

# Q2 FISCAL 2024

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LETTER TO  
SHAREHOLDERS

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JULY 24, 2024

The QuantumScape logo features the company name in a white, sans-serif font. A white, curved line arches over the 'Q' and 'S' of 'QuantumScape', starting under the 'Q' and ending under the 'S'.

QuantumScape®

Dear shareholders,

We are excited to provide an update on our activities since our last shareholder letter.

## PowerCo Agreement

On July 11, [we announced a landmark agreement](#) with PowerCo, the battery company of the Volkswagen Group. This deal reflects the value created by consistent execution on our development roadmap and customer validation of our technology. **We forecast that this capital-light licensing arrangement lengthens our cash runway into 2028, an extension of 18 months relative to our previous guidance.**



PowerCo and Volkswagen Group leaders tour QuantumScape labs in San Jose, Calif.

The deal consists of two major elements. First, it creates a dedicated and co-located team of experts from PowerCo and QuantumScape that will collaborate to industrialize our solid-state lithium-metal battery technology. The second component is a non-exclusive technology licensing agreement. Contingent upon satisfactory technical progress, QuantumScape will receive a \$130 million prepayment of royalties and grant PowerCo a non-exclusive license, covering an initial production volume of 40 GWh per year with an option to expand to 80 GWh, enough for approximately one million vehicles annually.<sup>1</sup> The license covers the technology platform used in our upcoming QSE-5 product. Additional agreements with PowerCo or other customers may include subsequent technology innovations, and could contribute to a further extension of our cash runway.

This agreement is a major step in our global scale-up strategy to bring our solid-state lithium-metal battery technology to market for electric vehicles. By joining forces, we can combine our cutting-edge technology with PowerCo's capabilities in industrialization and manufacturing. Under this licensing model, we can leverage our partners' investment of billions of dollars to industrialize our technology while maintaining our focus on innovation and development. We believe that this capital-light model will enable us to reach gigawatt-hour scale faster than we would be able to do under the prior joint venture structure and, when combined with prudent cash management, will allow us to extend the cash runway by 18 months.

We see this collaboration and its intellectual property framework as a potential template for future deals with other customers, and we believe the experience we gain in executing this technology transfer to PowerCo will be helpful for ensuring the success of such projects. Please refer to our [Current Report on Form 8-K](#) for more details on the agreement.

<sup>1</sup>This figure assumes an average gross pack energy of 80 kWh per vehicle.

## Customer Engagement

Our overall customer engagements remain robust – we have shipped Alpha-2 prototype cells to multiple customers in the automotive and consumer electronics sectors, and we continue to work closely with our prospective launch customer for the QSE-5 cell.

## Production Update: Raptor and Cobra

The core innovation that will allow our solid-state lithium-metal battery technology to be manufactured at gigawatt-hour scale is our fast separator production process, which we are rolling out in two stages, Raptor and Cobra. This year, Raptor will enable initial low-volume B-sample production of our first commercial product, QSE-5. Cobra is the key to higher-volume QSE-5 B-sample production next year, as well as a core element of the technology platform planned for licensing to PowerCo.

**We are on track to complete the Raptor process ramp**, one of our four key goals for the year. Raptor continues to show encouraging benefits for separator quality and has demonstrated the capability to produce the best-performing separators we have ever made. The Raptor process has been an important testbed for key elements of Cobra, and our progress on Raptor has allowed us to begin shifting increased resources toward Cobra development. We are starting to take delivery of Cobra equipment, in line with our annual goal.

We are encouraged by the progress we have made preparing for B-sample production before the end of this year. Our ongoing work includes integrating cell components, developing scalable processes and continuously improving reliability.

## Product Development: Safety Testing

Our prototype ~5 amp-hour cells based on our Alpha-2 design have [demonstrated](#) a promising safety profile, and we continue to believe our technology offers the potential for improved safety relative to conventional high-energy lithium-ion batteries. One noteworthy result from prototype cell testing was demonstrating thermal stability up to 300 °C; for reference, we tested conventional high-energy lithium-ion cells, which burst into flames between 174 °C and 185 °C.

We believe an improved safety profile presents a compelling value proposition across the full spectrum of applications. A design that can offer higher energy than conventional energy cells while remaining stable at extremely high temperatures would help enable automakers to make their battery packs smaller, lighter and more cost-effective while maintaining a safety profile as good or better than current designs. Moreover, in cases such as heavy trucking, the safety risks posed by conventional batteries impose onerous engineering overhead and design requirements to achieve acceptable system-level safety performance. A cell that can offer a fundamentally safer chemistry not only adds value to existing applications like automotive and consumer electronics, but also potentially opens up new markets that current technology is unable to serve effectively.

	QS Prototype Cell Safety Testing Results												Hazard Levels		
	Internal short circuit (nail penetration)		Crushing At 25°C	Overcharging		Short circuit		Cyclical exhaustive discharge		Cyclical overcharging		Thermal Stability	0	No effect	
	25°C	60°C		25°C	60°C	25°C	60°C	25°C	60°C	25°C	60°C		300 °C	1	Passive protection activated
													2	Defect/damage	
												3	Minor leakage or vent		
A0 24L	2	2	2	2	2	2	2	2	2	2	2	2	2	4	Major leakage or vent
α1 24L	2	2	-	2	2	2	2	-	-	-	-	-	-	5	Rupture
α2 24L	-	2	-	2	2	3	3	-	-	-	-	-	3	6	Fire or flame
														7	Energetic failure

Test protocol based on SAND2017-6925 and IEC/TR 62660-3 & -4

For more information on how to interpret our safety testing results, please read our [blog](#) on the subject. Note that these early results are from prototype cells based on our Alpha-2 design, not final QSE-5 cells, and a full suite of tests must be conducted on many such cells before conclusions can be drawn about the safety performance of the finished product.

## Financial Outlook

Capital expenditures in the second quarter were \$18.9M. Q2 capex primarily supported equipment purchases for low-volume QSE-5 prototype production, as well as the Cobra process and other equipment as we prepare for higher-volume QSE-5 prototype production in 2025. GAAP operating expenses and GAAP net loss were \$134.5M and \$123.0M respectively; Adjusted EBITDA loss was \$72.5M in Q2. A table reconciling GAAP net loss and Adjusted EBITDA loss can be found in the financial statements at the end of this shareholder letter. We ended Q2 with \$938M in liquidity. We maintain our full-year 2024 guidance for Adjusted EBITDA loss to be between \$250M and \$300M and expect to be on the lower end of our capital expenditure guidance range of \$70M to \$120M.

As mentioned in previous shareholder letters, our long-term capital requirements are a function of our commercialization pathway. We believe the licensing deal with PowerCo offers a capital-efficient path to market, and we now project our cash runway to extend into 2028. Additionally, we expect the deal to minimize the time to gigawatt-hour scale production of batteries based on our technology platform and potentially quadruple capacity relative to the previous joint venture arrangement.

The extension of our cash runway forecast is mainly attributable to:

- avoidance of planned spend on our joint venture, freeing up \$134M previously earmarked for our investment into the JV
- prepayment of royalties contingent on satisfactory technical progress
- inflows of development resources from our collaboration partner
- improvements to capital and operational efficiency with respect to our existing operations

Any additional funds raised, including under our ATM prospectus supplement, would further extend this cash runway.

As always, we encourage investors to read more on our financial information, business outlook and risk factors in our quarterly and annual SEC filings on our investor relations website.

## Strategic Outlook

The secular trend toward EV adoption continues, but despite decades of development, existing conventional battery technologies still cannot address the requirements of large segments of the automotive market. There is a clear need for a next-generation battery to drive broad adoption of EVs, and this need represents an extraordinary market opportunity, potentially hundreds of billions of dollars annually.

We believe that our solid-state lithium-metal platform is the clear leader in the next-generation battery race, and to seize this massive market opportunity, a global manufacturing ecosystem must be developed. This is where our collaboration with PowerCo fits in: they can bring their industrial expertise and operational excellence to bear on the formidable practical challenges of producing our next-generation battery platform at the gigawatt-hour scale. This non-exclusive deal also allows us to pursue additional opportunities while maintaining our tenacious focus on innovation and return on invested capital.

Above all, we see this collaboration with PowerCo as an opportunity to quickly and efficiently get our battery technology into series-production electric vehicles. The inherent leverage of this industrialization model takes advantage of the investments being made by automotive OEMs such as the Volkswagen Group, and our highly differentiated technology allows both partners to benefit from this collaboration. Moreover, under this model, our market share is not directly constrained by the size of our balance sheet or the bandwidth of our operations team.

Though significant work remains to achieve our ambitions, we are excited to begin our collaboration with PowerCo. It's the first step in the next phase of our journey to revolutionize energy storage and create exceptional value for shareholders. We look forward to reporting on our progress in the months to come.



Dr. Siva Sivaram  
President, CEO and Director



Kevin Hettrich  
CFO

**QuantumScape Corporation**  
**Condensed Consolidated Balance Sheets (Unaudited)**  
(In Thousands, Except per Share Amounts)

	June 30, 2024	December 31, 2023
<b>Assets</b>		
Current assets		
Cash and cash equivalents (\$3,609 and \$3,522 as of June 30, 2024 and December 31, 2023, respectively, for joint venture)	\$ 196,388	\$ 142,524
Marketable securities	741,467	928,284
Prepaid expenses and other current assets	35,614	12,709
Total current assets	973,469	1,083,517
Property and equipment, net	321,534	313,164
Right-of-use assets - finance lease	23,703	25,140
Right-of-use assets - operating lease	53,979	55,863
Other assets	24,098	24,294
Total assets	<u>\$ 1,396,783</u>	<u>\$ 1,501,978</u>
<b>Liabilities, redeemable non-controlling interest and stockholders' equity</b>		
Current liabilities		
Accounts payable	\$ 15,228	\$ 12,959
Accrued liabilities	66,530	10,180
Accrued compensation and benefits	22,368	26,043
Operating lease liability, short-term	5,208	5,006
Finance lease liability, short-term	3,067	2,907
Total current liabilities	112,401	57,095
Operating lease liability, long-term	55,646	57,622
Finance lease liability, long-term	33,518	35,098
Other liabilities	13,137	11,986
Total liabilities	214,702	161,801
Redeemable non-controlling interest	1,812	1,770
Stockholders' equity		
Preferred stock	—	—
Common stock	50	49
Additional paid-in-capital	4,305,018	4,221,892
Accumulated other comprehensive loss	(519)	(2,877)
Accumulated deficit	(3,124,280)	(2,880,657)
Total stockholders' equity	1,180,269	1,338,407
Total liabilities, redeemable non-controlling interest and stockholders' equity	<u>\$ 1,396,783</u>	<u>\$ 1,501,978</u>

**QuantumScape Corporation**  
**Condensed Consolidated Statements of Operations and Comprehensive Loss (Unaudited)**  
(In Thousands, Except per Share Amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Operating expenses:				
Research and development	\$ 97,746	\$ 86,453	\$ 181,593	\$ 163,394
General and administrative	36,711	37,089	84,765	70,126
Total operating expenses	134,457	123,542	266,358	233,520
Loss from operations	(134,457)	(123,542)	(266,358)	(233,520)
Other income (loss):				
Interest expense	(562)	(602)	(1,134)	(1,202)
Interest income	12,016	7,319	24,081	13,596
Other income (loss)	50	318	(170)	(12)
Total other income	11,504	7,035	22,777	12,382
Net loss	(122,953)	(116,507)	(243,581)	(221,138)
Less: Net income attributable to non-controlling interest, net of tax of \$0	22	14	42	30
Net loss attributable to common stockholders	\$ (122,975)	\$ (116,521)	\$ (243,623)	\$ (221,168)
Net loss	\$ (122,953)	\$ (116,507)	\$ (243,581)	\$ (221,138)
Other comprehensive income (loss):				
Unrealized gain on marketable securities	868	2,640	2,358	8,158
Total comprehensive loss	(122,085)	(113,867)	(241,223)	(212,980)
Less: Comprehensive income attributable to non-controlling interest	22	14	42	30
Comprehensive loss attributable to common stockholders	\$ (122,107)	\$ (113,881)	\$ (241,265)	\$ (213,010)
Basic and Diluted net loss per share	\$ (0.25)	\$ (0.26)	\$ (0.49)	\$ (0.50)
Basic and Diluted weighted-average common shares outstanding	501,232	445,324	498,688	442,724

**QuantumScape Corporation**  
**Condensed Consolidated Statements of Cash Flows (Unaudited)**  
(In Thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
<b>Operating activities</b>				
Net loss	\$ (122,953)	\$ (116,507)	\$ (243,581)	\$ (221,138)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	12,869	10,028	24,852	19,533
Amortization of right-of-use assets and non-cash lease expense	1,982	1,942	3,967	3,875
Amortization of premiums and accretion of discounts on marketable securities	(7,520)	(3,336)	(15,679)	(5,512)
Stock-based compensation expense	47,825	49,992	67,112	87,982
Other	1,245	(98)	1,352	501
Changes in operating assets and liabilities:				
Prepaid expenses and other current assets and other assets	(31)	995	(22,710)	133
Accounts payable, accrued liabilities and accrued compensation and benefits	1,755	91	63,319	(4,017)
Operating lease liability	(1,272)	(682)	(2,533)	(1,251)
Other liabilities	949	(100)	805	(100)
Net cash used in operating activities	(65,151)	(57,675)	(123,096)	(119,994)
<b>Investing activities</b>				
Purchases of property and equipment	(18,923)	(24,720)	(33,043)	(52,732)
Proceeds from maturities of marketable securities	509,204	261,440	893,843	452,483
Proceeds from sales of marketable securities	—	—	1,245	1,477
Purchases of marketable securities	(424,970)	(190,358)	(690,235)	(290,780)
Net cash provided by investing activities	65,311	46,362	171,810	110,448
<b>Financing activities</b>				
Proceeds from exercise of stock options and employee stock purchase plan	4,622	3,583	6,570	7,633
Principal payment for finance lease	(715)	(640)	(1,420)	(640)
Net cash provided by financing activities	3,907	2,943	5,150	6,993
Net increase (decrease) in cash, cash equivalents and restricted cash	4,067	(8,370)	53,864	(2,553)
Cash, cash equivalents and restricted cash at beginning of period	210,369	258,733	160,572	252,916
Cash, cash equivalents and restricted cash at end of period	<u>\$ 214,436</u>	<u>\$ 250,363</u>	<u>\$ 214,436</u>	<u>\$ 250,363</u>
<b>Supplemental disclosure of cash flow information</b>				
Cash paid for interest	\$ 562	\$ 602	\$ 1,134	\$ 602
Purchases of property and equipment, not yet paid	\$ 11,624	\$ 9,416	\$ 11,624	\$ 9,416

## Net Loss to Adjusted EBITDA

Adjusted EBITDA is a non-GAAP supplemental measure of operating performance that does not represent and should not be considered an alternative to operating loss or cash flow from operations, as determined by GAAP. Adjusted EBITDA is defined as net income (loss) before interest expense, non-controlling interest, revaluations, impairments, stock-based compensation, depreciation and amortization expense, and other non-recurring charges. We use Adjusted EBITDA to measure the operating performance of our business, excluding specifically identified items that we do not believe directly reflect our core operations and may not be indicative of our recurring operations. Adjusted EBITDA may not be comparable to similarly titled measures provided by other companies due to potential differences in methods of calculations. A reconciliation of Adjusted EBITDA to net loss is as follows:

(\$ in Thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
<b>GAAP net loss attributable to Common Stockholders</b>	<b>\$ (122,975)</b>	<b>\$ (116,521)</b>	<b>\$ (243,623)</b>	<b>\$ (221,168)</b>
Interest expense (income), net	(11,454)	(6,717)	(22,947)	(12,394)
Other expense (income), net	(50)	(318)	170	12
Net gain (loss) attributable to non-controlling interests	22	14	42	30
Stock-based compensation	47,825	49,992	67,112	87,982
Litigation settlement accrual and legal fees, net (1)	—	—	24,455	—
<b>Non-GAAP operating loss</b>	<b>\$ (86,632)</b>	<b>\$ (73,550)</b>	<b>\$ (174,791)</b>	<b>\$ (145,538)</b>
Depreciation and amortization expense (2)	14,119	10,028	26,102	19,533
<b>Adjusted EBITDA</b>	<b>\$ (72,513)</b>	<b>\$ (63,522)</b>	<b>\$ (148,689)</b>	<b>\$ (126,005)</b>

(1) This amount is with respect to the pending settlement of the securities class action litigation, which litigation was previously disclosed in our annual report filed on February 27, 2024.

(2) Depreciation and amortization expense includes accelerated depreciation and write-off of property and equipment no longer in use.

## Management's Use of Non-GAAP Financial Measures

This letter includes certain non-GAAP financial measures as defined by SEC rules. These non-GAAP financial measures are in addition to, and not a substitute for or superior to, measures of financial performance prepared in accordance with U.S. GAAP. There are a number of limitations related to the use of these non-GAAP financial measures versus their nearest GAAP equivalents. For example, other companies may calculate non-GAAP financial measures differently or may use other measures to evaluate their performance, all of which could reduce the usefulness of our non-GAAP financial measures as tools for comparison. We urge you to review the reconciliations of our non-GAAP financial measures to the most directly comparable U.S. GAAP financial measures set forth in this letter, and not to rely on any single financial measure to evaluate our business.

## Forward-Looking Statements

This letter contains forward-looking statements within the meaning of the federal securities laws and information based on management's current expectations as of the date of this letter. All statements other than statements of historical fact contained in this letter, including statements regarding the future development of the Company's battery technology, the anticipated benefits of the Company's technologies and the performance of its batteries, plans and objectives for future operations, forecasted cash usage, including spending and investment, are forward-looking statements. When used in this letter, the words "may," "will," "can," "estimate," "aim," "pro forma," "expect," "plan," "believe," "focus," "potential," "predict," "target," "forecast," "should," "would," "could," "continue," "ongoing," "project," "intend," "anticipate," "seek," "enable," "promising," "working toward," "progress toward," "prospective" the negative of such terms and other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain such identifying words. These forward-looking statements are based on management's current expectations, assumptions, hopes, beliefs, intentions, and strategies regarding future events and are based on currently available information as to the outcome and timing of future events.

These forward-looking statements involve significant risks and uncertainties that could cause the actual results to differ materially from the expected results. Many of these factors are outside the Company's control and are difficult to predict. Factors that may cause such differences include but are not limited to ones listed here. The Company faces significant challenges in its attempts to develop a solid-state battery cell and produce it at high volumes and may not be able to successfully develop its solid-state battery cell or build high volumes of multilayer cells for commercialization, including under its Collaboration Agreement. The Company could encounter significant delays and/or technical challenges in replicating and scaling up the performance seen in its single-layer and early multilayer cells, in achieving the high quality, consistency, reliability, safety, cost, and throughput required for commercial production and sale, and in developing a cell architecture that meets all the technical requirements. The Company has encountered and may encounter delays and other obstacles in acquiring, installing and operating new manufacturing equipment for automated and/or continuous-flow processes such as Raptor and Cobra, including vendor delays and other supply chain disruptions and challenges in optimizing its complex manufacturing processes. The Company may encounter delays and cost overruns in hiring and retaining the engineers it needs to expand its development and production efforts, including as a result of management changes or as part of the Collaboration Agreement, delays in building out or scaling up QS-0, and delays in establishing supply relationships for necessary materials, components or equipment. Delays in increasing production of engineering samples have slowed the Company's development efforts in the past. These or other sources of delay could impact our delivery of B-samples and delay or prevent successful commercialization of our products or the entry into the IP License Agreement. The Company may encounter delays, difficulties and technical challenges in its collaboration with PowerCo to industrialize its solid-state lithium-metal battery technology. Delays or difficulties in meeting technical milestones, including under the Collaboration Agreement required to trigger the IP License Agreement and related royalty prepayment, or scaling up QS-0 could cause prospective customers and collaboration partners not to purchase cells from us or not to proceed with the IP License Agreement. If the Company does not enter into the IP License Agreement, it will not receive the royalty prepayment and realize any of the other benefits expected from such agreement. The Company may be unable to adequately control the costs associated with its operations and the components necessary to build its solid-state battery cells at competitive prices. The Company's spending may be higher than currently anticipated and the Company may need to raise additional funds, including in the public markets, and this may cause dilution in the stock ownership of our investors. The Company may encounter difficulties, including due to challenges related to the management transition, the building out of high-volume processes, the achievement of the quality, consistency, reliability, safety, cost and throughput required for commercial production and sale, changes in economic and financial conditions, and not be successful in competing in the battery market industry or establishing and maintaining confidence in its long-term business prospects among current and future partners and customers. The Company is at an early stage of testing its battery technology for use in consumer electronics applications, and we may discover technical or other hurdles that impede our ability to serve that market. If the Company is unable to protect or assert its intellectual property, its business and competitive position would be harmed. The Company cautions that the foregoing list of factors is not exclusive. The Company cautions readers not to place undue reliance upon any forward-looking statements, which speak only as of the date made.

Except as otherwise required by applicable law, the Company disclaims any duty to update any forward-looking statements. Should underlying assumptions prove incorrect, actual results and projections could differ materially from those expressed in any forward-looking statements. Additional information concerning these and other factors that could materially affect the Company's actual results can be found in the Company's periodic filings with the SEC. The Company's SEC filings are available publicly on the SEC's website at [www.sec.gov](http://www.sec.gov).