

SUSTAINABILITY UPDATE

SEPTEMBER 30, 2024



Dear Stakeholders,

QuantumScape was founded with the mission to revolutionize energy storage to enable a sustainable future. More specifically, our goal has been to build the world's best batteries, as measured by energy density, power density, charge time, cycle life, and safety.

As we continue to evolve from a prototype-focused battery technology company to one that is closer to bringing the first commercial solid-state lithium-metal battery cell to market for electric vehicle applications, we find ourselves at a pivotal moment in our journey. This year, rather than providing a full report as in past years, we have chosen to share a newsletter update about our sustainability practices. This approach reflects the dynamic nature of our business as we continue our transition from prototype to product and adapt to new opportunities, including our recent agreement with PowerCo, which has the potential to completely shift our business model towards licensing our cutting-edge battery technology instead of manufacturing it ourselves. Such changes are influencing how we set and pursue our sustainability goals. Our mission to bring a disruptive solid-state lithium-metal battery to the world and advance the transition to a sustainable future remains our ultimate focus. This newsletter aims to keep you informed of our progress and the steps we are taking towards this shared goal.



Sustainability Update

The transportation sector is a significant source of global greenhouse gas emissions. Recognizing the environmental toll of gasoline-powered vehicles, nations and organizations around the world have committed to electrifying transportation, but we believe that widespread EV (Electric Vehicle) adoption hinges on significant improvements in battery technology.

Our focus is on electrifying the automotive powertrain, an application that we believe represents both an important part of the solution to the emissions problem as well as an opportunity to create tremendous value over the coming decades. We also recognize that our solid-state battery technology has applicability and can create value in other markets, including stationary storage and consumer electronics, and we intend to explore opportunities in those areas as appropriate. Our focus on this mission, and on sustainability more broadly, promotes the long-term interests of our stakeholders, while strengthening our board of directors' and management's accountability.

Sustainability at QuantumScape is a priority, from senior leadership to each employee, as we believe achieving operational excellence is intrinsically tied to operating our business responsibly and sustainably. As a leader in the development of next-generation solid-state lithium-metal batteries, we focus on sustainability topics such as the reduced environmental impact of our product, improved workplace health and safety, and strengthened employee development. Our board of directors' primary duty is to oversee our corporate strategy, which includes oversight of how environmental and social issues may impact the long-term interests of our stakeholders. In addition, our nominating and corporate governance committee provides direct board oversight on Sustainability and indicators that are connected to our strategic business initiatives. We formed a sustainability working group at the direction of our board of directors to evaluate our engagement with sustainability topics and develop our comprehensive strategy. Our most recent ESG (Environmental, Social, and Governance) report, [published in September 2023](#), is available on our website. We encourage all our stakeholders to read this update, which outlines the progress made in various sustainability, human capital, and governance areas.

As we commercialize our technology and have significant data updates to report, we aim to publish a detailed sustainability report.

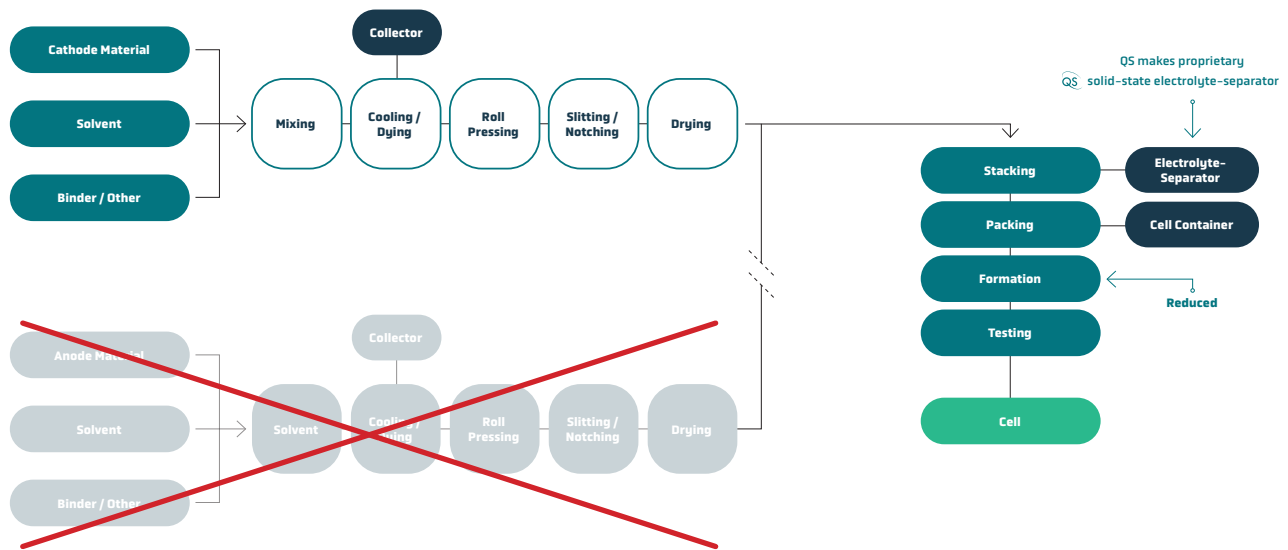
Environmental Product Impact

Compared with conventional lithium-ion batteries, our battery technology is designed to enable significant benefits to battery energy density, cycle life, fast charging, and safety, while providing a pathway to lower costs. We believe these benefits will provide significant value to our automotive OEM customers and to drivers, by enabling a switch to EVs without requiring difficult compromises. Because our technology has the potential to address key pain points, by extending vehicle range and enabling ~15-minute fast charging from 10% to 80% state-of-charge, we believe our battery technology will deliver an EV experience that is significantly more competitive with internal combustion engine vehicles than what today's EVs can achieve with conventional lithium-ion batteries.

Accelerating the transition to electric vehicles has important effects on the world's ability to meet the Paris Climate Accords' goals. However, reducing the carbon dioxide emissions from transportation is only one of the environmental benefits of electrification. Combustion vehicles have a significant negative impact on air quality in cities due to emissions of harmful pollutants such as nitrogen oxides and particulate matter. These emissions may lead to increased rates of asthma and other respiratory diseases, as well as a host of other health burdens that are still being understood. The impacts of air pollution also tend to fall disproportionately on low-income and marginalized communities. We believe our product can play a key role in reducing the effects of air pollution on people, the broader environment, and the global ecosystem.

Responsible Product Design and Circular Economy

We can further strengthen the environmental value of our technology by designing our batteries to perform better with less material, providing a longer useful life, and retaining utility in second-life applications. Eliminating the anode host material in our batteries reduces the need to extract resources – both natural and synthetic graphite production and processing are carbon intensive, and their supply chains present multiple sustainability concerns.



In addition, our technology offers improved recyclability: for conventional lithium-ion batteries, the graphite anode and polymer separator are some of the least recyclable parts of a cell. In contrast, when our battery reaches end of life, the material constituents are potentially largely recyclable, and we are now investing resources to develop the processes with the goal of returning such materials to useful applications and help build a circular economy.

In 2022, we entered an agreement with a commercial battery recycler to recycle certain battery components. Recycling of our scrap materials has allowed us to divert substantial amounts of battery component and consumable materials away from waste streams.

In 2023, we recycled more than 30,000 pounds (about 13,608 kg) of battery components. In 2023, we started measuring our Scope 1 and Scope 2 greenhouse gas emissions (GHG), which are primarily due to carbon dioxide emissions from utilities and development activities. These emissions are significantly lower than any reporting requirements set by the U.S. Environmental Protection Agency (EPA) and the California Air Resource Board (CARB).

As a pre-commercial company, we have not yet established a baseline for these emissions. We plan to publish our Scope 1 and 2 GHG data once our business operations and manufacturing processes have matured, which will also be influenced by the business model we adopt.

Product Safety

The goal of our solid-state lithium-metal battery technology is to power society’s transition away from fossil fuels. However, a key component of improved sustainability is improved product safety. With current batteries, many abuse conditions can result in serious vehicle fires, including overcharging and battery damage from accidents. To reduce these risks, flammable components in today’s lithium-ion EV batteries must be replaced with nonflammable alternatives. The nonflammable, noncombustible ceramic solid-electrolyte separator in our batteries replaces typical organic polymer separators found in traditional lithium-ion cells, which we believe will reduce the risk of fire and thermal runaway events. Although additional safety tests need to be performed as our materials and processes evolve.

In 2023 and 2024, we conducted product safety tests on some of our A0 and Alpha-2 prototype cells including nail penetration, external short circuit, and thermal stability testing at 300 °C (above the 180 °C melting point of lithium), and these cells successfully passed the safety tests of leading international automotive standards.

Our blog posts about “Understanding Battery Safety” covered the basics of battery safety and in Interpreting QuantumScape’s Safety Test Results, we presented a deep dive into a couple of key test results from energy-dense 24-layer QuantumScape prototype cells based on our Alpha-2 design, highlighting safety test results for nail penetration and thermal stability. In the nail penetration test, our prototype cell displayed a strong safety profile, avoiding thermal runaway and only showing a modest temperature increase. In thermal stability tests, our prototype cell remained stable at higher temperatures compared to conventional lithium-ion cells.

| QS Prototype Cell Safety Testing Results | | | | | | | | | | | | |
|--|--|------|---------------------|--------------|------|---------------|------|----------------------------------|------|--------------------------|------|----------------------|
| | Internal short circuit (nail penetration) | | Crushing At 25°C | Overcharging | | Short circuit | | Cyclical exhaustive discharge | | Cyclical overcharging | | Thermal Stability |
| | 25°C | 60°C | | 25°C | 60°C | 25°C | 60°C | 25°C | 60°C | 25°C | 60°C | 300 °C |
| A0 24L | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| α1 24L | 2 | 2 | - | 2 | 2 | 2 | 2 | - | - | - | - | - |
| α2 24L | - | 2 | - | 2 | 2 | 3 | 3 | - | - | - | - | 3 |

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

These early results are from prototype cells, and rigorous safety testing methodology requires a full suite of tests on many such cells before we can draw any firm conclusions about the safety performance of the finished product. Although there can be no such thing as a perfectly safe battery, we believe it is possible to improve the safety profile of conventional lithium-ion battery technology. At QuantumScape, we believe our ceramic solid-state electrolyte-separator has the potential to simultaneously offer both an improved safety profile and better energy, power, fast-charging, and cycle life, when compared with existing high-energy EV batteries. We also believe there is room to improve our safety profile even further, and we will continue to build, test, and refine our battery designs to achieve these improvements.

Supply Chain

In designing our battery, we intentionally looked to constrain our inputs to Earth-abundant materials and materials and equipment from existing supply chains. This has potentially significant impact on avoided emissions. Our long-term goal is to measure and continuously improve upon the environmental performance of our company based on our energy consumption, water consumption, GHG and air emissions, waste generation and ecological impacts that can accrue across our value chain, during raw material extraction, manufacturing, transportation, and distribution. We are investing in systems, processes, and the team to make progress on this goal.

In 2022, we formalized our supplier code of conduct, which is published on our website at www.quantumscape.com/supplier-code-of-conduct. As we begin to solidify the types and amounts of materials we will need, and choose longer-term supply chain partners, we will analyze and target areas of risk and opportunity in our supply chain that we can influence, prioritizing partners who have high standards for environmental sustainability or who are willing to improve their practices.

Workplace Health and Safety

We seek to manage environmental, health and safety risks via a sophisticated environment, health and safety system, including engineering controls, policies, procedures, training, monitoring, audits, and a proactive culture. Our proactive approach focuses on the prevention of injuries and regulatory compliance. We continue to scrutinize, evaluate, and monitor safety hazards through design reviews at every stage to proactively eliminate hazards, job hazard analyses, enhanced by our emergency response teams, training, and responsible reward program.

In 2023, we had nine OSHA recordable incidents which included cuts, slip and fall, and repetitive motion injuries.



Our OSHA Recordable Incident Rate (TRIR) of 1.0 in 2023 was well below the 2022 battery manufacturing industry average TRIR of 2.6 and 2022 motor vehicle manufacturing industry average TRIR of 5.9¹. Our Lost Time Incident Rate (LTIR) in 2023 was 0.43 compared to 1.5 for motor vehicle manufacturing industry.

We continue to build the culture of environmental protection, employee health and safety, and sustainability.

Human Capital Management

Our business benefits tremendously from the strength of our team, which is built on the training, ability, experience and cultural fit of its individual members. But hiring is only the first step in the process, and we invest in our team so they can continue to develop their talents and capabilities, broaden their experience, and achieve their full potential at QuantumScape.

The company has approximately 850 team members as of Q2 2024. In 2023, we shifted our focus from headcount growth to resource efficiency and optimization and since then we have launched programs designed to engage, develop and recognize our employees, including:

- ✔ Quarterly Employee Topics meetings
- ✔ Leader Path Training with external consultants for over 100 of our managers and internal training for all managers
- ✔ Employee Recognition Award Program
- ✔ Regular annual 360 feedback review

We support talent development for all our employees through a combination of on-the-job learning, formal training, individualized education, and development opportunities, complemented by our performance management system. As we expand our team, we balance a promote-from-within philosophy with the need to recruit top talent from a range of different industries and all over the world. We are implementing robust management development programs to help leaders engage and develop their team members.

¹<https://www.bls.gov/web/osh/table-1-industry-rates-national.htm>

We believe growth and performance result from investing in our employees across a broad spectrum of training, development, and career advancement, but there is also an important role for compensation to reward and retain valuable team members. We balance the need for internal pay equity with the necessity for market-leading compensation as we grow and compete for talent. Bonuses, RSUs, and an employee stock purchase offerings are important ways for us to reward our employees for their performance and ensure that they participate in the success of the business. All of our full-time regular employees hold equity in our company.

Diversity, Equity, and Inclusion

Our company is built on innovation, which requires people with different skills, experiences, and perspectives working collaboratively to develop new ways of approaching persistent problems. Our culture of innovation is sustained and bolstered only when everyone feels respected, accepted, and valued.

We are always mindful of what we promote when we promote. We seek to promote fair and equitable hiring and promotion processes and year-over-year improvements in diverse representation. Some of our actions to achieve this include:

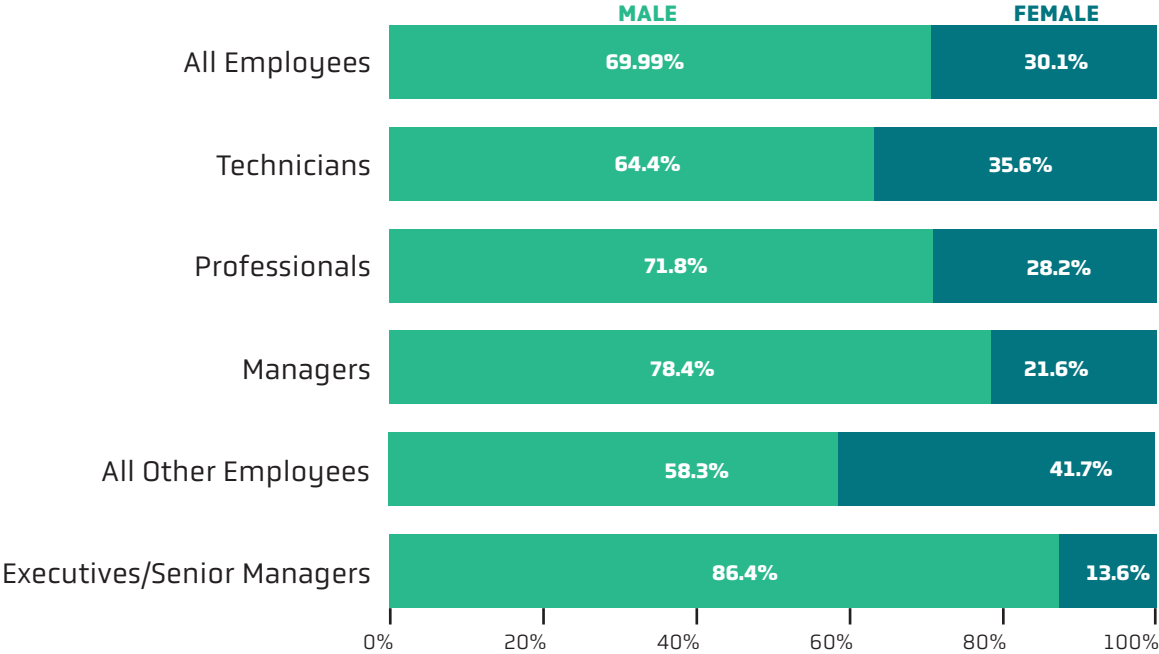
- Delivering management training for our senior leaders
- Implementing job leveling framework to ensure candidates are assessed against a consistent set of criteria, complemented by a structured interview process
- Making certain that our commitment to equal hiring and promotion opportunities is substantiated with equal pay for equal work, by conducting an annual internal pay equity analysis to identify weaknesses

In addition, we:

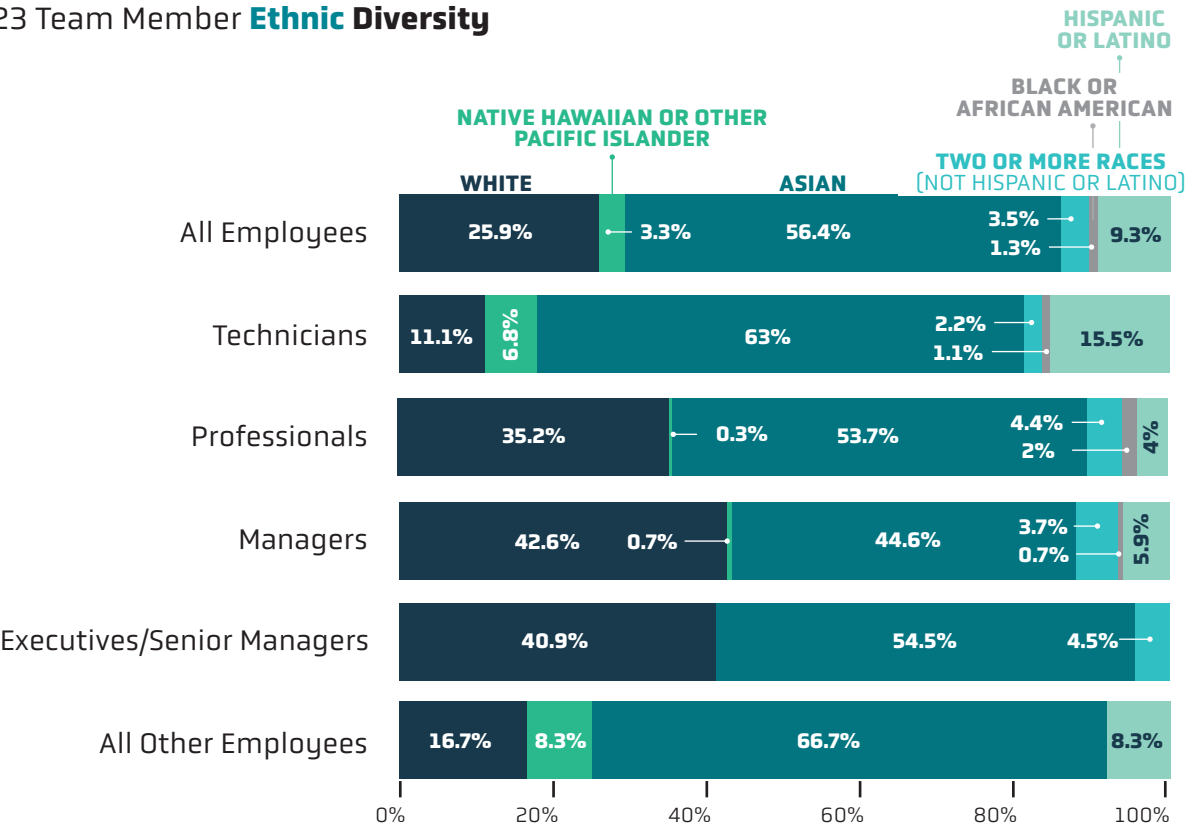
- Initiated a Women Leadership Council for our senior leaders
- Launched a talking series, inviting women leaders from different industries to present to all women employees
- Supported the Women in Clean Tech and Sustainability, a nonprofit organization that fosters an influential network of professionals to further the roles of women in growing the green economy and making a positive impact on the environment, and
- Sponsored and participated at the Women in Batteries conference through the Volta Foundation.

Although in-line with most companies in Silicon Valley, we are committed to improving gender and ethnic diversity at all levels of the company.

2023 Team Member **Gender Diversity**



2023 Team Member **Ethnic Diversity**



Data Protection and Security

We have established policies and processes for assessing, identifying, managing and disclosing, as necessary, risks from cybersecurity threats, and have integrated these processes into our overall risk management systems and processes. We routinely assess material risks from cybersecurity threats, including from any potential unauthorized occurrence on or conducted through our information systems that may result in adverse effects on the confidentiality, integrity, or availability of our information systems or any information residing therein. These risk assessments are designed to identify internal and external risks, the likelihood and potential damage that could result from such risks, and the sufficiency of existing policies, procedures, systems, and safeguards in place to manage such risks. Following these risk assessments, we evaluate whether and how to re-design, implement, and maintain safeguards intended to address and minimize identified risks and continue monitoring and testing the effectiveness of such safeguards.

We devote significant resources and have designated senior management to manage the cybersecurity and information security risk assessment and mitigation process. We have established an internal security committee that includes members of our information security/technology, internal audit/compliance, finance and accounting, people operations, and legal teams, to instill a thoughtful security culture across our company. Our employees and contractors are made aware of our cybersecurity policies through mandatory training during onboarding and on an annual basis. We also engage and consult with third parties in connection with our risk assessment processes, including advisors, consultants and auditors. These service providers assist us to design and implement our cybersecurity policies and procedures, as well as to monitor and test our safeguards. We deploy multiple tools and processes to monitor the prevention, detection, mitigation, and remediation of cybersecurity incidents, both internal and associated with the use of any third-party service provider.

One of the key functions of our board of directors is informed oversight of our risk management process, including risks from cybersecurity threats. Our board of directors is responsible for monitoring and assessing strategic risk exposure, and our executive officers are responsible for the day-to-day management of the material risks we face. Our board of directors administers its cybersecurity risk oversight function directly, as well as through the audit committee, which has been tasked with such oversight in the audit committee charter. The audit committee of our board of directors reviews cybersecurity and information security risks and mitigation strategies; the audit committee receives periodic updates on information security and privacy, and the full board receives at least an annual update.

Our information security program is fully compliant with the Trusted Information Security Assessment Exchange, which is based on the ISO/IEC 27001 and ISO/IEC 27002 standards and adapted to the automotive industry. We have not experienced a material security breach in our systems in the past three years.

Ethics and Compliance

Our board of directors has adopted a Code of Conduct available on our website at <https://ir.quantumscape.com/governance/governance-documents>. It serves as a guide, and we expect those it covers to use good judgment and adhere to the high ethical standards to which we are committed. Our Code of Conduct is designed to deter wrongdoing and promote fair and accurate financial reporting, compliance with applicable laws, rules and regulations, prompt internal reporting of violations of the Code of Conduct and any of our policies and procedures, honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest, and a culture of honesty and accountability. The nominating and corporate governance committee of our board of directors is responsible for overseeing the Code of Conduct, including regularly reviewing and updating our Code of Conduct for regulatory and best practices updates, and must approve any waivers of the Code of Conduct for employees, executive officers and directors. Any amendments to the Code of Conduct, or any waivers of its requirements, will be disclosed on our website.

In February 2023, our board of directors, upon recommendation of the nominating and corporate governance committee and as part of its annual corporate governance review cycle, approved certain amendments to our Code of Conduct.

We also have a Global Anti-Bribery and Anti-Corruption Policy dedicated to fostering and maintaining the highest ethical standards in each jurisdiction in which we conduct business. We have a zero-tolerance policy, and therefore all forms of bribery and corruption, regardless of whether they involve a public official or a private person, are prohibited. Our Anti-Corruption Policy complements our Code of Conduct in guiding employees and other company representatives in understanding concepts and activities that are prohibited by anti-bribery and anti-corruption laws. Both our Code of Conduct and our Anti-Corruption Policy are applicable to all of our officers, directors and employees, as well as our consultants, agents, contractors, business partners and any other third-party representatives acting on our behalf. We encourage reporting potential or suspected violations to our compliance officer or via our whistleblower hotline and prohibit any form of retaliation against good-faith reports.

Sustainability has been at the heart of our company since Day One, and we have the potential to deliver significant sustainability benefits to the electric vehicle industry. To summarize, our careful product design has the potential to improve safety by removing organic solvents and plastic separators from the cell. In addition, we limit the carbon footprint of batteries by avoiding excess lithium and graphite anode material. We believe our initial safety testing demonstrates that our product offers the potential for better safety compared to conventional lithium-ion batteries. We are also working on methods to reuse certain components to strengthen the circular economy. It is important to note that we are making this progress while protecting our intellectual property, keeping our diverse and inclusive workforce safe, and responsibly managing our supply chain. Because of this, we believe QuantumScope is set to succeed with its goal of revolutionizing energy storage to enable a sustainable future.

Sincerely,



Siva
President, CEO and Director

Forward-looking Statements

This letter contains forward-looking statements within the meaning of U.S. federal securities laws, including, but not limited to, statements regarding our goals, strategies, business plans, and expectations surrounding the commercialization of our solid-state lithium-metal battery technology, sustainability practices, and potential partnerships or business model shifts. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statements. These risks include, but are not limited to, the timing of development and commercialization efforts, the ability to meet technical milestones, changes in market conditions, and our ability to maintain strategic partnerships and sustainability efforts. We encourage you to review our filings with the Securities and Exchange Commission for a full discussion of the risks that could affect our business and future performance. Forward-looking statements speak only as of the date they are made, and we undertake no obligation to update them in light of new information or future events.