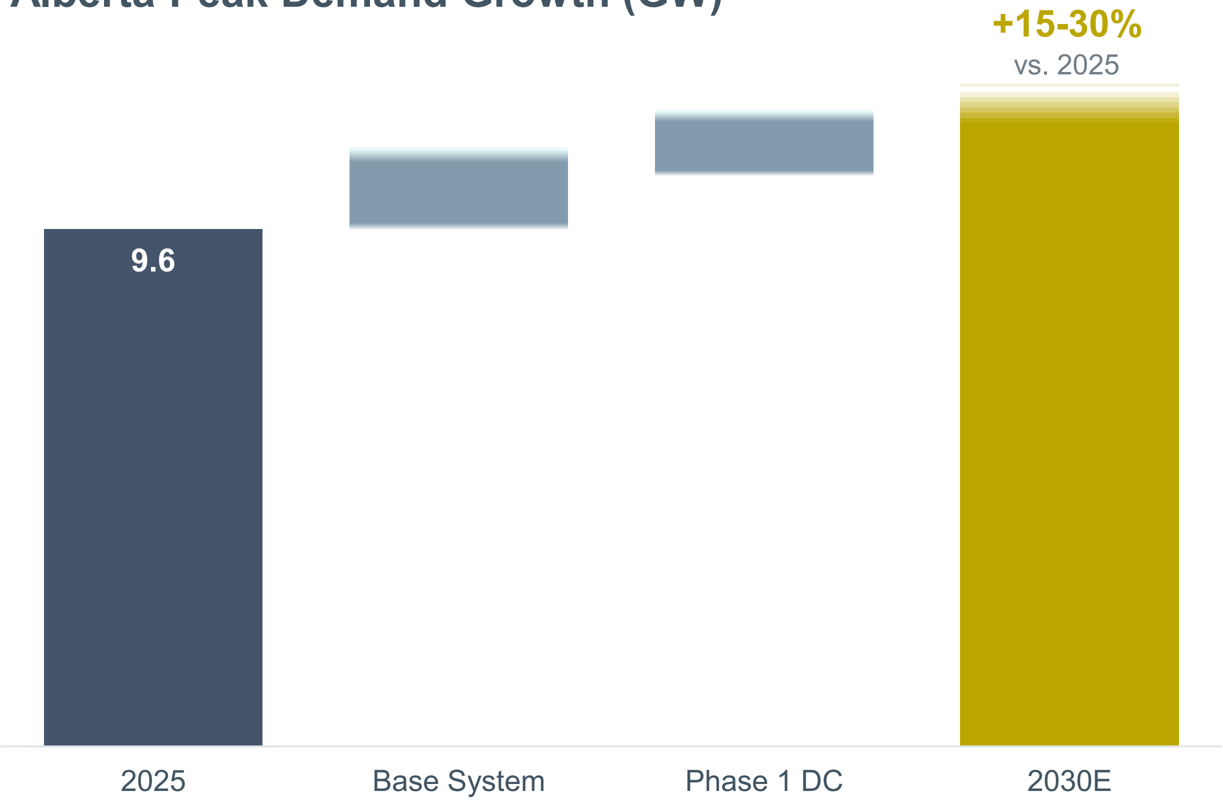
Load from **industrial reshoring and electrification** expected to grow at nearly twice the pace of overall demand

1. McKinsey 2026 2. Jefferies Research

Alberta is Playing a Leading Role

Policy clarity is enabling data-center load on top of native demand growth

Alberta Peak Demand Growth (GW)[1]

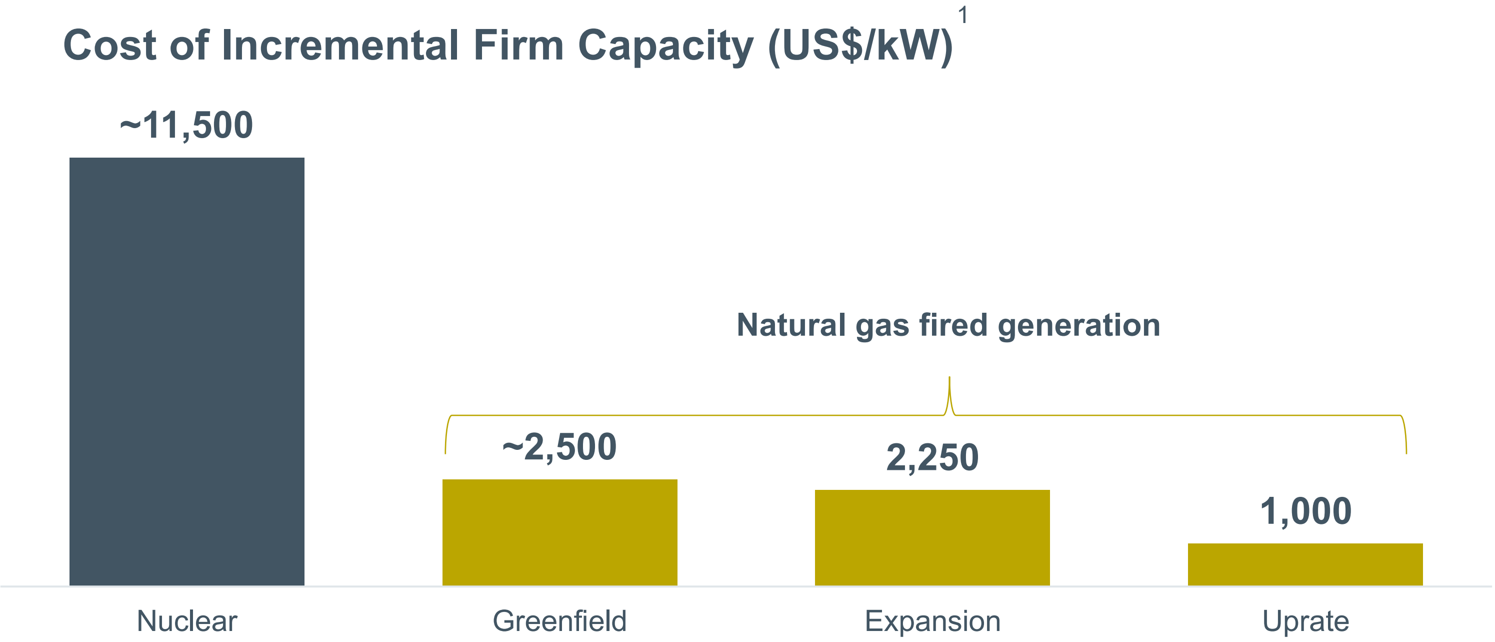


~1.8 GW
Data-center load sanctioned to date

10 – 15%
Expected reduction in reserve margin by 2030[1]

Natural Gas is the Answer

Faster speed to market, lowest cost to consumers



TIME TO COMPLETION

Nuclear	Greenfield	Expansion	Uprate
10+ yrs	5 – 7 yrs	3 – 4 yrs	1 – 2 yrs

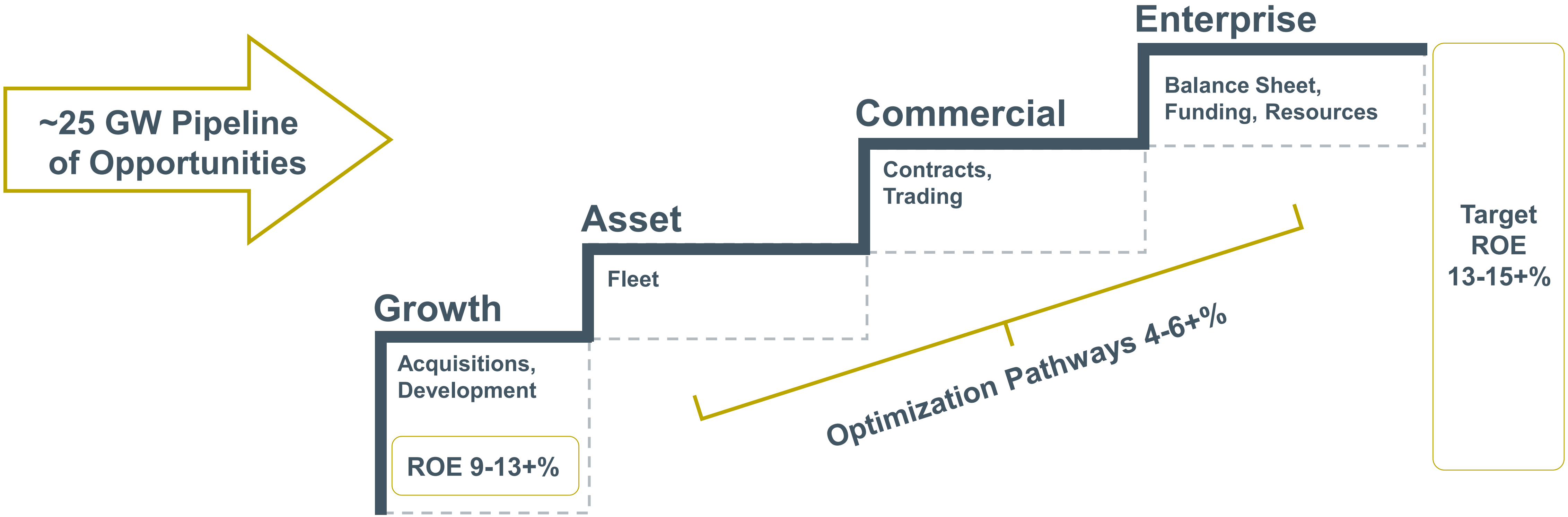
~2/3

Of 2026 announced data center capacity is backed by natural gas

1. Nuclear cost of incremental generation based on Lazard LCOE report. Natural gas fired generation incremental capacity based on average internal estimates.

Our Strategy

Acquire to grow, optimize to enhance value



Embedded Growth Opportunity[1]

Strong fundamentals driving increase in previously identified upside

Incremental Annual EBITDA[4] Opportunity

$1.25B Opportunity

2025 Investor Day $1 B
+$0.25 B

Merchant
$375 – 700 M

5 GW[2]
+ $10-20 / MWh
Incremental cash flow from merchant spark spreads and additional uncontracted volumes

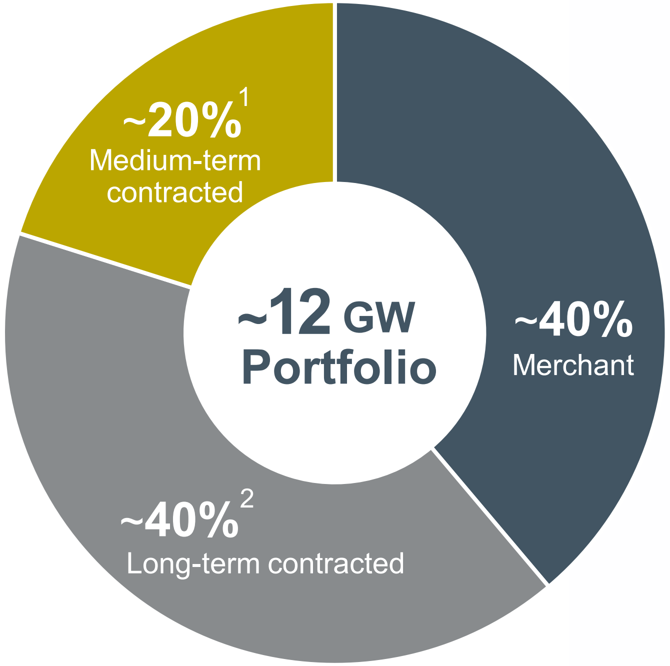
Contracted
~$400 – 550 M

4 GW[3]
+ $75-125 / kW year
Incremental contracted cash flow from existing assets and uprates

1. Refers to incremental EBITDA upside from a 2026 baseline for existing assets through pricing, commercialization and optimization initiatives, with limited or no incremental growth capital required. Amounts shown are illustrative for sensitivity purposes only and do not represent guidance. 2. Merchant range shows the impact of a spark spread lift for PJM assets (Rolling Hills and Hummel at 85% and 30% capacity factor, respectively). For Alberta, merchant upside potential shows the impact of incremental spark spread lift with 466MW of capacity (current MSSC limit) plus 65 - 100MW of additional capacity above the MSSC for Genesee 1 and 2 at 85% capacity factor. Incremental capacity at Genesee above the MSSC limit is subject to regulatory approval. 3.Contracted upside based on U.S. flexible generation assets with contracts expiring between 2029 and 2032; also includes the Meta ESA and uprates for various US natural gas sites including: Arlington Valley, Harquahala, La Paloma, MCV and Rolling Hills 4. EBITDA is a non-GAAP financial measure. See Non-GAAP Financial Measures and Ratios.

Strong Positioning

Stable contracted base with meaningful upside



~7GW (~60% of portfolio) | Available for contracting

1. Medium-term contracts have expiries prior to 2031. 2. Long-term contracts have expiries from 2032 onward.

Commercial Optimization

Maximizing Value Per Unit of Capacity Through Long-Term Contracting

	2022	2023	2025	2026	2026
Market	**WECC[1]**	**IESO[2]**	**MISO[4]**	**WECC[1]**	**AESO**
Capacity	600 MW	1,685 MW[3]	1,240 MW[3]	600 MW	250 MW
Added Term	6 Years	8 Years	10 Years	7 Years	>10 years
Counterparty	Utility	IESO	Consumers[6]	Utility	Meta
Credit Rating[5]	Baa1	Aa3	A3	Baa1	Aa3

Long-dated contracts with investment-grade counterparties support cash flow certainty and growth

1. WECC assets include Arlington Valley 2.IESO assets include East Windsor, Goreway and York (including BESS). 3. Capacity presented on a gross basis; Capital Power owns 50% of MCV and York.
4. MISO assets include Midland Cogeneration. 5.Credit ratings based on Moody's Ratings. 6. Refers to Consumers Energy

Alberta Energy Supply Agreement

Commercially optimizing our strategically positioned portfolio

Key Contract Terms

250 MW
Capacity and energy, expected 2H 2028

>10 Years
Long term duration agreement

IG Counterparty – Meta Platforms Inc.
AA-/Aa3 rated[1]

Strategic Benefits

- Optimizes merchant portfolio by adding contracted cash flow at compelling pricing
- No capital investment required
- Preserves commercial optimization potential at Genesee
- Enhances portfolio weighted average contract life

1.Credit ratings based on S&P Global Rating and Moody's Ratings, respectively.

Favorable Market Dynamics Unlocking Value

Our two largest markets have the strongest tailwinds for data center demand growth

CAPACITY BY MARKET — 12 GW[1]

AESO

- Policy clarity (Phase 2A BYOG[2])
- Demand growth (1.8 GW of DC[3] demand to-date)
- Long-term contracting opportunities
- Merchant pricing upside

PJM

- Capacity pricing certainty (through 2030)
- Tight reserve margins
- Record demand driving superior energy pricing

1. Markets by capacity include include AESO (28%), WECC (20%), PJM (18%), IESO (13)%, MISO (9%), Other U.S. (10%), Other Canada (3%). 2. AESO Phase 2A introduces the BYOG framework, creating a pathway for large-load customers to pair new demand with incremental generation supply. 3. "DC" refers to data center.

Genesee: Embedded Optionality

ALREADY IN PLACE

Generation in operation
Genesee 1, 2 & 3 (~2GW)

Interconnection at scale
Established transmission access

Industrial-scale land
20,000+ acres available on site

Investment-grade counterparty
BBB- / BBB (low)[1] ratings support long-dated offtake

WHAT THAT UNLOCKS

Co-location
Siting for data-centre-class load, with generation, transmission and a credit-worthy partner already on site

New generation & storage
Brownfield economics for dispatchable capacity and storage — no greenfield interconnection or land risk

1. Investment Grade Credit Ratings – S&P (BBB-), Fitch (BBB-) and DBRS (BBB low).

Reafﬁrming 2026 Guidance Ranges

Adjusted EBITDA[1]	AFFO[1]	Sustaining CAPEX
$1,565 M – 1,765 M	$890 M – 1,010 M	$290 M – 330 M

1. AFFO and Adjusted EBITDA are Non-GAAP financial measures. See Non-GAAP Financial Measures and Ratios.

Our 2030 Targets[1]

8-10%
Cash Flow

AFFO / Share Growth CAGR[2]

~50%
U.S. Growth

Additional Owned U.S. Capacity of 3.5 GW

13-15%
Annual TSR

Balanced returns from dividend yield and base business growth

1. 2026 base year for growth outlook through 2030. 2. AFFO per share is a Non-GAAP ratio. See Non-GAAP Financial Measures and Ratios.

CPX Value Proposition

We are Positioned to Deliver Long-Term Reliable Growth

- North America needs more reliable power.
- Additional natural gas generation is required.
- Capital Power has a proven and scalable platform.
- We have relentless execution and long-term reliable growth.

Capital Power

Forward-looking information

Forward-looking information or statements (collectively, forward-looking information) included in this presentation are provided to inform our shareholders, potential investors and other stakeholders about management's assessment of Capital Power's future plans and operations. This forward-looking 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, among other things, expectations regarding:

- our priorities and long-term strategies, including our strategy of diversification, acquiring and optimizing existing natural gas capacity, contracting and re-contracting our existing assets, and advancing strategic renewables development,
- growth opportunities among natural gas, renewables and storage technologies,
- our 2030 targets, including cash flow, U.S. growth, and total shareholder return,
- our 2026 guidance ranges, including sustaining capital expenditures, as well as AFFO and adjusted EBITDA,
- future revenues, expenses, earnings, adjusted EBITDA and AFFO,
- the outcomes resulting from the Energy Supply Agreement with Meta ("ESA"),
- PJM and Alberta's portfolio position, including portfolio hedged volumes and forward market pricing,
- the future pricing of electricity and market fundamentals in existing and target markets, and
- various aspects around existing, planned and potential development projects and acquisitions (including Arlington Valley, Hummel, North Carolina Solar, and East Windsor Expansion), including expectations around timing and completion.

These statements are based on certain assumptions and analyses made by the Company in light of 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 this forward-looking information relate to:

- electricity and other energy (including natural gas) and carbon prices,
- the Company's performance,
- the Company's business prospects (including potential re-contracting of facilities) and opportunities including expected growth and capital projects,
- the energy needs of certain jurisdictions,
- the status and impact of policy, legislation and regulations,
- effective tax rates,
- the development and performance of technology,
- the outcome of claims and disputes,
- foreign exchange rates, and
- other matters discussed under the Performance Outlook and Risks and Risk Management sections of the MD&A.

Whether actual results, performance or achievements will conform to our 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 our expectations. Such material risks and uncertainties include:

- 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 our supply chains,
- generation facility availability, wind capacity factor and performance including maintenance expenditures,
- Meta's completion of a data center as contemplated in the ESA,
- 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 market prices and 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 and recession,
- changes in the performance and cost of technologies and the development of new technologies, new energy efficient products, services and programs, and
- the risks and uncertainties discussed under the Risks and Risk Management section of the MD&A.

See Risks and Risk Management in our 2025 Integrated Annual Report for the year ended December 31, 2025 for further discussion of these and other risks.

Readers are cautioned not to place undue reliance on any such forward-looking information, which speak only as of the date made and that other events or circumstances, although not listed above, could cause Capital Power's actual results to differ materially from those estimated or projected and expressed in, or implied by the forward-looking information. Capital Power does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking information 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.