

August 7, 2025



ASPEN AEROGELS

Q2 2025 FINANCIAL RESULTS CALL

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H2 2025 Cost Structure Positioning

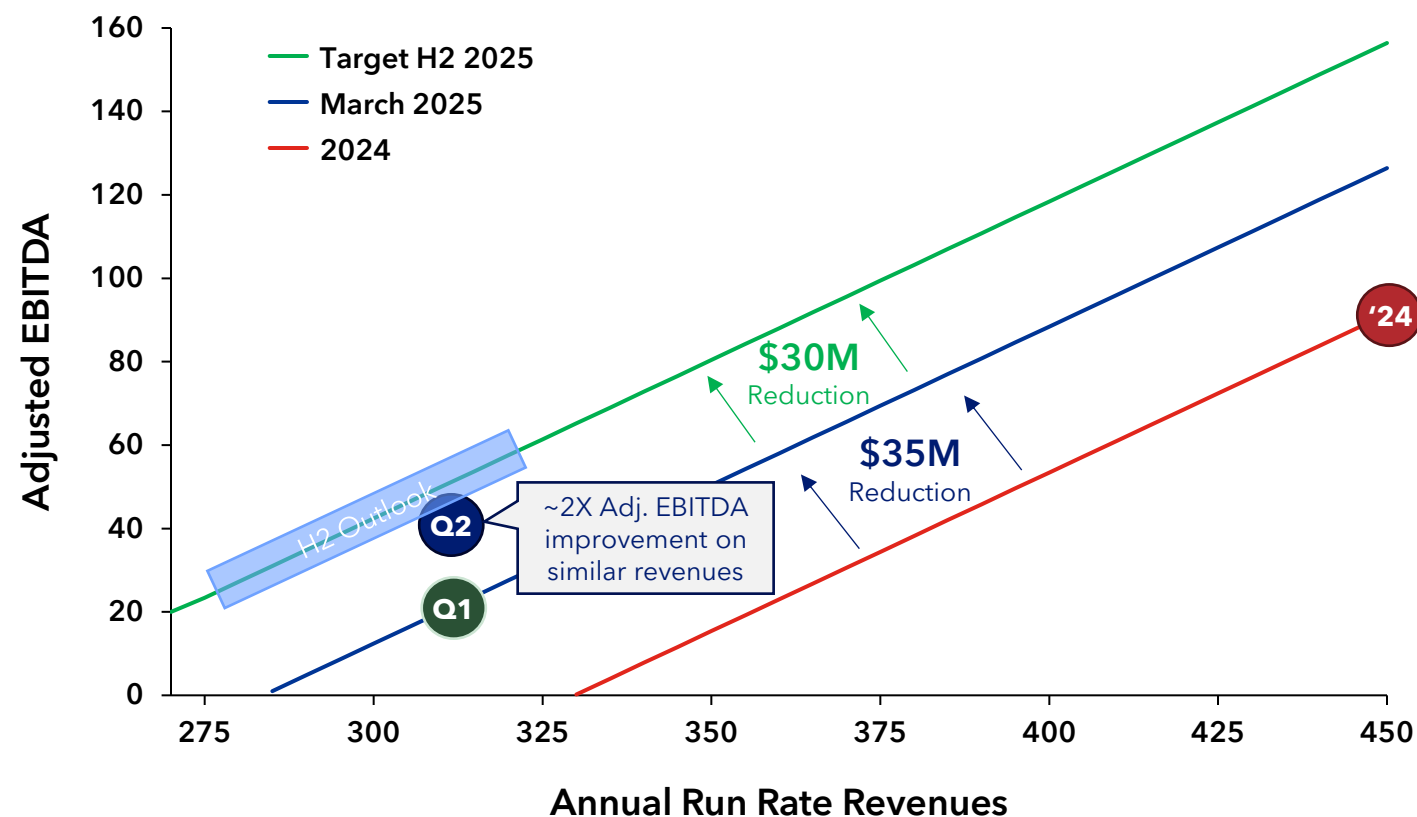
By reducing our fixed costs, we're driving improved financial performance in the second half of the year

Fixed cost structure is already on track to meet or exceed the targets presented during the last quarter...

Historical and Target Fixed Cost Structure Framework

Estimated Annualized Adjusted EBITDA at Various Potential Revenue Levels and Fixed Cost Structures

\$ in millions



... creating a path to ~2X the Adj. EBITDA on similar revenue in H2 2025

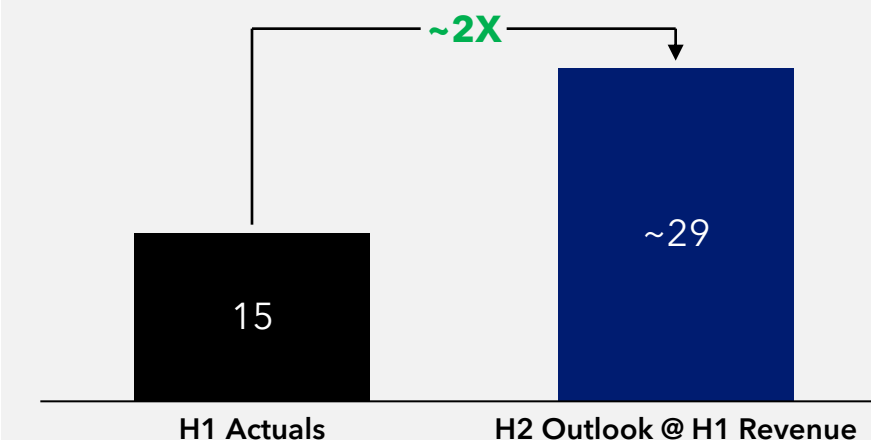
H2 2025 Financial Outlook¹

\$ in millions

\$140-160M	\$20-30M	\$(7)-3M
Revenue	Adj. EBITDA	Net Inc. (Loss)

Adj. EBITDA H1 vs H2 Representative Comparison¹

\$ in millions



Q2 2025 Financial Highlights

Disciplined cost structure management to enable operating leverage and drive near-term profitability

\$ in millions except EPS	Q1 2025 ¹	Q2 2025 ¹	YTD 2025 ¹	YTD 2024	Commentary
Revenues	\$78.7	\$78.0	\$156.7	\$212.3	<ul style="list-style-type: none"> \$55.2M of Thermal Barrier revenues in Q2 25 represents a 13% QoQ increase as key customers gain market share Energy Industrial maintained 35%+ gross margins on revenues of \$22.8M in Q2 25
Net Inc. (Loss) <i>Adj. Net Inc. (Loss)⁴</i>	\$(301.2) ³ \$(4.8)	\$(9.1) \$(3.2)	\$(310.3) ³ \$(8.0)	\$15.0	<ul style="list-style-type: none"> Continued improvement on material cost spend as percentage of revenue driven by yield improvements and improved BOM pricing
Adj. EBITDA²	\$4.9	\$9.7	\$14.7	\$41.9	<ul style="list-style-type: none"> EBITDA grew ~2X QoQ on similar revenues with incremental improvement expected in H2 2025
EPS (Loss) <i>Adj. EPS (Loss)⁴</i>	\$(3.67) ³ \$(0.06)	\$(0.11) ³ \$(0.04)	\$(3.78) ³ \$(0.10)	\$0.20	<ul style="list-style-type: none"> Path towards OPEX spend in line with 2022 run-rate levels on track as cost savings initiatives take effect
Cap Ex	\$13.0	\$12.9	\$25.9	\$50.7	<ul style="list-style-type: none"> Reduced CAPEX spend in Q2 25 by 50% YoY, driven by demobilizing Plant II and EV Thermal Barrier Equipment for new OEM program launches
Operating Cash Flow	\$5.6	\$(3.9)	\$1.7	\$(10.9)	<ul style="list-style-type: none"> Strict management of cash with an emphasis on working capital optimization going into H2 2025

1- Unaudited interim financials for 2025

2- See slide 7 herein for a reconciliation of net income (loss), the most directly comparable GAAP measure, to Adj. EBITDA

3- Included a \$286.6 million impairment charge for Plant II in Q1 2025 among other one-time items (see slide 7)

4- See slide 7 herein for a reconciliation of net income (loss) and earnings per share, the most directly comparable GAAP measures, to adjusted net income (loss) and adjusted earnings per share

2025 Outlook and Historical Trends

Cost structure actions driving improved Adjusted EBITDA in H2 2025; lower CAPEX expected in the second half of the year

2025 Outlook²

\$ in millions, except per share figures

	H1 Actuals ¹	H2 Outlook	FY Outlook
Revenues	\$157	\$140-160	\$297-317
Net Income (Loss)	\$(310)*	\$(7)-3	\$(317)-(307)*
Adj. EBITDA²	\$15	\$20-30	\$35-45
EPS (Loss)³	\$(3.78)	\$(0.08)-0.04	\$(3.86)-(3.73)
Cap Ex (excl. Plant II)	\$15	\$10	\$25

1- Unaudited interim financials for 2025

2- See slide 7 herein for a reconciliation of net income (loss), the most directly comparable GAAP measure, to Adjusted EBITDA for the presented period

3- Current outlook assumes diluted weighted average shares outstanding of 82.2 million for the year

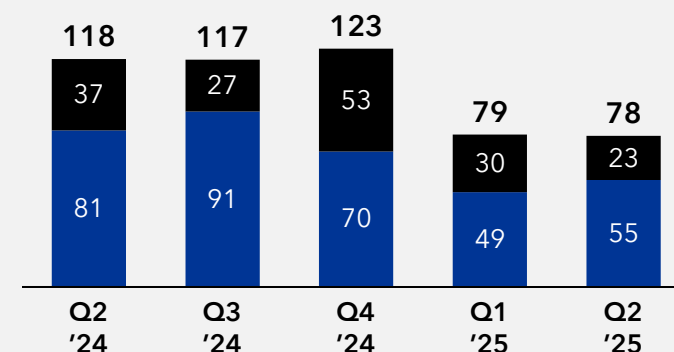
Note: figures may not total due to rounding

Historical Financial Trajectory¹

Revenues

\$ in millions

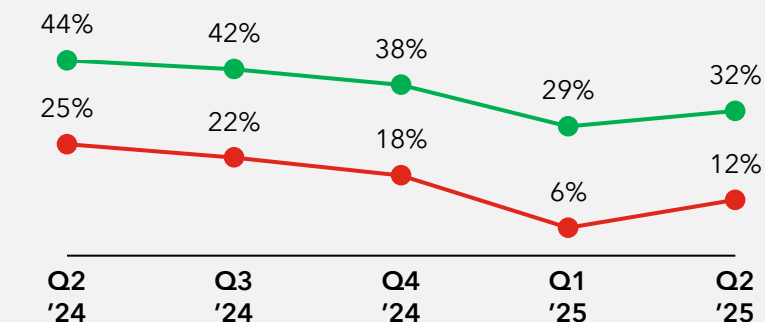
■ Thermal Barrier ■ Energy Industrial



Key Margins

%

● Gross Profit ● Adj EBITDA



Summary

Earning our right to win by leveraging the Aerogel Technology Platform®, executing, and investing to grow profitably

DEMONSTRATED OPERATING EXECUTION

Fixed cost reductions drove ~2X improvement in Adjusted EBITDA quarter-over-quarter at similar revenue run rates

INCREASING FLEXIBILITY TO MEET DEMAND

Sourcing optimization between Rhode Island and EMF; diversified raw material supply chain

SECURING MORE COMMERCIAL CONTRACTS

Working closely with EV OEMs; capitalize on upcoming Subsea and LNG project opportunities within the Energy Industrial segment

IMPROVING CAPITAL EFFICIENCY OF OUR MODEL

Improved cost structure and reduced capital expenditure plans provide path to positive free cash flow

The Road to Creating Near Term Value

Optimize the balance sheet / capital structure



Minimize capital projects



Secure additional EV Thermal Barrier awards



Reduce the Fixed Cost Structure



Profitable Energy Industrial Segment Growth



Flexible and Modular Supply



Appendix

GAAP to Non-GAAP Reconciliations

Adjusted Net Income (Loss) & EPS Reconciliation

	2025	2025	2025
(\$ in millions)	Q1	Q2	H1
Net Income (Loss)	(301.2)	(9.1)	(310.3)
Impairment of PP&E	286.6	1.0	287.6
Restructuring and Demobilization Costs	9.8	4.9	14.7
Adjusted Net Income (Loss)	(4.8)	(3.2)	(8.0)
Weighted Avg. Shares Outstanding	82.1	82.2	82.1
Reported EPS (Loss)	\$ (3.67)	\$ (0.11)	\$ (3.78)
Adjusted EPS (Loss)	\$ (0.06)	\$ (0.04)	\$ (0.10)

Adjusted EBITDA Reconciliation

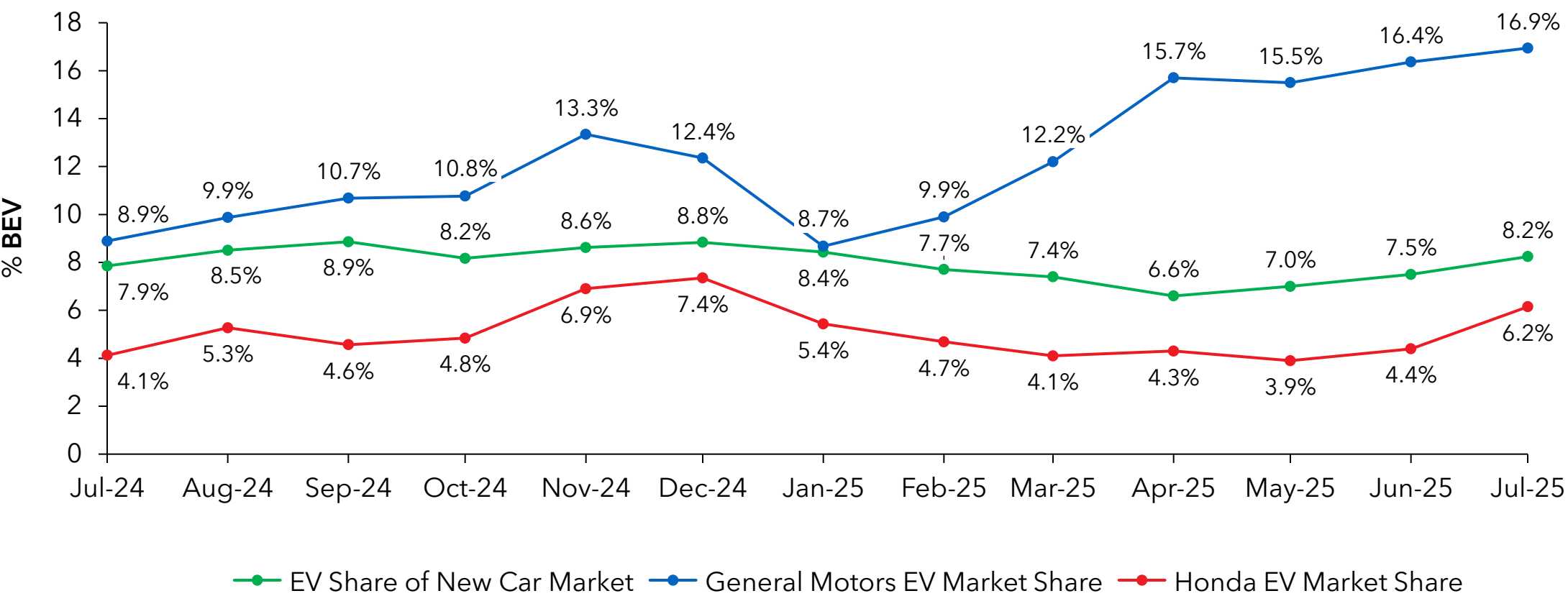
	2025		2024				H2-25 Outlook		FY-25 Outlook	
(\$ in millions)	Q1	Q2	Q1	Q2	Q3	Q4	Low	High	Low	High
Net Income (Loss)	(301.2)	(9.1)	(1.8)	16.8	(13.0)	11.4	(6.5)	3.5	(316.8)	(306.8)
Depreciation and Amortization	5.8	5.8	5.8	6.0	5.3	5.4	13.2	13.2	24.8	24.8
Stock-based Compensation	2.1	3.2	4.7	3.0	2.6	2.5	5.0	5.0	10.3	10.3
Loss on Extinguishment of Debt	-	-	-	-	27.5	-	-	-	-	-
Other (Income) Expense & Income Tax Expense	1.9	3.9	4.3	3.2	2.9	3.4	5.3	5.3	11.1	11.1
Impairment of PP&E	286.6	1.0	-	-	-	-	-	-	287.6	287.6
Restructuring and Demobilization Costs	9.8	4.9	-	-	-	-	3.0	3.0	17.7	17.7
Adjusted EBITDA	4.9	9.7	12.9	28.9	25.4	22.7	20.0	30.0	34.7	44.7

Note: Figures may not total due to rounding

US EV Sales Market Share

While US EV penetration remains suppressed after strong H2 2024, General Motors is gaining EV market share

United States Electric Vehicle Sales Percentages



Source: Wards Automotive Data

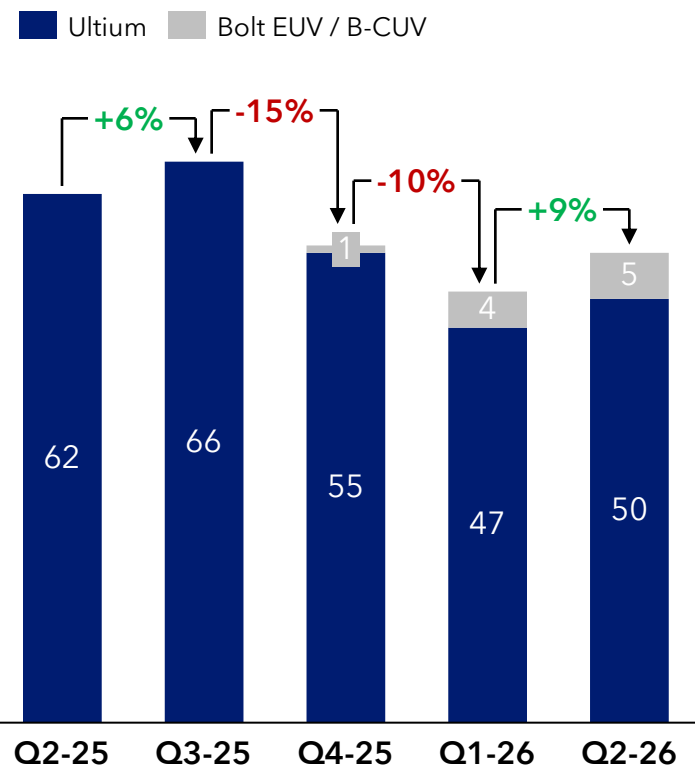
Demand Overview - GM IHS EV Forecast

~241k units expected in 2025; long-term forecast reduced due to changing regulatory & incentive environment

Strong Q3 expected with subsequent decreases in Q4 '25 / Q1 '26

GM NA EV Production Forecast¹

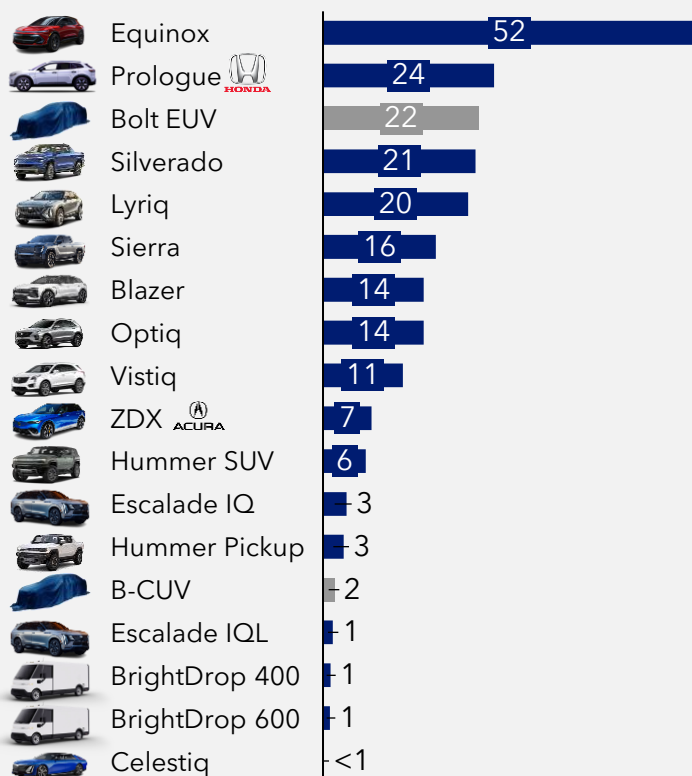
(Vehicles in thousands)



18 nameplates in 2026; Equinox represents ~24% of total volume

2026 GM NA EV Production Forecast¹

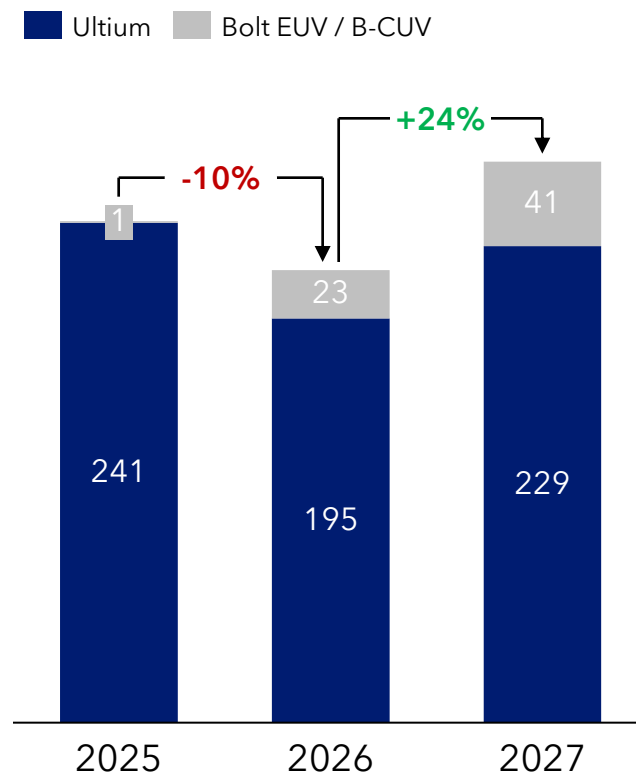
(Vehicles in thousands)



Production expected to decrease in 2026 before recovering in 2027

GM NA EV Production Forecast¹

(Vehicles in thousands)



An aerial photograph of a dense evergreen forest covered in a thick layer of snow. A dark, winding road or path cuts through the center of the forest, creating a serpentine shape. The trees are tightly packed, and their branches are heavily laden with white snow, creating a high-contrast texture against the dark ground and road.

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