UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2022
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

for the transition period from ________ to ________

STEM, INC.

(Exact name of registrant as specified in its charter)

Delaware	**333-251397**	**85-1972187**
(State or Other Jurisdiction of Incorporation or Organization)	(Commission File Number)	(IRS Employer Identification No.)

100 California St., 14th Fl, San Francisco, California 94111

(Address of principal executive offices including zip code)

1-**877-374-7836**

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.0001	**STEM**	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of June 30, 2022, the aggregate market value of the common stock of the registrant held by non-affiliates of the registrant was $1.026 billion.

As of February 9, 2023, the number of shares of common stock outstanding was 154,574,741.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required to be furnished pursuant to Part III of this Form 10-K is set forth in, and is incorporated by reference from, Stem’s definitive proxy statement for its 2023 Annual Meeting of Stockholders, to be filed by Stem with the Securities and Exchange Commission (“SEC”) pursuant to Regulation 14A within 120 days after December 31, 2022 (the “2023 Proxy Statement”).

STEM, INC.
Annual Report on Form 10-K
For the Year Ended December 31, 2022

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Forward-Looking Statements

This Annual Report on Form 10-K contain "forward-looking statements" within the meaning of the federal securities laws, which include any statements that are not historical facts. Such statements often contain words such as "expect," "may," "can," "believe," "predict," "plan," "potential," "projected," "projections," "forecast," "estimate," "intend," "anticipate," "ambition," "goal," "target," "think," "should," "could," "would," "will," "hope," "see," "likely," and other similar words.

Forward-looking statements address matters that are, to varying degrees, uncertain, such as statements about financial and performance targets and other forecasts or expectations regarding, or dependent on, our business outlook; the expected benefits of the combined Stem/AlsoEnergy company; our ability to secure sufficient and timely inventory from suppliers; our ability meet contracted customer demand; our ability to manage supply chain issues and manufacturing or delivery delays; our joint ventures, partnerships and other alliances; forecasts or expectations regarding energy transition and global climate change; reduction of greenhouse gas ("GHG") emissions; the integration and optimization of energy resources; our business strategies and those of our customers; our ability to retain or upgrade current customers, further penetrate existing markets or expand into new markets; our ability to manage our supply chains and distribution channels and the effects of natural disasters and other events beyond our control; our response to the COVID-19 pandemic and our preparedness for other widespread health emergencies;(and government and business responses thereto); the ongoing conflict in Ukraine; the expected benefits of the Inflation Reduction Act of 2022 on our business; and future results of operations, including Adjusted EBITDA.

Such forward-looking statements are subject to risks, uncertainties, and other factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements, including but not limited to our inability to secure sufficient and timely inventory from our suppliers,, and provide us with contracted quantities of equipment; our inability to meet contracted customer demand; supply chain interruptions and manufacturing or delivery delays; disruptions in sales, production, service or other business activities; general economic, geopolitical and business conditions in key regions of the world, including inflationary pressures, general economic slowdown or a recession, increasing interest rates, and changes in monetary policy; the ongoing effects of the COVID-19 pandemic on our workforce, operations, financial results and cash flows; the ongoing conflict in Ukraine; the results of operations and financial condition of our customers and suppliers; pricing pressure; inflation; weather and seasonal factors; our inability to continue to grow and manage our growth effectively; our inability to attract and retain qualified employees and key personnel; our inability to comply with, and the effect on their businesses of, evolving legal standards and regulations, particularly concerning data protection and consumer privacy and evolving labor standards; risks relating to the development and performance of our energy storage systems and software-enabled services; our inability to retain or upgrade current customers, further penetrate existing markets or expand into new markets; the risk that our business, financial condition and results of operations may be adversely affected by other political, economic, business and competitive factors; and other risks and uncertainties discussed in Part I, Item 1A, "Risk Factors" in this Annual Report on Form 10-K and in our other filings with the SEC. If one or more of these or other risks or uncertainties materialize (or the consequences of any such development changes), or should our underlying assumptions prove incorrect, actual outcomes may vary materially from those reflected in our forward-looking statements. Forward-looking and other statements in this report regarding our environmental, social, and other sustainability plans and goals are not an indication that these statements are necessarily material to investors or required to be disclosed in our filings with the SEC. In addition, historical, current, and forward-looking environmental, social, and sustainability-related statements may be based on standards for measuring progress that are still developing, internal controls and processes that continue to evolve, and assumptions that are subject to change in the future. Forward-looking statements in this report are made as of the date of this report, and we do not assume any obligation to update any forward-looking statements after the date of this Report, except as required by law.

Part I.

ITEM 1. BUSINESS

Overview

Stem, Inc., a Delaware corporation ("Stem," the "Company," "we," "us," or "our"), is a global leader in AI-driven clean energy solutions and services with a large, digitally connected, renewable energy network, providing customers with (i) an energy storage system, sourced from leading, global battery original equipment manufacturers ("OEMs"), that we deliver through our partners, including developers, distributors, and engineering, procurement and construction firms, (ii) edge hardware to aid in the collection of site data and the real-time operation and control of the site plus other optional equipment, (iii) ongoing software platform and professional services to operate integrated energy storage, and solar systems, through our Athena® artificial intelligence ("AI") platform ("Athena"), and (iv) solar asset performance monitoring and control, through Athena's PowerTrack application. In addition, in all the markets where we help manage our customers' clean energy assets, we

have agreements to use the Athena platform to participate in such markets and to share the revenue from such market participation.

We deliver hardware and our software-enabled services to our customers through our Athena platform. Our hardware, professional services, and recurring software-enabled services seek to mitigate customer energy costs through time-of-use and demand charge management innovations and a network of virtual power plants, while capturing revenue through participation in programs and merchant markets. The resulting network created by our growing customer base is designed to increase grid resilience and reliability through the real-time processing of market-based demand signals, energy prices and other factors in connection with the deployment of renewable energy resources to such customers. Additionally, our energy storage solutions are designed to support renewable energy generation by alleviating grid intermittency issues, thereby potentially reducing our customers' dependence on traditional, fossil fuel resources and subsequent greenhouse gas emissions (GHG) to help advance our customers' environmental, social, and governance (ESG) goals. As of December 31, 2022, Athena had accumulated more than 31 million runtime hours, with more than 500,000 industrial Internet of Things ("IoT") devices under management, across more than 200,000 sites in over 50 countries.

We operate in two key areas within the energy storage landscape: Behind-the-Meter ("BTM") and Front-of-the-Meter ("FTM"). An energy system's position in relation to a customer's electric meter determines whether it is designated a BTM or FTM system. BTM systems installed at customer locations generate energy that can be used on-site without interacting with the electric grid and passing through an electric meter. Our BTM systems are designed to reduce commercial and industrial ("C&I") customer energy bills and help our customers achieve their corporate ESG objectives. FTM, grid-connected systems deliver power into the grid, which is often sold to off-site customers and must pass through an electric meter prior to reaching an end-user. Our FTM systems are designed to decrease risk for project developers, asset owners, independent power producers and investors by adapting to dynamic energy market conditions in connection with the deployment of electricity and improving the combined value of the solar renewable resource and energy storage over the course of their FTM system's useful life. We also help asset owners and operators monitor and manage the health and performance of their clean energy assets. As an early participant in the BTM market, we developed operational focus and technical capabilities that position us to have multiple product offerings and services in the evolving market for FTM energy storage services. We believe that Athena's ability to optimize operations in both the BTM and FTM markets is unique in the industry and provides us with a competitive advantage.

Through our February 2022 acquisition of Also Energy Holdings, Inc. ("AlsoEnergy"), we combined our storage optimization capabilities with solar asset performance monitoring and control software.

History

We were originally known as Star Peak Energy Transition Corp. ("STPK"), which was a special purpose acquisition company that completed its public offering on August 20, 2020. On April 28, 2021 (the "Closing Date"), we consummated a business combination (the "Merger") pursuant to an Agreement and Plan of Merger by and among STPK, STPK Merger Sub Corp., a Delaware corporation and wholly-owned subsidiary of STPK ("Merger Sub"), and Stem, Inc., a Delaware corporation ("Legacy Stem"). The Merger was effected on the Closing Date through the merger of the Merger Sub with and into Legacy Stem, with Legacy Stem surviving as a wholly-owned subsidiary of the Company. Legacy Stem was a private company and is considered the Company's accounting predecessor.

On June 30, 2021, we issued 4,683,349 shares of common stock (the "Exchange Shares") to Star Peak Sponsor LLC, a Delaware limited liability company ("STPK Sponsor"), and Star Peak Sponsor Warrantco LLC, a Delaware limited liability company (together with STPK Sponsor, the "Sellers"). The issuance was pursuant to an Exchange Agreement dated as of June 25, 2021 by and among us and the Sellers (the "Exchange Agreement"). Pursuant to the Exchange Agreement and in consideration of the issuance to the Sellers of the Exchange Shares, the Sellers exchanged 7,181,134 warrants originally issued to STPK Sponsor in a private placement that closed simultaneously with the STPK initial public offering. The Exchange Shares were issued in reliance upon the exemption provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the "Securities Act").

On August 20, 2021, we issued an irrevocable notice for the redemption of all 12,786,129 of our outstanding public warrants at 5:00 p.m. Eastern time on September 20, 2021 (the "Redemption Date"). Pursuant to the notice of redemption, holders of public warrants exercised 12,638,723 public warrants for proceeds to us of $145.3 million, and we redeemed all remaining outstanding public warrants that had not been exercised as of 5:00 p.m. Eastern time on the Redemption Date. The public warrants have been delisted from the NYSE, and there are no public warrants left outstanding.

On November 22, 2021, we sold to Morgan Stanley & Co. LLC, Goldman Sachs & Co. LLC and Barclays Capital Inc, as initial purchasers (the "Initial Purchasers"), and the Initial Purchasers purchased from us, $460.0 million aggregate principal amount of our 0.50% Green Convertible Senior Notes due 2028 (the "2028 Convertible Notes"), pursuant to a purchase

agreement dated as of November 17, 2021, by and between us and the Initial Purchasers. The Notes were offered in a private placement in reliance on Section 4(a)(2) of the Securities Act to the Initial Purchasers for initial resale to qualified institutional buyers pursuant to an exemption from registration provided by Rule 144A promulgated under the Securities Act. On November 17, 2021, in connection with the pricing of the Notes, and on November 19, 2021, in connection with the exercise in full by the Initial Purchasers of their option to purchase additional Notes, we entered into capped call transactions with certain of the Initial Purchasers of the Notes. The Company's net proceeds from this offering were approximately $445.7 million, after deducting the Initial Purchasers' discounts and commissions and the estimated offering expenses payable by us. We used approximately $66.7 million of the net proceeds to pay the cost of the capped call transactions.

On February 1, 2022, we completed the acquisition of 100% of the outstanding shares of AlsoEnergy for an aggregate purchase price of $652.0 million. The acquisition was structured on a cash-free, debt-free basis and subject to other customary adjustments as set forth in the purchase agreement. The transaction combines our storage optimization capabilities with AlsoEnergy's solar asset performance monitoring and control software.

Competitive Strengths

Our competitive strengths include the following:

- ***Significant Benefits from Scale & Network Effects***: We believe we are the largest in global distributed energy storage megawatts under management, with more than 2.0 GWh operating or contracted across more than 960 sites and more than 25GW of solar assets under management. This generates a significant amount of operational data leading to enhanced software performance through machine-learning and improving customer economics.
- ***Advanced Technology Platform***: We developed one of the first AI platforms for energy storage and virtual power plants that automates storage participation in electricity markets and performs monitoring and management of customer loads, solar generation and energy prices with real-time, complex decision- making algorithms. The platform is able to co-optimize multiple energy market revenue streams across a diverse fleet of hardware throughout multiple geographies and energy markets.
- ***Compelling Business Model & Customer Solutions***: Our goal is to provide a seamless customer experience from commercial proposal to installation. We pioneered a project financed offering for C&I energy storage, providing customers immediate significant savings without capital expenditure. C&I customers are aggressively procuring renewable energy to meet ESG targets and save money on electricity. Our solution enables these objectives with minimal impact to customer operations. Customers sign long-term contracts, typically between 10 and 20 years in duration, while providing us the flexibility to control their energy storage system to earn market participation revenue, lower their energy costs and meet their decarbonization goals.
- ***Leading Strategic Partnerships***: We have numerous partnerships with a diverse set of industry leaders to reduce execution risk and increase speed to market in certain geographies. In Massachusetts, we have a partnership with Constellation Energy to pair our energy storage systems with retail energy offerings for C&I customers. Internationally, we have partnerships with leading regional industrial equipment and energy firms such as Copec in South America, each focused on leveraging the partner's local market knowledge and reputation with leading corporates, utilities and grid operators.
- ***Exceptional AI and Energy Storage Expertise***: We have a seasoned leadership team with a demonstrated track record of execution and more than 150 years of accumulated experience in energy storage, software and distributed energy expertise focused on AI, technology development, new market commercialization, renewable project development and utility / grid program operations. Our executive and data science team has more than 150 years of combined experience in machine learning, optimization and controls.

Our Strategy

Our mission is to maximize the economic, environmental, and resiliency value of energy assets through our leading AI platform. In order to fulfill our mission, we provide our customers, which include C&I companies and enterprises as well as independent power producers, renewable project developers, utilities, and grid operators, with (i) an energy storage system, sourced from leading, global battery OEMs, that we deliver through our partners, including developers, distributors, and engineering, procurement and construction firms, (ii) edge hardware to aid in the collection of site data and the real-time operation and control of the site plus other optional equipment, (iii) ongoing software platform and professional services to operate integrated energy storage, and solar systems, through our Athena, and (iv) solar asset performance monitoring and control, through Athena's PowerTrack application. In addition, in all the markets where we help manage our customers' clean energy assets, we have agreements to use the Athena platform to participate in such markets and to share the revenue from such market participation.

Our Customers

We operate in two key markets within the energy storage landscape: BTM and FTM. BTM systems installed at C&I customer locations provide power that can be used on-site without interacting with the electric grid and generally without generating energy that passes through a utility electric meter. FTM grid-connected systems deliver power into the grid which is often sold to off-site customers and transported by the grid prior to reaching an end-user. For BTM customers, we seek to maximize value by providing AI-powered storage services that reduce spending on utility bills, enhance the economics of solar and provide backup power. Additionally, we help BTM customers achieve renewable energy targets as part of their ESG commitments. For FTM customers, we provide software-enabled services to capture revenue from energy market participation, including the sale of capacity, energy and ancillary services into regional electricity markets helping these customers enhance renewable project returns while improving grid resiliency and reliability for utilities and grid operators. These services that we provide are all at the direction of our customers, and we do not independently participate in the wholesale electricity market.

Research and Development

We have invested significant amounts of time and expense in the development of our Athena platform. The ability to maintain our leadership position depends in part on our ongoing research and development activities. Our software development team of more than 200 product and technology professionals is responsible for the design, development, integration and testing of the Athena platform. We focus our efforts on developing Athena to continuously improve our algorithms, augment value with new revenue streams and localize based on geography and regulatory considerations.

Intellectual Property

Intellectual property is a key differentiator for our business, and we seek protection whenever possible for the intellectual property that we own and control, including but not limited to patents, proprietary information, trade secrets and software tools and applications. We rely upon a combination of patent, copyright, trade secret and trademark laws, as well as employee and third-party non-disclosure agreements and other contractual restrictions to establish and protect our proprietary rights.

We have developed a significant patent portfolio to protect elements of our proprietary technology. As of December 31, 2022, we had 87 patents across storage and solar assets performance.

Our intellectual property encompasses a diverse mix of patents with respect to our proprietary systems and software. These patents relate to the following broad categories:

- power electronics, including the basic interaction of batteries with the power grid where such electronics convert direct current (DC) battery power to alternating current (AC) compatible grid power;
- analytics and control, including use cases and decisions into the operation of an energy storage system and the coordination of providing economic or operational value to a customer; and
- networked operations and grid services that involve the aggregation and operation of a group of energy storage systems to provide value to a utility or grid operator.

Stem’s “Athena®” is a registered-trademark, and Athena’s trademarked applications include “Analyzer™,” “Supervisor™,” “Explorer™,” and “Bidder™.” The services relating to these trademarks include, but are not limited to, energy optimization services, software as a service for energy optimization services and energy storage charge and discharge.

We continually review our development efforts to assess the existence and patentability of our intellectual property. We pursue the registration of our domain names and trademarks and service marks in the U.S. In an effort to protect our brand, as of December 31, 2022, we had nearly ten registered trademarks in the U.S.

Competition

The energy storage industry is highly competitive, and new regulatory requirements for carbon emissions, technological advances, the lower cost of renewable energy, the decrease in battery costs, improving battery technology and shifting customer demands are causing the industry to evolve and expand. We believe that the principal competitive factors in the energy storage market include, but are not limited to:

- safety, reliability and quality;
- product performance and uptime;
- historical track record and references for customer satisfaction;
- experience in utilizing the energy storage system for multiple stakeholders;

- technological innovation;
- comprehensive solution from a single provider;
- ease of integration; and
- seamless hardware and software-enabled service offerings.

There is rising demand for clean electric power solutions that can provide electric power with lower carbon emissions with high availability. Additionally, the transition to renewable energy sources and distributed energy infrastructure has increased the complexity and variability of end-customer electricity demand. This industry transformation has created an opportunity for an increased role for energy storage solutions like ours. We believe as one of the largest in this industry we have a significant head start against our competition in this rapidly evolving environment. We believe the global push for lower carbon emissions combined with vast technological improvements in lithium-ion battery-powered technologies will drive C&I customers, utilities, independent power producers and project developers to grow their use of and investment in energy storage systems.

Our key competitors include energy optimization software providers, energy storage system OEMs, hardware integration providers, renewable project developers and engineering, procurement and construction firms. Our industry peers are typically focused on the development and marketing of single-purpose built solutions with captive hardware offerings, while our AI-powered platform is capable of delivering a multitude of software-enabled services operating an extensive and diverse network of energy storage systems across multiple geographies, utility, and grid operator service areas.

We believe that one of the key advantages driving sustainable differentiation for our company includes the focus and capabilities built in our pioneering history in the BTM segment of the energy storage industry. This experience required an emphasis on AI-driven co-optimization of energy storage operations and the build out of significant operational infrastructure to execute economic considerations for enterprise customers, utilities, and grid operators. We believe that the distributed asset management capability from this experience positions us well to compete in the evolving FTM segment of the energy storage industry as recent regulatory actions include the liberalization and formalization of rules for compensation of market participation for distributed energy resources. We believe the legacy single-purpose market for FTM solutions will be driven by greater demand for flexible solutions that can access multiple market opportunities. Our solutions have been designed to mitigate the challenges of today's enterprise customers, independent power producers, utilities, renewable asset owners and the modern electrical grid at scale with continuous improvements to artificial intelligence optimization strategies informed by operational data from one of the industry's largest network of digitally-connected energy storage systems.

We believe we are well-positioned to compete successfully in the market for energy storage hardware and software-enabled services. Despite our limited operating history, we are among the leaders in global distributed energy storage and solar assets under management, supported by our Athena platform, compelling customer services, strategic partnerships and seasoned leadership team with a proven track record of success.

Government Regulation and Compliance

There are varying policy frameworks across the U.S. and abroad designed to support and accelerate customer adoption of clean and/or reliable distributed generation technologies. These policy initiatives come in the form of tax incentives, cash grants, performance incentives and/or electric tariffs.

Our AI-powered platform manages energy assets currently installed worldwide with diverse policy frameworks across each energy market. States within the U.S. have utility procurement programs and/or renewable portfolio standards for which our technology is eligible, including California, Connecticut Hawaii, Massachusetts, New York, and Texas. These energy storage systems currently qualify for tax exemptions, incentives or other customer incentives in many states, and now with the United States Inflation Reduction Act of 2022 (the "IRA"), storage incentive tax credit and solar production tax credit.

Federal, state and local government statutes and regulations concerning electricity heavily influence the market for our product and services even though Stem is not regulated as a utility. These statutes and regulations often relate to electricity pricing, net metering, incentives, taxation, competition with utilities and the interconnection of customer-owned electricity generation. In the U.S., governments, often acting through state utility or public service commissions, change and adopt different rates for commercial customers on a regular basis. These changes can have a positive or negative effect on our ability to deliver cost savings to customers for the purchase of electricity.

Several states have an energy storage mandate or policies designed to encourage the adoption of storage. For example, California offers a cash rebate for storage installations through the Self Generation Incentive Program ("SGIP") and Massachusetts and New York offer performance-based financial incentives for storage. Storage installations also are supported

in certain states by state public utility commission policies that require utilities to consider alternatives such as storage before they can build new generation. In February 2018, the FERC issued Order 841 directing regional transmission operators and independent system operators to remove barriers to the participation of storage in wholesale electricity markets and to establish rules to help ensure storage resources are compensated for the services they provide. An appeal of Order 841 filed by utility trade associations and other parties challenging the extent of the FERC's jurisdiction over storage resources connected to distribution systems (among other issues) is currently pending before the U.S. Court of Appeals for the D.C. Circuit. In September 2020, the FERC issued Order 2222, opening up U.S. wholesale energy markets to aggregations of distributed energy resources like rooftop solar, BTM batteries, and electric vehicles.

Energy storage systems require interconnection agreements from the applicable local electricity utilities in order to operate. In almost all cases, interconnection agreements are standard form agreements that have been pre-approved by the local public utility commission or other regulatory body with jurisdiction over interconnection agreements. As such, no additional regulatory approvals are typically required once interconnection agreements are signed.

Our operations are subject to stringent and complex federal, state, and local laws and regulations governing the occupational health and safety of our employees and wage regulations. For example, Stem is subject to the requirements of the federal Occupational Safety and Health Act ("OSHA"), as amended, and comparable state laws that protect and regulate employee health and safety.

There are government regulations pertaining to battery safety, transportation of batteries and disposal of hazardous materials. Stem and our suppliers, as applicable, are required to comply with these regulations in order to sell our batteries into the market. The license and sale of our batteries and technology abroad is likely to be subject to export controls in the future.

Each of our installations or customer installations must be designed, constructed, and operated in compliance with applicable federal, state, and local regulations, codes, standards, guidelines, policies and laws. To install and operate energy storage systems on our platform, Stem, our customers or our partners, as applicable, are required to obtain applicable permits and approvals from local authorities having jurisdiction to install energy storage systems and to interconnect the systems with the local electrical utility.

Human Capital Resources

Our mission is to maximize the economic, environmental, and resiliency value of energy assets through our leading AI platform, and we are also committed to creating a world-class employee experience. We aim to foster and maintain a workplace that values the unique talents and contributions of every individual. We believe it is the diversity of our people, with varied skills and backgrounds, that shape our success and innovation. Our people-focused culture is driven by collaboration and global cross-functional connections. We recognize the success of Stem is dependent on our talent and the satisfaction of our global workforce, and we are greatly invested in the ability of our people to succeed and thrive. The following discussions provide a description of our employees, and outline how we manage our human capital resources and how we invest in our employees' success.

Employees

As of December 31, 2022, we had 660 employees, of whom 489 were based in the United States and 171 in international locations. As of December 31, 2022, approximately 29% of the global team was female and 71% was male.

We believe that our future success depends in part on our continued ability to hire, motivate and retain qualified employees in any operating environment.

Recruiting

We believe in investing for the future, including the future of our workforce by recruiting exceptional individuals who share our company values. Our recruiting team and hiring managers begin with the creation of detailed job descriptions, which clearly outline the skills and experience necessary for success in each role. We believe these steps are essential to effectively interview for identifiable skill sets and not just "personality fits." We strive to build our workforce from within whenever possible; however, if the best candidate for an available position is not identified from within our existing talent pool, we will look externally. Our recruitment strategy is to initially search for candidates directly through our professional networks, university and mentorship programs, and through advertising with certain partners. We also occasionally use recruitment consultants and search firms.

Professional Development

We are committed to helping people realize their highest potential and fostering a culture that supports personal development for individuals, leaders and teams across the organization. Our employees enjoy ample opportunity to learn new skills to develop and advance their career, and we provide opportunities for all our employees to receive ongoing formal training to help foster their professional development. We also encourage continuing education programs through approved institutions and online learning such as Udemy and Stem University and are activating a Middle Manager Learning series to supplement essential and leadership skills.

Employee Feedback

We value the feedback we receive from our employees. Our annual employee engagement survey asks all our employees for their input on a variety of matters. The results of the employee survey are disseminated to all employees, and the results are used to design action plans to assist managers with actively responding to employees' sentiments. The employee survey is an important tool that allows us to continuously improve, innovate and evolve through ongoing engagement and measurement.

Diversity and Inclusion

We are committed to building an inclusive culture and team environment that supports current and future diversity in our industry and our talent. In the spirit of Stem's core values we are "One Team" and succeed through collaboration when we respect, acknowledge and celebrate each other's differences. We are committed to creating an inclusive environment that promotes equality, cultural awareness and respect by implementing policies, benefits, training, recruiting and recognition practices to support our colleagues. We believe that diversity and inclusion is about valuing our differences and continually identifying ways to improve our cultural intelligence which ultimately leads to better decision-making and a more tailored client experience. To help us achieve and maintain a diverse workforce, we continue to build a strong and inclusive culture at Stem with the launch of two new employee networks focused on LGBTIA+, and Women in Leadership. We are committed to building the best workplace in our communities and the broader industry.

We also provide a monthly global Culture Coalition cadence to address our mission of "bringing a community of employees together to improve the work experience through innovative, creative, and fun culture initiatives." Each month we host a DEI subject and guest speaker to educate our workforce and provide pamphlets for employees and their families, books honoring and educating on Black History Month, women artists (displayed in our offices), and goods from indigenous owned business' as giveaways in our monthly contests.

Employee Compensation, Benefits & Well-being

We strive to enrich and elevate the lives of our employees through a robust compensation and benefits package that is flexible to meet both individual and family needs.

Stem's compensation and benefits programs are designed to attract and retain talent as well as motivate employees globally. In addition to competitive base salaries and bonus plans, Stem also offers attractive benefits programs both in the U.S. and globally. In the U.S., eligible employees may participate in medical, dental and vision plans as well as financial wellness benefits including health and dependent care flexible spending accounts, 401(k) plan with employer match, paid maternity and parental leave, health saving accounts, basic life insurance, accidental death and dismemberment insurance, short-term and long-term disability insurance, and commuter benefits.

Globally, we comply with location-specific mandatory government employee health and leave programs while also providing an employee assistance program, mental health, and physical wellness programs. We embrace regional and local cultural differences, and honor these by offering country-specific paid time off and paid holiday calendars that reflect the unique observations of each country. We support the continuing development of our staff around the world by offering several educational programs.

Stem designs its employee compensation and benefits programs to be competitive in relation to the market. Stem adjusts its employee compensation and benefits programs as needed based upon regular monitoring of applicable laws and practices and the competitive market. In structuring these benefit programs, Stem strives to provide an aggregate level of compensation and benefits that are comparable to the demands of the market.

Stem's compensation policies and procedures will continue to be designed to promote compliance with applicable government and regulatory guidelines as well as generally accepted compensation practices. Stem's goal is to have programs that are based on clear and consistent policies, recognizing the need to have flexibility to meet different organizational or market conditions.

Available Information

Our website is www.stem.com. We use our Investor Relations website, at https://investors.stem.com, as a routine channel for distribution of important information, including news releases, analyst presentations, and financial information. We make available free of charge, though our Investor Relations website, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy statements and Forms 3, 4 and 5 filed on behalf of directors and executive officers, and amendments to each of those reports, as soon as reasonably practicable after such material is filed with or furnished to the SEC. Alternatively, you may access these reports at the SEC's website at www.sec.gov. Copies are also available, without charge, from Stem Investor Relations, 100 California Street, 14th Floor, San Francisco, California, 94111. Unless expressly noted, the information on our website or any other website is not incorporated by reference in this Form 10-K and should not be considered part of this Form 10-K or any other filing that we make with the SEC.

Information About Our Executive Officers

The following table sets forth, as of January 31, 2023, the names and ages of the executive officers of Stem, Inc., including all offices and positions held by each for the past five years.

Name	Age	Current Position and Five-Year Business Experience
John Carrington	56	Chief Executive Officer and Director, since December 2013.
Bill Bush	57	Chief Financial Officer, since November 2016.
Saul R. Laureles	57	Chief Legal Officer and Corporate Secretary, since May 2021; Director, Corporate Legal Affairs and Assistant Corporate Secretary at Schlumberger Limited (a global oilfield services company), from May 2007 to May 2021.
Mike Carlson	59	Chief Operating Officer, since September 2022; Vice President of Koch Engineered Solutions, from August 2020 to September 2022; President of Digital Grid North America at Siemens Industries, Inc. from July 2014 to March 2019.
Kim Homenock	49	Chief People Officer, since March 2022 and was promoted to executive officer in July 2022; Director, Devices Software & Services HR for Amazon from May 2021 to March 2022; Director, NA Transportation HR from January 2018 to May 2021.
Alan Russo	53	Chief Revenue Officer, since February 2019; Senior Vice President of Global Sales and Marketing, April 2018 to February 2019; Senior Vice President of Sales and Marketing at REC Solar Holdings AS (subsidiary of Duke Energy), from October 2015 to April 2018.
Larsh Johnson	65	Chief Technology Officer, since January 2016.
Prakesh Patel	48	Chief Strategy Officer since January 2020; Vice President of Capital Markets and Strategy from 2013 to January 2020.
Robert Schaefer	61	President of Transformational Initiatives since January 2023; President, AlsoEnergy from February 2022 to January 2023; CEO of AlsoEnergy from August 2017 to January 2022.

ITEM 1A. RISK FACTORS.

The following discussion of risk factors known to us contains important information for the understanding of our "forward-looking statements," which are discussed immediately following Item 7A. of this Form 10-K and elsewhere. These risk factors should also be read in conjunction with Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, and the *Consolidated Financial Statements* and related notes included in this Form 10-K.

We urge you to consider carefully the risks described below, which discuss the material factors that make an investment in our securities speculative or risky, as well as in other reports and materials that we file with the SEC and the other information included or incorporated by reference in this Form 10-K. A manifestation of any of the following risks and uncertainties, or additional risks and uncertainties not currently known to us or that we currently deem immaterial, could, in circumstances we may or may not be able to accurately predict, materially adversely affect our business, operations, reputation, financial condition, results of operations, cash flows, liquidity, growth, prospects and stock price.

Summary Risk Factors

Risks Related to Our Business and Industry

- Our limited operating history at current scale and our nascent industry make evaluating our business and prospects difficult.
- Our distributed generation offerings may not receive widespread market acceptance.

- Our operations may continue to be adversely affected by the coronavirus outbreak.
- Sufficient demand for our hardware and software-enabled services may not develop or take longer to develop than we anticipate.
- Battery storage costs may not continue to decline.
- Estimates and assumptions used to determine the size of our total addressable market may be inaccurate.
- We currently face and will continue to face significant competition.

Risks Relating to Our Operations

- Supply chain disruption and competition could result in insufficient inventory and negatively affect our business.
- We face risks resulting from supplier concentration and limited supplier capacity.
- Long-term supply agreements could result in insufficient inventory.
- Our hardware and software-enabled services involve a lengthy sales and installation cycle. If we fail to close sales on a regular and timely basis it could adversely affect our business.
- We may fail to attract and retain qualified management and technical personnel, which may adversely affect our ability to compete and grow our business.
- We may not be able to develop, produce, market and sell our hardware and software-enabled services successfully.
- We have incurred significant losses in the past and expect to incur net losses through 2023.
- We may be unable to reduce our cost structure.
- Any future acquisitions we undertake may disrupt our business, adversely affect operations, dilute our stockholders, and expose us to significant costs and liabilities.
- Our current and planned foreign operations will subject us to additional business, financial, regulatory, and competitive risks.
- If any energy storage systems procured from OEM suppliers and provided to our customers contain manufacturing defects, our business and financial results could be adversely affected.
- Estimates of useful life for our energy storage systems and related hardware and software-enabled services may be inaccurate, and our OEM suppliers may not meet service and performance warranties and guarantees.
- Future product recalls could materially adversely affect our business, financial condition and operating results.
- Any disruption of, or interference with, our use of Amazon Web Services could adversely affect our business.
- Any failure to offer high-quality technical support services may adversely affect our relationships with our customers.
- Our business currently depends on the availability of rebates, tax credits and other financial incentives.
- The economic benefit of our energy storage systems to our customers depends on the cost of electricity available from alternative sources.
- We face risks related to our DevCo business model.
- We depend on significant customers for a substantial portion of our revenue. If we fail to retain or expand our customer relationships or significant customers reduce their purchases, our revenue could decline significantly.

Risks Related to Third-Party Partners

- We are exposed to interconnection and transmission facility development and curtailment risks.
- We may not successfully maintain relationships with third parties such as contractors and developers.

Risks Related to Our Intellectual Property and Technology

- Our future growth depends on our ability to continue to develop and maintain our proprietary technology.
- We may experience IT or data security failures.
- Our technology could have undetected defects, errors or bugs in hardware or software.

- We may not adequately secure, protect and enforce our intellectual property rights and trademarks.

Regulatory Risks

- The installation and operation of our energy storage systems are subject to environmental laws and regulations.
- Existing regulations and changes to such regulations may reduce demand for our energy storage systems.
- Our business could be adversely affected by trade tariffs or other trade barriers.
- Negative attitudes toward renewable energy from lawmakers and others may adversely affect our business, including by delaying permits for our customers' projects.

Additional Risks Related to Our Securities

- If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate consolidated financial statements or comply with applicable regulations could be impaired.
- We may issue a significant number of shares in the future in connection with investments or acquisitions.
- We do not intend to pay cash dividends for the foreseeable future.
- Analysts may not publish sufficient or any research about our business or may publish inaccurate or unfavorable research.
- The trading price of our common stock is volatile.
- Certain provisions of the Company's organizational documents may have an anti-takeover effect.
- The Company's exclusive forum provision may limit the Company's stockholders' ability to obtain a favorable judicial forum for disputes.
- The capped call transactions entered into in connection with the pricing of our Convertible Notes may adversely affect the market price of our stock.

General Risk Factors

- We will continue to incur significant costs as a result of operating as a public company.
- Future litigation, investigations or regulatory or administrative proceedings could have a material adverse effect on our business.

Risks Related to Our Business and Industry

Our limited operating history at current scale and our nascent industry make evaluating our business and prospects difficult.

From our inception in 2009 through 2012, we were focused principally on research and development activities relating to our energy storage systems technology. We did not sell any of our battery hardware and software-enabled services and did not recognize any material revenue until fairly recently. As a result, we have a limited history operating our business at its current scale, and therefore a limited history upon which you can base an investment decision.

There is rising demand for clean electric power solutions that can provide electric power with lower carbon emissions with high availability. One such solution is distributed, renewable energy generation, which is supplementing and replacing conventional generation sources, given its increasingly compelling economics. Among other renewable energy market trends, we expect our business results to be driven by declines in the cost of generation of renewable power both on an absolute basis and relative to other energy sources (as evidenced by current solar and wind generation deployments), decreases in the cost of manufacturing battery packs and a rapidly growing energy storage market driven by increasing demand from commercial and industrial customers, utilities and grid operators. However, predicting our future revenue and appropriately budgeting for our expenses is difficult, and we have limited insight into trends that may emerge and affect our business.

The distributed generation industry is emerging and our distributed generation offerings may not receive widespread market acceptance.

The implementation and use of distributed generation at scale is still relatively nascent, and we cannot be sure that potential customers will accept such solutions broadly, or our hardware and software-enabled services more specifically. Enterprises may be unwilling to adopt our offerings over traditional or competing power sources for any number of reasons, including the

perception that our technology is unproven, lack of confidence in our business model, unavailability of back-up service providers to operate and maintain the energy storage systems, and lack of awareness of our related hardware and software-enabled services. Because this is an emerging industry, broad acceptance of our hardware and software-enabled services is subject to a high level of uncertainty and risk. If the market develops more slowly than we anticipate, our business may be adversely affected.

Our operations may continue to be adversely affected by the COVID-19 pandemic, and we face disruption risks from the pandemic that could adversely affect our business.

The COVID-19 pandemic has resulted in the extended shutdown of certain businesses in the U.S., Europe and Asia, which has resulted, and may in the future result, in disruptions or delays to our supply chain increases in the costs of equipment, components and materials and has resulted in, and may result in further, significant disruptions to our customer base. Any disruption in these businesses will likely negatively affect our sales and operating results.

To date, COVID-19 has had a limited adverse impact on our operations, supply chains and hardware and software-enabled services. Due to governmental responses to limit the spread of COVID-19 and resulting global economic effects, we may experience significant and unpredictable reductions in demand for our hardware and software-enabled services. The continued effect of the COVID-19 pandemic is highly uncertain and cannot be predicted and there is no assurance that it will not have a material adverse impact on our business, financial condition and results of operations. The extent of the effect will depend on future developments, including actions taken to contain COVID-19, whether these effects persist, the duration and severity of additional outbreaks and the availability and effectiveness of vaccines and treatments for COVID-19 globally.

If renewable energy technologies are not suitable for widespread adoption, or if sufficient demand for our hardware and software-enabled services does not develop or takes longer to develop than we anticipate, our sales may decline and we may be unable to achieve or sustain profitability.

The market for renewable, distributed energy generation is emerging and rapidly evolving, and its future success is uncertain. If renewable energy generation proves unsuitable for widespread commercial deployment or if demand for our renewable energy hardware and software-enabled services fails to develop sufficiently, our revenue, market share and profitability would be adversely impacted.

Many factors may influence the widespread adoption of renewable energy generation and demand for our hardware and software-enabled services, including, but not limited to the cost-effectiveness of renewable energy technologies as compared with conventional and competitive technologies, the performance and reliability of renewable energy products as compared with conventional and non-renewable products, fluctuations in economic and market conditions that impact the viability of conventional and competitive alternative energy sources, increases or decreases in the prices of oil, coal and natural gas, continued deregulation of the electric power industry and broader energy industry, and the availability or effectiveness of government subsidies and incentives. You should consider our prospects in light of the risks and uncertainties emerging companies encounter when introducing new products and services into a nascent industry.

The failure of renewable energy hardware costs to continue to decline would have a negative effect on our business and financial condition.

The growth and profitability of our business depends on the continued decline in the cost of battery storage, solar photovoltaic ("PV") system components and related hardware. Over the last decade, the cost of renewable energy hardware has generally declined; however, the cost of lithium ion based battery storage systems have increased in recent months. Increased demand and global supply chain constraints could cause additional price increases. If, for whatever reason, there is a sustained increase in the price of battery storage systems, solar PV system components or related hardware, our business and financial condition will be negatively affected.

If the estimates and assumptions we use to determine the size of our total addressable market are inaccurate, our future growth rate may be affected and the potential growth of our business may be limited.

Market estimates and growth forecasts are subject to significant uncertainty and are based on assumptions and estimates that may prove to be inaccurate. Even if the markets in which we compete meet our size estimates and forecasted growth, our business could fail to grow at similar rates, if at all. The assumptions relating to our market opportunities include, but are not limited to, the following: (i) Wood Mackenzie research forecasts that the U.S. energy storage market, excluding the residential market, is expected to reach a total value of approximately 46.5 GWh in 2025; (ii) general declines in lithium-ion battery costs and in the cost of renewable generation; (iii) growing demand for renewable energy: and (iv) increased complexity of the electrical grid. Our market opportunities are also based on the assumption that our existing and future offerings will be more

attractive to our customers and potential customers than competing products and services. If these assumptions prove inaccurate, our business, financial condition and results of operations could be adversely affected.

We currently face and will continue to face significant competition.

We compete for customers, financing partners and incentive dollars with other providers of energy storage systems and asset performance monitoring and control solutions. Many providers of electricity, such as traditional utilities and other companies offering distributed generation products, have longer operating histories, customer incumbency advantages, access to and influence with local and state governments, and more capital resources than we do. Significant developments in alternative energy storage and management technologies or improvements in the efficiency or cost of traditional energy sources, including coal, oil, natural gas used in combustion or nuclear power, may materially and adversely affect our business and prospects in ways we cannot anticipate. We may also face new competitors who are not currently in the market, including as a result of the IRA and its anticipated impacts and benefits to our industry. If we fail to adapt to changing market conditions and to compete successfully with new competitors, we will limit our growth and adversely affect our business results.

Risks Relating to Our Operations

We are subject to supply chain risk and our suppliers may fail to deliver components according to schedules, prices, quality and volumes that are acceptable to us, which could negatively affect our results of operations.

We purchase our components and materials from international and domestic vendors, and are exposed to supply chain risks arising from logistics disruptions. Unexpected changes in business conditions, materials pricing, including inflation of raw material costs, labor issues, wars, natural disasters, health epidemics such as the COVID-19 pandemic, trade and shipping disruptions, port congestions and other factors beyond our or our suppliers' control could also affect these suppliers' ability to deliver components to us or to remain solvent and operational. For example, the Company's industry continues to face shortages and shipping delays affecting the supply of inverters, enclosures, battery modules and associated component parts for inverters and battery energy storage systems available for purchase. These shortages and delays can be attributed in part to the COVID-19 pandemic and resulting government action, as well as broader macroeconomic conditions that may persist once the immediate effects of the pandemic have subsided, and have been exacerbated by the ongoing conflict between Russia and Ukraine. In addition, international supply is also exposed to risks related to tariffs and sanctions, as well as political, social, and economic instability in regions where we source products and material. For example, in recent years, China and the U.S. have each imposed tariffs, and there remains a potential for further trade barriers and the possibility of an escalated trade war between China and the U.S. These or other tariffs could adversely affect our hardware component prices and negatively affect any plans to sell products in China and other impacted international markets. Disruptions in the availability of key equipment, components or materials such as lithium may adversely affect our business, prospects and operations, and volatility in prices and availability of such items may negatively affect our customer relationships and ability to plan for future growth.

We also face risks resulting from supplier concentration and limited supplier capacity.

We rely on a very small number of suppliers of energy storage systems and other equipment. If any of our suppliers were unable or unwilling to provide us with contracted quantities in a timely manner at prices, quality levels and volumes acceptable to us, we would have very limited alternatives for supply, and we may not be able to contract for and receive suitable alternative supply in a timely manner for our customers, or at all. Such an event may impair our ability to meet scheduled deliveries of our products to customers, which may cause our customers to cancel orders and subject us to liability, and may materially adversely affect our customer relationships, business, prospects, financial condition and results of operations. We may also be unsuccessful in our continuous efforts to negotiate with existing suppliers to obtain cost reductions and avoid unfavorable changes to terms. Global demand has increased for lithium-ion battery cells, which may cause challenges for our suppliers, including delays or price volatility. Any such delays or reduced availability of energy storage systems or other component materials may impact our sales and operating results. Further, these risks may increase as market demand for our offerings grows. Additionally, some of our suppliers supply systems and components to other businesses, including businesses engaged in the production of consumer electronics and other industries unrelated to energy storage systems. There are also larger purchasers of certain parts and materials that we supply to our customers. As a result, we may be unable to procure a sufficient supply of the items in the event that our suppliers fail to produce sufficient quantities to satisfy the demands of all of their customers. Any of these occurrences could materially adversely affect our business, prospects, financial condition and results of operations.

We have entered into long-term supply agreements that could result in insufficient inventory and negatively affect our results of operations.

We have entered into long-term supply agreements with certain suppliers of battery storage systems and other components of our energy storage systems. Some of these supply agreements provide for fixed or inflation-adjusted pricing and substantial prepayment obligations. Additionally, if our suppliers provide insufficient inventory at the level of quality required to meet customer demand, or if our suppliers are unable or unwilling to provide us with the contracted quantities, we will have limited alternatives for supply and our results of operations could be materially and negatively impacted. Further, we face significant specific counterparty risk under long-term supply agreements when dealing with certain suppliers without a long, stable production and financial history.

Given the uniqueness of our product, some of our suppliers do not have a long operating history and may not have substantial capital resources. In the event any such supplier experiences financial difficulties, it may be difficult or may require substantial time and expense to replace such supplier. We do not know whether we will be able to maintain long-term supply relationships with our critical suppliers, or secure new long-term supply agreements. Additionally, we procure many of the battery storage systems and components of our energy storage systems from non-U.S. suppliers, which exposes us to risks including unforeseen increases in costs or interruptions in supply arising from changes in applicable international trade regulations, such as taxes, tariffs, or quotas. Any of the foregoing could materially adversely affect our business, financial condition and results of operations.

Our hardware and software-enabled services involve a lengthy sales and installation cycle. If we fail to close sales on a regular and timely basis it could adversely affect our business, financial condition and results of operations. Amounts included in our pipeline and contracted backlog may not result in actual revenue or translate into profits.

Our sales cycle is typically six to 12 months for our hardware and software-enabled services, but can vary considerably. In order to make a sale, we must typically provide a significant level of education to prospective customers regarding the use and benefits of our hardware and software-enabled services.

The period between initial discussions with a potential customer and the sale of even a single energy storage system typically depends on a number of factors, including the potential customer's budget and decision as to the type of financing it chooses to use, as well as the arrangement of such financing. Prospective customers often undertake a significant evaluation process, which may further extend the sales cycle.

We view potential contracts with developers and independent power producers for energy optimization services and transfer of energy storage systems that are currently being pursued by our direct salesforce and channel partners as part of our pipeline. Our pipeline is an internal metric based on numerous assumptions and limitations, and is calculated using our own data, which has neither been prepared or audited in accordance with U.S. GAAP, nor been independently verified by third parties. We cannot guarantee that our pipeline provides an accurate indication of our future or expected results, or will result in meaningful revenue or profitability.

Currently, the time between the entry into a sales contract with a customer and the installation of our energy storage systems can range from nine to 18 months, or more. This lengthy sales and installation cycle is subject to a number of significant risks over which we have little or no control. We characterize contracts that have been signed but not yet installed as a booking that becomes part of our backlog. Because of both the long sales and installation cycles, we may expend significant resources without generating a sale or producing revenue from our bookings and backlog.

These lengthy sales and installation cycles increase the risk that our customers may fail to satisfy their payment obligations, cancel orders before the completion of the transaction or delay the planned date for installation. Cancellation rates may be affected by factors outside of our control including an inability to install an energy storage system at the customer's chosen location because of permitting or other regulatory issues, unanticipated changes in the cost or availability of alternative sources of electricity available to the customer or other reasons unique to each customer. Our operating expenses are based on anticipated sales levels, and many of our expenses are fixed. If we are unsuccessful in closing sales after expending significant resources or if we experience delays or cancellations, our business, financial condition and results of operations could be adversely affected.

Additionally, we have ongoing arrangements with our customers and target customers. Some of these arrangements are evidenced by contracts or long-term contract partnership arrangements. If these arrangements are terminated or if we are unable to continue to fulfill the obligations under such contracts or arrangements, our business, financial condition and results of operations could be adversely affected.

If we are unable to attract and retain key employees and hire qualified management, technical, engineering and sales personnel, our ability to compete and successfully grow our business could be adversely affected.

We believe that our success and our ability to reach our strategic objectives are highly dependent on the contributions of our key management, technical, engineering, finance and sales personnel. The loss of the services of any of our senior executives and other key employees could disrupt our operations, delay the development and introduction of our hardware and software-enabled services, and negatively affect our business, financial condition and operating results. In addition, our ability to manage our growth effectively, including expanding our market presence in international markets will be affected by our ability to successfully expand our management team, hire and train new personnel and implement and enhance human resources administrative systems. Our success in hiring, attracting and retaining senior management and other experienced and highly skilled employees will depend in part on our ability to provide competitive compensation packages and a high-quality work environment and maintain a desirable corporate culture. To help attract, retain, and motivate qualified employees, we use share-based awards, such as restricted stock units, and performance-based cash incentive awards. Sustained declines in our stock price, or lower stock price performance relative to competitors, can reduce the retention value of our share-based awards. We may not be able to attract, integrate, train, motivate or retain current or additional highly qualified personnel, and our failure to do so could adversely affect our business, financial condition and operating results.

Furthermore, there is continued and increasing competition for talented individuals in our field, and competition for qualified personnel is especially intense in the San Francisco Bay Area, where our principal offices are located. In addition to longstanding competition for highly skilled and technical personnel, we face increased competitive pressures and employee cost inflation in tighter labor markets, such as has been experienced during the COVID-19 pandemic. Industry competition and cross-industry labor market pressures may negatively impact our ability to attract and retain our executive officers and other key technology, sales, marketing and support personnel and drive increases in our employee costs, both of which could adversely affect our business, financial condition and results of operations.

We have incurred significant losses in the past and expect to incur net losses through at least 2023.

Since our inception in 2009, we have incurred significant net losses and have used significant cash in our business. As of December 31, 2022, we had an accumulated deficit of approximately $632.1 million. We expect to continue to expand our operations, including by investing in sales and marketing, research and development, staffing systems and infrastructure to support our growth. Under our current plans, we expect to incur net losses on a GAAP basis through at least 2023. Our ability to achieve profitability in the future will depend on a number of factors, including:

- growing our sales volume;
- increasing sales to existing customers and attracting new customers for our hardware and software- enabled services;
- improving our ability to procure energy storage systems from OEMs on cost-effective terms;
- improving our consolidated gross margins reflecting the ability to maintain favorable contract pricing and terms with our customers for our hardware and software-enabled services;
- improving the effectiveness of our sales and marketing activities;
- attracting and retaining key talent in a competitive marketplace;
- operating our systems profitably for the benefit of our customers; and
- the availability of incentives, including those associated with the IRA.

Even if we do achieve profitability when expected, we may be unable to sustain or increase our profitability in the future.

If we are not able to continue to reduce our cost structure in the future, our ability to become profitable may be impaired.

We must continue to reduce the costs of operation of our energy storage systems, and production and operation of our asset performance monitoring and control solutions, to expand our market. Additionally, certain of our existing service contracts were entered into based on projections regarding service cost reductions that assume continued advances in lowering the cost of delivery of our services, which we may be unable to realize. While we have been successful in reducing some of our costs to date, some of our costs have increased, and we could experience additional cost increases in the future. Any such increases could slow our growth and cause our financial results and operational metrics to suffer. In addition, we may face increases in our other expenses, including increases in wages or other labor costs, as well as marketing, sales or related costs. We will continue to make significant investments to drive growth in the future. To expand into new markets while still maintaining our current margins, we will need to continue to reduce our costs. Increases in any of these costs, or our failure to achieve projected cost reductions, could adversely affect our business, financial condition and results of operations. If we are unable to reduce our cost structure in the future, we may not be able to achieve profitability or we may fail to do so on a satisfactory timeline, which could have a material adverse effect on our business and prospects.

Any future acquisitions we undertake may disrupt our business, adversely affect operations, dilute our stockholders, and expose us to significant costs and liabilities.

Acquisitions are an important element of our business strategy, and we may pursue future acquisitions to increase revenue, expand our market position, add to our service offerings and technological capabilities, respond to dynamic market conditions, or for other strategic or financial purposes. However, we cannot assure you that we will identify suitable acquisition candidates or complete any acquisitions on favorable terms, or at all. In addition, any acquisitions we do complete, including our acquisition of AlsoEnergy, would involve a number of risks, which may include the following:

- the identification, acquisition and integration of acquired businesses require substantial attention from management. The diversion of management's attention and any difficulties encountered in the integration process could hurt our business;
- the identification, acquisition and integration of acquired businesses requires significant investment, including to determine which new service offerings we might wish to acquire, harmonize service offerings, expand management capabilities and market presence, and improve or increase development efforts and technology features and functions;
- the anticipated benefits from any acquisition may not be achieved on a timely basis or at all, including as a result of loss of clients or personnel of the target, other difficulties in supporting and transitioning the target's clients, difficulties in managing expanded operations and operations in foreign jurisdictions in which we have never operated, the inability to realize expected synergies from an acquisition, or negative organizational cultural effects arising from the integration of new personnel;
- we may face difficulties in integrating the personnel, technologies, solutions, operations, and existing contracts of the acquired business;
- we may fail to identify all of the problems, liabilities, risks or other shortcomings or challenges of an acquired company, technology or solution, including issues related to intellectual property, solution quality or architecture, income tax and other regulatory compliance practices, revenue recognition or other accounting or internal control practices, or employee or client issues;
- to pay for future acquisitions, we could issue additional shares of our common stock or pay cash. Issuance of shares would dilute stockholders. See "- We may issue a significant number of shares in the future in connection with investments or acquisitions" below. Use of cash reserves could diminish our ability to respond to other opportunities or challenges. Borrowing to fund any cash purchase price would result in increased fixed obligations and could also include covenants or other restrictions that would impair our ability to manage our operations;
- acquisitions expose us to the risk of assumed known and unknown liabilities including contract, tax, regulatory or other legal, and other obligations incurred by the acquired business or fines or penalties, for which indemnity obligations, escrow arrangements or insurance may not be available or may not be sufficient to provide coverage;
- new business acquisitions can generate significant intangible assets that result in substantial related amortization charges and the potential for goodwill impairments in the future;
- the operations of acquired businesses, or our adaptation of those operations, may require that we apply revenue recognition or other accounting methodologies, assumptions, and estimates that are different from those we use in our current business, which could complicate our financial statements, expose us to additional accounting and audit costs, and increase the risk of accounting errors;
- acquired businesses may have insufficient internal controls that we must remediate, and the integration of acquired businesses may require us to modify or enhance our own internal controls, in each case resulting in increased administrative expense and risk that we experience control deficiencies or fail to comply with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002; and
- acquisitions can sometimes lead to disputes with the former owners of the acquired company, which can result in increased legal expenses, management distraction and the risk that we may suffer an adverse judgment if we are not the prevailing party in the dispute.

Our current and planned foreign operations expose us to additional business, financial, regulatory and geopolitical risks, and any adverse event could have a material adverse effect on our results of operations.

As a result of our acquisition of AlsoEnergy, we now operate in more than 50 countries, including the United States and Canada, and in multiple EU and Latin American countries and Asia. Prior to our acquisition of AlsoEnergy, we operated in only three countries. We may in the future evaluate further opportunities to expand into new geographic markets and introduce new product offerings and services that are an extension of our existing business. We also may from time to time acquire

businesses or product lines with the potential to strengthen our market position, enable us to enter attractive markets, expand our technological capabilities, or provide synergy opportunities.

We have very limited experience operating outside of the U.S. Managing our international expansion will require additional resources and controls, including additional manufacturing and assembly facilities. Furthermore, any additional markets that we may enter could have different characteristics from the markets in which we currently operate, and our success will depend on our ability to adapt properly to these differences. Any further international expansion could subject our business to risks associated with international operations, including:

- compliance with multiple, potentially conflicting and changing governmental laws, regulations and permitting processes, including trade, labor, environmental, banking, employment, privacy and data protection laws and regulations, such as the EU Data Privacy Directive, as well as tariffs, export quotas, customs duties and other trade restrictions;
- compliance with U.S. and foreign anti-bribery laws, including the Foreign Corrupt Practices Act of 1977, as amended;
- difficulties in collecting payments in foreign currencies and associated foreign currency exposure;
- compliance with potentially conflicting and changing laws of taxing jurisdictions where we conduct business and applicable U.S. tax laws as they relate to international operations, the complexity and adverse consequences of such tax laws and potentially adverse tax consequences due to changes in such tax laws;
- the laws of some countries do not protect proprietary rights as fully as do the laws of the U.S. As a result, we may not be able to protect our proprietary rights adequately outside of the U.S.;
- regional economic and political conditions;
- conformity with applicable business customs, including translation into foreign languages and associated expenses;
- lack of availability of government incentives and subsidies;
- potential changes to our established business model;
- cost of alternative power sources, which could vary meaningfully outside the U.S.;
- difficulties in staffing and managing foreign operations in an environment of diverse culture, laws and customers, and the increased travel, infrastructure and legal and compliance costs associated with international operations;
- customer installation challenges which we have not encountered before, which may require the development of a unique model for each country;
- differing levels of demand among members of our customer base, including commercial and industrial customers, utilities, independent power producers and project developers; and
- restrictions on repatriation of earnings.

As a result of these risks, any future international expansion efforts that we may undertake (as well as our acquisition of AlsoEnergy) may not be successful and may negatively affect our results of operations and profitability.

In addition, there may be adverse effects to our business if there is instability, disruption or destruction in a significant geographic region, regardless of cause, including war, terrorism, riot, civil insurrection or social unrest; and natural or man-made disasters, including famine, flood, fire, earthquake, storm or disease. The U.S. government and other governments in jurisdictions in which we operate have imposed severe sanctions and export controls against Russia and Russian interests, and have threatened additional sanctions and controls. The ongoing conflict between Russia and Ukraine has exacerbated shortages and shipping delays affecting certain components and supplies. It is not possible to predict the broader consequences of this conflict, which could include further sanctions, embargoes, greater regional instability, geopolitical shifts and other adverse effects on macroeconomic conditions, currency exchange rates, supply chains and financial markets.

Our platform performance may not meet our customers' expectations or needs.

The renewable energy projects that our customers construct and own are subject to various operating risks that may cause them to generate less value for our customers than expected. These risks include a failure or wearing out of our or our operators', customers' or utilities' equipment; an inability to find suitable replacement equipment or parts; less than expected supply or quality of the project's source of electricity and faster than expected diminishment of such electricity supply; or volume disruption in our supply collection and distribution system. Any extended interruption or failure of our customer's projects for any reason to generate the expected amount of output could adversely affect our business, financial condition and results of operations. In addition, there has been in the past, and may be in the future, an adverse impact on our customers'

willingness to continue to procure additional hardware and software-enabled services from us if any of our customer's projects incur operational issues that indicate expected future cash flows from the project are less than the project's carrying value. Any such outcome could adversely affect our operating results or ability to continue to grow our sales volume or to increase sales to existing customers or new customers.

If any energy storage systems procured from OEM suppliers and provided to our customers contain manufacturing defects, our business and financial results could be adversely affected.

The energy storage systems we pair with our Athena® platform are complex energy solutions. We rely on our OEM suppliers to control the quality of the battery storage equipment and other components that make up the energy storage system sold to our customers. We are not involved in the manufacture of the batteries or other components of the energy storage systems. As a result, our ability to seek recourse for liabilities and recover costs from our OEM suppliers depends on our contractual rights as well as the financial condition and integrity of such OEM suppliers that supply us with the batteries and other components of our energy storage systems. Such systems may contain undetected or latent errors or defects. In the past, we have discovered latent defects in energy storage systems. In connection with such defects, we could incur significant expenses or disruptions of our operations, including to our energy storage network, that would prevent us from performing the automated data engineering required to support our AI processes and energy storage network. Any manufacturing defects or other failures of our energy storage systems to perform as expected could cause us to incur significant re-engineering costs, divert the attention of our personnel from operating and maintenance efforts, expose us to adverse regulatory action and litigation and significantly and adversely affect customer satisfaction, market acceptance and our business reputation. Furthermore, our OEM suppliers may be unable to correct manufacturing defects or other failures of any energy storage systems in a manner satisfactory to our customers, which could adversely affect customer satisfaction, market acceptance and our business reputation.

On rare occasions, lithium-ion batteries can rapidly release the energy they contain by venting smoke and flames in a manner that can ignite nearby materials as well as other lithium-ion batteries. This faulty result could subject us to lawsuits, product recalls or redesign efforts, all of which would be time consuming and expensive. Also, negative public perceptions regarding the suitability of lithium-ion batteries for energy applications or any future incident involving lithium-ion batteries, such as a plant, vehicle or other fire, even if such incident does not involve hardware provided by us, could adversely affect our business and reputation.

If our estimates of useful life for our energy storage systems and related hardware and software-enabled services are inaccurate, or if our OEM suppliers do not meet service and performance warranties and guarantees, our business and financial results could be adversely affected.

We sell hardware and software-enabled services to our customers. Our software-enabled services are essential to the operation of these hardware products. As a result, in connection with the sales of energy storage hardware, we enter into recurring long-term services agreements with customers for the usage of our Athena platform for approximately 10 to 20 years. Our pricing of services contracts is based upon the value we expect to deliver to our customers, including considerations such as the useful life of the energy storage system and prevailing electricity prices. We also provide performance warranties and guarantees covering the efficiency and output performance of our software-enabled services. We do not have a long history with a large number of field deployments, and our estimates may prove to be incorrect. Failure to meet these performance warranties and guarantee levels may require us to refund our service contract payments to the customer, or require us to make cash payments to the customer based on actual performance, as compared to expected performance.

Further, the occurrence of any defects, errors, disruptions in service, or other performance problems, interruptions, or delays associated with our energy storage systems or the Athena platform, whether in connection with day-to-day operations or otherwise, could result in:

- loss of customers;
- loss or delayed market acceptance and sales of our hardware and software-enabled services;
- delays in payment to us by customers;
- injury to our reputation and brand;
- legal claims, including warranty and service level agreement claims, against us; or
- diversion of our resources, including through increased service and warranty expenses or financial concessions, and increased insurance costs.

The costs incurred in correcting any material defects or errors in our hardware and software or other performance problems may be substantial and could adversely affect our business, financial condition and results of operations.

Future product recalls could materially adversely affect our business, financial condition and operating results.

Any product recall in the future, whether it involves our or a competitor's product, may result in negative publicity, damage our brand and materially and adversely affect our business, financial condition and results of operations. In the future, we may voluntarily or involuntarily initiate a recall if any of our products are proven to be or possibly could be defective or noncompliant with applicable environmental laws and regulations, including health and safety standards. Such recalls involve significant expense and diversion of management attention and other resources, which could adversely affect our brand image, as well as our business, financial condition and operating results.

We primarily rely on Amazon Web Services to deliver our services to users on our Athena platform, and any disruption of, or interference with, our use of Amazon Web Services could adversely affect our business, financial condition and results of operations.

We currently host our Athena platform and support our energy storage network operations on one or more data centers provided by Amazon Web Services ("AWS"), a third-party provider of cloud infrastructure services. We do not have control over the operations of the facilities of AWS that we use. AWS' facilities are vulnerable to damage or interruption from natural disasters, cybersecurity attacks, terrorist attacks, power outages, and similar events or acts of misconduct.

Our Athena platform's continuing and uninterrupted performance is critical to our success. We have experienced, and expect that in the future we will experience, interruptions, delays, and outages in service and availability from time to time due to a variety of factors, including infrastructure changes, human or software errors, website hosting disruptions and capacity constraints. In addition, any changes in AWS' service levels may adversely affect our ability to meet the requirements of users on our Athena platform. Since our Athena platform's continuing and uninterrupted performance is critical to our success, sustained or repeated system failures would reduce the attractiveness of our hardware and software-enabled services to customers. It may become increasingly difficult to maintain and improve our performance, as we expand and our energy storage network grows, increasing customer reliance on the Athena platform. Any negative publicity arising from any disruptions to AWS' facilities, and as a result, our Athena platform could adversely affect our reputation and brand and may adversely affect the usage of our hardware and software-enabled services. Any of the above circumstances or events may adversely affect our reputation and brand, reduce the availability or usage of our hardware and software- enabled services, lead to a significant short-term loss of revenue, increase our costs, and impair our ability to attract new users, any of which could adversely affect our business, financial condition and results of operations.

Our commercial agreement with AWS will remain in effect until terminated by AWS or us. AWS may terminate the agreement for convenience by providing us at least thirty (30) days' advance notice. AWS may also terminate the agreement for cause upon a material breach of the agreement, subject to AWS providing prior written notice and a 30-day cure period, and may in some cases terminate the agreement immediately for cause upon written notice. Even though our platform is entirely in the cloud, we believe that we could transition to one or more alternative cloud infrastructure providers on commercially reasonable terms. If our agreement with AWS is terminated or we add additional cloud infrastructure service providers, we may experience significant costs or downtime for a short period in connection with the transfer to, or the addition of, new cloud infrastructure service providers. However, we do not believe that such transfer to, or the addition of, new cloud infrastructure service providers would adversely affect our business, financial condition and results of operations over the longer term.

Any failure to offer high-quality technical support services may adversely affect our relationships with our customers and adversely affect our financial results.

Our customers depend on our support organization to resolve any technical issues relating to our hardware and software-enabled services. In addition, our sales process is highly dependent on the quality of our hardware and software-enabled services, on our business reputation and on strong recommendations from our existing customers. Any failure to maintain high-quality and highly-responsive technical support, or a market perception that we do not maintain high-quality and highly-responsive support, could adversely affect our reputation, our ability to sell our products to existing and prospective customers, and our business, financial condition and results of operations.

We offer technical support services with our hardware and software-enabled services and may be unable to respond quickly enough to accommodate short-term increases in demand for support services, particularly as we increase the size of our customer base. We also may be unable to modify the format of our support services to compete with changes in support services provided by competitors. It is difficult to predict demand for technical support services and if demand increases significantly, we may be unable to provide satisfactory support services to our customers. Additionally, increased demand for

these services, without corresponding revenue, could increase costs and adversely affect our business, financial condition and results of operations.

Our business currently depends on the availability of rebates, tax credits and other financial incentives. The reduction, modification, or elimination of government economic incentives could cause our revenue to decline and adversely affect business, financial condition and results of operations.

The U.S. federal government and some state and local governments provide incentives to end users and purchasers of our energy storage systems in the form of rebates, tax credits and other financial incentives, such as system performance payments and payments for renewable energy credits associated with renewable energy generation. In addition, some countries outside the United States also provide incentives to current and future end users and purchasers of our energy storage systems. We rely on these governmental rebates, tax credits and other financial incentives to significantly lower the effective price of the hardware and software-enabled services we offer to our customers. However, these incentives may expire on a particular date, end when the allocated funding is exhausted, or be reduced or terminated as a matter of regulatory or legislative policy.

Our energy storage systems and asset performance monitoring and control solutions have qualified for tax exemptions, incentives or other customer incentives in many states. Some states have utility procurement programs and/or renewable portfolio standards for which our technology is eligible. Our offerings are currently installed in various U.S. states, each of which may have its own enabling policy framework. There is no guarantee that these policies will continue to exist in their current form, or at all. Such state programs may face increased opposition on the U.S. federal, state and local levels in the future. Changes in incentive programs could reduce demand for our offerings, impair sales financing and adversely impact our business results.

The economic benefit of our offerings to our customers depends on the cost of electricity available from alternative sources, including local electric utility companies, which cost structure is subject to change.

The economic benefit of our offerings to our customers includes, among other things, the benefit of reducing such customer's payments to the local electric utility company. The rates at which electricity is available from a customer's local electric utility company is subject to change and any changes in such rates may affect the relative benefits of our energy storage systems. Factors that could influence these rates include the effect of energy conservation initiatives that reduce electricity consumption, construction of additional power generation plants (including nuclear, coal or natural gas), and technological developments by others in the electric power industry. Further, the local electric utility may impose "departing load," "standby" or other charges on our customers in connection with their acquisition of our energy storage systems, the amounts of which are outside of our control and which may have a material impact on the economic benefit of our energy storage systems to our customers. Changes in the rates offered by local electric utilities and/or in the applicability or amounts of charges and other fees imposed by such utilities on customers acquiring our energy storage systems could adversely affect the demand for our energy storage systems.

Additionally, even with available subsidies for our systems, the electricity produced by our energy storage systems is currently not cost competitive in some geographic markets, and we may be unable to reduce our costs to a level at which our energy storage systems would be competitive in such markets. As such, unless the cost of electricity in these markets rises or we are able to generate demand for our energy storage systems based on benefits other than electricity cost savings, our potential for growth in those markets may be limited.

Our business is subject to risks associated with construction, utility interconnection, cost overruns and delays, including those related to obtaining government permits and other contingencies that may arise in the course of completing installations.

Although we generally are not regulated as a utility, federal, state and local government statutes and regulations concerning electricity heavily influence the market for our products and services. These statutes and regulations often relate to electricity pricing, net metering, incentives, taxation and the rules surrounding the interconnection of customer-owned electricity generation for specific technologies. In the U.S., governments frequently modify these statutes and regulations. Governments, often acting through state utility or public service commissions, change and adopt different requirements for utilities and rates for commercial customers on a regular basis. Changes, or in some cases a lack of change, in any of the laws, regulations, ordinances or other rules that apply to customer installations and new technology could make it more costly for our customers to install and operate our energy storage systems on particular sites, and in turn could negatively affect our ability to deliver cost savings to customers for the purchase of electricity.

The installation and operation of our energy storage systems at a particular site is also generally subject to oversight and regulation in accordance with national, state and local laws and ordinances relating to building codes, safety, environmental protection and related matters, and typically requires obtaining and keeping in good standing various local and other

governmental approvals and permits, including environmental approvals and permits, that vary by jurisdiction. In some cases, these approvals and permits require periodic renewal. It is difficult and costly to track the requirements of every individual authority having jurisdiction over energy storage system installations, to design our energy storage systems to comply with these varying standards, and for our customers to obtain all applicable approvals and permits. We cannot predict whether or when all permits required for a given customer's project will be granted or whether the conditions associated with the permits will be achievable. The denial or delay of a permit or utility connection essential to a project or the imposition of impractical conditions would impair our customer's ability to develop the project. In addition, we cannot predict whether the permitting process will be lengthened due to complexities and appeals. Delay in the review and permitting process for a project can impair or delay our customers' abilities to develop that project or increase the cost so substantially that the project is no longer attractive to our customers. Furthermore, unforeseen delays in the review and permitting process could delay the timing of the installation of our energy storage systems and could therefore adversely affect the timing of the recognition of revenue related to hardware acceptance by our customer, which could adversely affect our operating results in a particular period.

In addition, the successful installation of our energy storage systems is dependent upon the availability of and timely connection to the local electric grid. We may be unable to obtain the required consent and authorization of local utilities to ensure successful interconnection to energy grids to enable the successful discharge of renewable energy to customers. Any delays in our customers' ability to connect with utilities, delays in the performance of installation-related services or poor performance of installation-related services will have an adverse effect on our results and could cause operating results to vary materially from period to period.

Our business depends on customers renewing their services subscriptions. If customers do not continue to use our subscription offerings or if we fail to expand the availability of hardware and software-enabled services available to our customers, our business and operating results will be adversely affected.

In addition to upfront sale of hardware and network integration, we depend on customers continuing to subscribe to services enabled by our Athena platform. Therefore, it is important that customers renew their subscriptions when the contract term expires, increase their purchases of our hardware and network solutions and enhance their subscriptions. Customers may decide not to renew their subscriptions with a similar contract period, at the same prices or terms or with the same or a greater number of users or level of functionality. Customer retention may decline or fluctuate as a result of a number of factors, including satisfaction with software-enabled services and features, functionality of our energy storage hardware and software-enabled services, prices, the features and pricing of competing products, reductions in spending levels, mergers and acquisitions involving customers and deteriorating general economic conditions.

If customers do not renew their subscriptions, if they renew on less favorable terms, if they fail to increase their purchase of our hardware and software-enabled services, or if they fail to refer us their customers and partners as potential new customers, our business, financial condition and results of operations will be adversely affected.

Changes in subscriptions or pricing models may not be reflected in near-term operating results.

We generally recognize subscription revenue from customers ratably over the terms of their contracts. As a result, most of the subscription revenue reported in each quarter is derived from the recognition of deferred revenue relating to subscriptions entered into during previous quarters. Consequently, a decline in new or renewed subscriptions in any single quarter will likely have only a small impact on revenue for that quarter. However, such a decline will negatively affect revenue in future quarters. In addition, the severity and duration of events may not be predictable and their effects could extend beyond a single quarter. Accordingly, the effect of significant downturns in sales and market acceptance of subscription services, and potential changes in pricing policies or rate of renewals, may not be fully apparent until future periods.

Severe weather events, including the effects of climate change, are inherently unpredictable and may have a material adverse effect on our financial results and financial condition.

Our business, including our customers and suppliers, may be exposed to severe weather events and natural disasters, such as tornadoes, tsunamis, tropical storms (including hurricanes), earthquakes, windstorms, hailstorms, severe thunderstorms, flooding, wildfires and other fires, extreme heatwaves, drought and power shut-offs causing, among other things, disruptions to our supply chain or utility interconnections and/or damage to energy storage systems installed at our customers' sites. Such damage or disruptions may prevent us from being able to satisfy our contractual obligations or may reduce demand from our customers for our energy storage systems causing our operating results to vary significantly from one period to the next. We may incur losses in our business in excess of: (1) those experienced in prior years, (2) the average expected level used in pricing, or (3) current insurance coverage limits.

The incidence and severity of severe weather conditions and other natural disasters are inherently unpredictable. Climate change is projected to affect the occurrence of certain natural events, such as an increase in the frequency or severity of wind

and thunderstorm events, and tornado or hailstorm events due to increased convection in the atmosphere; more frequent wildfires and subsequent landslides in certain geographies; higher incidence of deluge flooding; and the potential for an increase in severity of the hurricane events due to higher sea surface temperatures. Changing market dynamics, global policy developments and the increasing frequency and impact of extreme weather events on critical infrastructure in the U.S. and elsewhere as a result of climate change have the potential to disrupt our business, the business of our suppliers and the business of our customers, and may cause us to experience higher attrition, losses and additional costs to maintain or resume operations. Additionally, climate change and the occurrence of severe weather events may adversely impact the demand, price, and availability of insurance. Due to significant variability associated with future changing climate conditions, we are unable to predict the impact climate change will have on our business.

Increased scrutiny from stakeholders and regulators regarding ESG practices and disclosures, including those related to sustainability, and disclosure could result in additional costs and adversely impact our business and reputation.

Companies across all industries are facing increasing scrutiny relating to their Environmental, Social and Governance ("ESG") practices and disclosures and institutional and individual investors are increasingly using ESG screening criteria in making investment decisions. Our disclosures on these matters or a failure to satisfy evolving stakeholder expectations for ESG practices and reporting may potentially harm our reputation and impact employee retention, customer relationships and access to capital. For example, certain market participants use third-party benchmarks or scores to measure a company's ESG practices in making investment decisions and customers and supplies may evaluate our ESG practices or require that we adopt certain ESG policies as a condition of awarding contracts. In addition, our failure or perceived failure to pursue or fulfill our goals, targets and objectives or to satisfy various reporting standards within the timelines we announce, or at all, could expose us to government enforcement actions and private litigation.

Our ability to achieve any goal or objective, including with respect to environmental and diversity initiatives and compliance with ESG reporting standards, is subject to numerous risks, many of which are outside of our control. Examples of such risks include the availability and cost of technologies and products that meet sustainability and ethical supply chain standards, evolving regulatory requirements affecting ESG standards or disclosures, our ability to recruit, develop and retain diverse talent in our labor markets, and our ability to develop reporting processes and controls that comply with evolving standards for identifying, measuring and reporting ESG metrics. Methodologies for reporting ESG data may be updated and previously reported ESG data may be adjusted to reflect improvement in availability and quality of third-party data, changing assumptions, changes in the nature and scope of our operations and other changes in circumstances. Our processes and controls for reporting ESG matters across our operations and supply chain are evolving along with multiple disparate standards for identifying, measuring, and reporting ESG metrics, including ESG-related disclosures that may be required by the SEC, European and other regulators, and such standards may change over time, which could result in significant revisions to our current goals, reported progress in achieving such goals, or ability to achieve such goals in the future. As ESG best-practices, reporting standards and disclosure requirements continue to develop, we may incur increasing costs related to ESG monitoring and reporting.

We Face Risks Related to our DevCo Business Model

From time to time, we have entered into strategic joint ventures with qualified third parties to develop energy storage power generation projects ("DevCo Projects"), as more fully described above under Note 1 — *Business*, of the Notes to the consolidated financial statements in Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K. These projects require upfront investment by us and involve a high degree of risk. The success of this business model depends in large part on the successful development, financing and construction of projects. However, such projects ultimately may not be commercially viable or may not result in an adequate return of capital and, in pursuing these projects, we may incur unanticipated liabilities. Successful completion of a project may be adversely affected, delayed or rendered infeasible by numerous factors, including:

- interconnection costs and capacity constraints;
- transmission grid congestion issues;
- delays in obtaining required governmental permits and approvals;
- regulatory changes that adversely affect energy storage participation in wholesale markets;
- changes in wholesale market energy and ancillary services prices and costs;
- construction delays and contractor or developer partner performance shortfalls;
- cost overruns, including costs related to renting or owning land necessary to develop DevCo Projects;
- labor, equipment, and material supply shortages, failures or disruptions; and

- force majeure and other events out of our control.

In addition, our joint venture partners may at any time have economic, business or legal interests or goals that are inconsistent with the goals of the DevCo Project. Disagreements with our business partners may impede our ability to recognize the benefits of our DevCo Projects. Our joint venture partners may be unable or unwilling to meet their performance or other obligations under the operative documents, and we may be required to fulfill those obligations or to dissolve and liquidate the DevCo Project.

If a DevCo Project experiences any of the factors listed above or otherwise fails to reach completion or is significantly delayed, we could lose all or a portion of our development capital investment and our cash advances to purchase hardware. If a DevCo Project fails then we may be unable to recover our investment. Losing or delaying return of all or a portion of our investments in our DevCo Projects could have a material adverse effect on our business, financial condition and results of operations.

We depend on significant customers for a substantial portion of our revenue. If we fail to retain or expand our customer relationships or significant customers reduce their purchases, our revenue could decline significantly.

We depend on a small number of significant customers for our sales, and a small number of customers have historically accounted for a material portion of our revenue. The loss of any one of our significant customers, their inability to perform under their contracts, their termination or failure to renew their contracts with us, or their default in payment could cause our revenue to decline materially. For the near future, we may continue to derive a significant portion of our revenue from a small number of customers. For the fiscal year ended December 31, 2022, one customer accounted for approximately 46% of our revenue. Loss of a significant customer or a significant reduction in pricing or order volume from a significant customer could materially reduce our revenue and operating results in any reporting period.

In addition, we are subject to credit risk of our customers, and our operating results depend on receipt of timely payments from our customers. Any delay in payment by our customers may have an adverse effect on revenue and operating results. There is no assurance that we will be able to collect all or any of the amounts owed to us in a timely matter. If any of our customers face unexpected situations such as financial difficulties, we may not be able to receive full or any payment of the uncollected sums or enforce any judgment debts against such clients, and our business, results of operations and financial condition could be materially and adversely affected.

Risks Related to Third-Party Partners

Our hardware and software-enabled services rely on interconnections to distribution and transmission facilities that are owned and operated by third parties, and as a result, are exposed to interconnection and transmission facility development and curtailment risks.

Our hardware and software-enabled services are interconnected with electric distribution and transmission facilities owned and operated by regulated utilities necessary to deliver the electricity that our storage systems produce. A failure or delay in the operation or development of these distribution or transmission facilities could result in a loss of revenues or breach of a contract because such a failure or delay could limit the amount of renewable electricity that our energy storage systems deliver or delay the completion of our customers' construction projects. In addition, certain of our energy storage systems' generation may be curtailed without compensation due to distribution and transmission limitations, reducing our revenues and impairing our ability to capitalize fully on a particular customer project's potential. Such a failure or curtailment at levels above our expectations could impact our ability to satisfy agreements entered into with our suppliers and adversely affect our business.

Our growth depends in part on the success of our relationships with third parties, including contractors and project developers

We rely on third-party general contractors to install energy storage systems at our customers' sites. We currently work with a limited number of general contractors, which has impacted and may continue to impact our ability to facilitate customer installations as planned. Our work with contractors or their subcontractors may have the effect of our being required to comply with additional rules (including rules unique to our customers), working conditions, site remediation and other union requirements, which can add costs and complexity to an installation project. The timeliness, thoroughness and quality of the installation-related services performed by our general contractors and their subcontractors in the past have not always met our expectations or standards and in the future may not meet our expectations and standards and it may be difficult to find and train third-party general contractors that meet our standards at a competitive cost.

In addition, we are investing resources in establishing strategic relationships with market players across a variety of industries, including large renewable project developers, to generate new customers. These programs may not roll out as quickly as planned or produce the results we anticipated. A significant portion of our business depends on attracting new

partners and retaining existing partners. Negotiating relationships with our partners, investing in due diligence efforts with potential partners, training such third parties and contractors and monitoring them for compliance with our standards require significant time and resources and may present greater risks and challenges than expanding a direct sales or installation team. If we are not successful in establishing or maintaining our relationships with these third parties, our ability to grow our business and address our market opportunity could be impaired. Even if we are able to establish and maintain these relationships, we may not be able to execute on our goal of leveraging these relationships to meaningfully expand our business, brand recognition and customer base. Such circumstance would limit our growth potential and our opportunities to generate significant additional revenue or cash flows.

We must maintain customer confidence in our long-term business prospects in order to grow our business.

Customers may be less likely to purchase our hardware and services if they do not believe that our business will succeed or that our services and support and other operations will continue in the long term. Similarly, suppliers and other third parties will be less likely to invest time and resources in developing business relationships with us if they do not believe that our business will succeed. Accordingly, in order to build and maintain our business, we must maintain confidence among customers, suppliers, analysts, ratings agencies and other parties in our hardware and software-enabled services, long-term financial viability and business prospects. Maintaining such confidence may be particularly complicated by certain factors including those that are largely outside of our control, such as our limited operating history, customer unfamiliarity with our hardware and software-enabled services, delivery and service operations to meet demand, competition, future changes in the evolving distributed and renewable energy markets or uncertainty regarding sales performance compared with market expectations.

Accordingly, in order to grow our business, we must maintain confidence among our customers, OEM suppliers, third-party general contractor partners, financing partners and other parties in our long-term business prospects. This may be particularly complicated by factors such as:

- our limited operating history at current scale;
- our historical and anticipated near-term lack of profitability;
- unfamiliarity with or uncertainty about our energy storage systems and the overall perception of the distributed and renewable energy generation markets;
- prices for electricity in particular markets;
- competition from alternate sources of energy;
- warranty or unanticipated service issues we may experience in connection with third-party manufactured hardware and our proprietary software;
- the environmental consciousness and perceived value of environmental programs to our customers;
- the size of our expansion plans in comparison to our existing capital base and the scope and history of operations; and
- the availability and amount of incentives, credits, subsidies or other programs to promote installation of energy storage systems.

Several of these factors are largely outside our control, and any negative perceptions about our long-term business prospects, even if unfounded, would likely adversely affect our business, financial condition and results of operations.

Risks Related to Our Intellectual Property and Technology

If we are unsuccessful in developing and maintaining our proprietary technology, including our Athena platform, our ability to attract and retain partners could be impaired, our competitive position could be adversely affected and our revenue could be reduced.

Our future growth depends on our ability to continue to develop and maintain our proprietary technology that supports our hardware and software-enabled services, including our Athena platform. In the event that our current or future products and services require features that we have not developed or licensed, or we lose the benefit of an existing license, we will be required to develop or obtain such technology through purchase, license or other arrangements. If the required technology is not available on commercially reasonable terms, or at all, we may incur additional expenses in an effort to internally develop the required technology. We have received patents and have filed patent applications with respect to certain aspects of our technology, and we generally rely on patent protection with respect to our proprietary technology, as well as a combination of trade secrets and copyright law, employee and third-party non-disclosure agreements and other protective measures to protect intellectual property rights pertaining to our proprietary technology and hardware and software- enabled services. There can be no assurance that the steps taken by us to protect any of our proprietary technology will be adequate to prevent

misappropriation of these technologies by third parties. If we were unable to maintain our existing proprietary technology, our ability to attract and retain customers could be impaired, our competitive position could be adversely affected, and our revenue could be reduced.

A failure of our information technology ("IT") and data security infrastructure could adversely affect our business and operations.

The efficient operation of our business depends on our IT systems, some of which are managed by third-party service providers. We rely upon the capacity, reliability and security of our IT and data security infrastructure and our ability to effectively manage our business data, accounting, financial, legal and compliance functions, communications, supply chain, order entry and fulfillment, and expand and continually update this infrastructure in response to the changing needs of our business. Our existing IT systems and any new IT systems we utilize may not perform as expected. If we experience a problem with the functioning of an important IT system or a security breach of our IT systems, including during system upgrades or new system implementations, the resulting disruptions could adversely affect our business.

Despite our implementation of reasonable security measures, our IT systems, like those of other companies, are vulnerable to damages from computer viruses, natural disasters, fire, power loss, telecommunications failures, personnel misconduct, human error, unauthorized access, physical or electronic security breaches, cyber-attacks (including malicious and destructive code, phishing attacks, ransomware, and denial of service attacks), and other similar disruptions. Such attacks or security breaches may be perpetrated by bad actors internally or externally (including computer hackers, persons involved with organized crime, or foreign state or foreign state-supported actors). Cybersecurity threat actors employ a wide variety of methods and techniques that are constantly evolving, increasingly sophisticated, and difficult to detect and successfully defend against. Geopolitical tensions or conflicts, such as Russia's invasion of Ukraine, may further heighten the risk of cyber-attacks. We have experienced such incidents in the past, and any future incidents could expose us to claims, litigation, regulatory or other governmental investigations, administrative fines and potential liability. Any system failure, accident or security breach could result in disruptions to our operations. A material network breach in the security of our or our service providers' IT systems could include the theft of our trade secrets, customer information, human resources information or other confidential data, including but not limited to personally identifiable information. Although past incidents have not had a material adverse effect on our business operations or financial performance, to the extent that any disruptions or security breach results in a loss or damage to our data, or an inappropriate disclosure of confidential, proprietary or customer information, it could cause significant damage to our reputation, affect our relationships with our customers and strategic partners, lead to claims against us from governments and private plaintiffs, and otherwise adversely affect our business. We cannot guarantee that future cyberattacks, if successful, will not have a material effect on our business or financial results.

Many governments have enacted laws requiring companies to provide notice of cyber incidents involving certain types of data, including personal data. If an actual or perceived cybersecurity breach of security measures, unauthorized access to our system or the systems of the third-party vendors that we rely upon, or any other cybersecurity threat occurs, we may incur liability, costs, or damages, contract termination, our reputation may be compromised, our ability to attract new customers could be negatively affected, and our business, financial condition, and results of operations could be materially and adversely affected. Any compromise of our security could also result in a violation of applicable domestic and foreign security, privacy or data protection, consumer and other laws, regulatory or other governmental investigations, enforcement actions, and legal and financial exposure, including potential contractual liability. In addition, we may be required to incur significant costs to protect against and remediate damage caused by these disruptions or security breaches in the future. While we carry cyber insurance, we cannot be certain that our coverage will be adequate for liabilities actually incurred, that insurance will continue to be available to us on commercially reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim.

Our technology, including the Athena platform, could have undetected defects, errors or bugs in hardware or software which could reduce market adoption, damage our reputation with current or prospective customers and/or expose us to product liability and other claims that could materially and adversely affect our business.

We may be subject to claims that our hardware and software-enabled services, including the Athena platform have malfunctioned and persons were injured or purported to be injured. Any insurance that we carry may not be sufficient or it may not apply to all situations. Similarly, to the extent that such malfunctions are related to components obtained from third-party vendors, such vendors may not assume responsibility for such malfunctions. In addition, our customers could be subjected to claims as a result of such incidents and may bring legal claims against us to attempt to hold us liable. Any of these events could adversely affect our brand, relationships with customers, operating results or financial condition.

Furthermore, our Athena platform is complex, developed for over a decade by many developers, and includes a number of licensed third-party commercial and open-source software libraries. Our software has contained defects and errors and may in the future contain undetected defects or errors. We are continuing to evolve the features and functionality of our platform through updates and enhancements, and as we do, we may introduce additional defects or errors that may not be detected until

after deployment to customers through our hardware. In addition, if our hardware and software-enabled services, including any updates or patches, are not implemented or used correctly or as intended, inadequate performance and disruptions in service may result.

Any defects or errors in product or services offerings, or the perception of such defects or errors, or other performance problems could result in any of the following, each of which could adversely affect our business, financial condition and results of operations:

- expenditure of significant financial and product development resources, including recalls, in efforts to analyze, correct, eliminate or work around errors or defects;
- loss of existing or potential customers or partners;
- interruptions or delays in sales;
- delayed or lost revenue;
- delay or failure to attain market acceptance;
- delay in the development or release of new functionality or improvements;
- negative publicity and reputational harm;
- sales credits or refunds;
- exposure of confidential or proprietary information;
- diversion of development and customer service resources;
- breach of warranty claims;
- legal claims under applicable laws, rules and regulations; and
- the expense and risk of litigation.

Although we have contractual protections, such as warranty disclaimers and limitation of liability provisions, in many of our agreements with customers, resellers and other business partners, such protections may not be uniformly implemented in all contracts and, where implemented, may not fully or effectively protect from claims by customers, resellers, business partners or other third parties. Any insurance coverage or indemnification obligations of suppliers may not adequately cover all such claims, or cover only a portion of such claims. A successful product liability, warranty, or other similar claim could have an adverse effect on our business, financial condition and operating results. In addition, even claims that ultimately are unsuccessful could result in expenditure of funds in litigation, divert management's time and other resources and cause reputational harm.

Our failure to adequately secure, protect and enforce our intellectual property rights may undermine our competitive position, and litigation to protect our intellectual property rights may be costly.

Although we have taken many protective measures to protect our intellectual property, including trade secrets, policing unauthorized use of proprietary technology can be difficult and expensive. For example, many of our software developers reside in California and we cannot legally prevent them from working for a competitor.

Also, litigation may be necessary to enforce our intellectual property rights, protect our trade secrets, or determine the validity and scope of the proprietary rights of others. Such litigation may result in our intellectual property rights being challenged, limited in scope or declared invalid or unenforceable. We cannot be certain that the outcome of any litigation will be in our favor, and an adverse determination in any such litigation could impair our intellectual property rights and may adversely affect our business, prospects and reputation.

We rely primarily on patent, trade secret and trademark laws, and non-disclosure, confidentiality, and other types of contractual restrictions to establish, maintain, and enforce our intellectual property and proprietary rights. However, our rights under these laws and agreements afford us only limited protection and the actions we take to establish, maintain, and enforce our intellectual property rights may not be adequate. For example, our trade secrets and other confidential information could be disclosed in an unauthorized manner to third parties, our owned or licensed intellectual property rights could be challenged, invalidated, circumvented, infringed, or misappropriated or our intellectual property rights may not be sufficient to provide us with a competitive advantage, any of which could have a material adverse effect on our business, financial condition and results of operations. For example, we rely on our brand names, trade names and trademarks to distinguish our products and services, such as our Athena® platform, from the products of our competitors; however, third parties may oppose our trademark

applications, or otherwise challenge our use of such trademarks. In the event that our trademarks are successfully challenged and we lose rights to use those trademarks, we could be forced to rebrand our products and services, which could result in the loss of goodwill and brand recognition. In addition, the laws of some countries do not protect proprietary rights as fully as do the laws of the U.S. As a result, we may not be able to protect our proprietary rights adequately abroad.

Our patent applications may not result in issued patents, and our issued patents may not provide adequate protection, which may have a material adverse effect on our ability to prevent others from commercially exploiting products similar to ours.

We cannot be certain that our pending patent applications will result in issued patents or that any of our issued patents will afford protection against a competitor. The status of patents involves complex legal and factual questions, and the breadth of claims allowed is uncertain. As a result, we cannot be certain that the patent applications that we file will result in patents being issued, or that our patents and any patents that may be issued to us in the future will afford protection against competitors with similar technology. In addition, patent applications filed in foreign countries are subject to laws, rules and procedures that differ from those of the U.S., and thus we cannot be certain that foreign patent applications related to issued U.S. patents will be issued in other regions. Furthermore, even if these patent applications are accepted and the associated patents issued, some foreign countries provide significantly less effective patent enforcement than in the U.S.

In addition, patents issued to us may be infringed upon or designed around by others and others may obtain patents that we need to license or design around, either of which would increase costs and may adversely affect our business, prospects, and operating results.

We may need to defend ourselves against claims that we infringe, have misappropriated or otherwise violate the intellectual property rights of others, which may be time consuming and would cause us to incur substantial costs.

Companies, organizations, or individuals, including our competitors, may hold or obtain patents, trademarks, or other proprietary rights that they may in the future believe are infringed by our products and services. Although we are not currently subject to any claims related to intellectual property, these companies holding patents or other intellectual property rights allegedly relating to our technologies could, in the future, make claims or bring suits alleging infringement, misappropriation or other violations of such rights, or otherwise asserting their rights and seeking licenses or injunctions. Several of the proprietary components used in our energy storage systems have been subjected to infringement challenges in the past. We also generally indemnify our customers against claims that the hardware and software-enabled services we supply infringe, misappropriate, or otherwise violate third-party intellectual property rights, and we may therefore be required to defend our customers against such claims. If a claim is successfully brought in the future and we or our hardware and software-enabled services are determined to have infringed, misappropriated, or otherwise violated a third-party's intellectual property rights, we may be required to do one or more of the following:

- cease selling products or services that incorporate the challenged intellectual property;
- pay substantial damages (including treble damages and attorneys' fees if our infringement is determined to be willful);
- obtain a license from the holder of the intellectual property right, which license may not be available on reasonable terms or at all; or
- redesign our products or services, which may not be possible or cost-effective.

Any of the foregoing could adversely affect our business, financial condition and operating results. In addition, any litigation or claims, whether or not valid, could adversely affect our reputation, result in substantial costs, and divert resources and management attention.

We also license technology from third parties, and incorporate components supplied by third parties into our hardware. We may face claims that our use of such technology or components infringes or otherwise violates the rights of others, which would subject us to the risks described above. We may seek indemnification from our licensors or suppliers under our contracts with them, but our rights to indemnification or our suppliers' resources may be unavailable or insufficient to cover our costs and losses.

Regulatory Risks

The installation and operation of our energy storage systems are subject to environmental laws and regulations in various jurisdictions, and there is uncertainty with respect to the interpretation of certain environmental laws and regulations to our energy storage systems, especially as these regulations evolve over time.

We are subject to national, state and local environmental laws and regulations, as well as environmental laws in those foreign jurisdictions in which we operate. Environmental laws and regulations can be complex and may change often. These

laws can give rise to liability for administrative oversight costs, cleanup costs, property damage, bodily injury, fines and penalties. We are committed to compliance with applicable environmental laws and regulations, including health and safety standards, and we continually review the operation of our energy storage systems for health, safety and compliance. Our energy storage systems, like other battery technology-based products of which we are aware, produce small amounts of hazardous wastes and air pollutants, and we seek to ensure that they are handled in accordance with applicable regulatory standards.

Maintaining compliance with laws and regulations can be challenging given the changing patchwork of environmental laws and regulations that prevail at the U.S. federal, state, regional and local levels and in foreign countries in which we operate. Most existing environmental laws and regulations preceded the introduction of battery technology and were adopted to apply to technologies existing at the time, namely large, coal, oil or gas-fired power plants. Currently, there is generally little guidance from these agencies on how certain environmental laws and regulations may, or may not, be applied to our technology.

In many instances, our technology is moving faster than the development of applicable regulatory frameworks. It is possible that regulators could delay or prevent us from conducting our business in some way pending agreement on, and compliance with, shifting regulatory requirements. Such actions could delay the sale to and installation by customers of energy storage systems, require their modification or replacement, result in fines, or trigger claims of performance warranties and defaults under customer contracts that could require us to refund hardware or service contract payments, any of which could adversely affect our business, financial performance and reputation.

Existing regulations and changes to such regulations impacting the electric power industry may create technical, regulatory and economic barriers which could significantly reduce demand for our energy storage systems.

The market for electricity generation products is heavily influenced by U.S. federal, state, local and foreign government regulations and policies, as well as by tariffs, internal policies and practices of electric utility providers. These regulations, tariffs and policies often relate to electricity pricing and technical interconnection of customer-owned electricity generation. These regulations, tariffs and policies are often modified and could continue to change, and this could result in a significant reduction in demand for our energy storage systems. For example, utility companies commonly charge fees industrial customers for disconnecting from the electric grid or for having the capacity to use power from the electric grid for back-up purposes. These fees could change, increasing the cost to our customers of using our offerings and making them less economically attractive.

Negative attitudes toward renewable energy projects from the U.S. government, other lawmakers and regulators, and activists could adversely affect our business, financial condition and results of operations.

Parties with an interest in other energy sources, including lawmakers, regulators, policymakers, environmental and advocacy organizations or other activists may invest significant time and money in efforts to delay, repeal or otherwise negatively influence regulations and programs that promote renewable energy. Many of these parties have substantially greater resources and influence than we have. Further, changes in U.S. federal, state or local political, social or economic conditions, including a lack of legislative focus on these programs and regulations, could result in their modification, delayed adoption or repeal. Any failure to adopt, delay in implementing, expiration, repeal or modification of these programs and regulations, or the adoption of any programs or regulations that encourage the use of other energy sources over renewable energy, could adversely affect our business, financial condition and results of operations.

Opposition to our customers' project requests for permits or successful challenges or appeals to permits issued for their projects could adversely affect our operating plans.

A decrease in acceptance of renewable energy projects by local populations, an increase in the number of legal challenges, or an unfavorable outcome of such legal challenges could adversely affect the financial condition of our customers and reduce their demand for our hardware and software-enabled services. For example, persons, associations and groups could oppose renewable energy projects in general or our customers' projects specifically, citing, for example, misuse of water resources, landscape degradation, land use, food scarcity or price increase and harm to the environment. Moreover, regulation may restrict the development of renewable energy plants in certain areas. In order to develop a renewable energy project, our customers are typically required to obtain, among other things, environmental impact permits or other authorizations and building permits, which in turn require environmental impact studies to be undertaken and public hearings and comment periods to be held during which any person, association or group may oppose a project. The effect of such public opposition to renewable energy projects and any resulting reduction in customer demand for our hardware and software-enabled services could adversely affect our business, financial condition and results of operations.

Changes in the U.S. trade environment, including the imposition of import tariffs, could adversely affect the amount or timing of our revenues, results of operations or cash flows.

Escalating trade tensions, particularly between the United States and China, have led to increased tariffs and trade restrictions, including tariffs applicable to certain materials and components for products used in solar energy projects and the renewable energy market more broadly, such as module supply and availability. More specifically, in March 2018, the United States imposed a 25% tariff on steel imports and a 10% tariff on aluminum imports pursuant to Section 301 of the Trade Act of 1974 and has imposed additional tariffs on steel and aluminum imports pursuant to Section 232 of the Trade Expansion Act of 1962. To the extent we source products that contain overseas supplies of steel and aluminum, these tariffs could result in interruptions in the supply chain and negatively affect costs and our gross margins. Additionally, in January 2018, the United States adopted a tariff on imported solar modules and cells pursuant to Section 201 of the Trade Act of 1974. The tariff was initially set at 30%, with a gradual reduction over four years to 15%. While this tariff does not apply directly to the components we import, it may indirectly affect us by affecting the financial viability of solar energy projects, which could in turn reduce demand for our products. Furthermore, in July 2018, the United States adopted a 10% tariff on a long list of products imported from China under Section 301 of the Trade Act of 1974, including, inverters and power optimizers, which became effective on September 24, 2018. In June 2019, the Office of the U.S. Trade Representative increased the rate of such tariffs from 10% to 25%. While these tariffs are not directly applicable to our products, they could negatively affect the solar energy projects in which our products are used, which could lead to decreased demand for our products.

In addition, the United States currently imposes antidumping and countervailing duties on certain imported crystalline silicon photovoltaic ("PV") cells and modules from China and Taiwan. Such antidumping and countervailing duties can change over time pursuant to annual reviews conducted by the U.S. Department of Commerce ("USDOC"), and an increase in duty rates could have an adverse impact on our operating results.

In February 2022, Auxin Solar Inc., a U.S. producer of crystalline silicon PV products, petitioned the USDOC to investigate alleged circumvention of antidumping and countervailing duties on Chinese imports by crystalline silicon PV cells and module imports assembled and completed in Cambodia, Malaysia, Thailand, and Vietnam. On March 28, 2022, the USDOC announced that it would investigate the circumvention alleged in the petition. The timing and progress of many of our customers' projects depend upon the supply of PV cells and modules. As a result, if the USDOC makes negative circumvention determinations, it could adversely affect our business, financial condition and results of operations.

Tariffs, and the possibility of additional tariffs in the future, have created uncertainty in the industry. This has resulted in, and may continue to result in, some project delays. If the price of solar systems or energy storage systems in the United States increases, the use of these products could become less economically feasible and could reduce our gross margins or reduce the demand of such systems manufactured and sold, which in turn may decrease demand for our products. Additionally, existing or future tariffs may negatively affect key customers, suppliers, and manufacturing partners. Such outcomes could adversely affect the amount or timing of our revenues, results of operations or cash flows, and continuing uncertainty could cause sales volatility, price fluctuations or supply shortages, or cause our customers to advance or delay their purchase of our products. It is difficult to predict what further trade-related actions governments may take, which may include additional or increased tariffs and trade restrictions, and we may be unable to quickly and effectively react to such actions.

Additional Risks Related to our Securities and Our Capital Structure

We may issue a significant number of shares in the future in connection with investments or acquisitions.

We may issue securities in the future in connection with investments or acquisitions or otherwise. The amount of shares of common stock issued in connection with an investment or acquisition could constitute a material portion of our then-outstanding shares of common stock. Any issuance of additional securities in connection with investments or acquisitions may result in additional dilution to our stockholders.

We do not intend to pay cash dividends for the foreseeable future.

We currently intend to retain our future earnings, if any, to finance the further development and expansion of our business, and do not intend to pay cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, restrictions contained in future agreements and financing instruments, business prospects and such other factors as our board of directors deems relevant.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate consolidated financial statements or comply with applicable regulations could be impaired.

We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") and the rules and regulations of the applicable listing standards of the NYSE. We expect that the requirements of these rules and regulations will continue to increase our legal, accounting, and financial compliance costs; make some activities more difficult, time-consuming, and costly; and place significant strain on our personnel, systems, and resources.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we will file with the SEC is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms and that information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers. We are also continuing to improve our internal control over financial reporting. In order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting, we have expended, and anticipate that we will continue to expend, significant resources, including accounting-related costs and significant management oversight.

Our current controls and any new controls that we develop may become inadequate because of changes in conditions in our business. In addition, changes in accounting principles or interpretations could also challenge our internal controls and require that we establish new business processes, systems, and controls to accommodate such changes. Additionally, if these new systems, controls, or standards and the associated process changes do not give rise to the benefits that we expect or do not operate as intended, it could adversely affect our financial reporting systems and processes, our ability to produce timely and accurate financial reports, or the effectiveness of internal control over financial reporting. Moreover, our business may be harmed if we experience problems with any new systems and controls that result in delays in their implementation or increased costs to correct any post-implementation issues that may arise.

Further, weaknesses in our disclosure controls and internal control over financial reporting may be discovered in the future. Any failure to develop or maintain effective controls or any difficulties encountered in their implementation or improvement could harm our business or cause us to fail to meet our reporting obligations and may result in a restatement of our consolidated financial statements for prior periods. Any failure to implement and maintain effective internal control over financial reporting also could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting. Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our common stock. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on the NYSE. We are required to provide an annual management report on the effectiveness of our internal control over financial reporting.

Our independent registered public accounting firm is required to formally attest to the effectiveness of our internal control over financial reporting. Our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our internal control over financial reporting is documented, designed, or operating. Any failure to maintain effective disclosure controls and internal control over financial reporting could harm our business and could cause a decline in the trading price of our common stock.

If analysts do not publish research about our business or if they publish inaccurate or unfavorable research, our stock price and trading volume could decline.

The trading market for our common stock depends in part on the research and reports that analysts publish about our business. We do not have any control over these analysts. If one or more of the analysts who cover us downgrade our common stock or publish inaccurate or unfavorable research about our business, the price of our common stock would likely decline. If few analysts cover us, demand for our common stock could decrease and our common stock price and trading volume may decline. Similar results may occur if one or more of these analysts stop covering us in the future or fail to publish reports on us regularly.

The trading price of our common stock is volatile.

The trading price of our common stock has been and is likely to continue to be volatile. You may not be able to resell your shares at an attractive price due to a number of factors such as those listed in "- *Risks Relating to Stem's Business and Industry*" and the following:

- results of operations that vary from the expectations of securities analysts and investors;
- results of operations that vary from those of our competitors;

- the effects of the COVID-19 pandemic and its effect on the Company's business and financial conditions;
- changes in expectations as to the Company's future financial performance, including financial estimates and investment recommendations by securities analysts and investors;
- declines in the market prices of stocks generally;
- strategic actions by us or our competitors;
- announcements by us or our competitors of significant contracts, acquisitions, joint ventures, other strategic relationships or capital commitments;
- any significant change in the Company's senior management;
- changes in general economic or market conditions or trends in the Company's industry or markets, including as a result of a general economic slowdown or a recession, increasing interest rates and changes in monetary policy, or inflationary pressures;
- changes in business or regulatory conditions, including new laws or regulations or new interpretations of existing laws or regulations applicable to the Company's business;
- future sales of our common stock or other securities or the incurrence of significant debt;
- investor perceptions or the investment opportunity associated with our common stock relative to other investment alternatives;
- the public's response to press releases or other public announcements by us or third parties, including the Company's filings with the SEC;
- litigation involving the Company, the Company's industry, or both, or investigations by regulators into the Company's operations or those of the Company's competitors;
- financial and operating guidance, if any, that we provide to the public, any changes in this guidance or the Company's failure to meet this guidance;
- the development and sustainability of an active trading market for our common stock;
- actions by institutional or activist stockholders;
- changes in accounting standards, policies, guidelines, interpretations or principles; and
- other events or factors, including those resulting from natural disasters, war, acts of terrorism or responses to these events.

These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of our actual operating performance. In addition, price volatility may be greater if the public float and trading volume of our common stock is low.

In the past, following periods of market volatility, stockholders have instituted securities class action litigation. If we were involved in securities litigation, it could have a substantial cost and divert resources and the attention of executive management from the Company's business regardless of the outcome of such litigation.

Our financial condition and results of operations and other key metrics are likely to fluctuate on a quarterly basis in future periods, which could cause our results for a particular period to fall below expectations, resulting in a severe decline in the price of our common stock.

Our financial condition and results of operations and other key metrics have fluctuated significantly in the past and may continue to fluctuate in the future due to a variety of factors, many of which are beyond our control. For example, the amount of revenue we recognize in a given period is materially dependent on the volume of purchases of our energy storage systems and software-enabled services in that period.

In addition to the other risks described herein, the following factors could also cause our financial condition and results of operations to fluctuate on a quarterly basis:

- the timing of customer installations of our hardware, which may depend on many factors such as availability of inventory, product quality or performance issues, or local permitting requirements, utility requirements, environmental, health and safety requirements, weather and customer facility construction schedules, and availability and schedule of our third-party general contractors;

- the sizes of particular customer hardware installations and the number of sites involved in any particular quarter;
- delays or cancellations of energy storage system purchases and installations;
- fluctuations in our service costs, particularly due to unaccrued costs of servicing and maintaining energy storage systems;
- weaker than anticipated demand for our energy storage systems due to changes in government incentives and policies;
- interruptions in our supply chain;
- the timing and level of additional purchases by existing customers;
- unanticipated expenses or installation delays incurred by customers due to changes in governmental regulations, permitting requirements by local authorities at particular sites, utility requirements and environmental, health and safety requirements; and
- disruptions in our sales, production, service or other business activities resulting from our inability to attract and retain qualified personnel.

In addition, our revenue, key operating metrics and other operating results in future quarters may fall short of the expectations of investors and financial analysts, which could have an adverse effect on the price of our common stock.

Certain provisions of our Amended and Restated Charter and Amended and Restated Bylaws may have an anti- takeover effect and may delay, defer or prevent a merger, acquisition, tender offer, takeover attempt or other change of control transaction that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for the shares held by our stockholders.

These provisions, among other things:

- establish a staggered board of directors divided into three classes serving staggered three-year terms, such that not all members of our board of directors will be elected at one time;
- authorize our board of directors to issue new series of preferred stock without stockholder approval and create, subject to applicable law, a series of preferred stock with preferential rights to dividends or our assets upon liquidation, or with superior voting rights to our existing common stock;
- eliminate the ability of stockholders to call special meetings of stockholders;
- eliminate the ability of stockholders to fill vacancies on our board of directors;
- establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon by stockholders at our annual stockholder meetings;
- permit our board of directors to establish the number of directors;
- provide that our board of directors is expressly authorized to make, alter or repeal our Amended and Restated Bylaws;
- provide that stockholders can remove directors only for cause and only upon the approval of not less than 66 2⁄3 of all outstanding shares of our voting stock;
- require the approval of not less than 66 2⁄3 of all outstanding shares of our voting stock to amend our Amended and Restated Bylaws and specific provisions of our Amended and Restated Charter; and
- limit the jurisdictions in which certain stockholder litigation may be brought.

As a Delaware corporation, we are subject to the anti-takeover provisions of Section 203 of the DGCL, which prohibits a Delaware corporation from engaging in a business combination specified in the statute with an interested stockholder (as defined in the statute) for a period of three (3) years after the date of the transaction in which the person first becomes an interested stockholder, unless the business combination is approved in advance by a majority of the independent directors or by the holders of at least two-thirds of the outstanding disinterested shares. The application of Section 203 of the DGCL could also have the effect of delaying or preventing a change of control of our company.

These anti-takeover provisions could make it more difficult for a third-party to acquire us, even if the third-party's offer may be considered beneficial by many of our stockholders. As a result, our stockholders may be limited in their ability to obtain a premium for their shares. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing and to cause us to take other corporate actions you desire.

Our Amended and Restated Charter designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders.

Our Amended and Restated Charter provides that, that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum, to the fullest extent permitted by law, for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a breach of a fiduciary duty owed by any director, officer or other employee to us or our stockholders, (iii) any action asserting a claim against us or any director, officer, or other employee arising pursuant to the DGCL, (iv) any action to interpret, apply, enforce, or determine the validity of our second amended and restated certificate of incorporation or amended and restated bylaws, or (v) any other action asserting a claim that is governed by the internal affairs doctrine, shall be the Court of Chancery of the State of Delaware (or another state court or the federal court located within the State of Delaware if the Court of Chancery does not have or declines to accept jurisdiction), in all cases subject to the court's having jurisdiction over indispensable parties named as defendants.

In addition, our Amended and Restated Charter provides that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act but that the forum selection provision does not apply to claims brought to enforce a duty or liability created by the Securities Exchange Act of 1934, as amended, (the "Exchange Act"). Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers. Alternatively, if a court were to find the choice of forum provision contained in our Amended and Restated Charter to be inapplicable or unenforceable in an action, we might incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, financial condition, and operating results. For example, under the Securities Act, federal courts have concurrent jurisdiction over all suits brought to enforce any duty or liability created by the Securities Act, and investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring any interest in our shares of capital stock shall be deemed to have notice of and consent to this exclusive forum provision, but will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

Our ability to issue shares of common stock beyond 400 million may be affected by a recent Delaware Court of Chancery decision

A recent decision of the Delaware Court of Chancery involving a Delaware special purpose acquisition company's ("SPAC") that did not obtain a separate "class vote" of the SPAC's Class A common stockholders in connection with certain amendments to that SPAC's certificate of incorporation (the "Decision") has created uncertainty as to whether such a vote was required under Section 242(b)(2) of the DGCL. This in turn has created uncertainty as to whether the Company properly authorized and can issue common stock beyond the 400 million shares originally authorized in the Company's prior Certificate of Incorporation, even though the Company's stockholders voted on April 27, 2021, in favor of an increase in the number of authorized common stock from 400 million to 500 million (the "Share Increase"). As of the date of this Annual Report on Form 10-K, the Company has issued only 154.6 million shares of common stock and reserved 50.5 million shares of common stock, primarily for the exercise or vesting of outstanding long-term incentive awards and the potential issuance of our common stock in connection with the conversion of the 2028 Convertible Notes.

The Share Increase was approved at the time of the business combination between Stem and Star Peak Energy Transition Corp. by a majority of our outstanding shares of common stock. The Company did not obtain a separate vote of a majority of the Class A common stock for the Share Increase Amendment. While the Company does not believe that a separate vote of the Class A common stock was required to approve the Share Increase, the Decision raises the question whether the Company was required to obtain a separate affirmative vote of the Class A common stock in order to increase the authorized share count from 400 million to 500 million under the Delaware General Corporation Law. In light of the Court's December 27, 2022 decision, we are considering various options, including potentially seeking validation of the Share Increase Amendment by the Court pursuant to Section 205 of the DGCL.

The capped call transactions we entered into in connection with the pricing of our 2028 Convertible Notes may adversely affect the market price of our common stock.

In connection with the pricing of the 2028 Convertible Notes, we entered into capped call transactions with several affiliates of the Initial Purchasers (the "Option Counterparties"). The capped call transactions are expected generally to reduce potential dilution to our common stock upon conversion of any Convertible Notes and/or offset any cash payments we are required to make in excess of the principal amount of converted Notes, as the case may be, with such reduction and/or offset subject to a cap.

In addition, the Option Counterparties and/or their respective affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock in secondary market transactions and prior to the maturity of the Convertible Notes (and are likely to do so on each exercise date for the capped call transactions or following any termination of any portion of the capped call transactions in connection with any repurchase, redemption or early conversion of the Convertible Notes). This activity could cause or avoid an increase or decrease in the market price of our common stock.

We are subject to counterparty risk with respect to the capped call transactions.

The Option Counterparties are financial institutions, and we are subject to the risk that any or all of them might default under the capped call transactions. Our exposure to the credit risk of the option counterparties is not secured by any collateral. Past global economic conditions have resulted in the actual or perceived failure or financial difficulties of many financial institutions. If an option counterparty becomes subject to insolvency proceedings, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at that time under the capped call transactions with such option counterparty. Our exposure will depend on many factors but, generally, an increase in our exposure will be correlated to an increase in the market price and in the volatility of our common stock. In addition, upon a default by an option counterparty, we may suffer more dilution than we currently anticipate with respect to our common stock. We can provide no assurance as to the financial stability or viability of the option counterparties.

General Risk Factors

Our management team has limited experience managing a public company.

Most members of our management team have limited experience managing a publicly traded company, interacting with public company investors, and complying with the increasingly complex laws pertaining to public companies. Our management team may not successfully or efficiently manage us as a public company that is subject to significant regulatory oversight and reporting obligations under the federal securities laws and the continuous scrutiny of securities analysts and investors. These new obligations and constituents require significant attention from our senior management and could divert their attention away from the day-to-day management of our business, which could adversely affect our business, results of operations and financial condition.

Future litigation or administrative proceedings could have a material adverse effect on our business, financial condition, and results of operations.

We have been and continue to be involved in legal proceedings, administrative proceedings, claims, and other litigation. In addition, since our energy storage product is a new type of product in a nascent market, we have in the past needed and may in the future need to seek the amendment of existing regulations or, in some cases, the creation of new regulations, in order to operate our business in some jurisdictions. Such regulatory processes may require public hearings concerning our business, which could expose us to subsequent litigation. Unfavorable outcomes or developments relating to proceedings to which we are a party or transactions involving our products and services, such as judgments for monetary damages, injunctions, or denial or revocation of permits, could have a material adverse effect on our business, financial condition, and results of operations. In addition, settlement of claims could adversely affect our financial condition and results of operations.

Our operating results may be adversely affected by unfavorable economic and market conditions.

Unfavorable economic conditions, such as a general slowdown or recession of the global or U.S. economy, uncertainty and volatility in the financial markets, or inflation and rising interest rates, could reduce investment in projects that make use of our services. In addition, sustained unfavorable economic conditions might also have a negative impact on many of our customers or suppliers, which could impair their ability to meet their obligations to us. If economic and market conditions globally, in the U.S. or in other key markets become more volatile or deteriorate further, we may experience material impacts on our business, financial condition and results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our corporate headquarters is located in San Francisco, California. This facility comprises approximately 23,500 square feet of office space. We lease this facility. We have additional facilities, including in the following locations:

Type of Space	Location	Approximate Square Footage	Leased or Owned
Office and Warehouse	Burlingame, California	20,800 square feet	Leased
Office	Boulder, Colorado	15,800 square feet	Leased
Warehouse	Longmont, Colorado	13,950 square feet	Leased
Warehouse	Niwot, Colorado	7,800 square feet	Leased

We believe our space is adequate for our current needs and that suitable additional or substitute space will be available to accommodate the foreseeable expansion of our operations. For more information about our material lease commitments, see Note 8 — *Leases*, in the accompanying notes to the consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

ITEM 3. LEGAL PROCEEDINGS

The information with respect to this Item 3. Legal Proceedings is set forth in Note 20 — *Commitments and Contingencies,* in the accompanying notes to the consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

Part II.

ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information for Common Stock

Our common stock is listed on The New York Stock Exchange under the symbol “STEM.”

Holders

As of February 9, 2023, there were 108 holders of record of our common stock.

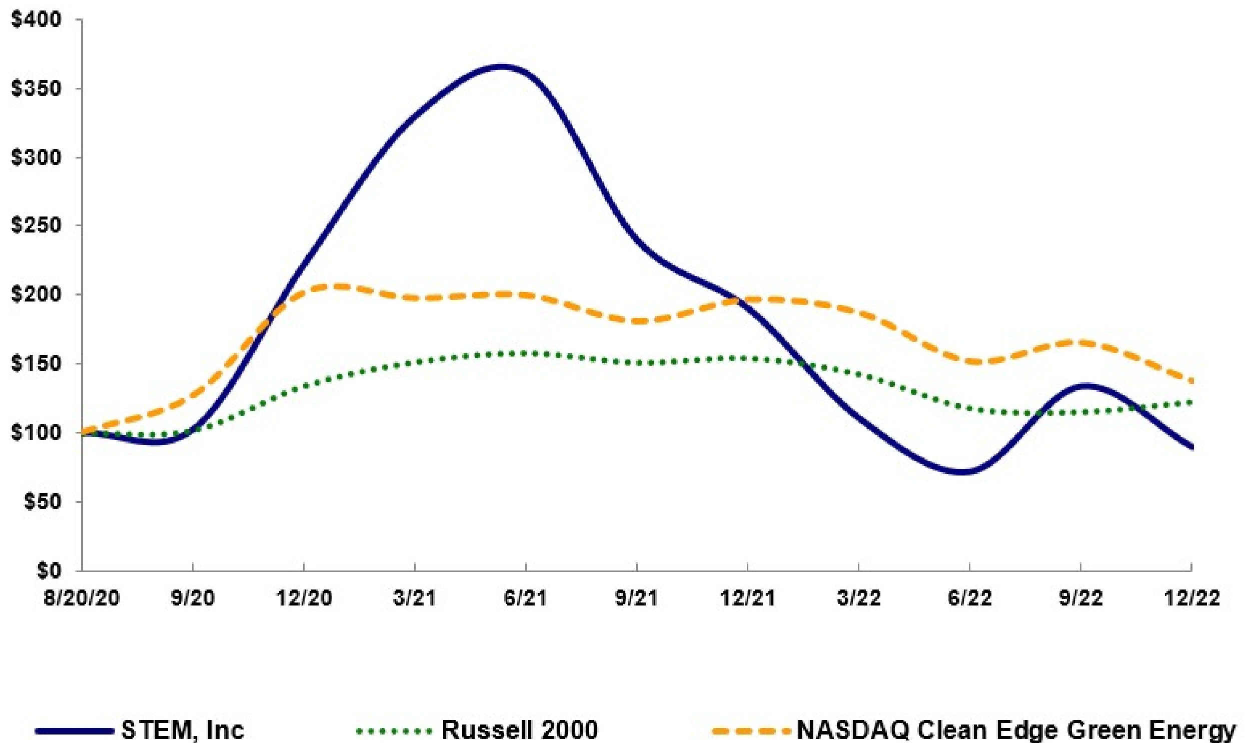
Dividend Policy

We have not paid any cash dividends on our common stock to date and currently intend to retain any future earnings to fund the growth of our business. The payment of cash dividends is subject to the discretion of our Board of Directors and may be affected by various factors, including our future earnings, financial condition, capital requirements, share repurchase activity, current and future planned strategic growth initiatives, levels of indebtedness, and other considerations our Board of Directors deem relevant.

Stock Performance Graph

This performance graph shall not be deemed “soliciting material” or deemed to be “filed” with the SEC, for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any of our filings under the Securities Act.

The following graph compares (i) the cumulative total stockholder return on our common stock from August 20, 2020 (the date our common stock commenced trading on the New York Stock Exchange under the symbol “STPK.”) through December 31, 2022 with (ii) the cumulative total return of the Russell 2000 Index (“RUT”) and the Nasdaq Clean Edge Green Energy Index (“CELS”) over the same period, assuming the investment of $100 in our common stock and in both of the other indices on August 20, 2020 and the reinvestment of dividends. As discussed above, we have never declared or paid a cash dividend on our common stock and do not anticipate declaring or paying a cash dividend in the foreseeable future.



Recent Sales of Unregistered Securities

Except as previously disclosed in a Current Report on Form 8-K, no other unregistered sales of our common stock were made during the year ended December 31, 2022.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None, other than shares of our common stock repurchased pursuant to net settlement by employees in satisfaction of income tax withholding obligations incurred through the vesting of stock awards.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and the related notes included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Report. In addition to our historical consolidated financial information, the following discussion contains forward-looking statements that reflect our plans, estimates, and beliefs. Our actual results and the timing of certain events could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include, but are not limited to, those discussed below and elsewhere in this Report, particularly in Part I, Item 1A, “Risk Factors.”

This MD&A section generally discusses 2022 and 2021 items and year-to-year comparisons between 2022 and 2021. Discussions of 2020 items and year-to-year comparisons between 2021 and 2020 that are not included in this Annual Report on Form 10-K can be found in the section entitled “Item 7. Management’s Discussion and Analysis of Financial Condition and Results or Operations” contained in our Form 10-K filed with the SEC on February 28, 2022.

The Merger

The information regarding the Merger set forth in the first paragraph of “Item 1. Business — History” above is incorporated herein by reference. See also Note 1 — *Business*, in the accompanying notes to the consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K. For financial reporting purposes, Legacy Stem is treated as the accounting acquirer.

Acquisition of AlsoEnergy

On February 1, 2022, we acquired 100% of the issued and outstanding capital stock of AlsoEnergy. The transaction combines our storage optimization capabilities with AlsoEnergy’s solar asset performance monitoring and control software. Through AlsoEnergy, we provide end-to-end turnkey solutions that monitor and manage renewable energy systems through AlsoEnergy’s PowerTrack software. PowerTrack includes data acquisitions and monitoring, performance modelling, agency reporting, internal reports, work order tickets, and supervisory control and data acquisition (“SCADA”) controls. AlsoEnergy has deployed systems at various international locations, but its primary customer base is in the United States, Germany and Canada. The total consideration for the AlsoEnergy acquisition was $652.0 million, comprised of $543.1 million paid in cash net of a working capital adjustment for an escrow recovery, and $108.9 million in the form of 8,621,006 shares of our common stock. We incurred $6.1 million of transaction costs related to the acquisition of AlsoEnergy, which were recorded in general and administrative expense during the year ended December 31, 2022. See Note 6 — Business Combinations, in the accompanying notes to the consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K.

Overview

Our mission is to maximize the economic, environmental, and resiliency value of energy assets through our leading AI platform. In order to fulfill our mission, we provide our customers, which include commercial and industrial (“C&I”) enterprises as well as independent power producers, renewable project developers, utilities and grid operators, with (i) an energy storage system, sourced from leading, global battery original equipment manufacturers (“OEMs”), that we deliver through our partners, including developers, distributors, and engineering, procurement and construction firms, (ii) edge hardware to aid in the collection of site data and the real-time operation and control of the site plus other optional equipment, (iii) ongoing software platform and professional services to operate integrated energy storage, and solar systems, through our Athena® artificial intelligence (“AI”) platform (“Athena”), and (iv) solar asset performance monitoring and control, through Athena’s PowerTrack application. In addition, in all the markets where we help manage our customers’ clean energy assets, we have agreements to use the Athena platform to participate in such markets and to share the revenue from such market participation.

We operate in two key areas within the energy storage landscape: Behind-the-Meter (“BTM”) and Front-of-the-Meter (“FTM”). An energy system’s position in relation to a customer’s electric meter determines whether it is designated a BTM or

FTM system. BTM systems provide power that can be used on-site without interacting with the electric grid and passing through an electric meter. Our software reduces C&I customer energy bills, increases their energy yield, and helps our customers facilitate the achievement of their corporate environmental, social, and corporate governance ("ESG") objectives.

FTM, grid-connected systems provide power to off-site locations and must pass through an electric meter prior to reaching an end-user. Through Athena, our FTM storage systems decrease risk for project developers, lead asset professionals, independent power producers and investors by adapting to dynamic energy market conditions in connection with the deployment of electricity and improving the value of energy storage over the course of their FTM system's lifetime. Through PowerTrack, our software maximizes FTM energy output and minimizes asset downtime.

Through our February 2022 acquisition of AlsoEnergy, we combined our storage optimization capabilities with solar asset performance monitoring and control software.

Since our inception in 2009, we have engaged in developing and marketing software-enabled services, raising capital, and recruiting personnel. We have incurred net operating losses and negative cash flows from operations each year since our inception. We have financed our operations primarily through proceeds received from the Merger, the issuance of convertible preferred stock, convertible senior notes, debt financing, and cash flows from customers.

Our total revenue grew from $127.4 million for the year ended December 31, 2021 to $363.0 million for the year ended December 31, 2022. For the years ended December 31, 2022 and 2021, we incurred net losses of $124.1 million and $101.2 million, respectively. As of December 31, 2022, we had an accumulated deficit of $632.1 million.

We expect that our sales and marketing, research and development, regulatory and other expenses will continue to increase as we expand our marketing efforts to increase sales of our solutions, expand existing relationships with our customers, and obtain regulatory clearances or approvals for future product enhancements. In addition, we expect our general and administrative costs and expenses to increase due to the additional costs associated with scaling our business operations as well as being a public company, including legal, accounting, insurance, exchange listing and SEC compliance, investor relations, and other costs and expenses.

Key Factors, Trends and Uncertainties Affecting our Business

We believe that our performance and future success depend on several factors that present significant opportunities for us but also pose risks and challenges, including but not limited to:

Decline in Lithium-Ion Battery Costs

Our revenue growth is directly tied to the continued adoption of energy storage systems by our customers. The cost of lithium-ion energy storage hardware has generally declined over the last decade, notwithstanding increases in recent months. The market for energy storage is rapidly evolving, and while we believe costs will continue to decline over time, there is no guarantee. If costs do not continue to decline, or do not decline as quickly as we anticipate, this could adversely affect our ability to increase our revenue and grow our business. The United States Inflation Reduction Act of 2022 (the "IRA") was signed into law on August 16, 2022 and includes incentives and tax credits aimed at reducing the effects of climate change, such as a tax credit for stand-alone battery storage projects. The implementation of the IRA is expected to further reduce the cost of battery storage systems for certain customers; however, there are numerous restrictions and requirements associated with qualifying for the tax credits and other incentives available under the IRA, and the Company continues to assess how the IRA may affect its business.

Increase in Deployment of Renewables

Deployment of intermittent resources has accelerated over the last decade, and today, wind and solar have become a low cost fuel source. We expect the cost of generating renewable energy to continue to decline and deployments of energy storage systems to increase. As renewable energy sources of energy production are expected to represent a larger proportion of energy generation, grid instability rises due to their intermittency, which can be addressed by energy storage solutions. The IRA is expected to further increase the deployment of renewable energy assets. We are continuing to evaluate the IRA and its requirements, as well as the application to our business and our customers.

Competition

We are a market leader in terms of capacity of energy storage under management. We intend to strengthen our competitive position over time by leveraging the network effect of Athena's AI infrastructure. Existing competitors may expand their product offerings and sales strategies, and new competitors may enter the market. Furthermore, our competitors include other types of software providers and some hardware manufacturers that offer software solutions. If our market share declines due to increased competition, our revenue and ability to generate profits in the future may be adversely affected.

Government Regulation and Compliance

Although we are not regulated as a utility, the market for our product and services is heavily influenced by federal, state, and local government statutes and regulations concerning electricity. These statutes and regulations, like the IRA, affect electricity pricing, net metering, incentives, taxation, competition with utilities, and the interconnection of customer-owned electricity generation. In the United States and internationally, governments continuously modify these statutes and regulations and acting through state utility or public service commissions, regularly change and adopt different rates for commercial customers. These changes can positively or negatively affect our ability to deliver cost savings to customers.

Supply Chain Constraints and Risk; COVID-19

We rely on a very small number of suppliers of energy storage systems and other equipment. If any of our suppliers were unable or unwilling to provide us with contracted quantities in a timely manner at prices, quality levels and volumes acceptable to us, we will have very limited alternatives for supply, and we may not be able find suitable replacements for our customers, if at all. Such an event could materially adversely affect our business, prospects, financial condition and results of operations.

The COVID-19 pandemic has resulted and may continue to result in widespread adverse effects on the global and U.S. economies. Ongoing government and business responses to COVID-19, along with COVID-19 variants and the resurgence of related disruptions, could have a continued material adverse impact on economic and market conditions and amplify effects of a global and U.S. economic slowdown.

In addition, the global supply chain and our industry have experienced significant disruptions in recent periods. We have seen supply chain challenges and logistics constraints increase, including shortages of inverters, enclosures, battery modules and associated component parts for inverters and battery energy storage systems available for purchase. In certain cases, this has caused delays in critical equipment and inventory, longer lead times, and has resulted in cost volatility. These shortages and delays can be attributed in part to the COVID-19 pandemic and resulting government action, as well as broader macroeconomic conditions, such as labor shortages, rising inflation, rising interest rates, and a recessionary environment and geographical instability, including the ongoing conflict between Russia and Ukraine and rising tensions between China and Taiwan. If these shortages and delays persist into 2023, they could adversely affect the timing of when battery energy storage systems can be delivered and installed, and when (or if) we can begin to generate revenue from those systems. In addition, we have experienced and are experiencing varying levels of volatility in costs of equipment and labor resulting in part from disruptions caused by general global economic conditions, including inflationary pressures and the COVID-19 pandemic.

As the COVID-19 pandemic reaches endemic stages, the future impact of the COVID-19 pandemic on our business, cash flows, liquidity, financial condition and results of operations remains highly dependent on future developments. Given the dynamic nature of these circumstances on our ongoing business, results of operations and overall financial performance, the future impact of COVID-19 and other macroeconomic factors, including the conflict in Ukraine, cannot be reasonably estimated at this time. In the event we are unable to mitigate the impact of delays or price volatility in energy storage systems, raw materials, and freight, it could materially adversely affect our business, prospects, financial condition and results of operations.

DevCo Joint Ventures

From time to time, the Company, through an indirect wholly-owned development subsidiary, has entered into strategic joint ventures with qualified third parties to develop select energy storage power generation projects ("DevCo Projects"), as more fully described above under Note 1 — *Business* in the accompanying notes to the consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K. These projects require significant upfront investment by us and involve a high degree of risk. If a DevCo Project fails to reach completion or is significantly delayed, we could lose all or a portion of our development capital investment. See "We Face Risks Related to our DevCo Business Model" in Part I, Item 1A. "Risk Factors" of this Annual Report on From 10-K for additional information about certain risks related to these DevCo Projects.

Non-GAAP Financial Measures

In addition to financial results determined in accordance with U.S. generally accepted accounting principles ("GAAP"), we use Adjusted EBITDA and non-GAAP gross margin, which are non-GAAP financial measures, for financial and operational decision making and as a means to evaluate our operating performance and prospects, develop internal budgets and financial goals, and to facilitate period-to-period comparisons. Our management believes that these non-GAAP financial measures provide meaningful supplemental information regarding our performance and liquidity by excluding certain expenses and expenditures that may not be indicative of our operating performance, such as stock-based compensation and other non-cash charges, as well as discrete cash charges that are infrequent in nature. We believe that both management and investors benefit from referring to these non-GAAP financial measures in assessing our performance and when planning, forecasting, and analyzing future periods. These non-GAAP financial measures also facilitate management's internal comparisons to our historical performance and liquidity as well as comparisons to our competitors' operating results. We believe these non-GAAP financial measures are useful to investors both because they (1) allow for greater transparency with respect to key metrics used by management in its financial and operational decision making and (2) are used by our institutional investors and the analyst community to help them analyze the health of our business. Adjusted EBITDA and non-GAAP gross margin should be considered in addition to, not as a substitute for, or superior to, other measures of financial performance prepared in accordance with GAAP.

Non-GAAP Gross Margin

We define non-GAAP gross margin as gross margin excluding amortization of capitalized software and impairments related to decommissioning of end-of-life systems.

The following table provides a reconciliation of gross margin (GAAP) to non-GAAP gross margin ($ in millions, except for percentages):

	Years Ended December 31,	
	2022	2021
Revenue	$ 363.0	$ 127.4
Cost of revenue	(329.9)	(126.1)
GAAP Gross Margin	33.1	1.3
GAAP Gross Margin (%)	*9 %*	*1 %*
Adjustments to Gross Margin (1):		
Amortization of capitalized software & developed technology	10.7	5.3
Impairments	3.5	4.6
Non-GAAP Gross Margin	$ 47.3	$ 11.2
Non-GAAP Gross Margin (%)	*13 %*	*9 %*

(1) Historically, management included a separate "Other Adjustments" caption in the table above as part of the adjustments to gross margin. Other Adjustments consisted of certain operating expenses including communication and cloud service expenditures reclassified to cost of revenue. Other Adjustments are no longer in the calculation of Non-GAAP Gross Margin and Non-GAAP Gross Margin %. Amounts reported for 2021 have been revised accordingly. We believe this change reflects a more accurate representation of our business for stakeholders to assess its performance.

Adjusted EBITDA

As discussed above, we believe that Adjusted EBITDA is useful for investors to use in comparing our financial performance with the performance of other companies. Nonetheless, the expenses and other items that we exclude in our calculation of Adjusted EBITDA may differ from the expenses and other items, if any, that other companies may exclude when calculating Adjusted EBITDA.

We calculate Adjusted EBITDA as net loss before depreciation and amortization, including amortization of internally developed software, net interest expense, further adjusted to exclude stock-based compensation and other income and expense items, including transaction and acquisition related charges, the change in fair value of warrants and embedded derivatives, vesting of warrants, loss on extinguishment of debt, litigation settlement and income tax provision or benefit. The expenses and other items that we exclude in our calculation of Adjusted EBITDA may differ from the expenses and other items, if any, that other companies may exclude when calculating Adjusted EBITDA.

The following table provides a reconciliation of Adjusted EBITDA to net loss (in thousands):

	Years Ended December 31,	
	2022	2021
	(in thousands)	
Net loss	$ (124,054)	$ (101,211)
Adjusted to exclude the following:		
Depreciation and amortization expense	48,783	29,098
Interest expense	10,468	17,395
Loss on extinguishment of debt	—	5,064
Stock-based compensation	28,661	13,546
Vesting of warrants	—	9,183
Change in fair value of warrants and embedded derivatives	—	(3,424)
Transaction costs in connection with business combination	6,068	—
Litigation settlement	(727)	—
Benefit from (provision for) income taxes	(15,161)	—
Adjusted EBITDA	$ (45,962)	$ (30,349)

Financial Results and Key Metrics

The following table presents our financial results and our key metrics (in millions, except for percentages and unless otherwise noted):

	Years Ended December 31,	
	2022	2021
	(in millions)	
Financial Results		
Revenue	$ 363.0	$ 127.4
GAAP Gross Margin	$ 33.1	$ 1.3
GAAP Gross Margin (%)	9 %	1 %
Non-GAAP Gross Margin	$ 47.3	$ 11.2
Non-GAAP Gross Margin (%)	13 %	9 %
Net loss	$ (124.1)	$ (101.2)
Adjusted EBITDA	$ (46.0)	$ (30.3)
Key Operating Metrics		
12-Month pipeline (in billions)* (1)	$ 7.1	$ 4.0
Bookings (2)	$ 1,056.9	$ 416.5
Contracted backlog* (3)	$ 969.0	$ 449.0
Contracted storage AUM (in GWh)* (4)	2.5	1.6
Solar monitoring AUM (in GW)* (5)	25.0	**
CARR* (6)	65.3	**

* *at period end*

** *not available*

(1) As described below.

(2) As described below.

(3) Total value of bookings in dollars, as reflected on a specific date. Backlog increases as new contracts are executed (bookings) and decreases as integrated storage systems are delivered and recognized as revenue.

(4) Total GWh of systems in operation or under contract.

(5) Total GW of systems in operation or under contract.

(6) Contracted Annual Recurring Revenue (CARR): Annual run rate for all executed software services contracts including contracts signed in the period for systems that are not yet commissioned or operating.

Pipeline

Pipeline represents the total value (excluding market participation revenue) of uncontracted, potential hardware and software contracts that are currently being pursued by our direct salesforce and channel partners with developers and independent power producers seeking energy optimization services and transfer of energy storage systems that have a reasonable likelihood of execution within 12 months of the end of the relevant period based on project timelines published by such developers and independent power producers. We cannot guarantee that the pipeline will result in meaningful revenue or profitability.

Beginning with the first quarter of 2023, we will no longer report 12-month Pipeline as we believe that contracted backlog is a more efficient metric of near and medium term revenue.

Bookings

Due to the long-term nature of our contracts, bookings are a key metric that allows us to understand and evaluate the growth of our Company and our estimated future revenue related to customer contracts for our energy optimization services and transfer of energy storage systems. Bookings represents the accumulated value at a point in time of contracts that have been executed under both our host customer and partnership sales models.

For host customer sales, bookings represent the expected consideration from energy optimization services contracts, including estimated incentive payments that are earned by the host customer from utility companies in relation to the services provided by us and assigned by the host customer to us. For host customer sales, there are no differences between bookings and remaining performance obligations at any point in time.

For partnership sales, bookings are the sum of the expected consideration to be received from the transfer of hardware and energy optimization services (excluding any potential revenues from market participation). For partnership sales, even though we have secured an executed contract with estimated timing of project delivery and installation from the customer, we do not consider it a contract in accordance with FASB ASU 2014-09 Topic 606, *Revenue from Contracts with Customers* ("ASC 606)", or a remaining performance obligation, until the customer has placed a binding purchase order. A signed customer contract is considered a booking as this indicates the customer has agreed to place a purchase order in the foreseeable future, which typically occurs within three months of contract execution. However, executed customer contracts, without binding purchase orders, are cancellable without penalty by either party.

For partnership sales, once a purchase order has been executed, the booking is considered to be a contract in accordance with ASC 606, and therefore, gives rise to a remaining performance obligation as we have an obligation to transfer hardware and energy optimization services in our partnership agreements. We also have the contractual right to receive consideration for our performance obligations.

The accounting policy and timing of revenue recognition for host customer contracts and partnership arrangements that qualify as contracts with customers under ASC 606, are described within Note 3- *Revenue*, in the accompanying notes to the consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

Components of Our Results of Operations

Revenue

We generate services and other revenue and hardware revenue. Services and other revenue is mainly generated through arrangements with host customers to provide energy optimization services using our proprietary software platform coupled with a dedicated energy storage system owned and controlled by us throughout the term of the contract. Fees charged to customers for energy optimization services generally consist of recurring fixed monthly payments throughout the term of the contract and in some arrangements, an installation and/or upfront fee component. We may also receive incentives from utility companies in relation to the sale of our services. Services and other revenue also includes the sale of project assets.

We generate hardware revenue through partnership arrangements consisting of promises to sell an energy storage system to solar plus storage project developers. Performance obligations are satisfied when the energy storage system along with all ancillary hardware components are delivered. The milestone payments received before the delivery of hardware are treated as deferred revenue. We separately generate services revenue through partnership arrangements by providing energy optimization services after the developer completes the installation of the project.

Cost of Revenue

Cost of services and other revenue includes depreciation of the cost of energy storage systems we own under long-term customer contracts, which includes capitalized fulfillment costs, such as installation services, permitting and other related costs. Cost of services and other revenue and other also includes the costs for the development and constructions of project assets. Cost of revenue may also include any impairment of inventory and energy storage systems, along with system maintenance costs associated with the ongoing services provided to customers. Costs of revenue are recognized as energy optimization and other supporting services are provided to our customers throughout the term of the contract.

Cost of hardware revenue generally includes the cost of the hardware purchased from a manufacturer, shipping, delivery, and other costs required to fulfill our obligation to deliver the energy storage system to the customer location. Cost of hardware revenue may also include any impairment of energy storage systems held in our inventory for sale to our customer. Cost of hardware revenue related to the sale of energy storage systems is recognized when the delivery of the product is completed.

Gross Margin

Our gross margin fluctuates significantly from quarter to quarter. Gross margin, calculated as revenue less costs of revenue, has been, and will continue to be, affected by various factors, including fluctuations in the amount and mix of revenue and the amount and timing of investments to expand our customer base. Over the long term, we hope to increase both our gross margin in absolute dollars and as a percentage of revenue through enhanced operational efficiency and economies of scale.

Operating Expenses

Sales and Marketing

Sales and marketing expense consists of payroll and other related personnel costs, including salaries, stock-based compensation, employee benefits, and travel for our sales and marketing personnel. In addition, sales and marketing expense includes trade show costs, amortization of intangibles and other expenses. We expect our sales and marketing expense to increase in future periods to support the overall growth in our business.

Research and Development

Research and development expense consists primarily of payroll and other related personnel costs for engineers and third parties engaged in the design and development of products, third-party software and technologies, including salaries, bonuses and stock-based compensation expense, project material costs, services and depreciation. We expect research and development expense to increase in future periods to support our growth, including continuing to invest in optimization, accuracy and reliability of our platform and other technology improvements to support and drive efficiency in our operations. These expenses may vary from period to period as a percentage of revenue, depending primarily upon when we choose to make more significant investments.

General and Administrative Expense

General and administrative expense consists of payroll and other related personnel costs, including salaries, stock-based compensation, employee benefits and expenses for executive management, legal, finance and other costs. In addition, general and administrative expense includes fees for professional services and occupancy costs. We expect our general and administrative expense to increase in future periods as we scale up headcount with the growth of our business, and as a result of operating as a public company, including compliance with the rules and regulations of the SEC, legal, audit, additional insurance expenses, investor relations activities, and other administrative and professional services.

Other Income (Expense), Net

Interest Expense

Interest expense consists primarily of interest on our outstanding borrowings under our outstanding notes payable, convertible promissory notes, convertible senior notes, and financing obligations and accretion on our asset retirement obligations.

Loss on Extinguishment of Debt

Loss on extinguishment of debt consists of penalties incurred in relation to the prepayment of our outstanding borrowings under our outstanding notes payable and the write-off of any unamortized debt issuance costs associated with such notes.

Change in Fair Value of Warrants and Embedded Derivatives

Change in fair value of warrants and embedded derivatives is related to the revaluation of our outstanding convertible preferred stock warrant liabilities and embedded derivatives related to the redemption features associated with our convertible notes at each reporting date.

Other Expenses, Net

Other expenses, net consists primarily of income from equity investments and foreign exchange gains or losses.

Results of Operations

Results of Operations for the Year Ended December 31, 2022 and 2021

	Year Ended December 31,			
	2022	2021	$ Change	% Change
	(In thousands, except percentages)			
Revenue				
Services and other revenue	$ 52,143	$ 20,463	$ 31,680	155%
Hardware revenue	310,837	106,908	203,929	191%
Total revenue	362,980	127,371	235,609	185%
Cost of revenue				
Cost of services and other revenue	43,153	28,177	14,976	53%
Cost of hardware revenue	286,735	97,947	188,788	193%
Total cost of revenue	329,888	126,124	203,764	162%
Gross margin	33,092	1,247	31,845	2,554%
Operating expenses				
Sales and marketing	48,882	19,950	28,932	145%
Research and development	38,303	22,723	15,580	69%
General and administrative	77,028	41,648	35,380	85%
Total operating expenses	164,213	84,321	79,892	95%
Loss from operations	(131,121)	(83,074)	(48,047)	58%
Other expense, net				
Interest expense	(10,468)	(17,395)	6,927	(40)%
Loss on extinguishment of debt	—	(5,064)	5,064	(100)%
Change in fair value of warrants and embedded derivatives	—	3,424	(3,424)	(100)%
Other income (expense), net	2,374	898	1,476	164%
Total other expense, net	(8,094)	(18,137)	10,043	(55)%
Loss before benefit from (provision for) income taxes	(139,215)	(101,211)	(38,004)	38%
Benefit from (provision for) income taxes	15,161	—	15,161	*
Net loss	$ (124,054)	$ (101,211)	$ (22,843)	23%

*Percentage is not meaningful

Revenue

Total revenue increased by $235.6 million, or 185%, for the year ended December 31, 2022, as compared to the year ended December 31, 2021. The change was primarily driven by a $203.9 million increase in hardware revenue primarily due to increase in demand for systems related to FTM partnership agreements and the inclusion of AlsoEnergy's revenue in the current period. Services and other revenue increased by $31.7 million compared to the year ended December 31, 2021, primarily due to the inclusion of AlsoEnergy's revenue in the current period.

Cost of Revenue

Cost of revenue increased by $203.8 million, or 162%, for the year ended December 31, 2022, as compared to the year ended December 31, 2021. The change was primarily driven by an increase of cost of hardware revenue of $188.8 million, which was due to the increase in demand for larger capacity systems, as well as an increase of $15.0 million in cost of services and other revenue, primarily related to AlsoEnergy.

Operating Expenses

Sales and Marketing

Sales and marketing expense increased by $28.9 million, or 145%, for the year ended December 31, 2022, as compared to the year ended December 31, 2021. The increase was primarily due to an increase of $11.0 million in personnel related expenses as a result of higher headcount, inclusive of an additional $2.5 million in stock-based compensation expense, an increase of $12.9 million in amortization expense related to intangible assets from the acquisition of AlsoEnergy, an increase of $1.9 million amortization of contract origination costs, and an increase of $3.1 million of professional services and other expenses.

Research and Development

Research and development expense increased by $15.6 million, or 69%, for the year ended December 31, 2022, as compared to the year ended December 31, 2021. The increase was primarily due to an increase of $12.5 million in personnel related expenses as a result of increased headcount, inclusive of an additional $2.3 million in stock-based compensation expense, and an increase of $3.1 million in professional services and other expenses.

General and Administrative

General and administrative expense increased by $35.4 million, or 85%, for the year ended December 31, 2022, as compared to the year ended December 31, 2021. The increase was primarily driven by an increase of $20.8 million in personnel related expenses as a result of higher headcount, inclusive of an additional $10.3 million in stock-based compensation expense, as well as an increase of $14.6 million in professional services, insurance, office, and other expenses.

Other Expense, Net

Interest Expense

Interest expense decreased by $6.9 million, or 40%, for the year ended December 31, 2022, as compared to the year ended December 31, 2021. The decrease was primarily driven by lower interest expense of $6.2 million due the repayment of notes payable during 2021, as discussed in Note 12 — *Notes Payable,* in the accompanying notes to the consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K, lower interest expense of $2.1 million from financing obligations, and net accretion of discount on investments of $0.9 million. The decrease was partially offset by additional $2.2 million in interest expense from the issuance of the 2028 Convertible Notes in November 2021 and other interest of $0.1 million.

Loss on Extinguishment of Debt

Loss on extinguishment of debt decreased by $5.1 million, or 100% for the year ended December 31, 2022, as compared to the year ended December 31, 2021. The decrease was driven by a prior year payment of a $4.0 million penalty on debt extinguishment and the write-off of $1.1 million of unamortized debt issuance costs upon the conversion of our Series D convertible notes in relation to the Merger.

Change in Fair Value of Warrants and Embedded Derivative

The change in fair value of warrants and embedded derivative reflected no activity for the year ended December 31, 2022 (as no warrants and embedded derivatives were outstanding), compared to income of $3.4 million for the year ended December 31, 2021, which resulted from a revaluation gain of warrants and embedded derivatives.

Other Income (Expenses), Net

Other expenses, net increased by $1.5 million, or 164%, for the year ended December 31, 2022, as compared to the year ended December 31, 2021. The net increase was primarily as a result of an increase in interest income from short-term investments.

Income Tax Benefit

During the year ended December 31, 2022, we recorded $15.2 million of income tax benefit, as a result of the partial release of our deferred tax asset valuation due to the acquisition of AlsoEnergy. The Company did not record a provision or benefit for income taxes during the year ended December 31, 2021.

A comparative discussion of our 2021 to 2020 results of operations can be found in Item 7 *"Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations"* included in our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on February 28, 2022.

Liquidity and Capital Resources

Sources of Liquidity

Liquidity describes the ability of a company to generate sufficient cash flows to meet the cash requirements of its business operations, including working capital needs, debt service, acquisitions, contractual obligations and other commitments. We assess liquidity in terms of our cash flows from operations and their sufficiency to fund our operating and investing activities. To meet our payment service obligations, we must have sufficient liquid assets and be able to move funds on a timely basis.

As of December 31, 2022, our principal sources of liquidity were cash, cash equivalents, and short-term investments of $250.0 million, which were held for working capital purposes and for investment growth opportunities. Our marketable securities generally consist of high-grade commercial paper, agency bonds, corporate debt securities, U.S. government agency securities, and treasury bills. We believe that our cash position is sufficient to meet our capital and liquidity requirements for at least the next 12 months from the date of this Form 10-K.

Our business prospects are subject to risks, expenses and uncertainties frequently encountered by companies in the early stages of commercial operations. The attainment of profitable operations is dependent upon future events, including obtaining adequate financing to complete our development activities, obtaining adequate supplier relationships, building our customer base, successfully executing our business and marketing strategy and hiring appropriate personnel. Failure to generate sufficient revenues, achieve planned gross margins and operating profitability, control operating costs, or secure additional funding may require us to modify, delay, or abandon some of our planned future expansion or development, or to otherwise enact operating cost reductions available to management, which could have a material adverse effect on our business, operating results, financial condition.

In the future, we may be required to obtain additional equity or debt financing in order to support our continued capital expenditures and operations. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all. If we are unable to raise additional capital or generate cash flows necessary to expand our operations and invest in new technologies, this could reduce our ability to compete successfully and harm our business, growth and results of operations.

Our long-term liquidity requirements are linked primarily to the continued extension of the Athena platform and supporting applications, including Athena PowerTrack, and the use of our balance sheet to improve the terms and conditions associated with the purchase of energy storage systems from our hardware vendors. While we have plans to potentially expand our geographical footprint beyond our current partnerships and enter into joint ventures, those are not required initiatives to achieve our plans.

Financing Obligations

We have entered into arrangements wherein we finance the cost of energy storage systems via special purpose entities ("SPEs") we establish with outside investors. These SPEs are not consolidated into our financial statements, but are accounted for as equity method investments. The investors provide us upfront payments through the SPEs. Under these arrangements, the payment by the SPE to us is accounted for as a borrowing by recording the proceeds received as a financing obligation. The financing obligation is repaid with the future customer payments and incentives received. A portion of the amounts paid to the SPE is allocated to interest expense using the effective interest rate method. Furthermore, we continue to account for the revenues from customer arrangements and incentives and all associated costs despite such systems being legally sold to the SPEs due to our significant continuing involvement in the operations of the energy storage systems. The total financing obligation as of December 31, 2022 was $79.6 million, of which $15.7 million was classified as a current liability.

Notes Payable

2021 Credit Agreement

In January 2021, we entered into a non-recourse credit agreement to provide a total of $2.7 million towards the financing of certain energy storage systems that we own and operate. The credit agreement has a stated interest of 5.45% and a maturity date of June 2031. We received an advance under the credit agreement of $1.8 million in January 2021. The repayment of advances received under this credit agreement is determined by the lender based on the proceeds generated by us through the operation of the underlying energy storage systems. We had $1.8 million of outstanding borrowings under this credit agreement as of December 31, 2022.

2028 Green Convertible Senior Notes

On November 22, 2021, we sold to Morgan Stanley & Co. LLC, Goldman Sachs & Co. LLC and Barclays Capital Inc, as initial purchasers (the "Initial Purchasers"), and the Initial Purchasers purchased from us, $460.0 million aggregate principal amount of our 0.50% Green Convertible Notes due 2028 (the "2028 Convertible Notes"), pursuant to a purchase agreement dated as of November 17, 2021, by and between us and the Initial Purchasers. The 2028 Convertible Notes will accrue interest payable semi-annually in arrears and will mature on December 1, 2028, unless earlier repurchased, redeemed or converted in accordance with their terms prior to such date. Upon conversion, we may choose to pay or deliver, as the case may be, cash, shares of common stock or a combination of cash and shares of common stock. The 2028 Convertible Notes are redeemable for cash at the Company's option at any time given certain conditions. Refer to Note 13 — *Convertible Promissory Notes*, in the accompanying notes to the consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

On November 17, 2021, in connection with the pricing of the 2028 Convertible Notes, and on November 19, 2021, in connection with the exercise in full by the Initial Purchasers of their option to purchase additional Notes, we entered into capped call transactions with certain of the Initial Purchasers of the 2028 Convertible Notes to minimize the potential dilution to the Company's common stockholders upon conversion of the 2028 Convertible Notes. Our net proceeds from this offering were approximately $445.7 million, after deducting the Initial Purchasers' discounts and commissions and the estimated offering expenses payable by the Company. We used approximately $66.7 million of the net proceeds to pay the cost of the capped call transactions described above. We intend to allocate an amount equivalent to the net proceeds from this offering to finance or refinance, in whole or in part, existing or new eligible green expenditures of Stem, including investments related to creating a more resilient clean energy system, optimized software capabilities for energy systems, and reducing waste through operations.

Cash Flows

The following table summarizes our cash flows for the periods indicated (in thousands):

	Year Ended December 31,	
	2022	**2021**
Net cash used in operating activities	$ (106,030)	$ (101,266)
Net cash used in investing activities	(544,373)	(185,233)
Net cash (used in) provided by financing activities	(9,272)	1,027,095
Effect of exchange rate changes on cash and cash equivalents	(202)	242
Net (decrease) increase in cash and cash equivalents	$ (659,877)	$ 740,838

Operating Activities

During the year ended December 31, 2022, net cash used in operating activities was $106.0 million, primarily resulting from our net loss of $124.1 million, adjusted for non-cash charges of $70.3 million and net cash outflow of $52.3 million from changes in operating assets and liabilities. Non-cash charges primarily consisted of depreciation and amortization of $45.4 million, non-cash interest expense of $1.9 million related to debt issuance costs, stock-based compensation expense of $28.7 million, non-cash lease expense of $2.3 million, accretion of asset retirement obligations of $0.2 million, impairment of energy storage systems of $2.6 million, loss on disposal of property and equipment of $0.3 million, impairment loss of project assets of $0.5 million, provision for accounts receivable allowance of $3.6 million, which were partially offset by an income tax benefit of $15.1 million and net accretion of discount on investments of $0.1 million. The net cash outflow from changes in operating assets and liabilities was primarily driven by an increase in accounts receivable of $155.8 million, an increase in deferred costs with suppliers of $37.1 million, an increase in other assets of $29.4 million, an increase in contract origination costs of $9.6 million, an increase in project assets of $3.7 million, a decrease in lease liabilities, net of $1.6 million, partially offset by a decrease in inventory of $18.6 million, an increase in accounts payable of $53.3 million, an increase in accrued expenses of $62.2 million, and an increase in deferred revenue of $51.0 million.

During the year ended December 31, 2021, net cash used in operating activities was $101.3 million, primarily resulting from our operating loss of $101.2 million, adjusted for non-cash charges of $59.5 million and net cash outflow of $59.5 million from changes in operating assets and liabilities. Non-cash charges primarily consisted of depreciation and amortization of $24.5 million, non-cash interest expense of $9.6 million, which included interest expenses associated with debt issuance costs, stock-based compensation expense of $13.5 million, change in the fair value of warrant liability and embedded derivative of $3.4 million, impairment of energy storage systems of $4.3 million, issuance of warrants for services of $9.2 million, non-cash lease expense of $0.9 million, accretion of asset retirement obligations of $0.2 million, and net amortization of premium on

investments of $0.7 million. The net cash outflow from changes in operating assets and liabilities was primarily driven by an increase in accounts receivable of $48.1 million, an increase in deferred costs with suppliers of $7.5 million, an increase in other assets of $17.2 million, a decrease in deferred revenue of $15.0 million, an increase in inventory of $1.9 million, an increase in contract origination costs of $2.6 million, a decrease in lease liabilities, net of $0.5 million, partially offset by an increase in accounts payable of $16.3 million and accrued expenses and other liabilities of $17.0 million.

Investing Activities

During the year ended December 31, 2022, net cash used in investing activities was $544.4 million, primarily consisting of $533.0 million used for our acquisition of AlsoEnergy, net of cash acquired, $2.6 million used for the purchase of energy systems, $16.8 million in capital expenditures on internally-developed software, and $1.5 million used for the purchase of property and equipment, partially offset by $9.6 million in net proceeds of available-for-sale investments.

During the year ended December 31, 2021, net cash used in investing activities was $185.2 million, primarily consisting of $189.9 million used for the purchase of available-for-sale investments, $3.6 million used for the purchase of energy systems, $5.9 million in capital expenditures on internally-developed software, $1.2 million used for the purchase of equity method investment, and $0.6 million used for the purchase of property plant and equipment, partially offset by $16.0 million in proceeds from the sale of available-for-sale investments.

Financing Activities

During the year ended December 31, 2022, net cash used in financing activities was $9.3 million, primarily consisting of repayment of financing obligations of $10.3 million and payments for taxes related to net share settlement of stock options of $2.3 million, partially offset by proceeds from exercise of stock options of $1.3 million, proceeds from other financing obligations of $1.5 million, and an investment from non-controlling interest of $0.5 million.

During the year ended December 31, 2021, net cash provided by financing activities was $1,027.1 million, primarily consisting of net proceeds from the Merger and PIPE financing of $550.3 million, proceeds from exercise of stock options and warrants of $148.5 million, proceeds from financing obligations of $7.8 million, proceeds from issuance of notes payable of $3.9 million, net proceeds from issuance of convertible promissory notes of $446.8 million, partially offset by purchased capped call options of $66.7 million, the repayment of notes payable of $41.4 million, payments for withholding taxes related to net share settlement of stock options of $12.6 million, and repayment of financing obligations of $9.6 million.

Contractual Obligations and Commitments

The contractual obligations presented in the table below represent our estimates of future payments under fixed contractual obligations and commitments. Changes in our business needs, cancellation provisions and changes in interest rates, as well as action by third parties and other factors, may cause these estimates to change. Therefore, our actual payments in future periods may vary from those presented in the table below. We generally expect to satisfy these commitments with cash on hand and cash provided by operating activities.

The following table summarizes our contractual obligations and commitments as of December 31, 2022 (in thousands).

	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Interest on 2028 convertible notes	$ 13,608	$ 2,300	$ 4,600	$ 4,600	$ 2,108
Operating lease obligations	15,387	3,152	5,119	4,416	2,700
Non-cancelable purchase obligations	3,575	1,446	1,282	847	—
Total	$ 32,570	$ 6,898	$ 11,001	$ 9,863	$ 4,808

See Note 8 — *Leases* and Note 13 — *Convertible Promissory Notes*, in the accompanying notes to the consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K for more details.

We do not consider our financing obligations as contractual obligations, as our repayments of such obligations are required only to the extent payments are collected in relation to the operation of the underlying energy storage systems. The obligation is nonrecourse and there are no contractual commitments to pay specific amounts at any point in time throughout the life of the obligation.

We are not a party to any off-balance sheet arrangements, including guarantee contracts, retained or contingent interests, or unconsolidated variable interest entities that either have, or would reasonably be expected to have, a current or future material effect on our consolidated financial statements.

Critical Accounting Policies and Estimates

Our discussion and analysis of financial condition and results of operations are based upon our consolidated financial statements. Our consolidated financial statements are prepared in accordance with GAAP. The preparation of our consolidated financial statements in accordance with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses. We base our estimates on past experience and other assumptions that we believe are reasonable under the circumstances, and we evaluate these estimates on an ongoing basis. Actual results may differ from those estimates.

Our critical accounting policies are those that materially affect our consolidated financial statements and involve difficult, subjective or complex judgments by management. A thorough understanding of these critical accounting policies is essential when reviewing our consolidated financial statements. We believe that the critical accounting policies listed below involve the most difficult management decisions because they require the use of significant estimates and assumptions as described above.

Our significant accounting policies are described in Note 2 — *Summary of Significant Accounting Policies*, in the accompanying notes to the consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K. We believe that the following critical accounting policies reflect the more significant estimates and assumptions used in the preparation of our consolidated financial statements:

Revenue Recognition

We generate revenue through host customer arrangements, partnership arrangements, and sales of project assets. We apply judgment during the identification of a contract to determine the customer's ability and intent to pay, which is based on a variety of factors, including the customer's historical payment experience or, in the case of a new customer, credit and financial information pertaining to the customer.

For contracts that contain multiple performance obligations, we allocate the transaction price for each contract to each performance obligation based on the relative standalone selling price, or SSP for each performance obligation. We use judgment in determining the SSP for our products and services. We typically assess the SSP for our products and services on an annual basis or when facts and circumstances change. To determine SSP, we maximize the use of observable standalone sales and observable data, where available. In instances where performance obligations do not have observable standalone sales, we utilize available information that may include other observable inputs or use the expected cost-plus margin approach to estimate the price we would charge if the products and services were sold separately. The expected cost-plus margin approach is currently used to determine SSP for each distinct performance obligation for sale of hardware.

In some cases, the total transaction price is determined based on the total consideration specified in the contract, including variable consideration in the form of a performance guaranty payment that represents potential amounts payable to customers. The expected value method is generally used when estimating variable consideration, which typically reduces the total transaction price due to the nature of the performance obligations to which the variable consideration relates. These estimates reflect our historical experience and current contractual requirements which cap the maximum amount that may be paid. The expected value method requires judgment and considers multiple factors that may vary over time depending upon the unique facts and circumstances related to each performance obligation. Depending on the facts and circumstances, a change in variable consideration estimate will either be accounted for at the contract level or using the portfolio method.

Business Combinations

We account for our business combinations using the acquisition method of accounting, which requires, among other things, allocation of the fair value of purchase consideration to the tangible and intangible assets acquired and liabilities assumed at their estimated fair values on the acquisition date. The excess of the fair value of purchase consideration over the values of these identifiable assets and liabilities is recorded as goodwill. When determining the fair value of assets acquired and liabilities assumed, we make estimates and assumptions, especially with respect to intangible assets. Our estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. During the measurement period, not to exceed one year from the date of acquisition, we may record adjustments to the assets acquired and liabilities assumed, with a corresponding offset to goodwill if new information is obtained related to facts and circumstances that existed as of the acquisition date. After the measurement period, any subsequent adjustments are reflected in the consolidated statements of operations. Acquisition costs, such as legal and consulting fees, are expensed as incurred.

Recent Accounting Pronouncements

Information with respect to recent accounting pronouncements may be found in Note 2 — *Summary of Significant Accounting Policies*, in the accompanying notes to the consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk represents the risk of loss that may impact our financial position because of adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of exposure resulting from potential changes in inflation, exchange rates or interest rates. We do not hold financial instruments for trading purposes.

Foreign Currency Exchange Risk

Our expenses are generally denominated in U.S. dollars. However, we have foreign currency risks related to our revenue and operating expenses denominated in Canadian dollars. We have entered into contracts with customers and a limited number of supply contracts with vendors with payments denominated in foreign currencies. We are subject to foreign currency transaction gains or losses on our contracts denominated in foreign currencies. To date, foreign currency transaction gains and losses have not been material to our financial statements.

Unfavorable changes in foreign exchange rates versus the U.S. dollar could increase our product costs, thus reducing our gross profit. We have not engaged in the hedging of foreign currency transactions to date, although we may choose to do so in the future. We do not believe that an immediate 10% increase or decrease in the relative value of the U.S. dollar to other currencies would have a material effect on operating results or financial condition.

Interest Rate Risk

Interest rate risk is the risk that the value or yield of fixed-income investments may decline if interest rates change. Fluctuations in interest rates may impact the level of interest expense recorded on outstanding borrowings. In addition, our convertible promissory notes, 2028 Convertible Notes, notes payable, and financing obligations bear interest at a fixed rate and are not publicly traded. Therefore, fair value of our convertible promissory notes, notes payable, financing obligations and interest expense is not materially affected by changes in the market interest rates. We do not enter into derivative financial instruments, including interest rate swaps, for hedging or speculative purposes.

Credit Risk

We routinely assess the creditworthiness of our customers. We generally have not experienced any material losses related to receivables from individual customers, or groups of customers during the years ended December 31, 2022 and 2021. We do not require collateral. Due to these factors, no additional credit risk beyond amounts provided for collection losses is believed by management to be probable in our accounts receivable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

STEM, INC.

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As of December 31, 2022 and 2021, and for Years Ended December 31, 2022, 2021 and 2020

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Stem, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Stem, Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive loss, stockholders' equity (deficit), and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 16, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

As described in the accompanying Management's Report on Internal Control over Financial Reporting, management excluded from its assessment the internal control over financial reporting at Also Energy Holdings, Inc., which was acquired on February 1, 2022, because the Company is in the process of evaluating the existing controls and procedures of Also Energy Holdings, Inc. and integrating Also Energy Holdings, Inc. into its internal control over financial reporting. Also Energy Holdings, Inc. constitutes 3% of total assets and 16% of revenues of the consolidated financial statement amounts as of and for the year ended December 31, 2022. Accordingly, our audit did not include the internal control over financial reporting at Also Energy Holdings, Inc.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Business Combinations — Trade Names, Customer Relationships and Developed Technology — Refer to Notes 2 and 6 to the financial statements

Critical Audit Matter Description

On February 1, 2022, the Company acquired 100% of the outstanding shares of Also Energy Holdings, Inc. ("AlsoEnergy"). The total consideration to acquire AlsoEnergy was $652.0 million, comprised of $543.1 million in cash, net of a working capital adjustment, and $108.9 million in the form of 8,621,006 shares of the Company's common stock. The Company incurred $6.1 million of transaction costs related to the acquisition. The Company accounted for the acquisition as a business

combination in which the Company determined that AlsoEnergy was a business. The total consideration was allocated to fair values of assets acquired and liabilities assumed, and the Company recognized $545.0 million of goodwill from the acquisition, which represents the excess of the purchase price over the fair value of the net identifiable assets acquired.

Included in the net identifiable assets acquired were trade names, customer relationships, and developed technology, for which the Company measured the fair value as of the acquisition date of $11.3 million, $106.8 million, and $30.1 million, respectively. The fair value of trade names was measured using the relief-from-royalty method, the fair value of customer relationships was measured using the multiple-period excess earnings method under the income approach, and the fair value of developed technology was measured using the relief-from-royalty method of the income approach. The acquired intangible assets will be amortized on a straight-line basis over their respective estimated useful lives.

We identified the fair value measurements of the acquired trade names, customer relationships, and developed technology as a critical audit matter because of the significant estimates and assumptions related to the Company's forecasts of future revenues and selection of the weighted average cost of capital, royalty rates, and estimated revenue growth rates in measuring the fair value of these assets. This required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists, when performing audit procedures to evaluate the reasonableness of the Company's forecasts of future revenues and selection of the weighted average cost of capital, royalty rates, and estimated revenue growth rates used to measure the fair value of the acquired trade names, customer relationships, and developed technology.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the fair value measurements of the acquired trade names, customer relationships, and developed technology included the following, among others:

- We tested the effectiveness of controls over the estimation process supporting the fair value estimates of the acquired trade names, customer relationships, and developed technology, including management's controls over the selection of the weighted average cost of capital, royalty rates, and estimated revenue growth rates used.
- With the assistance of our fair value specialists, we evaluated the reasonableness of the valuation methodology and the weighted average cost of capital and royalty rates used to measure the fair value of the acquired trade names, customer relationships, and developed technology.
- We evaluated the reasonableness of the Company's forecasts of future revenues and estimated revenue growth rates by comparing them to current industry reports, as well as to the historical performance of the acquired business and a similar business segment of the Company.
- We tested the source information underlying the fair value measurements of the acquired trade names, customer relationships, and developed technology and the mathematical accuracy of management's calculations.
- We evaluated the sufficiency of the disclosures related to the fair value measurements of the acquired trade names, customer relationships, and developed technology in the financial statements.

Business – Development subsidiary and strategic joint ventures — Refer to Notes 1 and 2 to the financial statements

Critical Audit Matter Description

In January 2022, the Company formed an indirect wholly-owned development subsidiary ("DevCo") to enter into strategic joint ventures (each a "DevCo JV") as a majority owner, with one or more qualified third parties as the minority owner, for the development of select renewable energy projects ("DevCo Projects"). The Company makes development capital contributions to DevCo Projects to fund project development and recovers those capital contributions plus a fee when the developer takes ownership of the project. The purpose of the DevCo JV is to develop and sell DevCo Projects, and secure Company hardware and software services for those projects.

In accordance with accounting principles generally accepted in the United States of America, the DevCo JVs are determined to be variable interest entities ("VIEs") as they lack sufficient equity to finance their activities without additional financial support, and the Company is deemed to be the primary beneficiary for these VIEs as it has both (1) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance, and (2) the obligation to absorb losses or receive benefits from the VIE that could potentially be significant. Accordingly, the DevCo JVs' operating results, assets and liabilities are consolidated by the Company, with third party minority owners' share presented as noncontrolling interest. The DevCo JVs' net income (loss) are allocated to the owners using the hypothetical liquidation at book value method at the end of each reporting period. As of December 31, 2022, the Company consolidated $9.5 million of DevCo JV net assets.

We identified the Company's accounting for the DevCo JVs as a critical audit matter because of the complexity of the joint venture agreements, and the significant judgment used by management in the determination of (1) whether the DevCo JV is a

VIE, and (2) the owner who would be considered the primary beneficiary of these VIEs in accordance with accounting principles generally accepted in the United States of America. This required a high degree of auditor judgment and an increased extent of effort, including the need to involve professionals with expertise in accounting for VIEs when performing audit procedures to evaluate management's accounting for the DevCo JVs.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the accounting for the DevCo JVs included the following, among others:

- We tested the effectiveness of controls over the technical accounting assessment of DevCo JV operating agreements, including management's review of the significant assumptions.
- We evaluated the reasonableness of management's accounting for the DevCo JVs in accordance with accounting principles generally accepted in the United States by:
  - Obtaining and evaluating the Company's accounting memoranda and other documentation regarding the application of the relevant accounting guidance to the DevCo JVs.
  - Obtaining, reading, and comparing the underlying terms and conditions of the relevant agreements to the Company's accounting memoranda and other documentation.
  - Evaluating the Company's conclusions regarding the accounting treatment applied to the DevCo JVs, with the assistance of professionals with expertise in accounting for VIEs.
- We evaluated the sufficiency of the disclosures related to the accounting for the DevCo JVs in the financial statements.

Revenue – Partnership Arrangements — Refer to Notes 2 and 3 to the financial statements

Critical Audit Matter Description

Partnership arrangements consist of promises to transfer inventory in the form of an energy storage system to a project developer and to separately provide energy optimization services to the ultimate owner of the project after the developer completes the installation of the project. Under partnership arrangements, the Company's customer is the project developer. The Company determined the promise to deliver the inventory as a component of the project for which the customer is responsible to develop is a separate and distinct performance obligation from the promise to provide energy optimization services. The Company allocates revenue between the hardware and energy storage services performance obligations based on the standalone selling price of each performance obligation. The standalone selling price for the hardware is established based on observable pricing. The standalone selling price for the energy optimization services is established using a residual value approach due to the significant variability in the services provided to each individual customer based on the specific requirements of each individual project and the lack of observable standalone sales of such services.

The Company transfers control of the inventory upon delivery and simultaneous transfer of title to the customer. The Company transfers control of its energy optimization services to its customers continuously throughout the term of the contract (a stand-ready obligation), which does not commence until the customer successfully completes the installation of the project. As a result, the time frame between when the Company transfers control of the inventory to the customer upon delivery is generally several months, and can be in excess of one year, before the Company is required to perform any subsequent energy optimization services. Revenue is recognized ratably as control of these services is transferred to its customers based on a time-based output measure of progress of days elapsed over the term of the contract, in an amount that reflects the consideration the Company expects to be entitled to in exchange for its services. For the year ended December 31, 2022, the partnership hardware and service revenue recognized was $280.4 million.

Given management's judgments to determine allocation of revenue between hardware and energy storage services performance obligations based on the standalone selling price of each performance obligation, auditing the judgments and estimates made in allocating revenue involved a high degree of auditor judgment and an increased extent of audit effort.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to partnership hardware and service revenue included the following, among others:

- We tested the effectiveness of the controls relevant to the revenue process.
- For partnership arrangements, we selected a sample of contracts with customers and performed the following procedures:

- Obtained and read the contracts and contract amendments, if any, and tested management's identification of significant terms and conditions.
  - Tested management's identification of distinct performance obligations by evaluating whether the underlying goods, services, or both were highly interdependent and interrelated.
  - Tested the allocation of the transaction price to each distinct performance obligation by comparing the relative standalone selling prices to the selling prices of similar goods or services.
  - Evaluated management's estimate of standalone selling prices for reasonableness.
  - Evaluated the timing of revenue recognition for each performance obligation through obtaining signed proof of delivery documents.
  - Tested the mathematical accuracy of management's calculation of revenue recognized in the financial statements.
- We evaluated the sufficiency of the disclosures related to revenue from Partnership Arrangements in the financial statements.

/s/DELOITTE & TOUCHE LLP

San Francisco, California

February 16, 2023

We have served as the Company's auditor since 2018.

STEM, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share amounts)

	December 31, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	$ 87,903	$ 747,780
Short-term investments	162,074	173,008
Accounts receivable, net of allowances of $3,879 and $91 as of December 31, 2022 and December 31, 2021, respectively	223,219	61,701
Inventory, net	8,374	22,720
Deferred costs with suppliers	43,159	13,744
Other current assets (includes $74 and $213 due from related parties as of December 31, 2022 and December 31, 2021, respectively)	8,026	4,897
Total current assets	532,755	1,023,850
Energy storage systems, net	90,757	106,114
Contract origination costs, net	11,697	8,630
Goodwill	546,649	1,741
Intangible assets, net	162,265	13,966
Operating lease right-of-use assets	12,431	12,998
Other noncurrent assets	65,339	24,531
Total assets	$ 1,421,893	$ 1,191,830
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 83,831	$ 28,273
Accrued liabilities	85,258	25,985
Accrued payroll	12,466	7,453
Financing obligation, current portion	15,720	15,277
Deferred revenue, current portion	64,311	9,158
Other current liabilities (includes $687 and $306 due to related parties as of December 31, 2022 and December 31, 2021, respectively)	5,412	1,821
Total current liabilities	266,998	87,967
Deferred revenue, noncurrent	73,763	28,285
Asset retirement obligation	4,262	4,135
Notes payable, noncurrent	1,603	1,687
Convertible notes, noncurrent	447,909	316,542
Financing obligation, noncurrent	63,867	73,204
Lease liabilities, noncurrent	10,962	12,183
Other liabilities	362	—
Total liabilities	869,726	524,003
Commitments and contingencies (Note 20)		
Stockholders' equity:		
Preferred stock, $0.0001 par value; 1,000,000 shares authorized as of December 31, 2022 and December 31, 2021, respectively; 0 shares issued and outstanding as of December 31, 2022 and December 31, 2021, respectively	—	—
Common stock, $0.0001 par value; 500,000,000 shares authorized as of December 31, 2022 and December 31, 2021; 154,540,197 and 144,671,624 issued and outstanding as of December 31, 2022 and December 31, 2021, respectively	15	14
Additional paid-in capital	1,185,364	1,176,845
Accumulated other comprehensive (loss) income	(1,672)	20
Accumulated deficit	(632,081)	(509,052)
Total Stem's stockholders' equity	551,626	667,827
Non-controlling interests	541	—
Total stockholders' equity	552,167	667,827
Total liabilities and stockholders' equity	$ 1,421,893	$ 1,191,830

The accompanying notes are an integral part of these consolidated financial statements.

STEM, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except share and per share amounts)

	Years Ended December 31,		
	2022	2021	2020
Revenue			
Services and other revenue	$ 52,143	$ 20,463	$ 15,645
Hardware revenue	310,837	106,908	20,662
Total revenue	362,980	127,371	36,307
Cost of revenue			
Cost of services and other revenue	43,153	28,177	21,187
Cost of hardware revenue	286,735	97,947	19,032
Total cost of revenue	329,888	126,124	40,219
Gross margin	33,092	1,247	(3,912)
Operating expenses			
Sales and marketing	48,882	19,950	14,829
Research and development	38,303	22,723	15,941
General and administrative	77,028	41,648	14,705
Total operating expenses	164,213	84,321	45,475
Loss from operations	(131,121)	(83,074)	(49,387)
Other expense, net			
Interest expense	(10,468)	(17,395)	(20,806)
Loss on extinguishment of debt	—	(5,064)	—
Change in fair value of warrants and embedded derivatives	—	3,424	(84,455)
Other income (expense), net	2,374	898	(1,471)
Total other expense, net	(8,094)	(18,137)	(106,732)
Loss before benefit from (provision for) income taxes	(139,215)	(101,211)	(156,119)
Benefit from (provision for) income taxes	15,161	—	(5)
Net loss	$ (124,054)	$ (101,211)	$ (156,124)
Net loss per share attributable to Stem common shareholders, basic and diluted	$ (0.81)	$ (0.96)	$ (4.13)
Weighted-average shares used in computing net loss per share to Stem common shareholders, basic and diluted	153,413,743	105,561,139	40,064,087

The accompanying notes are an integral part of these consolidated financial statements.

STEM, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)

	Years Ended December 31,		
	2022	2021	2020
Net loss	$ (124,054)	$ (101,211)	$ (156,124)
Other comprehensive loss:			
Unrealized loss on available-for-sale securities	(1,507)	(175)	—
Foreign currency translation adjustment	(185)	387	(246)
Total other comprehensive loss	$ (125,746)	$ (100,999)	$ (156,370)

The accompanying notes are an integral part of these consolidated financial statements.

STEM, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(in thousands, except share amounts)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Non-controlling Interests	Total Stockholders' Equity (Deficit)
	Shares	Amount					
Balance as of January 1, 2020	43,189,195	$ 3	$ 234,465	$ 54	$ (259,054)	$ —	$ (24,532)
Effect of exchange transaction (Note 13)	(3,448,648)	—	(10,605)	—	7,337	—	(3,268)
Cancellation of exchange transaction by shareholder	184,520	—	—	—	—	—	—
Recognition of beneficial conversion feature related to convertible notes	—	—	1,629	—	—	—	1,629
Issuance of warrants to purchase common stock	—	—	168	—	—	—	168
Issuance of shares upon exercise of stock options and warrants	277,718	1	421	—	—	—	422
Stock-based compensation	—	—	4,542	—	—	—	4,542
Foreign currency translation adjustments	—	—	—	(246)	—	—	(246)
Net loss	—	—	—	—	(156,124)	—	(156,124)
Balance as of December 31, 2020	40,202,785	4	230,620	(192)	(407,841)	—	(177,409)
Merger and PIPE financing (Note 1)	70,428,326	7	248,137	—	—	—	248,144
Conversion of warrants into common stock upon Merger (Note 14)	2,759,970	—	60,568	—	—	—	60,568
Conversion of convertible notes into common stock (Note 13)	10,921,548	1	77,747	—	—	—	77,748
Exchange of warrants into common stock (Note 14)	4,683,349	1	168,646	—	—	—	168,647
Issuance of common stock warrants for services (Note 14)	—	—	9,183	—	—	—	9,183
Public Warrants exercises (Note 14)	12,638,723	1	312,115	—	—	—	312,116
Issuance of 2028 Convertible Notes, net (Note 13)	—	—	130,979	—	—	—	130,979
Purchase of capped call options (Note 13)	—	—	(66,700)	—	—	—	(66,700)
Stock option exercises, net of statutory tax withholdings	2,667,384	—	(9,574)	—	—	—	(9,574)
Legacy stock warrant exercises (Note 14)	369,539	—	418	—	—	—	418
Stock-based compensation	—	—	14,706	—	—	—	14,706
Unrealized loss on available-for-sale securities	—	—	—	(175)	—	—	(175)
Foreign currency translation gain	—	—	—	387	—	—	387
Net loss	—	—	—	—	(101,211)	—	(101,211)
Balance as of December 31, 2021	144,671,624	14	1,176,845	20	(509,052)	—	667,827
Cumulative-effect adjustment upon adoption of ASU 2020-06 (Note 13)	—	—	(130,979)	—	1,598	—	(129,381)
Cumulative-effect adjustment upon adoption of ASU 2016-13 (Note 2)	—	—	—	—	(573)	—	(573)
Common stock issued upon business combination (Note 6)	8,621,006	1	108,882	—	—	—	108,883
Stock option exercises, net of statutory tax withholdings	1,019,552	—	(1,178)	—	—	—	(1,178)
Issuance of common stock upon release of restricted stock units	206,914	—	—	—	—	—	—
Shares issued for exercise of warrants	21,101	—	150	—	—	—	150
Stock-based compensation	—	—	31,644	—	—	—	31,644
Unrealized loss on available-for-sale securities	—	—	—	(1,507)	—	—	(1,507)
Foreign currency translation adjustments	—	—	—	(185)	—	—	(185)
Contributions from non-controlling interests	—	—	—	—	—	541	541
Net loss	—	—	—	—	(124,054)	—	(124,054)
Balance as of December 31, 2022	154,540,197	$ 15	$ 1,185,364	$ (1,672)	$ (632,081)	$ 541	$ 552,167

The accompanying notes are an integral part of these consolidated financial statements.

STEM, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Years Ended December 31,		
	2022	2021	2020
OPERATING ACTIVITIES			
Net loss	$ (124,054)	$ (101,211)	$ (156,124)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization expense	45,434	24,473	17,736
Non-cash interest expense, including interest expenses associated with debt issuance costs	1,901	9,648	10,044
Stock-based compensation	28,661	13,546	4,542
Change in fair value of warrant liability and embedded derivative	—	(3,424)	84,455
Non-cash lease expense	2,328	896	589
Accretion of asset retirement obligations	243	229	217
Impairment loss of energy storage systems	2,571	4,320	1,395
Loss on disposal of property, plant and equipment	276	—	—
Impairment loss of project assets	502	—	—
Issuance of warrants for services	—	9,183	—
Net (accretion of discount) amortization of premium on investments	(123)	664	—
Income tax benefit from release of valuation allowance	(15,100)	—	—
Provision for accounts receivable allowance	3,590	—	—
Other	3	(50)	(129)
Changes in operating assets and liabilities:			
Accounts receivable	(155,817)	(48,125)	(6,988)
Inventory	18,606	(1,877)	(17,263)
Deferred costs with suppliers	(37,134)	(7,540)	(2,615)
Other assets	(29,420)	(17,243)	(2,714)
Contract origination costs, net	(9,612)	(2,622)	(2,552)
Project assets	(3,711)	—	—
Accounts payable	53,260	16,329	201
Accrued expense and other liabilities	62,210	17,007	4,499
Deferred revenue	51,005	(14,967)	31,682
Operating lease liabilities, net	(1,649)	(502)	(646)
Net cash used in operating activities	(106,030)	(101,266)	(33,671)
INVESTING ACTIVITIES			
Acquisition of AlsoEnergy, net of cash acquired	(533,009)	—	—
Purchase of available-for-sale investments	(220,640)	(189,858)	—
Proceeds from maturities of available-for-sale investments	219,264	—	—
Proceeds from sales of available-for-sale investments	10,930	16,011	—
Purchase of energy storage systems	(2,606)	(3,604)	(6,196)
Capital expenditures on internally-developed software	(16,767)	(5,970)	(5,828)
Purchase of equity method investment	(50)	(1,212)	—
Purchase of property and equipment	(1,495)	(600)	(12)
Net cash used in investing activities	(544,373)	(185,233)	(12,036)
FINANCING ACTIVITIES			
Proceeds from exercise of stock options and warrants	1,276	148,532	422
Payments for taxes related to net share settlement of stock options	(2,302)	(12,622)	—
Net contributions from Merger and PIPE financing, net of transaction costs of $58,061	—	550,322	—
Proceeds from financing obligations	1,519	7,839	16,222
Repayment of financing obligations	(10,306)	(9,587)	(10,689)
Proceeds from issuance of convertible notes, net of issuance costs of $0, $14,299 and $240 for the years ended December 31, 2022, 2021 and 2020, respectively	—	446,827	33,081
Purchase of capped call options	—	(66,700)	—
Proceeds from issuance of notes payable, net of issuance costs of $0, $0 and $1,502 for the years December 31, 2022, 2021 and 2020, respectively	—	3,930	23,498

The accompanying notes are an integral part of these consolidated financial statements.

Investment from non-controlling interests	541	—	—
Repayment of notes payable	—	(41,446)	(22,240)
Net cash (used in) provided by financing activities	(9,272)	1,027,095	40,294
Effect of exchange rate changes on cash and cash equivalents	(202)	242	(534)
Net (decrease) increase in cash and cash equivalents	(659,877)	740,838	(5,947)
Cash and cash equivalents, beginning of year	747,780	6,942	12,889
Cash and cash equivalents, end of period	$ 87,903	$ 747,780	$ 6,942
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Cash paid for interest	$ 6,407	$ 10,188	$ 9,665
Cash paid for income taxes	$ 285	$ —	$ 2
NON-CASH INVESTING AND FINANCING ACTIVITIES			
Change in asset retirement costs and asset retirement obligation	$ 116	$ 231	$ 1,839
Exchange of warrants for common stock	$ —	$ 168,647	$ —
Conversion of warrants upon Merger	$ —	$ 60,568	$ —
Conversion of convertible notes upon Merger	$ —	$ 77,748	$ —
Conversion of accrued interest into outstanding note payable	$ —	$ 337	$ 644
Right-of-use asset obtained in exchange for lease liability	$ 428	$ 13,337	$ —
Settlement of warrant liability into common stock due to exercise	$ —	$ 167,050	$ —
Settlement of warrant liability into common stock due to redemption	$ —	$ 2,121	$ —
Issuance of common stock warrants	$ —	$ —	$ 168
Stock-based compensation capitalized to internal-use software	$ 2,983	$ 1,160	$ —
Purchase of energy storage systems in accounts payable	$ 172	$ —	$ 1,806

The accompanying notes are an integral part of these consolidated financial statements.

1. BUSINESS

Description of the Business

Stem, Inc., together with its consolidated subsidiaries ("Stem," the "Company," "we," "us," or "our"), maintains one of the world's largest digitally connected, intelligent renewable energy networks, providing customers (i) with an energy storage system, sourced from leading, global battery original equipment manufacturers ("OEMs"), that the Company delivers through its partners, including developers, distributors, and engineering, procurement and construction firms, (ii) edge hardware to aid in the collection of site data and the real-time operation and control of the site plus other optional equipment, (iii) ongoing software platform and professional services to operate integrated energy storage, and solar systems, through its Athena® artificial intelligence ("AI") platform ("Athena"), and (iv) solar asset performance monitoring and control, through Athena's PowerTrack application. In addition, in all the markets where the Company helps manage its customers' clean energy assets, the Company has agreements to use the Athena platform to participate in such markets and to share the revenue from such market participation.

The Company delivers its battery hardware and software-enabled services through its Athena platform to its customers. The Company's hardware and recurring software-enabled services mitigate customer energy costs through services such as time-of-use and demand charge management optimization and by aggregating the dispatch of energy through a network of virtual power plants. The resulting network created by the Company's growing customer base increases grid resilience and reliability through the real-time processing of market-based demand signals, energy prices and other factors in connection with the deployment of renewable energy resources to such customers. Additionally, the Company's energy storage solutions support renewable energy generation by alleviating grid intermittency issues, thereby reducing customer dependence on traditional, fossil fuel resources.

The Company's Athena PowerTrack application provides a vertically integrated solution that incorporates on-site power monitoring equipment that aggregates and communicates data to enable remote control of solar generation assets. PowerTrack provides direct access to individual site performance to measure and benchmark expected energy production, maximizing asset value for Stem's customers.

From time to time, the Company, through an indirect wholly-owned development subsidiary ("DevCo") formed in January 2022, will enter into strategic joint ventures (each a "DevCo JV") with qualified third parties for the development of select renewable energy projects ("DevCo Projects"). Using this structure, DevCo forms a new DevCo JV entity as the majority owner, with the developer as the minority owner. The purpose of the DevCo JV is to develop and sell DevCo Projects and secure Company hardware and software services for those projects. In DevCo Projects, the Company makes development capital contributions to fund project development, and recovers those capital contributions plus a fee when the developer takes ownership of the project. The Company will in some cases also elect to make cash advances to hardware suppliers to accelerate project construction timelines given long lead times to secure hardware. This business model is intended to allow the Company to advance development capital to key partners in strategic markets and securing hardware upfront, in order to generate higher-margin software and services and other revenue via exclusive long-term services contracts under the DevCo Projects.

On February 1, 2022, the Company acquired all of the issued and outstanding capital stock of Also Energy Holdings, Inc. ("AlsoEnergy"), which has been consolidated since the date of acquisition. Through AlsoEnergy, the Company provides end-to-end turnkey solutions that monitor and manage renewable energy systems through its PowerTrack software. PowerTrack includes data acquisitions and monitoring, performance modeling, agency reporting, internal reports, work order tickets, and supervisory control and data acquisition ("SCADA") controls. AlsoEnergy has deployed systems at various international locations, but its largest customer bases are in the United States, Germany and Canada. See Note 6 — *Business Combinations*.

The Company operated as Rollins Road Acquisition Company (f/k/a Stem, Inc.) ("Legacy Stem") prior to the Merger (as defined below). Stem, Inc. was incorporated on March 16, 2009 in the State of Delaware and is headquartered in San Francisco, California.

Star Peak Acquisition Corp. Merger

On December 3, 2020, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement") with Star Peak Transition Corp. ("STPK"), an entity that was then listed on the New York Stock Exchange under the trade symbol "STPK", and STPK Merger Sub Corp., a Delaware corporation and wholly-owned subsidiary of STPK ("Merger Sub"), providing for, among other things, and subject to the conditions therein, the combination of the Company and STPK pursuant to the merger of Merger Sub with and into the Company with the Company continuing as the surviving entity (the "Merger").

On April 28, 2021, shareholders of STPK approved the Merger, under which Stem received approximately $550.3 million, net of fees and expenses as follows (in thousands):

	Recapitalization
Cash — STPK trust and working capital cash	$ 383,383
Cash — PIPE (as described below)	225,000
Less: transaction costs and advisory fees paid	(58,061)
Merger and PIPE financing	$ 550,322

Immediately prior to the closing of the Merger, (i) all issued and outstanding shares of Legacy Stem preferred stock, par value $0.00001 per share (the "Legacy Stem Preferred Stock"), were converted into shares of Legacy Stem common stock, par value $0.000001 per share (the "Legacy Stem Common Stock") in accordance with Legacy Stem's amended and restated certificate of incorporation, (ii) all outstanding convertible promissory notes of Legacy Stem (the "Legacy Stem Convertible Notes") were converted into Legacy Stem Preferred Stock in accordance with the terms of the Legacy Stem Convertible Notes and (iii) certain warrants issued by Legacy Stem to purchase Legacy Stem Common Stock and Legacy Stem Preferred Stock (the "Legacy Stem Warrants") were exercised by holders into Legacy Stem Common Stock in accordance with the terms thereof. Upon the consummation of the Merger, each share of Legacy Stem common stock then issued and outstanding was canceled and converted into the right to receive shares of common stock of Stem using an exchange ratio of 4.6432.

In connection with the execution of the Merger Agreement, STPK entered into separate subscription agreements (each, a "Subscription Agreement") with a number of investors (each a "Subscriber"), pursuant to which the Subscribers agreed to purchase, and STPK agreed to sell to the Subscribers, an aggregate of 22,500,000 shares of common stock (the "PIPE Shares"), for a purchase price of $10 per share and an aggregate purchase price of $225.0 million, in a private placement pursuant to the subscription agreements (the "PIPE"). The PIPE investment closed simultaneously with the consummation of the Merger. The Merger was accounted for as a reverse recapitalization in accordance with U.S. generally accepted accounting principles ("GAAP"). Under this method of accounting, STPK was treated as the "acquired" company for financial reporting purposes. Accordingly, for accounting purposes, the Merger was treated as the equivalent of Stem issuing stock for the net assets of STPK, accompanied by a recapitalization. The net liabilities of STPK of $302.2 million, comprised primarily of the warrant liabilities associated with the Public and Private Placement Warrants discussed in Note 14 — *Warrants*, are stated at historical cost, with no goodwill or other intangible assets recorded.

Liquidity

The accompanying consolidated financial statements have been prepared in accordance with GAAP and with the instructions to Form 10-K and Regulation S-X, assuming the Company will continue as a going concern. As of December 31, 2022, the Company had cash and cash equivalents of $87.9 million, short-term investments of $162.1 million, an accumulated deficit of $632.1 million and net working capital of $265.8 million, with $15.7 million of financing obligations coming due within the next 12 months. During the year ended December 31, 2022, the Company incurred a net loss of $124.1 million and had negative cash flows from operating activities of $106.0 million. However, the net proceeds from the Merger of $550.3 million, the proceeds of $145.3 million from the exercise of Public Warrants (as described in Note 14 — *Warrants*), and the net proceeds of $445.7 million from the issuance of the Company's 0.50% Green Convertible Senior Notes due 2028 (the "2028 Convertible Notes") (as described in Note 13 — *Convertible Promissory Notes*) provided the Company with a significant amount of cash proceeds. As discussed in Note 6 — *Business Combinations*, the Company completed the acquisition of 100% of the outstanding shares of AlsoEnergy for an aggregate purchase price of $652.0 million, which consisted of $543.1 million in cash, net of a working capital adjustment for an escrow recovery and $108.9 million in common stock. The Company believes that its cash position is sufficient to meet capital and liquidity requirements for at least the next 12 months after the date that the financial statements are available to be issued.

The Company's business prospects are subject to risks, expenses, and uncertainties frequently encountered by companies in the early stages of commercial operations. The attainment of profitable operations is dependent upon future events, including securing new customers and maintaining current ones, securing and maintaining adequate supplier relationships, building its customer base, successfully executing its business and marketing strategy, obtaining adequate financing to complete the Company's development activities, and hiring and retaining appropriate personnel. Failure to generate sufficient revenues, achieve planned gross margins and operating profitability, control operating costs, or secure additional funding may require the Company to modify, delay or abandon some of its planned future expansion or development, or to otherwise enact operating cost reductions available to management, which could have a material adverse effect on the Company's business, operating results and financial condition.

Supply Chain Constraints and Risk

The Company's industry continues to face shortages and shipping delays affecting the supply of inverters, enclosures, battery modules and associated component parts for inverters and battery energy storage systems available for purchase. These shortages and delays can be attributed in part to the pandemic and resulting government action, as well as broader macroeconomic conditions that may persist once the immediate effects of the pandemic have subsided, and have been exacerbated by the ongoing conflict between Russia and Ukraine. If these shortages and delays persist into 2023, they could adversely affect the timing of when battery energy storage systems can be delivered and installed, and when (or if) the Company can begin to generate revenue from those systems. The Company cannot predict the full effects the pandemic will have on our business, cash flows, liquidity, financial condition and results of operations at this time due to numerous uncertainties. The Company will continue to monitor developments affecting its workforce, its suppliers, its customers and its business operations generally, and will take actions the Company determines are necessary in order to mitigate these.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The Company's consolidated financial statements have been prepared in accordance with GAAP.

Reclassifications

Certain prior year amounts have been reclassified for consistency with the current year presentation. Such reclassifications have no impact on previously reported net loss, stockholders' equity (deficit), or cash flows. For the years ended December 31, 2021 and December 31, 2020, $7.5 million and $2.6 million in net cash outflows were reclassified from Other assets to Deferred costs with suppliers in the consolidated statement of cash flows, respectively. This change had no impact to net cash used in operating activities.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company, its wholly-owned subsidiaries, and consolidated variable interest entities ("VIEs"). The Company presents non-controlling interests within the equity section of its consolidated balance sheets, and the amount of consolidated net loss that is attributable to Stem and the non-controlling interest in its condensed consolidated statements of operations. All intercompany balances and transactions have been eliminated in consolidation.

Variable Interest Entities

The Company forms special purpose entities ("SPEs"), some of which are VIEs, with its investors in the ordinary course of business to facilitate the funding and monetization of its energy storage systems. A legal entity is considered a VIE if it has either a total equity investment that is insufficient to finance its operations without additional subordinated financial support or whose equity holders lack the characteristics of a controlling financial interest. The Company's variable interests arise from contractual, ownership, or other monetary interests in the entity. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests.

The Company consolidates a VIE if it is deemed to be the primary beneficiary. The Company determines it is the primary beneficiary if it has the power to direct the activities that most significantly impact the VIEs' economic performance and has the obligation to absorb losses or has the right to receive benefits of the VIE that could potentially be significant to the VIE. The Company evaluates its relationships with its VIEs on an ongoing basis to determine whether it is the primary beneficiary.

Beginning in January 2022, the Company formed DevCo JVs with the purpose of originating potential battery storage facility projects in specific locations and conducting early-stage planning and development activities. The Company determined that the DevCo JVs are VIEs as they lack sufficient equity to finance their activities without additional financial support. The Company determined that it has both (1) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance, and (2) the obligation to absorb losses or receive benefits from the VIE that could potentially be significant. Accordingly, the Company has determined that it is the primary beneficiary of the DevCo JVs, and as a result, the DevCo JVs' operating results, assets and liabilities are consolidated by the Company, with third party minority owners' share presented as noncontrolling interest. The Company applied the hypothetical liquidation at book value method in allocating recorded net income (loss) to each owner based on the change in the reporting period, of the amount of net assets of the entity to which each owner would be entitled to under the governing contracts in a liquidation scenario.

The following table summarizes the carrying values of the assets and liabilities of the DevCo JVs that are consolidated by the Company as of December 31, 2022 (in thousands):

	December 31, 2022
Assets	
Cash and cash equivalents	$ 6,686
Other current assets	38
Other noncurrent assets	3,208
Total assets	$ 9,932
Liabilities	
Accounts payable	356
Other current liabilities	97
Total liabilities	$ 453

For the year ended December 31, 2022, the Company contributed approximately $7.8 million in capital investments for hardware purchases. The net income from the DevCo JVs during the year ended December 31, 2022 was $1.1 million.

Equity Method Investments

The Company has ownership interests in SPEs which it does not control. Where the Company holds an interest in these SPEs of greater than 20% and has the ability to exercise significant influence, the Company uses the equity method to account for its investments in these SPEs. Under the equity method of accounting, investments are stated at initial cost and are adjusted for subsequent additional investments and the Company's proportionate share of earnings or losses and distributions. Such proportionate share of earnings or losses is included within other expenses, net in the consolidated statements of operations. The Company considers whether its equity method investments are impaired when events or circumstances suggest that the carrying

amount may not be recoverable. An impairment charge is recognized in the consolidated statements of operations for a decline in value that is determined to be other-than-temporary. In determining if and when a decline in the fair value of these investments below their carrying value is other-than-temporary, the Company evaluates the market condition, trends of earnings and cash flows and other key measures of performance and recognizes such loss which is deemed to be other-than-temporary. No such losses have been recognized during the years ended December 31, 2022, 2021, and 2020.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. The Company bases its estimates on historical experience and on various other assumptions believed to be reasonable. Actual results could differ from those estimates and such differences could be material to the financial position and results of operations.

Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to, depreciable life of energy systems; the amortization of acquired intangibles; the amortization of financing obligations; deferred commissions and contract fulfillment costs; the valuation of energy storage systems, internally developed software, and asset retirement obligations; and the fair value of equity instruments, equity-based instruments, debt, warrant liabilities, embedded derivatives, and the fair value of assets acquired and liabilities assumed in a business combination.

Segment Information

Operating segments are defined as components of an entity for which discrete financial information is available that is regularly reviewed by the Chief Operating Decision Maker ("CODM") in deciding how to allocate resources to an individual segment and in assessing performance. The Company's Chief Executive Officer is the CODM. The CODM reviews financial information presented on a consolidated basis for purposes of making operating decisions, allocating resources, and evaluating financial performance. As such, management has determined that the Company operates as one operating segment that is focused exclusively on innovative technology services that transform the way energy is distributed and consumed. The operations acquired as part of the acquisition of AlsoEnergy have been included in the Company's operating segment. Net assets outside of the U.S. were less than 10% of total net assets as of December 31, 2022 and 2021.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity date of three months or less at the date of purchase to be cash equivalents. Cash and cash equivalents are maintained at financial institutions. The Company maintains all cash in a highly liquid form to meet current obligations.

Short-Term Investments

Investments with a maturity date greater than three months that the Company intends to convert to cash or cash equivalents within a year or less are classified as short-term investments in the Company's consolidated balance sheets. Additionally, in accordance with ASC 320, *Investments - Debt Securities*, the Company has classified all short-term investments as available-for-sale securities and changes in fair market value are reported in other comprehensive loss.

The Company utilizes its short-term investments as an alternative form of cash and, if the cash needs arise, could liquidate the investments at any point in time regardless of the contractual maturity of the investments. All of the Company's investments are tradable on an active market and could be sold at fair value at any point in time.

Accounts Receivable, Net

Accounts Receivable are stated at amounts estimated by management to be equal to their net realizable values. Accounts receivable also includes unbilled accounts receivable, which is composed of milestone development activities of noncancellable purchase orders and monthly energy optimization services provided and recognized but not yet invoiced as of the end of the reporting period. The allowance for doubtful accounts is the Company's best estimate of the amount of expected credit losses. The expectation of collectability is based on the Company's review of credit profiles of customers, contractual terms and conditions, current economic trends, and historical payment experience. If events or changes in circumstances indicate that specific receivable balances may be impaired, further consideration is given to the collectability of those balances and an allowance is recorded accordingly. The allowance for doubtful accounts balance was $3.9 million and $0.1 million as of December 31, 2022 and 2021, respectively.

Concentrations of Credit Risk and Other Uncertainties

Financial instruments that potentially subject the Company to concentration of credit risk consist of cash and cash equivalents and accounts receivable. The Company's cash balances are primarily invested in money market funds or on deposit at high credit quality financial institutions in the U.S. The Company's cash and cash equivalents are held at financial institutions where account balances may at times exceed federally insured limits. Management believes the Company is not exposed to significant credit risk due to the financial strength of the depository institution in which the cash is held. The Company has no financial instruments with off-balance sheet risk of loss.

At times, the Company may be subject to a concentration of credit risk in relation to certain customers due to the purchase of large energy storage systems made by such customers. The Company routinely assesses the creditworthiness of its customers. The Company has not experienced any material losses related to receivables from individual customers, or groups of customers during the years ended December 31, 2022, 2021 and 2020. The Company does not require collateral. Due to these factors, no additional credit risk beyond amounts provided for collection losses is believed by management to be probable in the Company's accounts receivable.

Significant Customers

A significant customer represents 10% or more of the Company's total revenue or accounts receivable, net balance at each reporting date. For each significant customer, revenue as a percentage of total revenue and accounts receivable as a percentage of total accounts receivable are as follows:

	Accounts Receivable December 31,		Revenue Year Ended December 31,		
	2022	2021	2022	2021	2020
Customers:					
Customer A	*	23 %	*	11 %	*
Customer B	*	15 %	*	10 %	12 %
Customer C	*	13 %	*	10 %	25 %
Customer D	54 %	*	46 %	*	*
Customer E	16 %	*	10 %	*	*
Customer F	11 %	*	*	*	*

*Total less than 10% for the respective period

There are inherent risks whenever a large percentage of total revenue is concentrated in a limited number of customers. Should a significant customer: terminate or fail to renew its contracts with the Company, in whole or in part, for any reason, or experience significant financial or operating difficulties, it could have a material adverse effect on the Company's financial condition and results of operations. In general, a customer that makes up a significant portion of revenues in one period, may not make up a significant portion in subsequent periods.

Prepaid warranty

Prepaid warranties are cash advances to suppliers for warranties on batteries. Such prepayments are amortized over five to fifteen years, based on the warranty period, starting when the battery becomes operational.

Inventory

Inventory consists of batteries, hardware and equipment either in-process at the Company's OEM suppliers or as a finished product at the Company's warehouse, which are sold and delivered directly to customers under the Company's partnership arrangements as individual assets or assembled systems. Battery inventory is stated at lower of cost or net realizable value with cost being determined by the specific identification method. Solar hardware and equipment cost is determined by the first-in, first-out (FIFO) method. The Company periodically reviews its inventory for potentially slow-moving or obsolete items and writes down specific items in inventory to net realizable value based on its assessment of market conditions.

Deferred Costs with Suppliers

Deferred costs with suppliers are payments to suppliers for materials that have not been delivered to the Company and are recognized upon receipt of an invoice from the supplier.

Energy Storage Systems, Net

The Company sells energy optimization services to host customers through the use of energy storage systems installed at customer locations. The Company determined that it does not transfer control of these energy storage systems to the customer, which are operated and controlled via the Company's proprietary software platform; therefore, these energy storage systems do not qualify as a leased asset. The energy storage systems are stated at cost, less accumulated depreciation and impairment (as applicable).

Energy storage systems, net is comprised of equipment costs, which include components such as batteries, inverters, and other electrical equipment, and associated design, installation, and interconnection costs required to begin providing the energy optimization services to customers.

Depreciation of the energy storage systems is a component of cost of revenues within the consolidated statements of operations and is calculated using the straight-line method over the estimated useful lives of the energy storage systems, or 10 years, once the respective energy storage systems have been installed and interconnected to the power grid, the Company has received permission to operate, and the Company has begun to provide energy optimization services to the customer (i.e., energy storage system is live). Repairs and maintenance costs are expensed as incurred. Impairment charges related to energy storage system that were determined to no longer be recoverable totaled $2.6 million, $4.3 million and $1.4 million for the years ended December 31, 2022, 2021, and 2020, respectively.

Project Assets

Project assets primarily consist of costs related to battery backup projects in various stages of development that are capitalized prior to the completion of the sale of the projects, including projects that may have begun commercial operation and are actively marketed and intended to be sold. These project related costs include costs for development and construction of a system. Development costs may include legal, consulting, permitting, transmission upgrade, interconnection, and other similar costs. The Company would typically classify project assets as noncurrent due to the nature of projects (as long-lived assets) and the time required to complete all activities to develop, construct, and sell projects, which is typically longer than 12 months. Once the Company enters into a definitive sales agreement, the Company will classify project assets as current until the sale is completed and the revenue on the sale has been recognized. The Company presents all sales and expenditures related to the development and construction of project assets, whether fully or partially owned, as a component of cash flows from operating activities.

The Company reviews project assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. It considers a project commercially viable or recoverable if it is anticipated to be sold for a profit once it is either fully developed or fully constructed. It considers a partially developed or partially constructed project commercially viable or recoverable if the anticipated selling price is higher than the carrying value of the related project assets. The Company examines a number of factors to determine if the project is expected to be recoverable, including whether there are any changes in environmental, permitting, market pricing, regulatory, or other conditions that may impact the project. Such changes could cause the costs of the project to increase or the selling price of the project to decrease. If a project is not considered recoverable, we impair the respective project assets and adjust the carrying value to the estimated fair value, with the resulting impairment recorded within "general and administrative" expense in the consolidated statements of operations. The Company recognized $0.5 million in project asset impairments for the year ended December 31, 2022.

Contract Origination Costs, Net

Contract origination costs, net is stated at gross contract origination costs less accumulated amortization. Contract origination costs consists of sales commissions earned by the Company's sales team, as well as related payroll taxes and other relevant fringe benefits that are direct, incremental, and recoverable costs of obtaining a contract with a customer. As a result, these amounts have been capitalized on the consolidated balance sheets. The Company deferred incremental costs of obtaining a contract of $9.6 million and $3.0 million during the years ended December 31, 2022 and 2021, respectively.

Contract origination costs are amortized over the expected period of benefit. The period of benefit is estimated by considering factors such as the timing of fulfillment of performance obligations, historical customer attrition rates, the useful life of the Company's technology, and the impact of competition in its industry. Amortization of contract costs were $6.3 million, $3.9 million and $0.8 million for the years ended December 31, 2022, 2021, and 2020, respectively, and are included in sales and marketing expense in the accompanying consolidated statements of operations. The Company also recorded $0.5 million and $0.1 million in impairment losses in sales and marketing expense in the statements of operations related to the contract origination costs that were determined to no longer be recoverable during the years ended December 31, 2021 and 2020, respectively. No impairment losses were recorded during the year ended December 31, 2022.

Business Combinations

The Company accounts for business acquisitions under ASC 805, *Business Combinations*. The total purchase consideration for an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities assumed at the acquisition date. Costs that are directly attributable to the acquisition are expensed as incurred. Identifiable assets (including intangible assets), liabilities assumed (including contingent liabilities) and noncontrolling interests in an acquisition are measured initially at their fair values at the acquisition date. The Company recognizes goodwill if the fair value of the total purchase consideration and any noncontrolling interests is in excess of the net fair value of the identifiable assets acquired and the liabilities assumed. The Company recognizes a bargain purchase gain within other income (expense), net, on the consolidated statement of operations if the net fair value of the identifiable assets acquired and the liabilities assumed is in excess of the fair value of the total purchase consideration and any noncontrolling interests. The Company includes the results of operations of the acquired business in the consolidated financial statements beginning on the acquisition date.

Goodwill

Goodwill amounts are not amortized, but rather tested for impairment at least annually or more often if circumstances indicate that the carrying value may not be recoverable. Goodwill is considered impaired if the carrying value of the reporting unit exceeds its fair value. We have one reporting unit and as a result, goodwill has been assigned to the single reporting unit. We conducted our annual impairment test of goodwill in the fourth quarter of fiscal year 2022 and determined that no adjustment to the carrying value of goodwill was required.

Intangible Assets

Internal-use software

The Company capitalizes costs incurred in the development of internal-use software during the application development stage. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Capitalized internal-use software is amortized on a straight-line basis over the estimated useful life of the software once it is ready for its intended use. The estimated useful life of costs capitalized is generally five years. The Company recorded amortization for internal-use software of $6.8 million, $5.0 million and $4.0 million in cost of revenues in the accompanying consolidated statements of operations for the years ended December 31, 2022, 2021, and 2020, respectively.

Finite-lived Intangible Assets

Finite-lived intangible assets consist of identifiable intangible assets acquired in business combinations, such as customer relationships, developed technology and trade names. Finite-lived intangible assets acquired in business combinations are initially recorded at fair value and subsequently presented net of accumulated amortization. These intangible assets are amortized on a straight-line basis over their estimated useful lives. Amortization expense for intangible assets was $16.8 million for the year ended December 31, 2022 and was not material for the years ended December 31, 2021, and 2020, respectively.

Impairment of Long-Lived Assets

The Company reviews its long-lived assets, which primarily consist of energy storage systems, right-of-use assets, and finite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable or that the useful life is shorter than originally estimated. Recoverability of assets is measured by comparing the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset over its remaining useful life.

If such assets are impaired, the impairment recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. If the useful life is shorter than originally estimated, the Company depreciates or amortizes the remaining carrying value over the revised shorter useful life. Assets to be disposed of by sale are reflected at the lower of their carrying amount or fair value less cost to sell.

Leases

The Company determines if an arrangement is or contains a lease at inception by assessing whether the arrangement contains an identified asset and whether it has the right to control the identified asset. Right-of-use ("ROU") assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. The classification of the Company's leases as operating or finance leases along with the initial measurement and recognition of the associated ROU assets and lease liabilities is performed at the lease commencement date. The measurement of ROU assets and lease liabilities is based on the present value of future lease payments over the lease

term. The ROU asset also includes the effect of any lease payments made prior to or on lease commencement and excludes lease incentives and initial direct costs incurred, as applicable.

As the implicit rate in the Company's leases is generally unknown, the Company uses its incremental borrowing rate based on the information available at the lease commencement date in determining the present value of future lease payments. The Company considers its credit risk, term of the lease, total lease payments and adjusts for the impacts of collateral, as necessary, when calculating its incremental borrowing rates. The lease terms may include options to extend or terminate the lease when it is reasonably certain the Company will exercise any such options. Rent expense for the Company's operating leases is recognized on a straight-line basis over the lease term. Variable lease payments are recorded as an expense in the period incurred.

The Company has elected to not separate lease and non-lease components for any leases within its existing classes of assets and, as a result, accounts for any lease and non-lease components as a single lease component. The Company has also elected to not apply the recognition requirement to any leases within its existing classes of assets with a term of 12 months or less.

Convertible Preferred Stock Warrant Liabilities

The Company evaluates whether its warrants for shares of convertible redeemable preferred stock are freestanding financial instruments that obligate the Company to redeem the underlying preferred stock at some point in the future and determined that each of its outstanding warrants for preferred stock are liability classified. The warrants are subject to re-measurement at each balance sheet date, and any change in fair value is recognized in the change in fair value of warrants and embedded derivatives in the consolidated statements of operations.

As discussed in Note 14 — *Warrants*, upon effectiveness of the Merger, substantially all of the outstanding convertible preferred stock warrants were converted into shares of common stock of Stem. As such, the associated warrant liability was reclassified to additional paid-in-capital upon the Merger and was no longer an outstanding Level 3 financial instrument as of December 31, 2022.

Common Stock Warrants

The Company evaluates common stock warrants under ASC 815-40, *Derivatives and Hedging—Contracts in Entity's Own Equity.* The Company assesses whether common stock warrants are freestanding financial instruments and whether they meet the criteria to be classified in stockholders' equity, or classified as a liability. Where common stock warrants do not meet the conditions to be classified in equity, the Company assesses whether they meet the definition of a liability under ASC 815. Common stock warrants that meet the definition of a liability are recognized on the balance sheet at fair value. Subsequent changes in their respective fair values are recognized in the consolidated statement of operations at each reporting date.

As indicated in Note 14 — *Warrants*, as part of STPK's initial public offering, the Company issued Public Warrants and Private Warrants, which upon issuance met the criteria for liability classification under ASC 815. As of December 31, 2022, no Public or Private warrants are outstanding.

Asset Retirement Obligations

The Company recognizes a liability for the fair value of asset retirement obligations ("ARO") associated with its energy storage systems in the period in which there is a legal obligation associated with the retirement of such assets and the amount can be reasonably estimated. The associated asset retirement costs are capitalized as part of the carrying amount of the energy storage systems and depreciated over the asset's remaining useful life. This liability includes costs related to the removal of its energy storage systems at the conclusion of each respective customer contract. Subsequent to initial measurement, the asset retirement liability is accreted each period and such accretion is recognized as an expense in the consolidated statements of operations. If there are changes in the estimated amount or timing of cash flows, a revision is recorded to both the asset retirement obligation and the asset retirement capitalized cost.

Financing Obligations

The Company has formed various SPEs to finance the development and construction of its energy storage systems. These SPEs, which are structured as limited liability companies, obtain financing in the form of large upfront payments from outside investors and purchase energy storage systems from the Company under master purchase agreements. The Company accounts for the large upfront payments received from the fund investor as a borrowing by recording the proceeds received as a financing obligation, which will be repaid through host customer payments and incentives received from the utilities that will be received by the investor.

The financing obligation is non-recourse once the associated energy storage systems have been placed in-service and the associated customer arrangements have been assigned to the SPE. However, the Company is responsible for any warranties, performance guarantees, accounting, performance reporting, and all other costs associated with the operation of the energy storage systems. Despite such energy storage systems being legally sold to the SPEs, the Company recognizes host customer payments and incentives as revenue during the period as discussed in Note 3 — *Revenue*. The amounts received by the fund investor from customer payments and incentives are recognized as interest using the effective interest method, and the balance is applied to reduce the financing obligation. The effective interest rate is the interest rate that equates the present value of the cash amounts to be received by a fund investor in relation to the underlying Projects with the present value of the cash amounts paid by the investor to the Company, adjusted for any payments made by the Company.

Fair Value of Financial Instruments

Assets and liabilities recorded at fair value in the consolidated financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. The fair value of the Company's financial assets and liabilities reflects management's estimate of amounts that the Company would have received in connection with the sale of the assets or paid in connection with the transfer of the liabilities in an orderly transaction between market participants at the measurement date. In connection with measuring the fair value of its assets and liabilities, the Company seeks to maximize the use of observable inputs (market data obtained from independent sources) and to minimize the use of unobservable inputs (internal assumptions about how market participants would price assets and liabilities).

Hierarchical levels which are directly related to the amount of subjectivity associated with the inputs to the valuation of these assets or liabilities are as follows:

Level 1 — Unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access as of the measurement date.

Level 2 — Inputs other than quoted prices included within Level 1 that are directly observable for the asset or liability or indirectly observable through corroboration with observable market data.

Level 3 — Unobservable inputs for the asset or liability only used when there is little, if any, market activity for the asset or liability at the measurement date.

This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to their fair value measurement. The Company's assessment of the significance of a specific input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability.

Financial assets and liabilities held by the Company measured at fair value on a recurring basis as of December 31, 2022 and 2021, include cash and cash equivalents, short-term investments, convertible notes, warrant liabilities and embedded derivatives which are bifurcated from the host financial instrument.

Revenue Recognition

Revenues are recognized when control of the promised goods or services are transferred to the Company's customers in an amount that reflects the consideration that is expected to be received in exchange for those goods or services. The Company generates all of its revenues from contracts with its customers. The Company recognizes revenue through arrangements with customers, host customer arrangements, partnership arrangements, and sale of project assets as described below.

Host Customer Arrangements

Host customer contracts are generally entered into with commercial entities that have traditionally relied on power supplied directly from the grid. Host customer arrangements consist of a promise to provide energy optimization services through the Company's proprietary software platform coupled with a dedicated energy storage system owned and controlled by the Company throughout the term of the contract. The host customer does not obtain legal title to, or ownership of the dedicated energy storage system at any point in time. The host customer is the end consumer of the energy that directly benefits from the energy optimization services provided by the Company. The term for the Company's contracts with host customers generally ranges from 5 to 10 years, which may include certain renewal options to extend the initial contract term or certain termination options to reduce the initial contract term.

Although the Company installs an energy storage system at the host customer site in order to provide the energy optimization services, the Company directs how and for what purpose the asset is used through the operation of its software platform and, as such, retains control of the energy storage system; therefore, the contract does not contain a lease. The Company determines the various energy optimization services provided throughout the term of the contract, which may include services such as remote monitoring, performance reporting, preventative maintenance and other ancillary services necessary for the safe and reliable operation of the energy storage system, are part of a combined output of energy optimization services and the Company provides a single distinct combined performance obligation representing a series of distinct days of services.

The Company determines the transaction price at the outset of the arrangement, primarily based on the contractual payment terms dictated by the contract with the customer. Fees charged to customers for energy optimization services generally consist of recurring fixed monthly payments throughout the term of the contract. In certain arrangements, the transaction price may include incentive payments that are earned by the host customer from utility companies in relation to the services provided by the Company. Under such arrangements, the rights to the incentive payments are assigned by the host customer to the Company. These incentives may be in the form of fixed upfront payments, variable monthly payments, or annual performance-based payments over the first 5 years of the customer contract term. Incentive payments may be contingent on approval from utility companies or actual future performance of the energy storage system.

Substantially all of the Company’s arrangements provide customers the unilateral ability to terminate for convenience prior to the conclusion of the stated contractual term or the contractual term is shorter than the estimated benefit period, which the Company has determined to be 10 years based on the estimated useful life of the underlying energy storage systems and the period over which the customer can benefit from the energy optimization services utilizing such energy storage systems. In these instances, the Company determined that upfront incentive payments received from its customers represent a material right that is, in effect, an advance payment for future energy optimization services to be recognized throughout the estimated benefit period. In contracts where the customer does not have the unilateral ability to terminate for convenience without a penalty during the estimated benefit period, the Company determined the upfront incentive payments do not represent a material right for services provided beyond the initial contractual period and are therefore a component of the initial transaction price. The Company revisits its estimate of the benefit period each reporting period. The Company’s contracts with host customers do not contain a significant financing component.

The Company transfers control of its energy optimization services to its customers continuously throughout the term of the contract (a stand-ready obligation) and revenue is recognized ratably as control of these services is transferred to its customers, in an amount that reflects the consideration the Company expects to be contractually entitled to in exchange for its services. Monthly incentive payments based on the performance of the energy storage system are allocated to the distinct month in which they are earned because the terms of the payments relate specifically to the outcome from transferring the distinct time increment (month) of service and because such amounts reflect the fees to which the Company expects to be entitled for providing energy optimization services each period, consistent with the allocation objective. Annual variable performance-based payments are estimated at the inception in the transaction price using the expected value method, which takes into consideration historical experience, current contractual requirements, specific known market events and forecasted energy storage system performance patterns, and the Company recognizes such payments ratably using a time-based measure of progress of days elapsed over the term of the contract to the extent that it is probable that a significant reversal of the cumulative revenue recognized will not occur in a future period. At the end of each reporting period, the Company reassesses its estimate of the transaction price. The Company does not begin recognition of revenue until the energy storage system is live (i.e., provision of energy optimization services has commenced) or, as it relates to incentive payments, when approval has been received from the utility company, if later.

Partnership Arrangements

Partnership arrangements consist of promises to transfer inventory in the form of an energy storage system to a “solar plus storage” project developer and separately provide energy optimization services as described previously to the ultimate owner of the project after the developer completes the installation of the project. Under partnership arrangements, the Company’s customer is the solar plus storage project developer. The customer obtains legal title to along with ownership and control of the inventory upon delivery and the customer is responsible for the installation of the project. Once installation of the project is complete, the owner of the solar plus storage project provides energy to the end consumer through a separate contractual arrangement directly with the end consumer. The term for the Company’s contracts with customers under partnership arrangements generally ranges from 10 to 20 years.

The Company determined the promise to deliver the inventory as a component of the solar plus storage project for which the customer is responsible to develop is a separate and distinct performance obligation from the promise to provide energy optimization services.

The Company determines the transaction price at the outset of the arrangement, primarily based on the contractual payment terms dictated by the contract with the customer. Fees charged for the sale of inventory generally consist of fixed fees payable upon or shortly after successful delivery to the customer. For some customers, the contractual payment terms are based on milestone dates of development activities, such as the date customers accept, acquire, or develop project assets or the date customers install or commission hardware on project assets. Such milestone dates may result in unbilled accounts receivable for noncancellable purchase orders when control of hardware is transferred to the customer and Company has legal right to consideration prior to the milestone date of development activities. For certain customers, the Company also guarantees the value of hardware will not decline for a certain period of time, usually six months to one year. The Company accounts for such contractual payments terms and guarantees as variable consideration at each measurement date at its most likely amount to the extent that it is probable that a significant reversal of cumulative revenue recognized will not occur. Fees charged to customers for energy optimization services consist of recurring fixed monthly payments throughout the term of the contract. The Company is responsible for designing, procuring, delivering and ensuring the proper components are provided in accordance with the requirements of the contract. Although the inventory is purchased by the Company from a third-party manufacturer, the Company determined it obtains control of the inventory prior to delivery to the customer and is the principal in the arrangement. The Company is fully responsible for responding to and correcting any customer issues related to the delivery of the inventory. The Company holds title and assumes all risks of loss associated with the inventory until the customer accepts the inventory. The Company is primarily responsible for fulfilling the delivery of the inventory to the customer, assumes substantial inventory risks and has discretion in the pricing charged to the customer. The Company has not entered into any partnership arrangements where it is not the principal in the transaction.

The Company allocates revenue between the hardware and energy storage services performance obligations based on the standalone selling price of each performance obligation. The standalone selling price for the hardware is established based on observable pricing. The standalone selling price for the energy optimization services is established using a residual value approach due to the significant variability in the services provided to each individual customer based on the specific requirements of each individual project and the lack of observable standalone sales of such services. The Company’s partnership arrangements do not contain a significant financing component.

The Company transfers control of the inventory upon delivery and simultaneous transfer of title to the customer. The Company transfers control of its energy optimization services to its customers continuously throughout the term of the contract (a stand-ready obligation), which does not commence until the customer successfully completes the installation of the project. As a result, the time frame between when the Company transfers control of the inventory to the customer upon delivery is generally several months, and can be in excess of one year, before the Company is required to perform any subsequent energy optimization services. Revenue is recognized ratably as control of these services is transferred to its customers based on a time-based output measure of progress of days elapsed over the term of the contract, in an amount that reflects the consideration the Company expects to be entitled to in exchange for its services.

In some partnership arrangements, the Company charges shipping fees for the inventory. The Company accounts for shipping as a fulfillment activity, since control transfers to the customer after the shipping is complete and includes such amounts within cost of revenue.

Sale of Project Assets

For sales of project assets in which the Company transfers 100% of the membership interest in project assets to a customer, the Company recognizes all of the revenue for the consideration received at a point in time when the membership interest was transferred to the customer, which typically occurs when the Company delivered the membership interest assignment agreement to the customer. The transaction price of contract arrangements is comprised of both fixed and variable amounts. Variable consideration is estimated at each measurement date at its most likely amount to the extent that it is probable that a significant reversal of cumulative revenue recognized will not occur and true-ups are applied prospectively as such estimates change. Changes in estimates for sales of project assets occur when the actual development expenses vary from estimates made at the time the membership interests transferred to the customer. The cumulative effect of revisions to transaction prices are recorded in the period in which the revisions to estimates are identified and the amounts can be reasonably estimated. Variable consideration related to the sale of project assets are generally resolved within 60 days of sale of project assets and are currently not material to the Company’s financial statements.

Cost of Revenue

Cost of Hardware Revenue

Cost of revenue related to the sale of hardware includes the cost of the hardware sold to project developers, which generally includes the cost to purchase the hardware from a manufacturer, shipping, and other costs required to fulfill the Company’s obligation to deliver the hardware to the customer location. Cost of revenue may also include any impairment of hardware held in inventory for sale to a customer. Cost of revenue related to the sale of hardware is recognized when the delivery of the hardware is completed.

Cost of Service and Other Revenue

Cost of revenue related to energy optimization services includes depreciation of the cost of energy storage systems associated with long-term host customer contracts, which includes capitalized fulfillment costs, such as installation services, permitting and other related costs. Cost of services and other revenue and other also includes the costs for the development and constructions of project assets. Cost of revenue may also include any impairment of energy storage systems along with energy storage system maintenance costs associated with the ongoing services provided to customers and other amounts not qualifying for capitalization pursuant to the Company’s internal use software capitalization policy. Cost of revenue is recognized as the energy optimization and other supporting services are provided to the Company’s customers throughout the term of the contract.

Sales and Marketing

Sales and marketing expense consists primarily of payroll and other related personnel costs, including stock-based compensation, employee benefits, and travel for the Company’s sales & marketing department. These costs are recognized in the period incurred. Advertising expenses for the years ended December 31, 2022, 2021, and 2020 were not material.

Research and Development

Research and development expense consists primarily of payroll and other related personnel costs for engineers and third parties engaged in the design and development of products, third-party software, and technologies, including salaries, bonus, and stock-based compensation expense, project material costs, services, and depreciation. The Company expenses research and development costs as they are incurred.

General and Administrative

General and administrative expense consists of payroll and other related personnel costs, including salaries, bonus, and stock-based compensation for executive management, legal, finance, and others. In addition, general and administrative expense includes fees for professional services and occupancy costs.

Stock-Based Compensation

The Company recognizes stock-based compensation expense related to employees over the requisite service period based on the grant-date fair value of the awards. The fair value of options granted is estimated using the Black-Scholes option valuation model. The Company recognizes the grant-date fair value of an award as compensation expense on a straight-line basis over the requisite service period, which typically corresponds to the vesting period for the award. The Company elects to account for forfeitures as they occur and, upon forfeiture of an award prior to vesting, the Company reverses any previously recognized compensation expense related to that award.

Income Taxes

The Company uses the asset and liability method of accounting for income taxes based on ASC 740, *Accounting for Income Taxes*. Under the asset and liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between financial statement carrying amounts and the tax basis of existing assets and liabilities. The Company records a valuation allowance to reduce tax assets to an amount for which realization is more likely than not. There are certain charges that are not deductible for tax purposes.

In evaluating the ability to recover its deferred income tax assets, the Company considers all available positive and negative evidence, including its operating results, ongoing tax planning, and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis. In the event the Company determines that it would be able to realize its deferred income tax assets in the future in excess of their net recorded amount, it would make an adjustment to the valuation allowance that would reduce the provision for income taxes. Conversely, in the event that all or part of the net deferred tax assets are determined not

to be realizable in the future, an adjustment to the valuation allowance would be charged to earnings in the period such determination is made.

The Company recognizes the tax benefit from uncertain tax positions in accordance with GAAP, which prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of uncertain tax positions taken or expected to be taken in the Company's tax return. No liability related to uncertain tax positions has been recognized in the financial statements.

The Company includes interest and penalties for uncertain tax positions in the financial statements as a component of income tax expense. No accrual has been deemed necessary as of December 31, 2022 and 2021.

Foreign Currency Translation

The Company's foreign subsidiaries financial position and results of operations are measured using the local currency as the functional currency. The functional currency is the currency of the primary economic environment in which an entity's operations are conducted. Assets and liabilities of foreign subsidiaries are translated at exchange rates in effect as of the balance sheet date. Revenues and expenses are translated at average exchange rates in effect during the year. Translation adjustments are recorded within accumulated other comprehensive loss, a separate component of stockholders' equity.

Net Loss Per Share Attributable to Common Stockholders

Basic net loss per share attributable to common stockholders is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding for the period, without consideration for potential dilutive securities. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted- average number of common shares and common share equivalents of potentially dilutive securities outstanding for the period. For purposes of the diluted net loss per share calculation, convertible notes, warrants, restricted stock units ("RSUs"), and common stock options are considered to be potentially dilutive securities. As the Company was in a net loss position for the years ended December 31, 2022, 2021, and 2020, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders because the effects of potentially dilutive securities are antidilutive.

Noncontrolling Interest

Noncontrolling interests represents the portion of net assets in consolidated subsidiaries that are not attributable, directly or indirectly, to us. In fiscal 2022, we have entered into arrangements with third-party investors under which the investors are determined to hold noncontrolling interests in entities fully consolidated by us. The net assets of the shared entities are attributed to the controlling and noncontrolling interests based on the terms of the governing contractual arrangements. We further determined the hypothetical liquidation at book value method ("HLBV Method") to be the appropriate method for attributing net assets to the controlling and noncontrolling interests as this method most closely mirrors the economics of the governing contractual arrangements. Under the HLBV Method, we allocate recorded income (loss) to each investor based on the change, during the reporting period, of the amount of net assets each investor is entitled to under the governing contractual arrangements in a liquidation scenario. The net income (loss) allocated to the noncontrolling interests were not material for the year ended December 31, 2022.

Recently Adopted Accounting Standards

The Company has adopted ASU 2020-06, *Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40),* effective January 1, 2022 using the modified retrospective approach. ASU 2020-06 simplifies the accounting for convertible instruments. The guidance removes certain accounting models which separate conversion features from the host contract for convertible instruments. As a result of the adoption of ASU 2020-06, the 2028 Convertible Notes are no longer bifurcated into separate liability and equity components in the December 31, 2022 consolidated balance sheet. Rather, the $460.0 million principal amount of the Company's 2028 Convertible Notes will be classified as a liability in the December 31, 2022 consolidated balance sheet. Upon adoption of ASU 2020-06, an adjustment was recorded to the 2028 Convertible Notes liability component, equity component (additional paid-in-capital) and accumulated deficit. The cumulative effect of the change was recognized as an adjustment to the opening balance of accumulated deficit at the date of adoption. The comparative information has not been restated and continues to be presented according to accounting standards in effect for those periods. This adjustment was calculated based on the carrying amount of the 2028 Convertible Notes as if it had always been treated only as a liability. Further, an adjustment was recorded to the debt discount and issuance costs as if these had always been treated as a contra liability only. Interest expense related to the accretion of the 2028 Convertible Notes is no longer recognized. Interest expense for the 2028 Convertible Notes for the year ended

December 31, 2022 would have been $15.3 million higher without the adoption of ASU 2020-06. As such, net loss attributable to the Company per common share for the year ended December 31, 2022 is $0.10 lower due to the effect of adoption of ASU 2020-06.

In June 2016, the FASB issued ASU 2016-13, *Financial instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, and subsequent related ASUs, which amends the guidance on the impairment of financial instruments by requiring measurement and recognition of expected credit losses for financial assets held. This ASU is effective for public and private companies' fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2019, and December 15, 2022, respectively. As the Company is no longer an emerging growth company as of January 1, 2022, the Company adopted ASU 2016-13 effective on such date, utilizing the modified retrospective transition method. Upon adoption, the Company updated its impairment model to utilize a forward-looking current expected credit losses ("CECL") model in place of the incurred loss methodology for financial instruments measured at amortized cost, primarily including its accounts receivable. The adoption did not have a material effect on the Company's consolidated financial statements.

In October 2021, the FASB issued ASU 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*. Under ASU 2021-08, an acquirer must recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with Topic 606. The Company early adopted ASU 2021-08 on a prospective basis effective January 1, 2022. As indicated in Note 6 — *Business Combinations*, the Company completed the acquisition of AlsoEnergy on February 1, 2022. The adoption of ASU 2021-08 resulted in the recognition of deferred revenue at amounts consistent with those recorded by the acquiree immediately before the acquisition date rather than at fair value. The adoption did not have a material effect on the Company's consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"). ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. ASU 2019-12 was effective for public entities for interim and annual periods beginning after December 15, 2020, with early adoption permitted. The Company adopted ASU 2019-12 effective May 1, 2021. The adoption of this standard did not have a material impact on the Company's consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, *Intangibles — Goodwill and Other — Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASU 2018-15"). The intent of this pronouncement is to align the requirements for capitalizing implementation costs incurred in a cloud computing arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software as defined in ASC 350-40. Under ASU 2018-15, the capitalized implementation costs related to a cloud computing arrangement will be amortized over the term of the arrangement and all capitalized implementation amounts will be required to be presented in the same line items of the financial statements as the related hosting fees. ASU 2018-15 is effective for public and private companies' fiscal years beginning after December 15, 2019, and December 15, 2020, respectively, and interim periods within those fiscal years, with early adoption permitted. The Company adopted ASU 2018-15 as of January 1, 2021. The adoption did not have a material effect on the Company's consolidated financial statements.

3. REVENUE

Disaggregation of Revenue

The following table provides information on the disaggregation of revenue as recorded in the consolidated statements of operations (in thousands):

	Year ended December 31,		
	2022	2021	2020
Hardware revenue	$ 310,837	$ 106,908	$ 20,662
Services and other revenue	52,143	20,463	15,645
Total revenue	$ 362,980	$ 127,371	$ 36,307

Within services and other revenue, the Company recorded revenue from project assets of $3.9 million for the year ended December 31, 2022. Partnership hardware and service revenue was $280.4 million, $107.1 million, and $20.7 million for the years ended December 31, 2022, 2021, and 2020, respectively.

The following table summarizes reportable revenue by geographic regions determined based on the location of the customers (in thousands):

	Year ended December 31,		
	2022	2021	2020
United States	$ 353,792	$ 127,230	$ 36,181
Rest of the world	9,188	141	126
Total revenue	$ 362,980	$ 127,371	$ 36,307

Remaining Performance Obligations

Remaining performance obligations represent contracted revenue that has not been recognized, which includes contract liabilities (deferred revenue) and amounts that will be billed and recognized as revenue in future periods. As of December 31, 2022, the Company had $534.9 million of remaining performance obligations, and the approximate percentages expected to be recognized as revenue in the future are as follows (in thousands, except percentages):

	Total remaining performance obligations	Percent Expected to be Recognized as Revenue		
		Less than one year	Two to five years	Greater than five years
Services and other revenue	$ 322,645	17 %	48 %	35 %
Hardware revenue	212,270	100 %	— %	— %
Total revenue	$ 534,915			

Contract Balances

Deferred revenue primarily includes cash received in advance of revenue recognition related to energy optimization services and incentives. The following table presents the changes in the deferred revenue balance during the years ended December 31, 2022, 2021, and 2020 (in thousands):

	2022	2021	2020
Balance as of beginning of period	$ 37,443	$ 52,410	$ 20,728
Deferred revenue acquired upon business combination	49,626	—	—
Upfront payments received from customers	206,868	89,951	40,481
Upfront or annual incentive payments received	5,797	6,614	8,015
Revenue recognized related to amounts that were included in beginning balance of deferred revenue	(22,669)	(33,585)	(9,764)
Revenue recognized related to amounts that were included in acquired balance of deferred revenue	(3,338)	—	—
Revenue recognized related to deferred revenue generated during the period	(135,653)	(77,947)	(7,050)
Balance as of end of period	$ 138,074	$ 37,443	$ 52,410

4. SHORT-TERM INVESTMENTS

The following tables summarize the estimated fair value of the Company's short-term investments and the gross unrealized holding gains and losses as of December 31, 2022 and 2021 (in thousands):

	As of December 31, 2022			
	Amortized cost	Unrealized gain	Unrealized Loss	Estimated Fair Value
Corporate debt securities	$ 17,056	$ —	$ (164)	$ 16,892
Commercial paper	18,922	—	—	18,922
U.S. government bonds	106,774	—	(1,515)	105,259
Certificate of deposits	9,986	—	—	9,986
Treasury bills	9,518	3	(5)	9,516
Agency bonds	1,500	—	(1)	1,499
Total short-term investments	$ 163,756	$ 3	$ (1,685)	$ 162,074

	As of December 31, 2021			
	Amortized cost	Unrealized gain	Unrealized Loss	Estimated Fair Value
Corporate debt securities	$ 42,174	$ 11	$ (52)	$ 42,133
Commercial paper	20,743	—	—	20,743
U.S. government bonds	86,265	—	(135)	86,130
Certificate of deposits	21,501	6	—	21,507
Agency bonds	2,500	—	(5)	2,495
Total short-term investments	$ 173,183	$ 17	$ (192)	$ 173,008

The following table presents the contractual maturities of the Company's short-term investments as of December 31, 2022 (in thousands):

	As of December 31, 2022	
	Amortized cost	Estimated Fair Value
Due within one year	$ 98,136	$ 97,732
Due between one to two years	65,620	64,342
Total	$ 163,756	$ 162,074

The Company periodically reviews the individual securities that have unrealized losses on a regular basis to evaluate whether or not any security has experienced, or is expected to experience, credit losses resulting in the decline in fair value. The Company evaluates, among other factors, whether the Company intends to sell any of these marketable securities and whether it is more likely than not that the Company will be required to sell any of them before recovery of the amortized cost basis. During the year ended December 31, 2022, the Company did not record an allowance for credit losses, as management believes any such losses would be immaterial based on the investment-grade credit rating for each of the short-term investments as of the end of each period.

5. FAIR VALUE MEASUREMENTS

Fair value accounting is applied for all financial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis. At December 31, 2022 and 2021, the carrying amount of accounts receivable, other current assets, accounts payable, and accrued and other current liabilities approximated their estimated fair value due to their relatively short maturities. There were no assets or liabilities classified as Level 3 as of December 31, 2022 and 2021.

The following table provides the financial instruments measured at fair value on a recurring basis (in thousands):

	December 31, 2022			
	Level 1	Level 2	Level 3	Total
Assets				
Cash equivalents:				
Money market fund	$ 10,618	$ —	$ —	$ 10,618
Commercial paper	—	2,988	—	2,988
Debt securities:				
Corporate debt securities	—	16,892	—	16,892
Commercial paper	—	18,922	—	18,922
U.S. government bonds	—	105,259	—	105,259
Certificate of deposits	—	9,986	—	9,986
Treasury bills	—	9,516	—	9,516
Other	—	1,499	—	1,499
Total financial assets	$ 10,618	$ 165,062	$ —	$ 175,680

	December 31, 2021			
	Level 1	Level 2	Level 3	Total
Assets				
Cash equivalents:				
Money market fund	$ 127,261	$ —	$ —	$ 127,261
Debt securities:				
Corporate debt securities	—	42,133	—	42,133
Commercial paper	—	20,743	—	20,743
U.S. government bonds	—	86,130	—	86,130
Certificate of deposits	—	21,507	—	21,507
Other	—	2,495	—	2,495
Total financial assets	$ 127,261	$ 173,008	$ —	$ 300,269

The Company’s money market funds are classified as Level 1 because they are valued using quoted market prices. The Company’s short-term investments consist of available-for-sale securities and are classified as Level 2 because their value is based on valuations using significant inputs derived from or corroborated by observable market data.

Fair Value of Convertible Promissory Notes

The convertible notes are recorded at face value less unamortized debt issuance costs (see Note 13 — *Convertible Promissory Notes* for additional details) on the consolidated balance sheet as of December 31, 2022. As of December 31, 2022, the estimated fair value of the convertible notes was $293.1 million based on Level 2 quoted bid prices of the convertible notes in an over-the-counter market on the last trading date of the reporting period.

6. BUSINESS COMBINATIONS

On February 1, 2022, Stem, Inc. acquired 100% of the outstanding shares of AlsoEnergy. AlsoEnergy provides end-to-end turnkey solutions that monitor and manage renewable energy systems. AlsoEnergy has deployed systems at various international locations, but its largest customer bases are in the United States, Germany and Canada. The combined company delivers a one-stop-shop solution for front-of-meter and commercial and industrial ("C&I") customers with solar and storage needs.

The total consideration to acquire AlsoEnergy was $652.0 million, comprised of $543.1 million in cash, net of a working capital adjustment for an escrow recovery, and $108.9 million in the form of 8,621,006 shares of the Company's common stock. The Company incurred $6.1 million of transaction costs related to the acquisition of AlsoEnergy, which were recorded in general and administrative expense during the year ended December 31, 2022.

The following table summarizes the purchase price as a part of the acquisition of AlsoEnergy (in thousands):

	Purchase Price
Cash consideration	$ 544,059
Equity consideration	108,883
Working capital adjustment	(915)
Total consideration	$ 652,027

The following table summarizes the fair values of assets acquired and liabilities assumed in the acquisition of AlsoEnergy at the date of acquisition (in thousands):

Assets Acquired	
Cash	$ 10,135
Accounts receivable	9,614
Other current assets	1,795
Inventory	3,701
Operating lease right-of-use assets	1,333
Separately identifiable intangible assets acquired other than goodwill	152,100
Other noncurrent assets	1,032
Total identifiable assets acquired	179,710
Liabilities Assumed	
Accounts payable	1,985
Other current liabilities	1,596
Accrued payroll	2,533
Deferred revenue, current portion	17,486
Lease liabilities, current portion	431
Deferred revenue, noncurrent	32,140
Lease liabilities, noncurrent	902
Deferred tax liability	15,476
Other noncurrent liabilities	150
Total liabilities assumed	72,699
Total net identifiable assets acquired	107,011
Goodwill	545,016
Total consideration	$ 652,027

Based on the accounting guidance provided in ASC 805, the Company accounted for the acquisition of AlsoEnergy as a business combination in which the Company determined that AlsoEnergy was a business.

In the second quarter of 2022, a working capital adjustment was made that resulted in the decrease of goodwill of $0.9 million. The allocation of fair values of assets acquired and liabilities assumed was finalized in the fourth quarter of 2022. No further adjustments were made.

The following table and accompanying paragraphs below summarize the intangible assets acquired, their fair value as of the acquisition date, and their estimated useful lives for amortizable intangible (in thousands, except estimated useful life, which is in years):

	Fair Value	Useful Life
Trade name	$ 11,300	7
Customer relationships	106,800	12
Backlog	3,900	1.1
Developed technology	30,100	7
Separately identifiable intangible assets acquired other than goodwill	$ 152,100	

Trade names include the AlsoEnergy and PowerTrack trade names, which were measured at fair value using the relief-from-royalty method. Customer relationships represent the estimated fair values of the underlying relationship with AlsoEnergy customers measured using the multiple-period excess earnings method under the income approach. Backlog relates to subscriptions contracts that were measured at fair value using the multiple-period excess earnings method under the income approach. Developed technology represents the preliminary fair value of AlsoEnergy's renewable energy platform that was measured using the relief-from-royalty method of the income approach. Significant estimates and assumptions related to the Company's forecasts of future revenues and selection of the weighted average cost of capital, royalty rates, and estimated revenue growth rates are used in measuring the fair value of these assets. The amortization expense for all acquired intangible assets will be recognized on a straight-line basis over their respective estimated useful lives.

Goodwill represents the excess of the purchase price over the fair value of the net identifiable assets acquired. The acquisition of AlsoEnergy resulted in the recognition of $545.0 million of goodwill. Goodwill acquired primarily consists of expanded market and product opportunities, including acceleration of growth of renewable energy onto the power grid, expanded value for the Company's customers to manage and optimize combined solar and energy storage systems through the vertical integration of software solutions, as well as access of the Company's product offerings to international markets.

Goodwill created as a result of the acquisition of AlsoEnergy is not expected to be deductible for tax purposes. A net deferred tax liability of $15.5 million was established for the intangible assets acquired net of deferred tax assets, which primarily consists of net operating loss carryforwards and deferred revenue.

Unaudited Pro Forma Financial Information

The following unaudited pro forma financial information summarizes the combined results of operations for the Company and AlsoEnergy, as if the acquisition had occurred on January 1, 2021. The pro forma financial information is as follows (in thousands):

	(Unaudited) Twelve Months Ended December 31,	
	2022	2021
Total revenue	$ 366,815	$ 189,930
Net loss	$ (131,959)	$ (132,187)

The pro forma financial information for the periods presented above has been calculated after adjusting the results of AlsoEnergy to reflect the business combination accounting effects resulting from this acquisition, including the elimination of transaction costs incurred by the Company, amortization expense from acquired intangible assets, and settlement of stock option awards. The historical consolidated financial statements have been adjusted in the pro forma combined financial statements to give effect to pro forma events that are directly attributable to the business combination. The pro forma financial information is for informational purposes only, and is not indicative of either future results of operations, or results that may have been achieved had the acquisition been consummated as of the beginning of 2022 or 2021.

7. GOODWILL AND INTANGIBLE ASSETS, NET

Goodwill

Goodwill consists of the following (in thousands):

	December 31,	
	2022	2021
Goodwill	$ 547,556	$ 1,625
Recovery of escrow from AlsoEnergy acquisition	(915)	—
Effect of foreign currency translation	8	116
Total goodwill	$ 546,649	$ 1,741

Intangible Assets, Net

Intangible assets, net, consists of the following (in thousands):

	December 31,	
	2022	2021
Developed technology	$ 30,600	$ 500
Trade name	11,300	—
Customer relationships	106,800	—
Backlog	3,900	—
Internally developed software	49,472	29,706
Intangible assets	202,072	30,206
Less: Accumulated amortization	(39,809)	(16,276)
Add: Currency translation adjustment	2	36
Total intangible assets, net	$ 162,265	$ 13,966

Amortization expense for intangible assets was $23.6 million, $5.3 million and $4.5 million for the years ended December 31, 2022, 2021, and 2020, respectively, of which amortization of internally developed software and developed technology is recognized in cost of goods sold and amortization of customer relationships, trade name, and backlog is recognized in sales and marketing in the consolidated statements of operations.

8. LEASES

The Company leases and subleases certain office spaces with lease terms ranging from 2 to 7 years. These leases require monthly lease payments that may be subject to annual increases throughout the lease term. Certain of these leases also include renewal options at the election of the Company to renew or extend the lease for an additional five years. These optional periods have not been considered in the determination of the ROU assets or lease liabilities associated with these leases as the Company did not consider the exercise of these options to be reasonably certain.

The Company performed evaluations of its contracts and determined each of its identified leases are operating leases. For the years ended December 31, 2022, 2021, and 2020, the Company incurred $2.8 million, $1.3 million and $0.8 million, respectively, of rent expense included in operating expenses in the consolidated statements of operations in relation to its operating leases, inclusive of short-term and variable lease expense which was immaterial. Cash paid for amounts included in the measurement of operating lease liabilities for the years ended December 31, 2022, 2021, and 2020 was $1.6 million $0.5 million and $0.7 million, respectively, and was included in net cash used in operating activities in the Company's consolidated statements of cash flows.

As of December 31, 2022, future payments associated with the Company's operating lease liabilities were as follows (in thousands):

	Operating Leases
2023	$ 3,152
2024	2,926
2025	2,193
2026	2,179
2027	2,237
Thereafter	2,700
Total lease payments	15,387
Less: imputed interest	(1,851)
Total operating lease liability future lease payments	$ 13,536

Reported as of December 31, 2022 and 2021 (in thousands):

	December 31,	
	2022	2021
Current portion of operating lease liabilities included within other current liabilities	$ 2,574	$ 1,240
Non-current portion of operating lease liabilities	10,962	12,183
Total	$ 13,536	$ 13,423

The following summarizes additional information related to operating leases:

	December 31,	
	2022	2021
Weighted average remaining operating lease term (in years)	5.5	6.7
Weighted average discount rate	4.7 %	4.5 %

9. ASSET RETIREMENT OBLIGATION

The information below details the asset retirement obligation for the years ended December 31, 2022 and 2021 as follows (in thousands):

	December 31,	
	2022	2021
Beginning balance at January 1,	$ 4,135	$ 4,137
Retirement cost revaluation	(116)	(231)
Accretion expense	243	229
Ending balance at December 31,	$ 4,262	$ 4,135

10. ENERGY STORAGE SYSTEMS, NET

Energy Storage Systems, Net

Energy storage systems, net, consists of the following (in thousands):

	December 31, 2022	December 31, 2021
Energy storage systems placed into service	$ 143,154	$ 143,592
Less: accumulated depreciation	(58,782)	(45,250)
Energy storage systems not yet placed into service	6,385	7,772
Total energy storage systems, net	$ 90,757	$ 106,114

Depreciation expense for energy storage systems was approximately $14.9 million, $14.4 million and $13.9 million for the years ended December 31, 2022, 2021, and 2020, respectively. Depreciation expense is recognized in cost of service revenue.

11. BALANCE SHEET COMPONENTS

Accounts Receivable, net

Accounts receivable, net consists of the following (in thousands):

	December 31,	
	2022	2021
Unbilled receivables	$ 151,278	$ 12,208
Accounts receivable - customer	70,727	45,680
Financing obligation receivables	5,061	3,801
Accounts receivable allowance	(3,879)	(91)
Other	32	103
Total accounts receivable, net	$ 223,219	$ 61,701

Inventory

Inventory consists of the following (in thousands):

	December 31,	
	2022	2021
Work in process inventory	$ 3,374	$ 20,582
Raw Materials	4,623	—
Finished Goods	376	—
Batteries	1	2,138
Total inventory	$ 8,374	$ 22,720

Other Current Assets

Other current assets consist of the following (in thousands):

	December 31,	
	2022	2021
Prepaid expenses	$ 5,676	$ 3,137
Utility program deposits	80	353
Due from related parties	74	213
Other	2,196	1,194
Total other current assets	$ 8,026	$ 4,897

Other Noncurrent Assets

Other noncurrent assets consist of the following (in thousands):

	December 31,	
	2022	2021
Prepaid warranties and maintenance	$ 33,686	$ 15,991
Unbilled receivables, net	9,409	—
Deferred costs with suppliers	7,720	—
Receivable from SPEs (Note 17)	2,543	3,565
Self-generation incentive program deposits	688	940
Investment in VIEs	1,971	1,924
Property and equipment, net	2,158	512
Project assets	3,208	—
Other	3,956	1,599
Total other noncurrent assets	$ 65,339	$ 24,531

Depreciation expense for property and equipment was $0.6 million for each of the year ended December 31, 2022 and immaterial for the years ended December 31, 2021 and 2020.

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	December 31,	
	2022	2021
Accrued payables	$ 83,022	$ 25,062
Accrued interest – notes payable	311	344
Other accrued liabilities	1,925	579
Total accrued liabilities	$ 85,258	$ 25,985

Other Current Liabilities

Other current liabilities consist of the following (in thousands):

	December 31,	
	2022	2021
System advances	$ 266	$ 267
Lease liabilities – current portion	2,574	1,240
Due to related parties	687	306
Other	1,885	8
Total other current liabilities	$ 5,412	$ 1,821

12. NOTES PAYABLE

Revolving Loan Due to SPE Member

In April 2017, the Company entered into a revolving loan agreement with an affiliate of a member of certain of the Company's special purpose entities ("SPE"). This agreement was, from time to time, subsequently amended. The purpose of this revolving loan agreement was to finance the Company's purchase of hardware for its various energy storage system projects. The agreement had a total revolving loan capacity of $45.0 million that bore fixed interest at 10% with a maturity date of June 2020.

In May 2020, concurrent with the 2020 Credit Agreement discussed below, the Company entered into an amendment to the revolving loan agreement, which reduced the loan capacity to $35.0 million and extended the maturity date to May 2021. The amendment increased the fixed interest rate for any borrowings outstanding more than nine months to 14% thereafter. Additionally, under the original terms of the revolving loan agreement, the Company was able to finance 100% of the value of the hardware purchased up to the total loan capacity. The amendment reduced the advance rate to 85%, with an additional reduction to 70% in August 2020. The amendment was accounted for as a modification of the debt, which did not have a material impact on the consolidated financial statements. In April 2021, the Company repaid the remaining outstanding balance of this facility with the proceeds received from the Merger. The facility was terminated after the repayment in April 2021.

Term Loan Due to Former Non-Controlling Interest Holder

In June 2018, the Company acquired the outstanding member interests of an entity controlled by the Company for $8.1 million. The Company financed this acquisition by entering into a term loan agreement with the noncontrolling member bearing fixed interest of 4.5% per quarter (18.0% per annum) on the outstanding principal balance. The loan required fixed quarterly payments throughout the term of the loan, which was scheduled to be paid in full by April 1, 2026.

In May 2020, the Company amended the term loan and, using the proceeds from the 2020 Credit Agreement discussed below, prepaid $1.5 million of principal and interest on the note, of which $1.0 million was towards the outstanding principal balance, thereby reducing the fixed quarterly payment due to the lender. In relation to this amendment, the Company was required to issue warrants for 400,000 shares of common stock resulting in a discount to the term loan of $0.2 million. In April 2021, the Company repaid the remaining outstanding balance of this facility with the proceeds received from the Merger. Upon prepayment of this facility, the Company incurred $2.6 million in prepayment penalties that were recorded to loss on extinguishment of debt in the Company’s statement of operations. The facility was terminated after the repayment in April 2021.

2020 Credit Agreement

In May 2020, the Company entered into a credit agreement (“2020 Credit Agreement”) with a new lender that provided the Company with proceeds of $25.0 million to provide the Company with access to working capital towards the purchase of energy storage system equipment. The 2020 Credit Agreement has a maturity date of the earlier of (1) May 2021, (2) the maturity date of the revolving loan agreement, or (3) the maturity date of the Pre-Merger Convertible Promissory Notes discussed below in Note 13 — *Convertible Promissory Notes*. The loan bore interest of 12% per annum, of which 8% was paid in cash and 4% added back to principal of the loan balance every quarter. The Company used a portion of the proceeds towards payments associated with existing debt. In April 2021, the Company repaid the outstanding balance of this facility with the proceeds received from the Merger. Upon prepayment of this facility, the Company incurred $1.4 million in prepayment penalties that were recorded to loss on extinguishment of debt in the Company’s statement of operations. The facility was terminated after the repayment in April 2021.

2021 Credit Agreement

In January 2021, the Company, through a wholly owned Canadian entity, entered into a credit agreement to provide a total of $2.7 million towards the financing of certain energy storage systems. The credit agreement is structured on a non-recourse basis and the system will be operated by the Company. The credit agreement has a stated interest of 5.45% and a maturity date of June 2031. The Company received an advance under the credit agreement of $1.8 million in January 2021. The repayment of advances received under this credit agreement is determined by the lender based on the proceeds generated by the Company through the operation of the underlying energy storage systems. As of December 31, 2022 and 2021, the outstanding balance was $1.8 million and $1.9 million, respectively. The Company was in compliance with all covenants contained in the 2021 Credit Agreement as of December 31, 2022 and 2021.

The Company’s outstanding debt consisted of the following as of December 31, 2022 and 2021 (in thousands):

	December 31, 2022	December 31, 2021
Outstanding principal	$ 1,784	$ 1,902
Unamortized discount	(181)	(215)
Carrying value of debt	$ 1,603	$ 1,687

13. CONVERTIBLE PROMISSORY NOTES

As of December 31, 2020, the Company had various convertible notes outstanding to investors. The Company refers to the collective group of all such note instruments as the "Pre-Merger Convertible Promissory Notes." As of December 31, 2020, these Pre-Merger Convertible Promissory Notes had a balance of $67.6 million. During the year ended December 31, 2021, the Company issued additional convertible notes, including convertible promissory notes issued and sold in January 2021 (the "Q1 2021 Convertible Notes") and the 2028 Convertible Notes. Upon effectiveness of the Merger on April 28, 2021, all outstanding Pre-Merger Convertible Promissory Notes were converted to common stock and cancelled (see "—Conversion and Cancellation of Convertible Promissory Notes Upon Merger" below). As of December 31, 2021, the Pre-Merger Convertible Promissory Notes and the Q1 2021 Convertible Notes were no longer outstanding.

Q1 2021 Convertible Notes

In January 2021, the Company issued and sold the Q1 2021 Convertible Notes under the same terms as the then existing Pre-Merger Convertible Promissory Notes to various investors with aggregate gross proceeds of $1.1 million. The Company evaluated the conversion option within the Q1 2021 Convertible Notes and determined the effective conversion price was beneficial to the note holders.

Conversion and Cancellation of Convertible Promissory Notes Upon Merger

Immediately prior to the effectiveness of the Merger, the entire balance of the Company's outstanding Pre-Merger Convertible Promissory Notes issued by Legacy Stem automatically converted into shares of Legacy Stem Common Stock. Upon the effectiveness of the Merger, these shares of Legacy Stem Common Stock automatically converted into 10,921,548 shares of common stock of Stem. The balance associated with the outstanding Pre-Merger Convertible Promissory Notes totaling $77.7 million, including $7.7 million of interest accrued on the notes through the date of Merger, was reclassified to additional paid-in-capital. The unamortized portion of the debt discount associated with the outstanding Q1 2021 Convertible Notes totaling $1.1 million was fully expensed to loss on extinguishment of debt on the Company's statement of operations.

2028 Convertible Notes and Capped Call Options

2028 Convertible Notes

On November 22, 2021, the Company issued $460.0 million aggregate principal amount of its 2028 Convertible Notes in a private placement offering to qualified institutional buyers (the "Initial Purchasers") pursuant to Rule 144A under the Securities Act of 1933, as amended.

The 2028 Convertible Notes are senior, unsecured obligations of the Company and bear interest at a rate of 0.5% per year, payable in cash semi-annually in arrears in June and December of each year, beginning in June 2022. The notes will mature on December 1, 2028, unless earlier repurchased, redeemed or converted in accordance with their terms prior to such date. Upon conversion, the Company may choose to pay or deliver, as the case may be, cash, shares of common stock or a combination of cash and shares of common stock. The Notes are redeemable for cash at the Company's option at any time given certain conditions (as discussed below), at an initial conversion rate of 34.1965 shares of common stock per $1,000 principal amount of 2028 Convertible Notes, which is equivalent to an initial conversion price of approximately $29.24 (the "2028 Conversion Price") per share of the Company's common stock. The conversion rate is subject to customary adjustments for certain events as described in the Indenture.

The Company may redeem for cash all or any portion of the 2028 Convertible Notes, at the Company's option, on or after December 5, 2025 if the last reported sale price of the Company's common stock has been at least 130% of the 2028 Conversion Price then in effect for at least 20 trading days at a redemption price equal to 100% of the principal amount of the 2028 Convertible Notes to be redeemed, plus accrued and unpaid interest.

The Company's net proceeds from this offering were approximately $445.7 million, after deducting the Initial Purchasers' discounts and debt issuance costs. To minimize the impact of potential dilution to the Company's common stockholders upon conversion of the 2028 Convertible Notes, the Company entered into separate capped calls transactions (the "Capped Calls") as described below.

In accordance with accounting guidance for debt with conversion and other options, the Company separately accounted for the liability and equity components of the 2028 Convertible Notes by allocating the proceeds between the liability component and the equity component, due to the Company's ability to settle the 2028 Convertible Notes in cash, its common Stock, or a combination of cash and common Stock at the option of the Company. The carrying amount of the liability component was

calculated by measuring the fair value of a similar liability that does not have an associated conversion feature. The equity component of the 2028 Convertible Notes was recognized as a debt discount and represents the difference between the gross proceeds from the issuance of the 2028 Convertible Notes and the fair value of the liability component of the 2028 Convertible Notes on the date of issuance. The debt discount is amortized to interest expense using the effective interest method over approximately seven years, or the expected life of the 2028 Convertible Notes. The equity component is not remeasured as long as it continues to meet the conditions for equity classification.

After allocating the proceeds of the liability and equity components, the Company further allocated $14.3 million initial purchasers' debt discount and debt issuance cost of $12.4 million and $1.9 million, respectively. The initial purchaser's discount and debt issuance costs primarily consisted of underwriters, advisory, legal, and accounting fees. These costs were allocated to the debt and equity components based on the allocation of the proceeds as follows (in thousands):

	Amount	Equity Component	Debt Component
Initial Purchaser's Debt Discount	$ 12,420	$ 3,650	$ 8,770
Debt Issuance Costs	1,871	550	1,321
Total	$ 14,291	$ 4,200	$ 10,091

The portion allocated to the debt component is amortized to interest expense using the effective interest method over the expected life of the 2028 Convertible Notes, or approximately its seven-year term. The effective interest rate on the liability component of the 2028 Convertible Notes for the period from the date of issuance through December 2028 is 5.96%, which remains unchanged from the date of issuance.

At the original issuance date, the fair value of the debt component of the Company's 2028 Convertible Notes was $324.8 million and the estimated fair value of the equity component was $135.2 million, as measured on the date of issuance, resulting in a total fair value of $460.0 million for the 2028 Convertible Notes. The 2028 Convertible Notes were priced at par at the valuation date resulting in the fair value of the 2028 Convertible Notes equal to the principal amount of $460.0 million. The fair value of the equity component has been calculated as the residual amount between the fair value of the 2028 Convertible Notes and the fair value of the debt component.

Upon adoption of ASU 2020-06, the Company allocated all of the debt discount to long-term debt. The debt discount is amortized to interest expense using the effective interest method, computed to be 0.9%, over the life of the 2028 Convertible Notes or approximately its seven-year term. The outstanding 2028 Convertible Notes balances as of December 31, 2022 are summarized in the following table (in thousands):

	December 31, 2022	December 31, 2021
Long Term Debt		
Outstanding principal	$ 460,000	$ 460,000
Unamortized initial purchaser's debt discount and debt issuance cost	(12,091)	(143,458)
Net carrying amount	$ 447,909	$ 316,542

The following table presents total interest expense recognized related to the 2028 Convertible Notes during the year ended December 31, 2022 (in thousands):

	December 31, 2022	December 31, 2021
Cash interest expense		
Contractual interest expense	$ 2,300	$ 249
Non-cash interest expense		
Amortization of debt discount and debt issuance cost	1,986	1,812
Total interest expense	$ 4,286	$ 2,061

Capped Call Options

On November 17, 2021, in connection with the pricing of the 2028 Convertible Notes, and on November 19, 2021, in connection with the exercise in full by the Initial Purchasers of their option to purchase additional Notes, the Company entered

into Capped Calls with certain counterparties. The Company used $66.7 million of the net proceeds to pay the cost of the Capped Calls.

The Capped Calls have an initial strike price of $29.2428 per share, which corresponds to the initial conversion price of the 2028 Convertible Notes and is subject to anti-dilution adjustments. The Capped Calls have a cap price of $49.6575 per share, subject to certain adjustments.

The Capped Calls are considered separate transactions entered into by and between the Company and the Capped Calls counterparties, and are not part of the terms of the 2028 Convertible Notes. The Company recorded a reduction to additional paid-in capital of $66.7 million during the year ended December 31, 2021 related to the premium payments for the Capped Calls. These instruments meet the conditions outlined in ASC 815 to be classified in stockholders' equity (deficit) and are not subsequently remeasured as long as the conditions for equity classification continue to be met.

14. WARRANTS

Legacy Stem Warrants

Prior to the Merger, the Company had issued warrants to purchase shares of Legacy Stem's preferred stock in conjunction with various debt financings. The Company has also issued warrants to purchase shares of Legacy Stem's common stock. Upon effectiveness of the Merger, the Company had 50,207,439 warrants outstanding, of which substantially all were converted into 2,759,970 shares of common stock of Stem. Upon conversion of the warrants, the existing warrant liabilities were remeasured to fair value resulting in a gain on remeasurement of $100.9 million and a total warrant liability of $60.6 million, which was then reclassified to additional paid-in-capital. As of December 31, 2022, there were 2,533 Legacy Stem Warrants outstanding. These instruments are exercisable into the Company's common stock and are equity classified.

Public Warrants and Private Placement Warrants

As part of STPK's initial public offering, under the Warrant Agreement dated as of August 20, 2020 (the "Warrant Agreement") and, prior to the effectiveness of the Merger, STPK issued 12,786,168 warrants each of which entitled the holder to purchase one share of common stock at an exercise price of $11.50 per share of common stock (the "Public Warrants"). Simultaneously with the closing of the Initial Public Offering, STPK completed the private sale of 7,181,134 million warrants to STPK's sponsor (the "Private Warrants"). Upon issuance, these warrants met the criteria for liability classification. Upon the effectiveness of the Merger, Stem assumed the outstanding Public Warrants and Private Warrants, which continued to meet the criteria for liability classification, resulting in assumed warrant liabilities of $185.9 million and $116.7 million, respectively, or a total warrant liability of $302.6 million. Such warrants were initially recorded at fair value and remeasured to fair value at each reporting period. The fair value of the Private Warrants was determined using the Black-Scholes method. Black-Scholes inputs used to value the warrants are based on information from purchase agreements and within valuation reports prepared by an independent third party for the Company. Inputs include exercise price, selection of guideline public companies, volatility, fair value of common stock, expected dividend rate and risk-free interest rate.

On June 25, 2021, the Company entered into an exchange agreement (the "Exchange Agreement") with the holders of the 7,181,134 outstanding Private Placement Warrants, pursuant to which such holders received 4,683,349 shares of the Company's common stock on June 30, 2021, in exchange for the cancellation of all outstanding Private Placement Warrants. The Exchange Shares were issued in reliance upon the exemption provided by Section 3(a)(9) of the Securities Act of 1933, as amended. Immediately prior to the exchange, the Private Warrants were marked to fair value, resulting in a loss of $52.0 million. As a result of the Exchange Agreement, there are no Private Warrants outstanding.

On August 20, 2021, the Company issued an irrevocable notice for redemption of all 12,786,129 of the Company's outstanding public warrants at 5:00 p.m. Eastern time on September 20, 2021 ("Redemption Date"). Pursuant to the notice of redemption, holders exercised 12,638,723 Public Warrants for a purchase price of 11.50 per share, for proceeds to the Company of approximately $145.3 million. The Company redeemed all remaining outstanding Public Warrants that had not been exercised as of 5:00 p.m. Eastern time on the Redemption Date. As a result of the settlement of the Public Warrants, the Company recorded a gain of $134.9 million on the revaluation of the warrant liability. The Company also recorded a gain of $2.1 million on the redemption of unexercised Public Warrants. These gains are recorded in "change in fair value of warrants and embedded derivative" in the consolidated statements of operation in the year ended December 31, 2021. The Public Warrants have been delisted from the NYSE, and there are no public warrants outstanding.

Warrants Issued for Services

On April 7, 2021, the Company entered into a strategic relationship with an existing shareholder not deemed to be a related party to jointly explore on a non-exclusive basis possible business opportunities to advance projects in the United States, the United Kingdom, Europe and Asia. As consideration for the strategic relationship, upon closing of the Merger, the Company issued warrants to purchase 350,000 shares of the Company's common stock at an exercise price of $0.01 per share. These warrants were deemed to have been fully earned as of the grant date. The warrants were valued at fair market value as of the grant date totaling $9.2 million and recorded to general and administrative expense in the Company's statement of operations. In May 2021, all of these warrants were exercised for shares of the Company's common stock.

15. COMMON STOCK

The Company had reserved shares of common stock for issuance as follows:

	December 31, 2022
Shares reserved for warrants	2,533
RSUs outstanding	6,719,490
Options outstanding	8,243,637
Shares available for future issuance under the 2021 Equity Incentive Plan	14,737,772
Conversion of 2028 Convertible Notes	20,842,773
Total	50,546,205

As of December 31, 2022, the Company had 14,737,772 shares of common stock reserved for future issuance under equity incentive plans corresponding to the 2021 Equity Incentive Plan. As of December 31, 2022, 2,331,125 stock options and 7,533,770 RSUs had been granted to employees under the 2021 Equity Incentive Plan.

16. STOCK-BASED COMPENSATION

Under both the Stem, Inc. 2009 Equity Incentive Plan (the "2009 Plan") and the Stem Inc. 2021 Equity Incentive Plan (the "2021 Plan," and together with the 2009 Plan, the "Plans"), the Company may grant stock options, stock appreciation rights, restricted stock, restricted stock units ("RSUs") and other awards that are settled in shares of the Company's common stock. The Company does not intend to grant new awards under the 2009 Plan. All shares that remain available for future grants are under the 2021 Plan.

Stock Options

Under the Plans, the exercise price of an option cannot be less than 100% of the fair value of one share of common stock for incentive or non-qualified stock options, and not less than 110% of the fair value for stockholders owning greater than 10% of all classes of stock, as determined by the Company's Board of Directors (the "Board"). Options under the Plans generally expire after 10 years. Under the Plans, the Compensation Committee of the Board determines when the options granted will become exercisable. Options granted under the Plans generally vest 1/4 one year from the grant date and then 1/48 each month over the following three years and are exercisable for 10 years from the date of the grant. The Plans allow for exercise of unvested options with repurchase rights over the restricted common stock issued at the original exercise price. The repurchase rights lapse at the same rate as the options vest.

The following table summarizes the stock option activity for the year ended December 31, 2022:

	Number of Options Outstanding	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (in thousands)
Balances as of December 31, 2021	8,766,466	$ 6.01	7.1	123,562
Options granted	1,255,490	9.27		
Options exercised	(1,512,719)	2.32		
Options forfeited	(265,600)	15.45		
Options expired	—	—		
Balances as of December 31, 2022	8,243,637	$ 6.88	6.6	$ 35,566
Options vested and exercisable — December 31, 2022	5,694,795	$ 3.93	5.7	$ 33,203

The weighted-average grant date fair value of stock options granted to employees was $5.82, $18.84 and $3.79 during the years ended December 31, 2022, 2021, and 2020, respectively. The intrinsic value of options exercised was $12.7 million, $56.1 million and $1.1 million during the years ended December 31, 2022, 2021, and 2020, respectively.

Significant Assumptions in Estimating Option Fair Value

The Company uses the Black-Scholes model for estimating the fair value of options granted. The weighted-average assumptions used in the Black-Scholes are as follows:

	December 31,		
	2022	2021	2020
Expected volatility	68.28 %	74.00 %	71.41 %
Risk-free interest rate	1.73 %	1.06 %	0.49 %
Expected term (years)	6.25	6.23	5.82
Dividend yield	—	—	—

Restricted Stock Units

RSUs represent a right to receive one share of the Company's common stock that is both non-transferable and forfeitable unless and until certain conditions are satisfied. RSUs generally, either cliff vest on the third anniversary of the award grant date, or vest 1/4 per year over a four-year period, subject to continued employment through each anniversary. The fair value of restricted stock units is determined on the grant date and is amortized over the vesting period on a straight-line basis.

The following table summarizes the RSU activity for the period ended December 31, 2022:

	Number of RSUs Outstanding	Weighted-Average Grant Date Fair Value Per Share
Balances as of December 31, 2021	1,799,677	$ 36.01
RSUs granted	5,708,586	9.19
RSUs vested	(206,910)	26.78
RSUs forfeited	(581,863)	14.91
Balances as of December 31, 2022	6,719,490	$ 15.34

Stock-Based Compensation Expense

The following table summarizes stock-based compensation expense recorded in each component of operating expenses in the Company's consolidated statements of operations and comprehensive loss (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Sales and marketing	$ 4,251	$ 1,723	$ 396
Research and development	4,634	2,367	1,211
General and administrative	19,776	9,456	2,935
Total stock-based compensation expense	$ 28,661	$ 13,546	$ 4,542

As of December 31, 2022, the Company had approximately $18.3 million of remaining unrecognized stock-based compensation expense for stock options, which is expected to be recognized over a weighted average period of 1.7 years. As of December 31, 2022, the Company had approximately $76.1 million of remaining unrecognized stock-based compensation expense for RSUs, which is expected to be recognized over a weighted average period of 2.3 years. Research and development expenses of $3.0 million corresponding to internal-use software, were capitalized during the year ended December 31, 2022.

17. SPECIAL PURPOSE ENTITES

The Company has formed various SPEs to finance the development and construction of its energy storage systems. These SPEs, which are structured as limited liability companies, obtain financing from outside investors and purchase projects from

the Company under master purchase agreements by making an upfront payment to the Company for such energy storage systems. As discussed in Note 2 — *Summary of Significant Accounting Policies*, the Company accounts for the large upfront payment received from the SPE as a financing obligation. The legal purchase of the energy storage system does not affect the Company's legal or constructive obligation to the host customer.

Unconsolidated VIEs

SPV II, SPV III, and SPV IV

On January 23, 2015, June 7, 2016, and June 30, 2017 the Company entered into agreements to form three Limited Liability Companies: Stem Finance SPV II, LLC ("SPV II"), Stem Finance SPV III, LLC ("SPV III"), and Generate-Stem LCR, LLC ("SPV IV"), respectively. These agreements are accounted for as unconsolidated VIEs because the Company lacks the power to direct the activities that most significantly impact the economics of these entities. Although the Company is not the primary beneficiary of these entities, due to its significant continuing involvement in the generation of cash flows of the energy storage systems and legal responsibilities under the host customer contract, the Company is required to include the assets, liabilities, revenues, and expenses of these entities in its consolidated financial statements. The significant activities involve deciding which energy storage systems to be purchased by the SPE and setting of the annual operating budgets which govern the ongoing operation and maintenance of the energy storage systems. Both of these activities significantly impact the revenue, expenses, and resulting residual returns or losses that will accrue to the investors of the SPE and require approval by both Stem and the other third-party investor. Stem, the non-managing member of the SPE, shares power through its rights to (i) agree on SPE purchases of energy storage systems in the master purchase agreement, and (ii) approve the annual operating budgets in the operating and maintenance agreement. The other investor shares power through its rights as the managing member in the SPE. As a result, power is shared with the other investors in the SPE who are not considered related parties (including de facto agency relationships) of the Company. Investments in such SPEs are accounted for under the equity method of accounting and are recorded within other noncurrent assets on the consolidated balance sheets. The Company's maximum loss exposure from these entities is limited to the aggregate carrying amount of its equity method investments. As of December 31, 2022, the Company had not provided, and is not required to provide, financial support through a liquidity arrangement or otherwise, to its SPEs, including circumstances in which it could be exposed to further losses (e.g., cash shortfalls). The Company's cumulative share of the earnings/(losses) in SPV II, SPV III and SPV IV was immaterial for the year ended December 31, 2022, and $0.1 million for both of the years ended December 31, 2021 and 2020.

Copec

During March 2020, the Company entered into the JV Agreement with *Compania de Petroleos de Chile Copec S.A.* ("Copec"), a leading wholesaler and distributor of petroleum products, that supplies fuel, lubricants, and other retail services such as carwash and foods through its series of service stations. The Company operates more than 650 service stations in Chile and more than 2,500 through different subsidiaries companies around South America, Central America, and the United States.

The purpose of the JV Agreement is to form an entity with equity contributions from both Stem and Copec to explore and develop business opportunities within the commercial and industrial space, including utilities and grid operators, in Latin America with the focus of providing intelligent energy storage solutions that leverage advanced software analytics and controls (principally through the Athena Platform developed by Stem). Stem's technology and expertise will be combined with the strength of Copec's scale, distribution network, energy knowledge and other expertise areas to develop business in certain territories as defined in the JV Agreement.

The JV entity is a VIE and the Company holds a variable interest in the JV Entity. However, the Company does not have the power to direct activities that most significantly impact the economics of the JV Entity and, as such, is not the primary beneficiary. Accordingly, the Company does not consolidate the JV Entity. The Company has concluded that it has the ability to exercise significant influence over the JV Entity, and accounts for the investment using the equity method.

The following table summarizes additional information about the Company's equity method investments, SPV II, SPV III, SPV IV and Copec:

	SPV II	SPV III	SPV IV	COPEC
Date formed	January 23, 2015	June 7, 2016	June 30, 2017	March 24, 2020
Initial ownership %	49 %	50 %	50 %	49 %
Stem's interest	100% of Class A shares	100% of Class B shares	100% of Class B shares	100% of Class A shares
Initial distributions:				
Class A	10% (Stem)	80% (Stem — 50%)	97.5 %	To be determined
Class B	90 %	20% (Stem — 100%)	2.5% (Stem)	N/A

As of December 31, 2022 and 2021, the Company's investment in its unconsolidated SPEs, recorded within other noncurrent assets on the consolidated balance sheets, was as follows (in thousands):

	December 31,	
	2022	2021
Investment in SPV II	$ —	$ —
Investment in SPV III	439	421
Investment in SPV IV	308	291
Copec	1,174	1,212
Other equity method investments	$ 50	$ —
Total equity method investments	$ 1,971	$ 1,924

As discussed in Note 2 — *Summary of Significant Accounting Policies*, the Company accounts for the legal sales of the energy storage systems to the SPEs as a financing obligation. This is because the Company has significant continuing involvement in the generation of cash flows of the energy storage systems and continue to be legally responsible under the host customer contract. Accordingly, in addition to the equity method investment, the Company has the following financing obligations associated with energy storage systems legally sold to the unconsolidated SPEs (in thousands):

	December 31,	
	2022	2021
Financing obligation, current portion	$ 15,720	$ 15,277
Financing obligation, noncurrent	$ 63,867	$ 73,204

Interest expense related to the financing obligations was $6.3 million, $8.5 million, and $6.9 million for the years ended December 31, 2022, 2021, and 2020, respectively.

As a result of being the accounting owner of energy storage systems sold to the SPEs and retaining the obligation to provide energy optimization services to host customers, the Company records the carrying value of energy storage system assets and obligations under the customer host contracts on its consolidated balance sheet. These balances were as follows as of December 31, 2022 and 2021 (in thousands):

	December 31,	
	2022	2021
Energy storage systems, net	$ 76,617	$ 92,426
Deferred revenue, current	$ 4,943	$ 4,417
Deferred revenue, noncurrent	$ 10,682	$ 10,835
Other liabilities	$ 3,763	$ 3,586

Because the Company is the legal party responsible for providing services to the host customer and significantly involved in generating the revenue under the host customer arrangements, the Company records the revenue associated with services, and separately records payments to the VIE as debt and interest payments. Revenues recognized by the Company associated with

energy storage systems legally sold to the unconsolidated SPEs were $17.8 million, $16.9 million, and $12.8 million for the years ended December 31, 2022, 2021, and 2020, respectively. Such revenues are inclusive of incentive fees, consistent with the Company's revenue policy. Depreciation expense recognized within cost of service revenue by the Company for the energy storage systems legally sold to the unconsolidated SPEs was $6.8 million, $12.8 million and $11.8 million for the years ended December 31, 2022, 2021, and 2020, respectively.

18. NET LOSS PER SHARE

The following table sets forth the computation of basic and diluted net loss per share attributable to common stockholders (in thousands, except share and per share amounts):

	Year Ended December 31,		
	2022	2021	2020
Numerator - Basic and Diluted:			
Net loss	$ (124,054)	$ (101,211)	$ (156,124)
Less: Deemed Dividend	—	—	(9,484)
Net loss attributable to common stockholders, basic and diluted	(124,054)	(101,211)	(165,608)
Denominator:			
Weighted-average number of shares outstanding used to compute net loss per share attributable to common stockholders, basic and diluted	153,413,743	105,561,139	40,064,087
Net loss per share attributable to common stockholders, basic and diluted	$ (0.81)	$ (0.96)	$ (4.13)

The following table shows total outstanding potentially dilutive shares excluded from the computation of diluted shares outstanding for the periods presented as the effect would have been anti-dilutive:

	December 31,		
	2022	2021	2020
Outstanding Pre-Merger Convertible Promissory Notes	—	—	10,495,111
Outstanding 2028 Convertible Notes	15,730,390	15,730,390	—
Outstanding stock options	8,243,637	8,766,466	11,065,658
Outstanding warrants	2,533	23,673	10,832,616
Outstanding RSUs	6,719,490	1,799,677	—
Total	30,696,050	26,320,206	32,393,385

19. INCOME TAXES

The components of loss before provision for income taxes for the years ended December 31, 2022, 2021, and 2020 are as follows (in thousands):

	December 31,		
	2022	2021	2020
Domestic	$ (137,164)	$ (101,211)	$ (156,119)
Foreign	(2,051)	—	—
Loss before income taxes	$ (139,215)	$ (101,211)	$ (156,119)

Due to the Company's net losses, the Company did not record a provision for federal income taxes during the years ended December 31, 2022, 2021 and 2020, respectively. The Company continues to maintain a full valuation allowance for its net U.S. federal and state deferred tax assets.

The components of the provision for income tax expense for the years ended December 31, 2022, 2021, and 2020 are as follows (in thousands):

	December 31,		
	2022	2021	2020
Current:			
Federal	$ (24)	$ —	$ —
State	184		5
Foreign	188	—	—
Total current	348	—	5
Deferred:			
Federal	(12,448)	—	—
State	(3,021)		
Foreign	(40)	—	—
Total deferred	(15,509)	—	—
Total provision for income taxes	$ (15,161)	$ —	$ 5

The effective tax rate of the Company's provision (benefit) for income taxes differs from the federal statutory rate as follows:

	December 31,		
	2022	2021	2020
Statutory rate	21.00 %	21.00 %	21.00 %
State tax	2.04 %	3.15 %	3.19 %
Foreign income and withholding taxes	(0.42)%	1.61 %	0.41 %
Stock-based compensation	(0.51)%	6.17 %	(0.60)%
Change in fair value of warrants	— %	0.71 %	(11.36)%
Other	(2.26)%	(1.19)%	— %
Non-deductible interest expense	(0.96)%	(2.53)%	(1.51)%
Valuation allowance	(8.00)%	(28.92)%	(11.13)%
Total	10.89 %	— %	— %

Deferred income taxes arise from temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax reporting purposes, as well as net operating losses ("NOLs") and tax credit carryforwards.

Significant components of the Company's deferred tax assets and liabilities as of December 31, 2022 and 2021 are as follows (in thousands):

	December 31,	
	2022	2021
Deferred tax assets:		
Net operating losses	$ 122,005	$ 92,160
Tax credits	720	741
Depreciable assets	291	604
Operating lease liabilities	3,234	3,558
Accruals and allowances	3,004	1,803
Stock-based compensation	3,549	1,359
Deferred revenue	34,575	24,734
Interest expense	1,245	1,209
Other	1,967	3,989
Total gross deferred tax assets	170,590	130,157
Less: Valuation allowance	(140,636)	(125,082)
Net deferred tax assets	29,954	5,075
Deferred tax liabilities:		
Amortization of asset retirement obligation	(634)	(768)
Intangibles	(26,319)	(862)
Right-of-use assets	(2,961)	(3,445)
Total gross deferred tax liabilities	(29,914)	(5,075)
Net deferred taxes	$ 40	$ —

As of December 31, 2022 and 2021, the Company had federal NOL carryforwards of approximately $409.8 million and $300.8 million, respectively, and state NOL carryforwards of approximately $353.2 million and $274.6 million, respectively. Of the $409.8 million federal net operating loss, $97.0 million will begin to expire in 2029, while the remaining amount does not expire. The federal and state NOL carryforwards will both begin to expire in 2029. The state net operating loss carryforwards will begin to expire in 2029. As of December 31, 2022 and 2021, the Company had foreign NOL carryforwards of approximately $23.5 million and $9.0 million, respectively. The foreign net operating loss carryforwards expire in 2039.

As of December 31, 2022 and 2021, the Company had federal research and development tax credit carryforwards of $0.7 million and $0.7 million, respectively, which begin to expire in 2029 if not utilized. As of December 31, 2022 and 2021, the Company had California research and development tax credit carryforwards of $0.7 million and $0.7 million, respectively, which do not expire.

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. As a result of a history of taxable losses and uncertainties as to future profitability, the Company recorded a full valuation allowance against its deferred tax assets with exception of a foreign subsidiary which has been profitable historically. The valuation allowance was $140.6 million and $125.1 million as of December 31, 2022 and 2021, respectively.

Utilization of the net operating loss carryforwards and tax credit forwards may be subject to a substantial annual limitation due to ownership change limitations that may have occurred or that could occur in the future, as required by the Internal Revenue Code Section 382, as well as similar state provisions. In general, an "ownership change," as defined by the code, results from a transaction or series of transactions over a three-year period resulting in an ownership change of more than 50 percentage points of the outstanding stock of a company by certain stockholders or public groups. Any limitation may result in expiration of all or a portion of the NOL or tax credit carryforwards before utilization. The Company has not performed a detailed analysis to determine whether an ownership change under Section 382 of the Code has previously occurred. As a result, the Company's ability to utilize existing carryforwards could be restricted.

The Company had gross unrecognized tax benefits of $0.7 million and $0.7 million as of December 31, 2022 and 2021, respectively. There were no material additions, reductions or settlements of unrecognized tax benefits for years ended December 31, 2022 and 2021. The Company expects resolution of unrecognized tax benefits, if created, would occur while the full valuation allowance of deferred tax assets is maintained. The Company does not expect to have any unrecognized tax

benefits that, if recognized, would affect the effective tax rate. As of December 31, 2022, the Company did not have a liability for potential penalties or interest. The Company does not expect its unrecognized tax benefits to change significantly over the next 12 months.

In the normal course of business, the Company is subject to examination by taxing authorities throughout the United States of America, Canada, Germany, Japan and India. The Company is not currently under audit by the Internal Revenue Service or other foreign revenue agencies, or similar state or local authorities. The tax return years 2018 through 2022 remain open to examination by the major domestic taxing jurisdictions to which the Company is subject. Net operating losses generated on a tax return basis by the Company for calendar years 2009 through 2022 remain open to examination by the major domestic taxing jurisdictions.

20. COMMITMENTS AND CONTINGENCIES

Non-cancelable Purchase Obligations

In the normal course of business, we enter into non-cancelable purchase commitments with various parties to purchase primarily software-based services. As of December 31, 2022, we had outstanding non-cancelable purchase obligations with a term of less than 12 months of $1.4 million and non-cancelable purchase obligations with a term 12 months or longer of $2.1 million.

Contingencies

The Company is party to various legal proceedings from time to time arising in the ordinary course of its business. A liability is accrued when a loss is both probable and can be reasonably estimated. Management believes that the probability of a material loss with respect to any currently pending legal proceeding is remote. However, litigation is inherently uncertain and it is not possible to definitively predict the ultimate disposition of any of these proceedings. The Company does not believe that there are any pending legal proceedings or other loss contingencies that will, either individually or in the aggregate, have a material adverse effect on the Company's consolidated financial statements.

21. EMPLOYER RETIREMENT PLAN

The Company sponsors a 401(k) profit sharing plan covering all eligible employees. Participants may elect to defer a percentage of their compensation ranging from 1% to 100%, up to the maximum allowable by law by making contributions to the plan. The Company may match, at its discretion, the employee contributions according to the terms of the plan. During the year ended December 31, 2022, the company made matching contributions of $0.6 million to the plan. During the years ended December 31, 2021, and 2020, the Company did not match any of its employees' contributions.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures (Disclosure Controls) within the meaning of Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Our Disclosure Controls are designed to provide reasonable assurance that information required to be disclosed by us in the reports we file or submit under the Exchange Act, such as this Annual Report on Form 10-K, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Our Disclosure Controls are also designed to provide reasonable assurance that such information is accumulated and communicated to our management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), as appropriate, to allow timely decisions regarding required disclosure.

Based on management's evaluation (under the supervision and with the participation of our CEO and our CFO) as of December 31, 2022, of the effectiveness of the design and operation of our Disclosure Controls, our CEO and CFO have concluded that our Disclosure Controls were effective as of December 31, 2022.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, our CEO and CFO to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP and includes those policies and procedures that (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our management, including our CEO and CFO, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on the evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2022.

On February 1, 2022, we completed our acquisition of certain assets of Also Energy Holdings, Inc. (AlsoEnergy). We are in the process of evaluating the existing controls and procedures of AlsoEnergy, and integrating AlsoEnergy into our internal control over financial reporting. In accordance with SEC Staff guidance permitting a company to exclude an acquired business from management's assessment of the effectiveness of internal control over financial reporting for the year in which the acquisition is completed, we have excluded the business that we acquired in the AlsoEnergy acquisition from our assessment of the effectiveness of internal control over financial reporting as of December 31, 2022. The business that we acquired in the AlsoEnergy acquisition constituted 3% of our total assets as of December 31, 2022 and 16% of our revenues for the year ended December 31, 2022.

Our independent registered public accounting firm, Deloitte & Touche LLP, has audited the effectiveness of our internal control over financial reporting as of December 31, 2022, as stated in its report which is included herein.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f)) under the Exchange Act) that occurred during the quarterly period ended December 31, 2022, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting, except as described below:

Remediation Activities

As previously reported, management identified material weaknesses in its internal control over financial reporting as of December 31, 2021. The material weaknesses that we identified related to (i) the accounting for energy storage systems, deferred cost of goods sold and inventory, (ii) ineffective internal controls over review of the Company's consolidated financial

statements and related disclosures, (iii) a lack of formality in our internal control activities, especially related to management review-type controls, and (iv) ineffective internal controls over the review of certain revenue recognition calculations.

We implemented several measures designed to improve our internal control over financial reporting in order to remediate the control deficiencies noted above. These steps include:

- Developing and delivering internal control training to management and finance/accounting personnel, focusing on a review of management’s and individual roles and responsibilities related to internal control over financial reporting.
- Hiring, training and developing experienced accounting executives and personnel with a level of public accounting knowledge and experience in the application of US GAAP commensurate with our financial reporting requirements and the complexity of our operations and transactions.
- Establishing and implementing policies and practices to attract, develop and retain competent public accounting personnel.
- Engaging a qualified third party Sarbanes-Oxley (“SOX”) compliance firm to assist us in bolstering and implementing our SOX compliance program, with a focus on documenting processes and controls, identifying and addressing control gaps, formalizing the internal control activities and strengthening the overall quality of documentation that evidences control activities.
- Performing a financial statement risk assessment and scoping exercise to identify and assess the risks of material misstatements in our financial statements to better ensure that the appropriate effort and resources are dedicated to addressing risks of material misstatements.
- Establishing a disclosure committee comprised of our CEO, CFO, Chief Legal Officer, Chief Accounting Officer and other senior finance/accounting and legal personnel to, among other things, review and, as necessary, help revise the Company’s controls and other procedures to ensure that information required by us to be disclosed is recorded, processed, summarized and reported accurately and on a timely basis.
- Implementing a Section 302 sub-certification program to reinforce the Company’s culture of compliance.
- Implementing processes to improve monitoring activities involving the review and supervision of our accounting operations, including increased and enhanced balance sheet reviews to allow more focus on quality account reconciliations and enhanced monitoring of our internal control over financial reporting.
- Implementing new accounting applications to enhance and streamline the order-to-cash and commissions processes.

As a result of these efforts, the Company determined that all material weaknesses were remediated and our internal control over financial reporting was effective as of December 31, 2022.

Inherent Limitations on Effectiveness of Internal Controls

Our management, including the CEO and CFO, does not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system’s objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Furthermore, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of the effectiveness of controls to future periods are subject to risks. Over time, controls may become inadequate because of changes in business conditions or deterioration in the degree of compliance with policies or procedures.

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

Part III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

See “Item I. Business —Information About Our Executive Officers” of this Report for information regarding the executive officers of Stem. The other information required for this Item will be included in the 2023 Proxy Statement, including under the headings “Corporate Governance” and “Delinquent Section 16(a) Reports,” if applicable, and is incorporated by reference.

We maintain a Code of Business Conduct and Ethics that applies to all employees, officers and directors, including our principal executive, principal financial and principal accounting officers, or persons performing similar functions. Our Code of Business Conduct and Ethics is published on our website at investors.stem.com/governance. We intend to disclose on our website future amendments to certain provisions of our Code of Business Conduct and Ethics, or waivers of the code granted to executive officers and directors, in accordance with SEC rules.

ITEM 11. EXECUTIVE COMPENSATION

The information required for this Item will be included in the 2023 Proxy Statement including under the headings “Executive Compensation” “Compensation Committee Interlocks” and “Report of the Compensation Committee,” and is incorporated by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNER AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required for this item will be included in the 2023 Proxy Statement, including under the heading “Certain Information About Our Common Stock,” and is incorporated by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required for this Item will be included in the 2023 Proxy Statement, including under the headings “Certain Relationships and Related Party Transactions” and “Corporate Governance,” and is incorporated by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required for this Item will be included in the 2023 Proxy Statement, including under the heading “Ratification of Independent Auditor Selection,” and is incorporated by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements: The financial statements filed as part of this Report are listed on the index to financial statements on page 53.

(2) Financial Schedules: All schedules have been omitted because they are not required, not applicable, not present in amounts sufficient to require submission of the schedule, or the required information is otherwise included.

(b) Exhibits. The exhibits listed on the Exhibit Index are included, or incorporated by reference, in this Report.

ITEM 16. FORM 10-K SUMMARY

None.

EXHIBIT INDEX

Exhibit No.	Description
3.1	Second Amended and Restated Certificate of Incorporation, dated April 28, 2021 (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed on May 4, 2021).
3.2	Amended and Restated Bylaws, dated October 27, 2022 (incorporated by reference to Exhibit 3 to the Current Report on Form 8-K filed on October 31, 2022).
4.1	Indenture dated as of November 22, 2021, between the Company and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to Stem's Current Report on Form 8-K filed on November 22, 2021).
4.2	Form of 0.50% Convertible Senior Note due 2028 (included in Exhibit 4.1).
4.3	Description of the Registrant's Securities (incorporated by reference to Exhibit 4.3 to Stem's Annual Report on Form 10-K filed on February 28, 2022).
10.1	Form of Confirmation for Capped Call Transactions (incorporated by reference to Exhibit 10.1 to Stem's Current Report on Form 8-K filed on November 22, 2021).
10.2	Purchase Agreement dated as of November 17, 2021, between the Company and the Initial Purchasers (incorporated by reference to Exhibit 10.2 to Stem's Current Report on Form 8-K filed on November 22, 2021).
10.3†	Stem, Inc. 2009 Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to Stem's Annual Report on Form 10-K filed on February 28, 2022).
10.4†	Form of Stock Option Agreement under the Stem, Inc. 2009 Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to Stem's Annual Report on Form 10-K filed on February 28, 2022).
10.5†	Stem, Inc. 2021 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to Stem's Registration Statement on Form S-8 filed on July 2, 2021)
10.6†	Form of Stock Option Agreement under the Stem, Inc. 2021 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to Stem's Quarterly Report on Form 10-Q filed on August 11, 2021).
10.7	Global Restricted Stock Unit Award Agreement under the Stem, Inc. 2021 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to Stem's Quarterly Report on Form 10-Q filed on November 4, 2022).
10.8	Investor Rights Agreement dated April 28, 2021, by and among the Company and certain of its stockholders (incorporated by reference to Exhibit 10.3 of the Company Current Report on Form 8-K filed on May 4, 2021)
10.9††	Framework BESS Sale and Purchase Agreement, dated as of August 17, 2021, by and between Tesla, Inc. and Stem, Inc. (Incorporated by reference to Exhibit 10.1 to Stem's Quarterly Report on Form 10-Q filed on August 5, 2021)
10.10††	First Amended and Restated Master Supply Agreement for Purchase and Sale of Energy Storage Systems, dated as of February 28, 2020, by and between Sungrow USA Corporation, Sungrow Samsung SDI Energy Storage Power Supply Co., Ltd. and Stem, Inc. (incorporated by reference to Exhibit 10.3 to Stem's Quarterly Report on Form 10-Q filed on August 5, 2022).
10.11††	First Amended and Restated Master Supply Agreement for Purchase and Sale of Energy Storage Equipment, dated as of September 14, 2022, by and between Powin Energy Corporation and Stem, Inc. (incorporated by reference to Exhibit 10.2 to Stem's Quarterly Report on Form 10-Q filed on November 4, 2023).
10.12†	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.10 to Stem's Annual Report on Form 10-K filed on February 28, 2022).
10.13†	Form of Executive Employment Agreement (incorporated by reference to Exhibit 10.11 to Stem's Annual Report on Form 10-K filed on February 28, 2022).

21*	Subsidiaries of the Registrant.
23*	Consent of Independent Registered Public Accounting Firm.
24*	Powers of Attorney.
31.1*	Certification of Chief Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith

** Furnished herewith

† Management or compensatory plan or arrangement

†† Information in this exhibit (indicated by brackets) has been redacted pursuant to Item 601(b)(10)(iv) of Regulation S-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 16, 2023

STEM, INC.

By: /s/ William Bush
William Bush
Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Name	Title
* John Carrington	Chief Executive Officer and Director (Principal Executive Officer)
/s/ William Bush William Bush	Chief Financial Officer (Principal Financial Officer)
/s/Rahul Shukla Rahul Shukla	Chief Accounting Officer (Principal Accounting Officer)
* David Buzby	Chairman of the Board
* Adam E. Daley	Director
* Anil Tammineedi	Director
* Michael C. Morgan	Director
* Laura D’Andrea Tyson	Director
* Lisa L. Troe	Director
* Jane Woodward	Director
/s/ Saul R. Laureles * By Saul R. Laureles, Attorney-in-Fact	February 16, 2023

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 14A
Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934
(Amendment No.)

Filed by the Registrant ☒

Filed by a Party other than the Registrant ☐

Check the appropriate box:

☐ Preliminary Proxy Statement

☐ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

☒ Definitive Proxy Statement

☐ Definitive Additional Materials

☐ Soliciting Material under §240.14a-12

Stem, Inc.

(Name of Registrant as Specified in Its Charter)
(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check all boxes that apply):

☒ No fee required.

☐ Fee paid previously with preliminary materials.

☐ Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11.

100 California St., 14th Floor, San Francisco, California 94111

NOTICE OF 2023 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JUNE 7, 2023

To our Stockholders:

Stem, Inc. (the "Company") will hold its 2023 Annual Meeting of Stockholders (the "Annual Meeting") on Wednesday, June 7, 2023, beginning at 10:00 a.m. Pacific Time. The Annual Meeting will be a virtual meeting conducted exclusively online via live audio webcast. Please visit *www.virtualshareholdermeeting.com/STEM2023* for more details, including instructions on how to register to attend the virtual Annual Meeting. The Annual Meeting will be held for the following purposes, as more fully described in the accompanying proxy statement (the "Proxy Statement"):

(1) to elect the three director nominees named in the Proxy Statement to serve until the 2026 Annual Meeting of Stockholders or until their successors are duly elected and qualified ("Proposal 1");

(2) to approve the amendment and restatement of our Second Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") to provide for the declassification of our Board of Directors over a five-year period and make corresponding updates to director removal provisions ("Proposal 2" or the "Declassification Amendment");

(3) to approve the amendment and restatement of our Certificate of Incorporation to eliminate supermajority voting requirements to amend our Certificate of Incorporation and Bylaws ("Proposal 3" or the "Majority Voting Amendment");

(4) to approve the amendment and restatement of our Certificate of Incorporation to provide exculpation from liability for certain officers of the Company in accordance with recent amendments to Delaware law ("Proposal 4" or the "Officer Exculpation Amendment");

(5) to ratify the selection of Deloitte & Touche LLP as the Company's independent registered public accounting firm for the year ending December 31, 2023 ("Proposal 5");

(6) to approve, on an advisory basis, the compensation of our named executive officers ("Proposal 6"); and

(7) to transact any other matters that may properly come before the Annual Meeting or any adjournments or postponements thereof.

Our Board of Directors (the "Board") has fixed April 10, 2023 as the record date. Only stockholders of record at the close of business on that date will be entitled to notice of, and to vote at, the Annual Meeting or any adjournment or postponement thereof.

Instructions for accessing the virtual Annual Meeting are provided in the Proxy Statement. We believe holding the Annual Meeting online via a live audio webcast expands stockholder access, improves communications, and lowers our costs while reducing the environmental impact of the meeting. Additionally, in light of the continued public health impact of the COVID-19 pandemic, and to support the health and well-being of our stockholders, employees and communities, we believe holding this year's Annual Meeting virtually is appropriate. Stockholders will be able to listen to the Annual Meeting live online, submit questions and vote their shares virtually.

By Order of the Board of Directors,

Saul R. Laureles
Chief Legal Officer and Corporate Secretary

San Francisco, California
April 21, 2023

Whether or not you expect to participate in the virtual Annual Meeting, please vote as promptly as possible in order to ensure your representation at the Annual Meeting. You may vote online or, if you requested printed copies of the proxy materials, by telephone or by using the proxy card or voting instruction form provided with the printed proxy materials.

PROXY OVERVIEW

ANNUAL MEETING OF STOCKHOLDERS
To Be Held on Wednesday, June 7, 2023

"Thank you for being a Stem stockholder. No matter how large or small your holdings, your vote is important to us. We encourage you to vote in accordance with the Board's recommendations." —John Carrington, CEO and Director

Voting Roadmap

Voting Items	Board's Voting Recommendation	More Information Beginning on Page
1. Election of three Class II director nominees to serve 3-year terms • ***Adam E. Daley*** • ***Anil Tammineedi*** • ***Lisa L. Troe***	**FOR** (each nominee)	**6**
2. Approval of amendments to our certificate of incorporation to declassify the Board over a five-year period and make corresponding updates to director removal provisions	**FOR**	**10**
3. Approval of amendments to our certificate of incorporation to eliminate supermajority voting requirements to amend our certificate of incorporation and bylaws	**FOR**	**12**
4. Approval of amendments to our certificate of incorporation to provide for officer exculpation	**FOR**	**14**
5. Ratification of Deloitte & Touche as independent auditor for 2023	**FOR**	**16**
6. Advisory approval of the compensation of our named executive officers	**FOR**	**19**

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LEGAL MATTERS

Important Notice Regarding the Availability of Proxy Materials for the 2023 Annual Meeting of Stockholders to Be Held on June 7, 2023. The Proxy Statement and Annual Report for the year ended December 31, 2022 are available at www.proxyvote.com.

Forward-Looking Statements. This Proxy Statement may contain "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, which are subject to substantial risks and uncertainties and are based on estimates and assumptions. All statements other than statements of historical fact included in the Proxy Statement are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "might," "will," "objective," "intend," "should," "could," "can," "would," "expect," "believe," "design," "estimate," "predict," "potential," "plan," or the negative of these terms, and similar expressions intended to identify forward-looking statements. These statements involve known and unknown risks, uncertainties, and other factors that could cause our actual results to differ materially from the forward-looking statements expressed or implied in the Proxy Statement. Such risks, uncertainties, and other factors include those risks described in "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our most recent Annual Report on Form 10-K filed with the SEC and other subsequent documents we file with the SEC. The Company expressly disclaims any obligation to update or alter any statements whether as a result of new information, future events, or otherwise, except as required by law.

Website References. Website references throughout this document are inactive textual references and provided for convenience only, and the content on the referenced websites is not incorporated herein by reference and does not constitute a part of the Proxy Statement.

Use of Trademarks. Stem, Athena and PowerTrack are trademarks of Stem, Inc. Other names and brands may be claimed as the property of others.

Company References. Unless the context otherwise requires, references in the Proxy Statement to "Stem," "we," "us," "our," or the "Company" refer to Stem, Inc. and its consolidated subsidiaries. The Company was originally known as

Star Peak Energy Transition Corp. ("STPK"), a special purpose acquisition company that completed its initial public offering on August 20, 2020. On April 28, 2021, we consummated our initial business combination (the "Merger") pursuant to an Agreement and Plan of Merger dated December 3, 2020, by and among STPK, STPK Merger Sub Corp., a Delaware corporation and wholly-owned subsidiary of STPK, and Stem, Inc., a Delaware corporation ("Legacy Stem"). In February 2022 we completed the acquisition (the "AlsoEnergy Acquisition") of Also Energy Holdings, Inc. ("AlsoEnergy").

100 California St., 14th Floor, San Francisco, California 94111

PROXY STATEMENT

FOR THE 2023 ANNUAL MEETING OF STOCKHOLDERS
QUESTIONS AND ANSWERS ABOUT THE PROXY MATERIALS AND VOTING

What Is the Purpose of These Proxy Materials?

We are making these proxy materials available to you in connection with the solicitation of proxies by our Board for use at our 2023 Annual Meeting of Stockholders (the "Annual Meeting"), to be held virtually on June 7, 2023 at 10:00 a.m. Pacific Time, or at any other time following adjournment or postponement thereof. You are invited to participate in the Annual Meeting and to vote on the proposals described in this Proxy Statement. The proxy materials are first being made available to our stockholders on or about April 21, 2023.

Why Did I Receive a Notice of Internet Availability?

Pursuant to U.S. Securities and Exchange Commission ("SEC") rules, we are furnishing the proxy materials to our stockholders primarily via the Internet instead of mailing printed copies. This process allows us to expedite our stockholders' receipt of proxy materials, lower the costs of printing and mailing the proxy materials, and reduce the environmental impact of our Annual Meeting. If you received a Notice of Internet Availability of Proxy Materials (the "Notice"), you will not receive a printed copy of the proxy materials unless you request one. The Notice provides instructions on how to access the proxy materials for the Annual Meeting via the Internet, how to request a printed set of proxy materials, and how to vote your shares.

Why Are We Holding a Virtual Annual Meeting?

We have adopted a virtual meeting format for the Annual Meeting to provide a consistent experience to all stockholders regardless of geographic location. We believe this expands stockholder access, improves communications, and lowers our costs, while reducing the environmental impact of the meeting. A virtual meeting format is particularly important to protect our stockholders and employees in light of the evolving public health and safety considerations posed by the ongoing coronavirus (COVID-19) pandemic. In structuring our virtual Annual Meeting, our goal is to enhance rather than constrain stockholder participation in the meeting, and we have designed the meeting to provide stockholders with the same rights and opportunities to participate as they would have at an in-person meeting.

Who Can Vote?

Only stockholders of record at the close of business on April 10, 2023 (the "Record Date") are entitled to notice of the Annual Meeting and to vote on the proposals described in this Proxy Statement. At the close of business on the Record Date, 155,518,799 shares of our common stock were issued and outstanding.

What Is the Difference between Holding Shares of Common Stock as a Registered Stockholder and as a Beneficial Owner?

Registered Stockholder: Shares Registered in Your Name

If your shares of common stock are registered directly in your name with our transfer agent, Computershare Trust Company, N.A., you are considered to be, with respect to those shares of common stock, the registered stockholder, and these proxy materials are being sent directly to you by us.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary, or Custodian

If your shares of common stock are held by a broker, fiduciary, or custodian, you are considered the beneficial owner of shares of common stock held in "street name," and these proxy materials are being forwarded to you from that broker, fiduciary, or custodian.

How Can I Participate in the Virtual Annual Meeting?

Only stockholders of record and beneficial owners of shares of our common stock as of the close of business on April 10, 2023, the Record Date, may attend and participate in the virtual Annual Meeting, including to vote and ask questions. You will not be able to attend the Annual Meeting physically in person.

To attend and participate in the Annual Meeting, including to vote and ask questions, stockholders of record should go to the meeting website at www.virtualshareholdermeeting.com/STEM2023, enter the 16-digit control number found on your proxy card or Notice, and follow the instructions on the website. If your shares are held in street name and your voting instruction form or Notice indicates that you may vote those shares through www.proxyvote.com, then you may access, participate in and vote at the Annual Meeting with the 16-digit access code indicated on that voting instruction form or Notice. Otherwise, stockholders who hold their shares in street name should contact their bank, broker or other nominee (preferably at least five days before the Annual Meeting) and obtain a "legal proxy" in order to be able to attend, participate in or vote at the Annual Meeting.

We will endeavor to answer as many stockholder-submitted questions as time permits that comply with the Annual Meeting rules of conduct. We reserve the right to edit profanity or other inappropriate language and to exclude questions regarding topics that are not pertinent to meeting matters or Company business. If we receive substantially similar questions, we may group such questions together and provide a single response to avoid repetition.

The meeting webcast will begin promptly at 10:00 a.m. Pacific Time. Online check-in will begin approximately 15 minutes before then. We encourage you to allow ample time for check-in procedures. If you experience technical difficulties during the check-in process or during the meeting, please call the number listed on the meeting website for technical support. Additional information regarding the rules and procedures for participating in the Annual Meeting will be set forth in our meeting rules of conduct, which stockholders can view during the meeting at the meeting website.

What Am I Voting on?

The proposals to be voted on at the Annual Meeting are as follows:

(1) to elect the three director nominees named in the Proxy Statement to serve until the 2026 Annual Meeting of Stockholders or until their successors are duly elected and qualified ("Proposal 1");

(2) to approve the amendment and restatement of our Second Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") to provide for the declassification of our Board of Directors over a five-year period and make corresponding updates to director removal provisions ("Proposal 2" or the "Declassification Amendment");

(3) to approve the amendment and restatement of our Certificate of Incorporation to eliminate supermajority voting requirements to amend our Certificate of Incorporation and Bylaws ("Proposal 3" or the "Majority Voting Amendment");

(4) to approve the amendment and restatement of our Certificate of Incorporation to provide exculpation from liability for certain officers of the Company in accordance with recent amendments to Delaware law ("Proposal 4" or the "Officer Exculpation Amendment");

(5) to ratify the selection of Deloitte & Touche LLP as the Company's independent registered public accounting firm for the year ending December 31, 2023 ("Proposal 5");

(6) to approve, on an advisory basis, the compensation of our named executive officers ("Proposal 6"); and

(7) to transact any other matters that may properly come before the Annual Meeting or any adjournments or postponements thereof.

How Does the Board Recommend That I Vote?

The Board recommends that you vote your shares "**FOR**" each director nominee in Proposal 1 and "**FOR**" Proposals 2, 3, 4, 5 and 6.

What If Another Matter Is Properly Brought before the Annual Meeting?

As of the date of filing this Proxy Statement, the Board knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the Annual Meeting, it is the intention of the persons named as proxies in the proxy card to vote on such matters in accordance with their best judgment.

How Many Votes Do I Have?

Each share of common stock is entitled to one vote on each proposal to be voted on at the Annual Meeting.

What Does It Mean If I Receive More Than One Set of Proxy Materials?

If you receive more than one set of proxy materials, your shares may be registered in more than one name or held in different accounts. Please cast your vote with respect to each set of proxy materials that you receive to ensure that all of your shares are voted.

How Do I Vote?

Registered Stockholder: Shares Registered in Your Name

If you are the registered stockholder, you may vote your shares online during the virtual Annual Meeting (see "How Can I Participate in the Virtual Annual Meeting?" above) or by proxy in advance of the Annual Meeting by Internet at *www.proxyvote.com* or, if you requested paper copies of the proxy materials, by completing and mailing a proxy card or by telephone at 800-690-6903. Even if you plan to attend the Annual Meeting, we recommend that you also submit your vote as early as possible in advance so that your vote will be counted if you later decide not to, or are unable to, virtually attend the Annual Meeting.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary, or Custodian

If you are the beneficial owner, you may vote your shares online during the virtual Annual Meeting (see "How Can I Participate in the Virtual Annual Meeting?" above) or you may direct your broker, fiduciary, or custodian how to vote in advance of the Annual Meeting by following the instructions they provide.

What Happens If I Do Not Vote?

Registered Stockholder: Shares Registered in Your Name

If you are the registered stockholder and do not vote in one of the ways described above, your shares will not be voted at the Annual Meeting and will not be counted toward the quorum requirement.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary, or Custodian

If you are the beneficial owner and do not direct your broker, fiduciary, or custodian how to vote your shares, your broker, fiduciary, or custodian will only be able to vote your shares with respect to proposals considered to be "routine." Your broker, fiduciary, or custodian is not entitled to vote your shares with respect to "non-routine" proposals, which we refer to as a "broker non-vote." Whether a proposal is considered routine or non-routine is subject to stock exchange rules and final determination by the stock exchange. Even with respect to routine matters, some brokers are choosing not to exercise discretionary voting authority. As a result, we urge you to direct your broker, fiduciary, or custodian how to vote your shares on all proposals to ensure that your vote is counted.

What If I Sign and Return a Proxy Card or Otherwise Vote but Do Not Indicate Specific Choices?

Registered Stockholder: Shares Registered in Your Name

The shares represented by each signed and returned proxy will be voted at the Annual Meeting by the persons named as proxies in the proxy card in accordance with the instructions indicated on the proxy card. However, if you are the registered stockholder and sign and return your proxy card without giving specific instructions, the persons named as proxies in the proxy card will vote your shares in accordance with the recommendations of the Board. Your shares will be counted toward the quorum requirement.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary, or Custodian

If you are the beneficial owner and sign and return your voting instruction form without giving specific instructions, your broker, fiduciary, or custodian will only be able to vote your shares with respect to proposals considered to be “routine.” Your broker, fiduciary, or custodian is not entitled to vote your shares with respect to “non-routine” proposals, resulting in a broker non-vote with respect to such proposals.

Can I Change My Vote after I Submit My Proxy?

Registered Stockholder: Shares Registered in Your Name

If you are the registered stockholder, you may revoke your proxy at any time before the final vote at the Annual Meeting in any one of the following ways:

(1) You may complete and submit a new proxy card, but it must bear a later date than the original proxy card;

(2) You may submit new proxy instructions via telephone or the Internet;

(3) You may send a timely written notice that you are revoking your proxy to our Corporate Secretary at the address set forth on the first page of this Proxy Statement; or

(4) You may vote by attending the Annual Meeting virtually. However, your virtual attendance at the Annual Meeting will not, by itself, revoke your proxy.

Your last submitted vote is the one that will be counted.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary, or Custodian

If you are the beneficial owner, you must follow the instructions you receive from your broker, fiduciary, or custodian with respect to changing your vote.

What Is the Quorum Requirement?

The holders of a majority of the shares of common stock outstanding and entitled to vote at the Annual Meeting must be present at the Annual Meeting, either virtually or represented by proxy, to constitute a quorum. A quorum is required to transact business at the Annual Meeting.

Your shares will be counted toward the quorum only if you submit a valid proxy (or a valid proxy is submitted on your behalf by your broker, fiduciary or custodian) or if you attend the Annual Meeting virtually and vote. Abstentions and broker non-votes will be counted toward the quorum requirement. If there is no quorum, the chairman of the Annual Meeting or the holders of a majority of shares of common stock virtually present at the Annual Meeting, either personally or by proxy, may adjourn the Annual Meeting to another time or date.

How Many Votes Are Required to Approve Each Proposal and How Are Votes Counted?

Votes will be counted by a representative of Broadridge Financial Solutions who has been appointed as the independent Inspector of Elections for the Annual Meeting.

Proposal 1: Election of Directors

A nominee will be elected as a director at the Annual Meeting if the nominee receives a plurality of the votes cast "FOR" his or her election. "Plurality" means that the individuals who receive the largest number of votes cast "FOR" are elected as directors. Broker non-votes, if any, and votes that are withheld will not be counted as votes cast on the matter and will have no effect on the outcome of the election. Stockholders do not have cumulative voting rights for the election of directors.

Proposal 2: Approval of the Amendment and Restatement of the Certificate of Incorporation to Declassify our Board over a Five-Year Period

The affirmative vote of at least 66 ⅔% of the shares of common stock outstanding and entitled to vote thereon is required for the approval of this amendment to the Certificate of Incorporation. Abstentions and broker non-votes, if any, will have the same effect as a vote "AGAINST" the matter.

Proposal 3: Approval of the Amendment and Restatement of the Certificate of Incorporation to Replace the Supermajority Voting Requirements with Majority Voting Requirements

The affirmative vote of at least 66 ⅔% of the shares of common stock outstanding and entitled to vote thereon is required for the approval of this amendment to the Certificate of Incorporation. Abstentions and broker non-votes, if any, will have the same effect as a vote "AGAINST" the matter.

Proposal 4: Approval of the Amendment and Restatement of the Certificate of Incorporation to provide for Exculpation of Officers

The affirmative vote of at least 66 ⅔% of the shares of common stock outstanding and entitled to vote thereon is required for the approval of this amendment to the Certificate of Incorporation. Abstentions and broker non-votes, if any, will have the same effect as a vote "AGAINST" the matter.

Proposal 5: Ratification of Independent Auditor Selection

The affirmative vote of a majority of shares of common stock present or represented at the Annual Meeting and entitled to vote thereon is required for the ratification of the selection of Deloitte & Touche LLP as our independent registered public accounting firm for the year ending December 31, 2023. Abstentions will have the same effect as a vote "AGAINST" the matter. Broker non-votes, if any, will have no effect on the outcome of this proposal.

Proposal 6: Advisory Approval of Executive Compensation

The affirmative vote of a majority of shares of common stock present or represented at the Annual Meeting and entitled to vote thereon is required for the advisory approval of executive compensation. Abstentions will have the same effect as a vote "AGAINST" the matter. Broker non-votes, if any, will have no effect on the outcome of this proposal.

Who Is Paying for This Proxy Solicitation?

We will pay the costs associated with the solicitation of proxies, including the preparation, assembly, printing, and mailing of the proxy materials. We may also reimburse brokers, fiduciaries, or custodians for the cost of forwarding proxy materials to beneficial owners of shares of common stock held in "street name."

Our employees, officers, and directors may solicit proxies in person or via telephone or the Internet. We will not pay additional compensation for any of these services.

How Can I Find out the Voting Results?

We expect to announce preliminary voting results at the Annual Meeting. We will disclose final voting results in a Current Report on Form 8-K that we will file with the SEC within four business days after the Annual Meeting.

PROPOSAL 1: ELECTION OF DIRECTORS

Our Board is currently divided into three classes, with members of each class holding office for staggered three-year terms. There are currently three Class II directors who are up for election at the Annual Meeting to serve for a term expiring at the 2026 Annual Meeting of Stockholders; three Class III directors, whose terms expire at the 2024 Annual Meeting of Stockholders; and two Class I directors, whose terms expire at the 2025 Annual Meeting of Stockholders, in all cases until their successors have been duly elected and qualified or until the earlier of their resignation or removal.

Our Board has nominated Adam E. Daley, Anil Tammineedi, and Lisa L. Troe for election as Class II directors. They have indicated that they are willing and able to serve as directors. However, if any of them becomes unable or, for good cause, unwilling to serve, proxies may be voted for the election of such other person as will be designated by our Board, or the Board may decrease the size of the Board.

As discussed in greater detail in Proposal 2, the Board recently approved, subject to stockholder approval, an amendment and restatement of our Certificate of Incorporation to provide for the declassification of our Board over a five-year period. If Proposal 2 is approved by the requisite vote of stockholders at the Annual Meeting, the Board will be completely declassified, and all directors will be subject to annual election to one-year terms, beginning with the 2028 Annual Meeting of Stockholders.

Information Regarding Director Nominees and Continuing Directors

Biographical and other information regarding our director nominees and directors continuing in office, including the primary skills and experiences considered by our Nominating, Governance and Sustainability Committee (the "Nominating Committee") in determining to recommend them as nominees, is set forth below.

Name	Class	Age (as of April 10)	Position
David Buzby [(2)]	III	63	Independent Chairman of the Board
John Carrington	III	56	Chief Executive Officer and Director
Adam E. Daley [(1)]	II	46	Independent Director
Michael C. Morgan [(2)]	III	54	Independent Director
Anil Tammineedi [(1),(3)]	II	46	Independent Director
Lisa L. Troe [(1)]	II	61	Independent Director
Laura D'Andrea Tyson [(3)]	I	75	Independent Director
Jane Woodward [(2),(3)]	I	63	Independent Director

(1) Member of the Audit Committee.
(2) Member of the Compensation Committee.
(3) Member of the Nominating Committee.

Class II Director Nominees

Adam E. Daley. Mr. Daley has served as a member of our Board since the closing of the Merger in April 2021, and was a member of the STPK board of directors from 2020 until the Merger. He is a Partner at Magnetar Capital LLC, Co-Head of Magnetar's Energy & Infrastructure Group and a member of Magnetar Capital's Management Committee and Investment Committee. Since joining Magnetar Capital at its inception in 2005, Mr. Daley has been focused primarily on the sourcing, execution and management of various investments in the energy, energy infrastructure and renewables sectors. Prior to joining Magnetar Capital, Mr. Daley was an investment banker at Citigroup's Global Corporate and Investment Bank from 1999 to 2005. Mr. Daley has served as a member of the board of directors of Lightstar Renewables LL since 2023, PosiGen, Inc. since December 2021, Double Eagle Energy III, LLC since January 2018, Vesper Energy Development LLC since November 2020 and DoublePoint Energy, LLC since June 2018. Mr. Daley previously served as a director of Star Peak Corp. II (NYSE: STPC) from January 2021 to September 2021. Mr. Daley earned his B.S. in Finance with High Honors from the University of Illinois.

Mr. Daley is qualified to serve as a director due to his broad transactional experience in the energy, energy infrastructure and renewables sectors, his strong strategic focus and his financial expertise, all of which enable him to make valuable contributions to Stem's financial and strategic planning and industry competitiveness.

Anil Tammineedi. Mr. Tammineedi has served as a member of our Board since the closing of the Merger in April 2021, and was a member of the Legacy Stem Board of Directors from 2019 until the Merger. He is a Partner at the Angeleno Group, LLC, a leading global investment firm focused on high-growth clean energy and climate solutions companies, where he has been leading investments across a number of sectors, including sustainable mobility, energy storage, resource efficiency and smart infrastructure since 2008. Prior to joining the Angeleno Group, Mr. Tammineedi served in various product development and management roles related to semiconductors targeting communications, mobile and power management applications at Broadcom Inc., a semiconductor company, from 1999 to 2006. Mr. Tammineedi has served as a member of the board of directors of Locana since 2016, and served as a director of Patriot Environmental Services, Inc. from 2016 until its acquisition in 2022. He also serves as a board observer at mPrest, Inc. Mr. Tammineedi has a M.S. from Iowa State University and an M.B.A. from the UCLA Anderson School of Management, where he serves as a Senior Faculty Advisor to the Business Creation Program and lectures on Impact Investing and Entrepreneurship. Mr. Tammineedi is also a Kauffman Fellow.

Mr. Tammineedi is qualified to serve as a director due to his extensive experience in the technology sector and with high-growth and clean energy companies, and as a director on the boards of other companies.

Lisa L. Troe. Ms. Troe has served as a member of our Board since the closing of the Merger in April 2021. She was a Senior Managing Director of Athena Advisors LLC, from January 2014 to June 2021, a firm she co-founded to provide services in securities litigation, public company accounting, financial reporting and disclosure, compliance systems, enterprise risk management and other business needs and strategies. From 2005 to 2013, Ms. Troe was a Senior Managing Director at FTI Consulting, Inc. (NYSE: FCN), a global business advisory firm. From 1995 to 2005, Ms. Troe served on the Staff of the Division of Enforcement of the U.S. Securities and Exchange Commission's Pacific regional office, including seven years as a Branch Chief and six years as the Regional Chief Enforcement Accountant. Prior to joining the SEC, Ms. Troe was an auditor at a Big Four public accounting firm and held corporate accounting and financial positions in the oil and gas industry.

Ms. Troe serves as a director and a member or chair of the audit committee of (i) Magnite, Inc. (Nasdaq: MGNI), an independent platform that facilitates the purchase and sale of digital advertising, since February 2014; (ii) HireRight Holdings Corp (NYSE: HRT), which provides employers with global background screening and other workforce solutions, since March 2021; and (iii) Expro Group Holdings N.V. (NYSE: XPRO), an international oilfield services company that facilitates safer development of new energy and extends the longevity of resources production, since October 2021. She served as a director on private company boards in multiple industries and as an independent member of a public company board special committee. Ms. Troe is a member of the National Association of Corporate Directors and holds a CERT certification in cybersecurity from the Software Engineering Institute of Carnegie Mellon University. Ms. Troe earned her B.S. in Business Administration with Honors from the University of Colorado and is a Certified Public Accountant.

Ms. Troe is qualified to serve as a director due to her expertise in public company accounting, financial reporting and disclosure; public company governance and oversight; and enterprise risk management, as well as for the depth of her government and business experience, and her extensive public company board and audit committee experience. Ms. Troe also has diverse experience in a wide range of industries, allowing her to bring additional valuable perspectives to our Board.

Required Vote

A nominee will be elected as a director at the Annual Meeting if the nominee receives a plurality of the votes cast "FOR" his or her election. "Plurality" means that the individuals who receive the largest number of votes cast "FOR" are elected as directors. ***Broker non-votes, if any, will not be counted as votes cast on the matter and will have no effect on the outcome of the election.***

Recommendation of the Board

The Board of Directors recommends a vote "FOR" the election of each of the Class II director nominees set forth above.

Class I Directors Continuing in Office

Laura D'Andrea Tyson. Dr. Tyson has been a member of our Board since the closing of the Merger in April 2021. She is a Distinguished Professor of the Graduate School and Professor Emeritus at the Haas School of Business at the University of California, Berkeley, and has served in this capacity since 2016. She has also been Chair of the Board of Trustees and Steering Committee Member of the Blum Center for Developing Economies since 2007, and is the Faculty Director of the Berkeley Haas Blockchain Initiative and the co-Faculty Director of the Sustainable and Impact Finance Initiative at the Haas School of Business since 2019. Dr. Tyson has also held a series of other positions at the University of California, Berkeley, including Professor of Business Administration and Economics at the Haas School of Business from 2007 to 2016, the Founder, Faculty Director and Interim Director of the Institute of Business and Social Impact from 2013 to 2020, Interim Dean of UC Berkeley's Haas School of Business from July 1, 2018 to December 31, 2018 and Dean of the Haas School from 1998 through 2001. She was also Dean of London Business School, University of London from 2001 through 2006.

Dr. Tyson has been a director of Lexmark International Inc. since 2017 and Apex Swiss Holdings, SARL since 2017. Dr. Tyson previously served on the board of directors of CBRE Group, Inc. (NYSE: CBRE) from 2010 to April 2022, AT&T Inc. (NYSE: T) from 1999 to 2020, Morgan Stanley (NYSE: MS) from 1997 to 2016 and Silver Springs Networks, Inc. (NYSE: SSNI) from 2009 to 2018. Dr. Tyson has been a board member of the Haas School of Business since 2020, the Blum Center of Developing Economics since 2016, SeriousFun Children's Network since 2020, the Opportunity Institute since 2018, and the Sustainability Accounting Standards Board Foundation between 2017 and 2022.

Dr. Tyson has numerous advisory roles, such as Senior Advisor to the Rock Creek Group since 2009 and to the APAX Global Partners Fund since 2021. She is an Economic Advisor to the McKinsey Global Institute and a Global Economy Fellow for the MasterCard Center for Inclusive Growth since 2019, having acted as special advisor since 2016. Dr. Tyson was a member of the *Commission d'experts sur les grands défis économiques* for French President Emmanuel Macron since 2020. She has served as an advisory board member for APAX Global Impact since 2021 and Angeleno Group since 2018. She has served on the executive board of the Major League Baseball Professional Development League since 2022. She is the co-chair of the California Governor's Council of Economic Advisors. Other government roles include membership on the US President's Council of Advisors on Science and Technology (Working Group Member on Semiconductors) from 2016 to 2017, Secretary of State Foreign Affairs Policy Board and Council on Jobs and Competitiveness for the President of the U.S. from 2011 to 2013, Economic Recovery Advisory Board to the President of the U.S. from 2009 to 2011. She is a regular opinion columnist for Project Syndicate, an international media group that publishes pieces on its website and on numerous print publications around the world. Dr. Tyson was a member of President Clinton's cabinet from 1993 to 1996 and was the first woman to serve in the positions of Chair of the President's Council of Economic Advisors, from 1993 to 1995, and Director of the White House National Economic Council, from 1995 to 1996. Dr. Tyson received her B.A. from Smith College and holds a Ph.D. in Economics from the Massachusetts Institute of Technology.

Dr. Tyson is qualified to serve as a director due to her extensive public company board and governance experience, deep experience in the technology and energy industries, expertise in economics and public policy, her experience as an advisor in various business and political arenas, and her accomplishment at the highest levels of government service.

Jane Woodward. Ms. Woodward has served as a member of our Board since the closing of the Merger in April 2021. She is a Founding Partner of MAP Energy, LLC, a firm that focuses on energy investing and manages one of the largest private mineral portfolios in the U.S. She is a Managing Partner of WovenEarth Ventures, a boutique fund of funds focused on early-stage venture and niche project development. Ms. Woodward is also a member of the boards of directors of Fervo Energy, a geothermal project developer where she has served since 2021, Project Canary, an ESG data provider where she has served since 2021, and Ambient Fuels, a green hydrogen project developer where she has served since 2022. Ms. Woodward has also served as an adjunct professor of civil and environmental engineering at Stanford University since 1991 and has more than 30 years of experience developing and teaching energy classes. Ms. Woodward also serves on the Precourt Institute for Energy Advisory Council at Stanford University. Prior to founding MAP and teaching at Stanford, Ms. Woodward worked as an exploration geologist with ARCO Exploration Company and later as a petroleum engineering consultant to Stanford University's endowment. Ms. Woodward earned her B.A. in Geological Sciences from the University of California, Santa Barbara and her M.S. in Applied Earth Science and her M.B.A. from Stanford University.

Ms. Woodward is qualified to serve as a director due to her extensive private sector experience in numerous areas within the energy and renewables industries, as well as three decades of energy-related teaching experience.

Class III Directors Continuing in Office

John Carrington. Mr. Carrington has served as our Chief Executive Officer and a member of our Board since the closing of the Merger in April 2021, and was our Chief Executive Officer and a member of the board of directors of Legacy Stem from December 2013 until the Merger. Mr. Carrington leads the energy storage and analytics movement at the Company. He has more than 25 years of leadership experience at technology, energy and industrial companies. In 2013, Mr. Carrington joined Stem from MiaSolé, the world's largest CIGS-based thin film solar company. From 2011 to 2013, he served as Chief Executive Officer and Director at MiaSolé. Prior to MiaSolé, from 2008 to 2009, he was the Executive Vice President of Marketing and Business Development at First Solar. From 1991 to 2008, Mr. Carrington worked at General Electric Company, most recently as General Manager and Chief Marketing Officer of GE Plastics. Mr. Carrington earned his B.S. in Economics from the University of Colorado.

Mr. Carrington is qualified to serve as a director due to his extensive executive experience in the energy and technology sectors. Additionally, as CEO of Stem, he possesses a deep knowledge of our business operations, financial strategy and operational strategy, as well as the industry, all of which enhance his contributions to our Board. The Board believes that Mr. Carrington's service as the Company's Chief Executive Officer is an important link between management and the Board, enabling the Board to perform its oversight function with the benefit of his perspectives on the Company's business and operations.

David Buzby. Mr. Buzby has served as member of our Board since the closing of the Merger in April 2021, and served on the Legacy Stem board of directors from April 2010 until the Merger. In April 2021 he was appointed Chairman of our Board. Mr. Buzby has been on the board of directors of Spring Valley Acquisition Corp. II (Nasdaq: SVIIU) since its initial public offering in October 2022 and Climate Transition Capital Acquisition (AEX: CTCA1) since 2021. He served on the board of directors of Leading Edge Equipment Technologies from 2017 until 2023. Mr. Buzby served as a member of the Investment Committee at the PRIME Coalition from 2016 to 2022, and as Founder and Chief Executive Officer of Bright Plain Renewable Energy from 2011 to 2016. He previously served as a member of the board of directors of Cambrian Innovation Inc. from 2016 to 2020. He was a founding investor and former director of SunRun Inc. (Nasdaq: RUN) from 2008 to 2012, SunEdison, Inc. from 2004 to 2009, Valueclick, Inc. from 1998 to 2014, Prevalent Power, Inc. from 2003 to 2005, Resource Holdings from 1991 to 1998 and Best Internet from 1995 to 1999. Mr. Buzby also served as the Chief Executive Officer of SunEdison and Resource Holdings and Chief Financial Officer of Best Internet. Mr. Buzby earned his B.A. from Middlebury College and his M.B.A. from Harvard Business School.

Mr. Buzby is qualified to serve as a director due to his extensive experience in the climate transition sector and as a director on the boards of other public companies.

Michael C. Morgan. Mr. Morgan has served as a member of our Board since the closing of the Merger in April 2021, and he served as the Chairman of the board of directors of STPK from August 2020 until the Merger. In 2008, Mr. Morgan co-founded Triangle Peak Partners, LP, a multi-strategy asset management firm focused on venture capital and growth equity, and he currently serves as its Chairman. Since 2004, Mr. Morgan has also served as President and Chief Executive Officer of Portcullis Partners, LP, a private investment partnership and limited partner of Triangle Peak Partners. Mr. Morgan has served as the lead independent director of Kinder Morgan, Inc. (NYSE: KMI), one of the largest energy infrastructure companies in North America, since 2011, and has served on the board of KMI and its predecessors since 2003. Mr. Morgan joined Kinder Morgan in 1997 and headed Kinder Morgan's corporate development efforts until 2001. He then served as President of KMI until 2004. Mr. Morgan has been a director of Sunnova Energy International, Inc. (NYSE: NOVA) since its initial public offering in June 2019, and served on the board of its predecessor (Sunnova Energy Corporation) from October 2015 until NOVA's initial public offering. Mr. Morgan was Chairman, and a member of the audit and compensation committees, of the board of directors of Star Peak Corp. II (NYSE: STPC) from January 2021 until its merger with Benson Hill in September 2021. Mr. Morgan is a frequent volunteer at Stanford University, and currently serves as co-chair of the Precourt Energy Institute Advisory Council and on several other advisory committees. Mr. Morgan earned his B.A. in Economics and M.A. in Sociology from Stanford University and his M.B.A. from Harvard Business School.

Mr. Morgan is qualified to serve as a director due to his extensive experience in the energy infrastructure and clean energy sectors, corporate finance, capital markets and M&A, and corporate development and strategy, as well as his extensive experience as a director on other public company boards.

PROPOSAL 2: APPROVAL OF THE AMENDMENT AND RESTATEMENT OF OUR CERTIFICATE OF INCORPORATION TO DECLASSIFY OUR BOARD OF DIRECTORS OVER A FIVE-YEAR PERIOD AND MAKE CORRESPONDING UPDATES TO DIRECTOR REMOVAL PROVISIONS

We are submitting to our stockholders a vote to adopt an amendment and restatement (the "Amended Certificate") of our current Certificate of Incorporation to begin to phase out our classified Board structure over a five-year period and to make corresponding updates to director removal provisions (the "Declassification Amendment"). This means that our classified Board would begin to phase out at our 2026 annual meeting of stockholders, with annual voting to elect each director to serve a one-year term beginning with our 2028 annual meeting of stockholders.

Our Certificate currently provides for our Board to be divided into three classes of directors serving staggered three-year terms, with the classes being as equal in number as possible. Consequently, at each annual meeting of our stockholders, the term of only one class expires, with only that class of directors being subject to stockholder re-election. The current structure of our Board is sometimes referred to as a "classified" or "staggered" board of directors.

The Board has approved and declared advisable the Declassification Amendment, subject to its approval by our stockholders at the Annual Meeting. By phasing out our classified board structure over time and requiring all of our directors to submit to election every year, we believe that we will further our goal of promoting corporate governance policies that maximize the accountability of our Board to our stockholders.

Summary of Declassification Amendment

The following is a summary of the proposed Declassification Amendment, and is qualified in its entirety by reference to the full text of the Amended Certificate as set forth in Annex B (with additions shown as underlined and deletions shown as struck through).

The Declassification Amendment that is proposed to be included in the Amended Certificate provides for the gradual elimination of our declassified board structure, such that for our annual meetings of shareholders in 2026 and 2027, the classes of directors whose terms expire at those meetings will be nominated for re-election for one-year terms, and our Board will be fully declassified, with all directors standing for annual election, beginning with the Company's 2028 annual meeting of stockholders.

The following table illustrates how our classified Board of Directors will be phased out if our stockholders approve the Declassification Amendment, assuming no change in the number of our directors.

Annual Meetings	Number of Directors to be Elected (Class)	Term of Directors Elected (Year of Expiration)
2024	Three (Class III)	Three-year term (expires 2027)
2025	Two (Class I)	Three-year term (expires 2028)
2026	Three (Class II)	One-year term (expires 2027)
2027	Six (Class II and Class III)	One-year term (expires 2028)
2028	Eight (All Directors)	One-year term (expires 2029)

Consistent with Delaware law, the Declassification Amendment would also amend the Certificate of Incorporation to provide that directors elected annually may be removed by stockholders either for or without cause. Directors elected for and serving out the remainder of a three-year term would continue to be removable only for cause.

The Declassification Proposal further provides that those directors who may be removed for or without cause may be removed by the affirmative vote of the holders of a majority of our outstanding common stock (a "Majority Vote") rather than the holders of at least 66 ⅔% of the shares of our common stock outstanding and entitled to vote. This means that, assuming that our stockholders approve this Proposal and the Amended Certificate becomes effective, from and after our 2026 annual meeting of stockholders, the Class II directors may be removed from office by a Majority Vote, from and after the 2027 meeting of stockholders, the Class II and Class III directors may be removed from office by a Majority Vote, and from and after the 2028 annual meeting of stockholders, any director may be removed by a Majority Vote.

The Declassification Amendment also amends Section 5.2 to reflect that once our Board is fully declassified, directors elected to fill vacancies on the Board will serve for a term expiring at the next annual meeting of stockholders, and that while the declassification of our Board is being phased in, any director elected to fill a vacancy on the Board will serve for the same term as the remainder of the class to which the director is elected.

The Amended Certificate, as reflected in Annex B, also includes certain technical and other administrative changes that do not substantively affect stockholder rights, including removing "Second" from the term "Second Amended and Restated Certificate" and other immaterial changes.

If our stockholders do not approve the Declassification Amendment, our Board will remain classified with each class of directors serving three-year terms and being subject to re-election only once every three years.

Reasons for the Proposed Amendment

Our Board recognizes that a classified board structure offers several advantages, such as promoting board continuity and stability, encouraging directors to take longer-term perspectives providing increased protection in the context of certain company takeover tactics, as a classified board makes it more difficult to change a majority of all directors in a single year. However, although our Board appreciates that these are important considerations, our Board also considered the potential advantages of declassification, including the ability for our stockholders to evaluate directors annually, which reinforces our directors' accountability to shareholders. The Board has determined it would be in the best interests of the Company and its stockholders to phase out the classified board structure, rather than declassify the Board immediately, so as to continue to promote continuity and stability in the near term during the initial years following the Merger and reduce the risk of disruption from special interest groups, which might have an agenda contrary to the long-term interests of all stockholders, while also being responsive to the concerns of stockholders that believe annual elections increase the accountability of directors to stockholders. Our Board believes that a robust governance program is vital to creating long-term stockholder value and that the phased declassification of the Board, if the proposed Declassification Amendment is approved, would further demonstrate the Company's commitment to strong corporate governance.

Conforming Changes to our Bylaws

If our stockholders approve the Declassification Amendment at the Annual Meeting, we will make conforming changes to our Bylaws, as well as changes to adopt a majority voting standard for director elections (for more information, see "Corporate Governance – Elimination of Protection Measures").

Required Vote

The affirmative vote of at least 66 ⅔% of the shares of common stock outstanding and entitled to vote thereon is required for the approval of the Declassification Amendment. ***Broker non-votes, if any, will have the same effect as a vote "AGAINST" this proposal.***

If approved by stockholders, we plan to amend and restate the Certificate of Incorporation to incorporate the amendments described in this Proposal 2 and file such Amended and Restated Certificate of Incorporation with the Delaware Secretary of State. Such Amended and Restated Certificate of Incorporation is expected to become effective at the time of that filing. If our stockholders approve Proposals 3 and 4, we expect that the Amended and Restated Certificate of Incorporation we file will also include the amendments contemplated by such proposals.

Recommendation of the Board

The Board of Directors recommends a vote "FOR" the approval of the Declassification Amendment in the form attached to this Proxy Statement as Annex B.

PROPOSAL 3: APPROVAL OF THE AMENDMENT AND RESTATEMENT OF OUR CERTIFICATE OF INCORPORATION TO REMOVE SUPERMAJORITY VOTING REQUIREMENTS TO AMEND OUR CERTIFICATE OF INCORPORATION AND BYLAWS

We are submitting to our stockholders a vote to adopt certain provisions in the Amended Certificate to replace the supermajority stockholder voting requirements in our current Certificate of Incorporation with a majority voting standard following the Company's 2026 annual meeting of stockholders (the "Majority Voting Amendment").

Currently, our Bylaws and Certificate of Incorporation provide that certain stockholder actions require the affirmative vote of the holders of at least 66 ⅔% of the shares of our common stock outstanding and entitled to vote (a "Supermajority Vote"). After considering the advantages and disadvantages of the Supermajority Voting Requirements at this time, the Board has approved and declared advisable the replacement of the Supermajority Vote provisions with a requirement that such actions be approved by the affirmative vote of the holders of a majority of our outstanding common stock (a "Majority Vote"), subject to its approval by our stockholders at the Annual Meeting.

Summary of the Majority Voting Amendment

The following is a summary of the proposed Majority Voting Amendment, and is qualified in its entirety by reference to the full text of the Amended Certificate as set forth in Annex C (with additions shown as underlined and deletions shown as struck through).

Our current Certificate of Incorporation provides that any amendment or repeal of the provisions below must be approved by a Supermajority Vote:

- The classification of the Board;
- The removal of a director;
- The ability of stockholders to take action;
- The liability of directors and officers of the Company and their duties with respect to certain opportunities; and
- The forum for certain disputes.

In addition, our current Certificate of Incorporation provides that a Supermajority Vote is required for our stockholders to amend our Bylaws.

The Majority Voting Amendment would provide that, the Supermajority Vote standard would be removed, following our 2026 annual meeting of stockholders, for the amendments to our Certificate of Incorporation listed above, and stockholder amendments to our Bylaws.

Reasons for the Proposed Amendment

Our Board carefully considered the advantages of the Supermajority Vote provisions, analyzed current corporate governance trends, and evaluated the appropriateness of the Supermajority Vote provisions in light of our overall corporate governance structure and ongoing stockholder engagement efforts. Consistent with its strong commitment to the careful consideration of stockholder views, our Board has determined that it is in the best interests of the Company and its stockholders to amend the Certificate of Incorporation to remove the Supermajority Vote provisions and replace them with Majority Vote requirements, and that such amendment taking effect beginning in 2026 rather than immediately (as described above) strikes the right balance in terms of continuing to promote continuity and stability in the near term.

Conforming Changes to our Bylaws

If our stockholders approve the Majority Voting Amendment at the Annual Meeting, we will make conforming changes to our Bylaws.

Required Vote

The affirmative vote of at least 66 ⅔% of the shares of common stock outstanding and entitled to vote thereon is required for the approval of the Majority Voting Amendment. ***Broker non-votes, if any, will have the same effect as a vote "AGAINST" this proposal.***

If approved by stockholders, we plan to amend and restate the Certificate of Incorporation to incorporate the amendment described in this Proposal 3 and file such Amended and Restated Certificate of Incorporation with the Delaware Secretary of State. Such Amended and Restated Certificate of Incorporation is expected to become effective at the time of that filing. If stockholders also approve Proposals 2 and 4, we expect that the Amended and Restated Certificate of Incorporation we file will also include the amendments contemplated by such proposals.

Recommendation of the Board

The Board of Directors recommends a vote "FOR" the approval of the Majority Voting Amendment in the form attached to this Proxy Statement as Annex C.

PROPOSAL 4: APPROVAL OF THE AMENDMENT AND RESTATEMENT OF OUR CERTIFICATE OF INCORPORATION TO LIMIT THE LIABILITY OF CERTAIN OFFICERS OF THE COMPANY, IN ACCORDANCE WITH RECENT AMENDMENTS TO DELAWARE LAW

We are submitting to our stockholders a vote to adopt certain provisions in the Amended Certificate that will provide exculpation from liability for certain officers of the Company as permitted pursuant to recent amendments to Delaware law, similar to, but more limited than, protections currently available to directors of the Company (the "Officer Exculpation Amendment").

Background

The Company is incorporated in the State of Delaware and therefore subject to the Delaware General Corporation Law ("DGCL"). The DGCL permits Delaware corporations to limit or eliminate the directors' personal liability for monetary damages resulting from a breach of fiduciary duty, subject to certain limitations as described below. These provisions are referred to as "exculpatory provisions" or "exculpatory protections." Exculpatory provisions for directors are already included in the current Certificate of Incorporation.

Recently, the Delaware legislature amended the DGCL to permit Delaware corporations to provide similar exculpatory protections for officers. As adopted, amended Section 102(b)(7) of the DGCL protects officers from personal monetary liability under limited circumstances as explained below. These protections do not apply automatically and must be included in the Company's Certificate of Incorporation to be effective.

The Officer Exculpation Amendment would extend the exculpation protections to certain officers of the Company, to the fullest extent permitted by Delaware Law. For the reasons set forth below, the Board has approved and declared advisable the Officer Exculpation Amendment, subject to its approval by our stockholders at the Annual Meeting. This summary is qualified in its entirety by reference to the full text of the Amended Certificate as set forth in Annex D (with additions shown as underlined).

Conditions and Limitations to Exculpation under DGCL Section 102(b)(7)

As amended, Section 102(b)(7) of the DGCL provides important conditions and limitations on a corporation's exculpation of its officers for monetary damages from breaches of fiduciary duty.

- Exculpation is not available for breaches of the fiduciary duty of loyalty to the corporation or its stockholders.
- Exculpation is not available for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of the law.
- Exculpation is not available for any transactions from which the officer derived an improper personal benefit.
- The protections of Section 102(b)(7) are limited to monetary damages only. Claims against officers for equitable relief are available.
- In contrast to exculpation for directors, exculpation for officers is not available in connection with any derivative claims on behalf of the corporation by a stockholder.

In accordance with Delaware law, under the Officer Exculpation Amendment, the only officers who would be eligible for exculpation would be (i) anyone serving as our President, Chief Executive Officer, Chief Operating Officer, Chief Financial Officer, Chief Legal Officer, Chief Accounting Officer, Controller and Treasurer, (ii) any other named executive officers, and (iii) any other officer who has consented to service of process in Delaware by written agreement.

Reasons for the Proposal

The Board believes that eliminating personal monetary liability for officers under certain circumstances is reasonable and appropriate. Claims against corporations for breaches of fiduciary duties are expected to continue to increase. Delaware corporations that fail to adopt officer exculpation provisions may experience a disproportionate amount

of nuisance litigation and disproportionately increased costs in the form of increased director and officer liability insurance premiums, as well as diversion of management attention from the business of the corporation.

Furthermore, the Board anticipates that similar exculpation provisions are likely to be adopted by our peer companies and others with whom the Company competes for executive talent. As a result, officer exculpation provisions may become advantageous for Delaware corporations to attract and retain experienced and qualified corporate officers.

The Officer Exculpation Amendment would provide for the elimination of personal monetary liability for certain officers to the fullest extent permitted by the DGCL. These protections would not limit the liability of officers in those cases described above under the heading "Conditions and Limitations to Exculpation under DGCL 102(b)(7)."

Taking into account the narrow class and type of claims for which officers would be exculpated, and the benefits the Board believes would accrue to the Company and its stockholders—enhancing its ability to attract and retain talented officers and potentially reducing future litigation costs associated with frivolous lawsuits—the Board determined that the Officer Exculpation Amendment is in the best interests of the Company and its stockholders.

Required Vote

The affirmative vote of at least 66 ⅔% of the shares of common stock outstanding and entitled to vote thereon is required for the approval of the Officer Exculpation Amendment. ***Broker non-votes, if any, will have the same effect as a vote "AGAINST" this proposal.***

If approved by stockholders, we plan to amend and restate the Certificate of Incorporation to incorporate the amendment described in this Proposal 4 and file such Amended and Restated Certificate of Incorporation with the Delaware Secretary of State. Such Amended and Restated Certificate of Incorporation is expected to become effective at the time of that filing. If our stockholders approve Proposals 2 and 3, we expect that the Amended and Restated Certificate of Incorporation we file will also include the amendments contemplated by such proposals.

Recommendation of the Board

The Board of Directors recommends a vote "FOR" the approval of the Officer Exculpation Amendment in the form attached to this Proxy Statement as Annex D.

PROPOSAL 5: RATIFICATION OF INDEPENDENT AUDITOR SELECTION

Our Audit Committee has selected Deloitte & Touche LLP ("Deloitte") as the Company's independent registered public accounting firm for the year ending December 31, 2023. In this Proposal 5 we are asking stockholders to vote to ratify this selection. Representatives of Deloitte are expected to be present at the Annual Meeting. They will have the opportunity to make a statement, if they desire to do so, and will be available to respond to appropriate questions from stockholders.

Stockholder ratification of the selection of Deloitte as the Company's independent registered public accounting firm is not required by law or our bylaws. However, we are seeking stockholder ratification as a matter of good corporate practice. If our stockholders fail to ratify the selection, our Audit Committee will reconsider its selection. Even if the selection is ratified, the Committee, in its discretion, may direct the selection of a different independent registered public accounting firm at any time during the year if it determines that such a change would be in the best interests of the Company and our stockholders.

Deloitte has served as our independent registered public accounting firm since August 2021, and provided services to Legacy Stem from 2018 until the Merger. The following table summarizes the audit fees billed and expected to be billed by Deloitte for the indicated fiscal years and the fees billed by Deloitte for all other services rendered during the indicated fiscal years. All services associated with such fees were pre-approved by our Audit Committee in accordance with the "Pre-Approval Policies and Procedures" described below.

	Year Ended December 31,	
Fee Category	**2022**	**2021**
Audit Fees [2]	$ 3,322,729	$ 1,639,470
Audit-Related Fees [3]	541,151	347,394
Tax Fees [4]	—	—
All Other Fees [5]	1,895	1,895
Total Fees	$ 3,865,775	$ 1,988,759

[1] Higher fees in 2022 as compared to 2021 were largely the result of the review of our implementation of controls required by Section 404(b) of the Sarbanes-Oxley Act of 2002 and the AlsoEnergy Acquisition.

[2] Consists of fees for the audit of our annual financial statements, as well as reviews of quarterly financial statements included in Quarterly Reports on Form 10-Q.

[3] Consists of fees for assurance and related services reasonably related to the performance of the audit or review of our financial statements and services provided in connection with SEC filings, including consents and comfort letters.

[4] Consists of fees for professional services for tax compliance, tax advice, and tax planning.

[5] Consists of fees for all other services.

Change of Auditors in 2021

On August 9, 2021, the Audit Committee of our Board approved the dismissal of WithumSmith+Brown, PC ("Withum") as the Company's independent registered public accounting firm, and the Company accordingly notified Withum of such action effective as of August 11, 2021. Withum had served as STPK's independent registered public accounting firm prior to the Merger.

Withum's report on the Company's financial statements as of December 31, 2020 and December 31, 2019, and the related statements of operations, changes in stockholders' equity and cash flows for the years ended December 31, 2020 and December 31, 2019, did not contain any adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope or accounting principles, other than with respect to the Company's ability to continue as a going concern due to the Company's obligation to either complete a business combination by August 20, 2022, or cease all operations except for the purpose of liquidating.

During the period from October 29, 2018 (inception) through December 31, 2019, the year ended December 31, 2020, and the subsequent period through August 11, 2021, there were no: (i) disagreements with Withum on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to Withum's satisfaction, would have caused Withum to make reference to the subject matter of the

disagreement in connection with its report or (ii) "reportable events," as defined in Item 304(a)(1)(v) of Regulation S-K and related instructions.

Effective August 11, 2021, the Audit Committee engaged Deloitte as the Company's new independent registered public accounting firm. During the years ended December 31, 2020 and December 31, 2019, and through the effective date of the Company's engagement of Deloitte, the Company did not consult with Deloitte regarding either:

- the application of accounting principles to a specified transaction, either completed or proposed; or the type of audit opinion that might be rendered on the Company's financial statements, and no written report or oral advice was provided to the Company by Deloitte that Deloitte concluded was an important factor considered by the Company in reaching a decision as to an accounting, auditing or financial reporting issue, or

- any matter that was either the subject of a disagreement, as that term is described in Item 304(a)(1)(iv) of Regulation S-K under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the related instructions to Item 304 of Regulation S-K under the Exchange Act, or a reportable event, as that term is defined in Item 304(a)(1)(v) of Regulation S-K under the Exchange Act.

The Company provided Withum with a copy of the disclosures made by the Company in connection with the change in auditor and requested that Withum furnish the Company with a letter addressed to the SEC stating whether it agreed with the statements made by the Company in response to Item 304(a) of Regulation S-K under the Exchange Act. Withum provided the Company with such letter, which is filed as an exhibit to the Company's Current Report on Form 8-K filed with the SEC on August 12, 2021.

Pre-Approval Policy and Procedures

Our Audit Committee has adopted procedures requiring the pre-approval of all audit and permissible non-audit services performed by our independent registered public accounting firm. In its pre-approval and review of non-audit service fees, the Audit Committee considers, among other factors, the possible effect of the performance of such services on the auditors' independence.

These procedures generally approve the performance of specific services subject to a cost limit for all such services. This general approval is reviewed, and if necessary modified, at least annually. The Committee may pre-approve certain other audit-related or other non-audit services it believes would not impair the independence of the auditor and are consistent with SEC and Public Company Accounting Oversight Board ("PCAOB") rules on auditor independence. The Committee does not delegate its responsibility to approve services performed by our auditor to any member of management. The Committee has delegated authority to the Committee chair to pre-approve any audit or non-audit service to be provided to us by our auditor provided that the fees for such services do not exceed $150,000, (1) per each engagement or project, (2) per each additional category of services, or (3) to the extent required under such procedures, for any individual service exceeding the pre-approved budgeted fee levels for the specified service, in each case with such limit applying to each individual engagement/project, service or category of services being approved by the Committee chair and not on an aggregated or quarterly/annual basis. Any approval of services by the Committee chair pursuant to this delegated authority must be reported to the Committee at its next regularly scheduled meeting.

Required Vote

The affirmative vote of a majority of shares of common stock present or represented at the Annual Meeting and entitled to vote thereon is required for the ratification of the selection of Deloitte & Touche LLP as our independent registered public accounting firm for the year ending December 31, 2023. ***Broker non-votes, if any, will have no effect on the outcome of this proposal.***

Recommendation of the Board

The Board of Directors recommends that you vote "FOR" the ratification of the selection of Deloitte & Touche as our independent registered public accounting firm for fiscal year 2023.

REPORT OF THE AUDIT COMMITTEE

During 2022, only non-management directors comprised the Audit Committee. The Board determined that each member of the Audit Committee is independent under the New York Stock Exchange ("NYSE") listing standards. The Audit Committee operates under a written charter adopted by the Board. As described more fully in its charter, the purpose of the Audit Committee is to assist the Board in its general oversight of the Company's accounting and financial reporting processes, audits of the financial statements, internal control and audit functions, and compliance with legal and regulatory requirements and ethical standards adopted by the Company.

The Audit Committee has reviewed and discussed the audited financial statements for the year ended December 31, 2022 with the Company's management and with Deloitte, the Company's independent registered public accounting firm. The Audit Committee has discussed with Deloitte the matters required to be discussed by the applicable standards of the PCAOB and the SEC. The Audit Committee has also received the written disclosures and the letter from Deloitte pursuant to applicable PCAOB requirements regarding its communications with the Audit Committee concerning independence, and the Audit Committee has discussed with Deloitte its independence.

Based on the foregoing, the Audit Committee recommended to the Board, and the Board approved, the inclusion of the audited financial statements in the Company's 2022 Annual Report on Form 10-K for the year ended December 31, 2022.

Submitted by the Stem Audit Committee

Lisa L. Troe (Chair)
Adam E. Daley
Anil Tammineedi

PROPOSAL 6: ADVISORY VOTE TO APPROVE NAMED EXECUTIVE OFFICER COMPENSATION

Our Board is asking you to approve, on a non-binding advisory basis, the compensation of our NEOs, as disclosed in this Proxy Statement. This item, which is provided pursuant to Section 14A of the Exchange Act, is commonly referred to as a “say-on-pay” resolution.

This say-on-pay proposal gives our stockholders the opportunity to express their views on our NEOs’ compensation as a whole. This vote is not intended to address any specific element of compensation but rather the overall compensation of our NEOs and our compensation philosophy, policies, and practices described in this Proxy Statement. Please read the “Compensation Discussion and Analysis” and the compensation tables and narrative disclosure that follow for information about our executive compensation program, including details of the 2022 compensation of our NEOs. Our Compensation Committee believes that these policies and practices are effective in implementing our compensation philosophy and achieving our compensation program goals.

As an advisory vote, the outcome of the vote on this proposal is not binding. However, our Compensation Committee, which is responsible for designing and administering our executive compensation program, will consider the outcome of this vote when making future executive compensation decisions. Unless our Board modifies its policy on the frequency of holding say-on-pay votes, the next say-on-pay vote will occur at our 2024 Annual Meeting of Stockholders.

Required Vote

The affirmative vote of a majority of shares of common stock present or represented at the Annual Meeting and entitled to vote thereon is required for the advisory approval of our named executive officers’ compensation. ***Broker non-votes, if any, will have no effect on the outcome of this proposal.***

Recommendation of the Board

The Board of Directors recommends a vote “FOR” the approval, on an advisory non-binding basis, of our named executive officers’ compensation.

CORPORATE GOVERNANCE

Our current governance practices provide for strong independent leadership, active participation by independent directors and independent evaluation of, and communication with, many members of senior management. These governance practices are reflected in our Corporate Governance Guidelines and our various committee charters, which are available on our website located at *investors.stem.com*, under "Governance."

Our Governance Philosophy

Our Board believes that there is no single set of generally accepted corporate governance practices that is appropriate across all companies, and that governance practices may evolve as circumstances change. In 2021, our Board determined to separate the Chief Executive Officer and Chairman of the Board functions to allow our independent Chairman to oversee corporate governance matters and our CEO to focus on leading the Company's business. See "—Board Leadership Structure" below for more information.

Our history as a special purpose acquisition company ("SPAC"), prior to the Merger left us with certain structural protections common to SPACs. For example, we currently have a classified board, plurality voting for the election of directors, only the Board is empowered to call a special meeting of our stockholders, and we require a supermajority vote to approve a limited number of items in our Certificate of Incorporation. Following careful deliberation after the closing of the Merger, our Board determined to retain these measures for a period to promote stability and continuity of our Board and to allow us to focus on a consistent strategy while we established ourselves as a public company and transition away from our SPAC roots.

Declassification of our Board and Elimination of Supermajority Voting Requirements

The Board assesses our corporate governance practices at least annually, and may modify these practices from time to time to best address the Company's unique circumstances, and respond to feedback from and advance the best interests of all stockholders, as and when appropriate. Reflective of this approach, and as discussed in greater detail in Proposals 2 and 3, the Board recently approved, subject to stockholder approval, the amendment and restatement of our Certificate of Incorporation to provide for the declassification of our Board over a five-year period (Proposal 2), and to replace the supermajority voting requirements with majority voting requirements (Proposal 3). If Proposal 2 is approved by the requisite vote of stockholders at the Annual Meeting, directors will be elected to one-year terms of office beginning at the 2026 Annual Meeting of Stockholders, and the Board will be completely declassified and all directors will be subject to annual election to one-year terms beginning with the 2028 Annual Meeting of Stockholders. If Proposal 3 is approved by the requisite vote of stockholders at the Annual Meeting, the supermajority voting requirements in our Certificate of Incorporation will be replaced by majority voting requirements. The Board has determined that this is in the best interests of the Company and our stockholders, and has recommended a vote "FOR" Proposals 2 and 3.

Adoption of Majority Voting for Director Elections

In addition, the Board has adopted an amendment to our Bylaws that will replace plurality voting requirement for the election of our directors in uncontested elections with majority voting if the Declassification Amendment is approved by our stockholders at the Annual Meeting. Plurality voting means that the directors who receive the most "for" votes are elected to the board until all the seats are filled. Under the amended Bylaws, directors in uncontested elections would be elected only if they received a majority of the votes cast – essentially more "for" than "against" votes. We will adopt a director resignation policy that sets forth procedures that apply if an incumbent director fails to get a majority of the votes cast if this Bylaw amendment becomes effective. This change to our Bylaws will only take effect if the Declassification Amendment is approved by our stockholders at the Annual Meeting. If the Declassification Amendment is not approved, the plurality standard for all director elections will remain.

Board Composition

Director Nomination Process

The Nominating Committee is responsible for, among other things, overseeing succession planning for directors and building a qualified board to oversee management's execution of the Company's strategy and safeguard the long-term interests of stockholders. In this regard, the Committee is charged with developing and recommending Board membership criteria to the Board for approval, evaluating the composition of the Board annually to assess the skills and experiences that

are currently represented on the Board and the skills and experiences that the Board may find valuable in the future, and identifying, evaluating, and recommending potential director candidates.

In identifying potential candidates for Board membership, the Nominating Committee considers recommendations from directors, stockholders, management and others, including, from time to time, third-party search firms to assist it in locating qualified candidates. Once potential director candidates are identified, the Committee, with the assistance of management, undertakes a vetting process that considers each candidate's background, independence, and fit with the Board's priorities. As part of this vetting process, the Nominating Committee, as well as other members of the Board and the CEO, may conduct interviews with the candidates. If the Committee determines that a potential candidate meets the needs of the Board and has the desired qualifications, it recommends the candidate to the Board for appointment or nomination and to the stockholders for election at the annual meeting. As part of the search process for each new director, the Nominating Committee actively seeks out women and nationally, racially, and ethnically diverse candidates to include in the pool from which Board nominees are chosen.

Criteria for Board Membership

In assessing potential candidates for Board membership and in assessing Board composition, the Nominating Committee considers a wide range of factors and generally seeks to balance the following skills, experiences, and backgrounds on the Board:

- **Senior Leadership**: Directors who have served in senior leadership positions are important to us because they have the experience and perspective to analyze, shape, and oversee the execution of important operational and strategic issues. These directors' insights and guidance, and their ability to assess and respond to situations encountered while serving on our Board, may be enhanced by leadership experience at businesses or organizations that involve organizational growth, expansion into new markets, navigation of the regulatory landscapes, and technology or other rapidly evolving business models.

- **Clean Energy and Renewables**: Directors with experience in the energy, energy infrastructure, clean energy, and renewables industries provide valuable insight to our Board.

- **Public Company Board Experience**: Directors with public company board experience understand the dynamics and operation of a corporate board, the relationship of a public company's board to the CEO and other senior management personnel, the legal and regulatory landscape in which public companies must operate, the importance of particular agenda and oversight issues, and how to oversee an ever-changing mix of strategic, operational, and compliance-related matters.

- **Business Development and M&A Experience**: Directors with a background in business development and M&A provide insight into developing and implementing strategies for growing our business. Useful experiences in this area includes skills in assessing "make" vs. "buy" decisions, analyzing the "fit" of a proposed acquisition with a company's strategy, valuing transactions, and assessing management's plans for integration with existing operations.

- **Diverse Background**: Contribution to the diversity of personal backgrounds on the Board, including with respect to gender, race, ethnic and national background, geography, age, and sexual orientation, is an important factor when assessing candidates. In this regard, three of our eight directors identify as female and one director identifies as racially/ethnically diverse.

- **Financial Expertise**: Knowledge of financial markets, financing, and funding operations, as well as accounting and financial reporting processes, assists our directors in understanding, advising on, and overseeing Stem's capital structure, financing, and investing activities, as well as our financial reporting and internal controls.

- **Government and Regulatory Experience**: Directors who have served in government positions provide experience and insights that help us work constructively with governments at the federal, state and local levels and address public policy issues, particularly as they relate to Stem's operations and public support for renewable energy and the energy transition. Directors with a background in regulation can assist the Board in fulfilling its oversight responsibilities related to Stem's legal and regulatory compliance and its engagement with regulatory authorities.

In addition to the above, the Nominating Committee generally believes it is important for all Board members to possess the highest personal and professional ethics, integrity, and values, an inquisitive and objective perspective, a sense for priorities and balance, the ability and willingness to devote sufficient time and attention to Board matters, and a willingness to represent the long-term interests of all our stockholders.

The Nominating Committee assesses its effectiveness in balancing these considerations in connection with its annual evaluation of the composition of the Board.

Summary of Director Skills and Characteristics

The chart below summarizes the qualifications of our directors, as well as director nominees, including knowledge, skills, experiences and other attributes that the Board believes are relevant to their Board and committee service. Each director and nominee possesses numerous other skills and experience not identified in the following chart, as further detailed in their biographies beginning on page 6 of this Proxy Statement. We believe our directors, including our director nominees, provide a well-rounded set of expertise to assist in effective oversight of Stem management.

Substantial Knowledge, Skills and Experience	Buzby	Carrington	Daley	Morgan	Tammineedi	Troe	Tyson	Woodward
Industry/Operational Experience	X	X	X	X	X	X		X
Business Development and Strategy	X	X	X	X	X		X	X
Current or Former CEO	X	X		X				
Other Public Company Boards	X		X	X		X	X	
Accounting and Financial Reporting Expertise	X		X	X	X	X		
Corporate Finance Expertise	X		X	X	X	X		
Capital Allocation Expertise	X	X	X	X	X	X	X	X
Energy Transition Expertise	X	X	X	X	X			X
Cybersecurity / Information Security				X		X	X	
Mergers & Acquisitions Expertise	X	X	X	X	X			
Enterprise Risk Management Expertise	X	X	X	X		X	X	
Global Business Expertise	X	X		X			X	
Government, Regulatory & Public Policy						X	X	X

Stockholder Recommendations for Directors

It is the Nominating Committee’s policy to consider written recommendations from stockholders for nominees for director. The Committee considers nominees recommended by our stockholders in the same manner as a candidate recommended by other sources. Any such recommendations should be submitted to the Committee as described in the section titled “Stockholder Communications” and should include the same information required under our bylaws for nominating a director, as described under “Stockholder Proposals and Director Nominations for Next Year’s Annual Meeting.”

Board Leadership Structure; Independent Chairman of the Board

One of the Board’s key responsibilities is to evaluate and determine an appropriate board leadership structure to provide for independent oversight of management. As stated above, the Board believes that there is no single, generally accepted board leadership structure that is appropriate across all circumstances, and that the right structure may vary as circumstances change. As such, the independent members of the Board periodically review the Board’s leadership structure to evaluate whether the structure remains appropriate for the Company, and may modify this structure from time to time to best address the Company’s unique circumstances and advance the best interests of all stockholders, as and when appropriate. At any time when the chairman is not independent or there is not a chairman, the independent members of the Board will, upon the recommendation of the Nominating Committee, designate an independent director to serve as lead independent director.

Our Board's independent directors have selected an independent member of the Board, David Buzby, to serve as Chairman of the Board. The Board recognizes that one of its key responsibilities is to evaluate and determine an appropriate board leadership structure so as to promote independent oversight of management. Currently, the Board believes that the roles of Chairman and CEO should be separate and that the Chairman should be an independent director as this structure enables our independent Chairman to oversee corporate governance matters and our CEO to focus on leading the Company's business. Our Board believes that its programs for overseeing risk, as described in the "Board Risk Oversight" section below, would be effective under a variety of leadership frameworks. Accordingly, the Board's risk oversight function did not significantly affect its selection of the current leadership structure.

The independent directors generally meet in executive session without management present at every regular Board meeting. The purpose of these executive sessions, which are led by our independent Chairman of the Board, is to encourage and enhance communication among independent directors.

Board Oversight of Risk Management

The Board and its committees are actively involved in overseeing risk management for Stem. The Board routinely assesses the Company's major risks and options for mitigation, in order to promote our stockholders' interests in Stem's long-term health, financial strength and overall success. We believe that our Board composition provides the Company with robust and well-rounded experience to assist in effective oversight of management, as discussed on pages 21-23 of this Proxy Statement. The full Board oversees assessment of major risks facing the Company, determining the extent to which such risks are applicable and, to the extent the Board deems it appropriate, evaluating management's plans for their mitigation. The risks that the Board routinely considers relate to operational, financial, geopolitical, strategic, regulatory, competitive and climate-related risks. The full Board oversees risk management by the CEO and our senior management team, by reviewing major financial objectives, and critical strategies and long-term plans, including, but not limited to, major allocations of capital, significant proposed business acquisitions, operating performance and sustainability.

In addition, the Board delegates to its committees responsibility for overseeing certain types of risk, some of which are reflected below:

- The Audit Committee has overall responsibility for overseeing the Company's practices with respect to risk assessment and management. Some of the specific responsibilities of the Committee are overseeing management of risks related to our financial reporting and internal controls, cybersecurity risks, and major financial risks.

- The Compensation Committee is responsible for overseeing management of risks related to our compensation policies and programs and human capital resources.

- The Nominating Committee is responsible for overseeing management of risks related to director succession planning, our corporate governance, and our ESG and sustainability practices and initiatives.

The Board committees report regularly to the Board on activities in their respective areas of oversight. In addition, the Board and its committees receive regular reports from members of the Company's senior management on areas of significant risk to the Company, including strategic, operational, financial, legal and regulatory risks. While our Board has an oversight role, management is tasked with direct day-to-day responsibility for management and assessment of risks and the implementation of processes and controls to mitigate their effects on the Company.

Our senior management team has developed a comprehensive strategic planning and enterprise risk management ("ERM") process for identifying, assessing and managing risk. Through this process, we identify key risks through an annual corporate-level risk mapping exercise, which involves the CEO, the CFO, our Chief Legal Officer ("CLO") and other members of senior management, along with a bottom-up operational risk assessment by our various business units and functions. Our executive leadership team and its ERM and Disclosure Committee report directly to the Board, and quarterly present to the Board a comprehensive report on risk identification, response and mitigation strategies. In addition, in 2022, we formed a DevCo Investment Committee (the "DevCo IC") comprised of our CEO, CFO, CLO and other members of senior management in sales, finance and operations. The purpose of the DevCo IC is to report on, and manage, our development company ("DevCo") strategy and growth, as well to identify and manage our major risk exposures as relate to our DevCo business model. The DevCo IC meets monthly, and reports quarterly to the Audit Committee.

Director Independence

The NYSE listing rules require a majority of a listed company's board of directors to be comprised of independent directors who do not have a disqualifying relationship, as described in the NYSE listing rules, and who, in the opinion of the board of directors, have no direct or indirect material relationship with the Company. Subject to specified exceptions, each member of a listed company's audit, compensation and nominating committees must be independent, and audit and compensation committee members must satisfy additional independence criteria under the NYSE listing rules and the Exchange Act.

Our Board undertook a review of its composition and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment, and affiliations, including the beneficial ownership of our capital stock by each non-employee director, our Board has determined that all but one of our current directors, including Messrs. Buzby, Daley, Morgan, and Tammineedi, and Mses. Troe and Woodward, and Dr. Tyson, qualify as "independent directors" as defined by the NYSE listing rules. Mr. Carrington is not deemed to be independent under NYSE listing rules by virtue of his employment with the Company.

Our Board also determined that each of the directors currently serving on the Audit Committee and the Compensation Committee satisfy the independence standards for audit committees and compensation committees, as applicable, established by the SEC and NYSE listing rules.

Director Attendance

The Board held four regularly scheduled meetings and six special meetings in 2022. As shown in the Board Committee Members chart below, standing committees of the Board collectively held a total of 16 meetings in 2022, with each committee holding a number of regularly scheduled and special meetings (except for the Nominating Committee, which held no special meetings). We expect each director to attend every meeting of the Board and the committees on which he or she serves. Each incumbent director attended at least 75% of the meetings of the Board and each committee on which he or she served in 2022 (held during the period in which the director served), and on average directors attended 98% of Board and committee meetings in 2022. The Board's policy is that directors should endeavor to attend the annual stockholders' meeting. Our CEO attended our 2022 Annual Meeting of Stockholders.

Board Committees

Our Board has a separately designated Audit Committee, Compensation Committee, and Nominating Committee, each of which has the composition and responsibilities described below. Members serve on these committees until their resignation or until otherwise determined by our Board. Each of these committees is empowered to retain outside advisors as it deems appropriate, regularly reports its activities to the full Board and has a written charter, which is posted on our website located at *investors.stem.com*, under "Governance."

Board Committee Members as of April 21, 2023

Name	Audit Committee	Compensation Committee	Nominating Committee
David Buzby		X	
Adam E. Daley	X		
Michael C. Morgan		Chair	
Anil Tammineedi	X		X
Lisa L. Troe	Chair		
Laura D'Andrea Tyson			Chair
Jane Woodward		X	X
# of Meetings in 2022	8	5	4

Audit Committee. The primary responsibilities of our Audit Committee are to oversee the accounting and financial reporting processes of the Company and its subsidiaries, including the audits of the Company's financial statements, the integrity of the financial statements, and the annual review of the performance, effectiveness, and independence of the outside auditor. This includes reviewing the financial information provided to stockholders and others, and reviewing the adequacy and effectiveness of the Company's internal controls. The Committee also makes

recommendations to the Board as to whether our financial statements should be included in our Annual Report on Form 10-K.

The Board has determined that Ms. Troe qualifies as an "audit committee financial expert," under SEC rules, and that each Audit Committee member is sufficiently proficient in reading and understanding the Company's financial statements to serve on the Audit Committee.

Compensation Committee. The primary responsibilities of our Compensation Committee are to periodically review, evaluate and approve the total direct compensation and other benefits for our executive officers and directors, and to evaluate whether each element remains competitive with the companies in our executive compensation peer group. This includes reviewing and approving corporate goals and objectives relevant to the compensation of our executive officers, evaluating the performance of these officers in light of the goals and objectives, and setting the officers' total direct compensation based on those evaluations (except for the total direct compensation of the CEO, which is determined by the independent members of the Board on recommendation of the Compensation Committee). The Committee oversees our engagement with stockholders on executive compensation matters and also oversees how we manage our human capital resources. The Committee also administers and makes recommendations to the Board regarding equity incentive plans and approves the grant of equity awards under the plans.

The Compensation Committee may delegate its authority to one or more subcommittees or to one member of the Committee. The Committee may also delegate authority to review and approve the compensation of our employees to certain of our executive officers. Even where the Committee does not delegate authority, our executive officers will typically make recommendations to the Committee regarding compensation to be paid to our employees and the size of equity awards under our equity incentive plans, but will not be present during voting or deliberations on their own compensation. The Committee has the authority to engage outside advisors, such as compensation consultants, to assist it in carrying out its responsibilities. The Committee engaged Pearl Meyer & Partners, LLC in 2022 to provide advice regarding the amount and form of executive and director compensation.

Nominating Committee. The primary responsibilities of our Nominating Committee are to engage in succession planning for the Board, develop and recommend to the Board criteria for identifying and evaluating qualified director candidates, and make recommendations to the Board regarding candidates for election or re-election to the Board at each annual stockholders' meeting. The Committee is responsible for overseeing our corporate governance practices and making recommendations to the Board concerning corporate governance matters. The Committee is also responsible for making recommendations to the Board concerning the size, structure, composition, and functioning of the Board and its committees. In addition, the Committee is responsible for overseeing our environmental, social, governance ("ESG") and sustainability policies, activities, and opportunities, our political contributions and lobbying activities, if any, and our engagement with stockholders on governance, sustainability, and related matters.

Our Commitment to Sustainability

We are committed to the health and well-being of our people, our communities and our planet. While our commitment is firmly established, as a relatively young public company, our formal processes, strategies and governance framework concerning ESG matters are developing. Our Sustainability Policy Statement is available on our website and outlines our philosophy with respect to climate change and greenhouse gas emissions ("GHG"), biodiversity and supply chain concerns, among other things.

ESG Management and Oversight

Our sustainability governance structure is evolving to include numerous participants engaging in information-sharing and decision-making, capitalizing on the depth and breadth of expertise throughout Stem. As discussed in "—Board Committees" above, our Nominating Committee has direct oversight over sustainability issues, and regularly meets with key stakeholders to oversee the development of our ESG program. In 2021, we established an ESG Committee, which is comprised of senior executives and other key stakeholders from legal, investor relations and strategy, that provide functional oversight for various ESG activities at the Company.

In October 2022, we hired a Director of ESG to consolidate our existing ESG efforts and further develop our formal ESG program. Our Director of ESG's responsibilities include:

- assisting the CEO, Chief Legal Officer and Chief People Officer and other stakeholders in further developing our ESG program and strategy;

- formulating and recommending policies and practices to implement our strategy;

- overseeing internal ESG data collection and reporting; and
- advising management and the Nominating Committee regarding ESG issues.

ESG Partnerships and Reporting

We have engaged a third-party firm to help us build out our supply chain due diligence program, including with respect to conflict minerals and human rights issues. Our aim is to promote sustainability at all points in our supply chain, and comprehensive due diligence is step 1. As we establish and grow these programs, our goal is to have a positive influence, by being open and transparent in our communication and education, with all our partners with whom we engage. Our goal is develop sustainable relationships with our partners while being guided by the circular economy principal, a model of production and consumption that favors durability, reuse, remanufacturing, and recycling to keep materials circulating for as long as possible and reduce waste. Our Partner Code of Conduct and Human Rights Policy Statement can be found on our website and set out our philosophy with respect to our relationship with our partners and human rights concerns.

We plan to publish our inaugural Sustainability Report in 2024, which will be available on our website. We are in discussions with carbon accounting firms to help us analyze and quantify our GHG emissions and related environmental metrics. We believe that quantifying our GHG emissions will support our ability to communicate to our stakeholders, via our Sustainability Report, what our carbon footprint is and how we intend to continue supporting global decarbonization, to reduce climate change.

Valuing Diversity, Equity and Inclusion

We are committed to diversity, equity and inclusion ("DEI") within our workforce. To help us achieve and maintain a diverse workforce, we continue to build a strong and inclusive culture at Stem with the launch of Diversity, Equity, Inclusion training for all employees and Unconscious and Implicit Bias Leadership training. We also introduced two new employee networks focused on LGBTQIA+, and Women in Leadership, and are committed to building the best workplace that we can in our communities and the industry.

We also provide a monthly global Culture Coalition forum that addresses our mission of "bringing a community of employees together to improve the work experience through innovative, creative, and fun culture initiatives." Each month we host a DEI subject and guest speaker to educate our workforce, and we provide pamphlets for employees and their families, books honoring and educating on Black History Month, women artists (displayed in our offices), and goods from indigenous owned business' as giveaways in our monthly contests.

We believe that helping all our employees realize their highest potential by fostering a culture that supports personal development across the organization is necessary to promote inclusion. Our employees have the opportunity to learn new skills to develop and advance their career, and we provide opportunities for all our employees to receive ongoing formal training to help foster their professional development.

We also value the feedback we receive from our employees. Our annual employee engagement survey asks all our employees for their input on a variety of matters. The results of the employee survey are disseminated to all employees, and the results are used to design action plans to assist managers with actively responding to employees' sentiments. The most impactful action implemented in 2022 was bringing employee valued benefits inclusive of enhanced pregnancy/parental leave, access to counselling for life events, and a mental wellness and fitness app. The employee survey is an important tool that allows us to continuously improve, innovate and evolve through ongoing engagement and measurement.

Other Corporate Governance Practices and Policies

Board Evaluation Process

In addition to regularly reviewing its leadership structure, the Board conducts an annual self-assessment of its overall functioning and effectiveness. In order to maximize input and facilitate useful feedback, our CLO solicits, from each director, comments on overall Board performance, Board priorities, interaction with management, the flow of information from management to and from the Board and its committees; Board discussion topics, agendas, and processes, and how to further improve overall Board functioning. This information is collected through written questionnaires/ assessments, and individual director interviews. In addition, the Chairman of the Board makes himself available for one-on-one discussions with the other members of the Board. Our CLO then aggregates and anonymizes the responses, which he then shares with the Nominating Committee. The Chair of the Nominating Committee, along with our CLO, reviews the feedback from the self-evaluation process and makes recommendations to the Board for areas with respect to which the Board and its committees should consider improvements. These areas are further discussed at a meeting led by our CLO at

which all Board members are present. At the conclusion of this meeting, the Chairman of the Board, working with the senior management team, develops action plans for any items that require follow-up. For example, in 2022, Directors continued to prioritize the need for flexible and responsive meeting agendas that allowed the Board to interact efficiently with management on key strategic topics relevant to the business in the dynamic external environment. Similarly, the Board made ongoing adjustments and improvements to its Board and Committee meetings throughout the year to help ensure efficient and effective interaction and performance of its critical governance and risk oversight roles.

Stockholder Communications

Our Board has established a process whereby interested parties may communicate with our Board and/or with any individual director. Interested parties, including stockholders, may send communications in writing, addressed to the Board or an individual director, c/o the Corporate Secretary, Stem, Inc., 100 California Street, 14th Floor, San Francisco, CA 94111. Our Corporate Secretary will forward these communications as appropriate to the addressee, depending on the facts and circumstances outlined in the communication. Our Board has directed our Corporate Secretary not to forward certain items such as spam, junk mailings, product inquiries, resumes, and other forms of job inquiries, surveys, and business solicitations. Additionally, our Board has advised the Corporate Secretary not to forward material that is illegal or threatening, but to make our Board aware of such material which it may request be forwarded, retained, or destroyed at our Board's discretion.

To enable the Company to speak with a single voice, as a general matter, senior management serves as the primary spokesperson for the Company and is responsible for communicating with various constituencies, including stockholders, on behalf of the Company. Directors may participate in discussions with stockholders and other constituencies on issues where Board-level involvement is appropriate. In addition, the Board is kept informed by Company management of the Company's stockholder engagement efforts.

Code of Business Conduct and Ethics

Our Board has adopted a Code of Business Conduct and Ethics that establishes the standards of ethical conduct applicable to all our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. It addresses, among other matters, compliance with laws and policies, conflicts of interest, corporate opportunities, regulatory reporting, external communications, confidentiality requirements, insider trading, proper use of assets, and how to report compliance concerns. A copy of the code is available on our website located at *investors.stem.com*, under "Governance." We intend to disclose any amendments to the code, or any waivers of its requirements, on our website to the extent required by applicable rules. Our Board is responsible for applying and interpreting the code in situations where questions are presented to it.

Anti-Hedging Policy

We have a policy that prohibits our directors, officers, employees, consultants, and contractors from engaging in (a) short-term trading; (b) short sales; (c) transactions involving publicly traded options or other derivatives, such as trading in puts or calls with respect to Company securities; and (d) hedging transactions.

Compensation Committee Interlocks

None of the members of our Compensation Committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or the compensation committee of any entity that has one or more executive officers serving on our Board or Compensation Committee.

EXECUTIVE OFFICERS

Biographical and other information regarding our executive officers is set forth below. There are no family relationships among any of our directors or executive officers.

Name	Age (as of April 21)	Position
John Carrington [(1)]	56	Chief Executive Officer and Director
William Bush	58	Chief Financial Officer
Saul R. Laureles	57	Chief Legal Officer and Secretary
Mike Carlson	59	Chief Operating Officer
Kim Homenock	49	Chief People Officer
Alan Russo	54	Chief Revenue Officer
Larsh Johnson	65	Chief Technology Officer
Prakesh Patel	48	Chief Strategy Officer
Robert Schaefer	61	President of Transformational Initiatives

(1) For Mr. Carrington's biographical information, see "Information Regarding Director Nominees and Continuing Directors" above.

William Bush. Mr. Bush has served as our Chief Financial Officer since the closing of the Merger in April 2021, and served as the Chief Financial Officer of Legacy Stem from November 2016 until the Merger. Mr. Bush manages the Company's corporate and project financing efforts. Mr. Bush has served on the board of directors of Appreciate Holdings, Inc. (Nasdaq: SFR) since December 2022. From 2010 to 2016, Mr. Bush served as Chief Financial Officer of Borrego Solar Systems Inc., a solar and energy storage company. Mr. Bush has served as Chief Financial Officer for numerous high-growth solar, software and online media companies, and co-founded Buzzsaw.com, a spinoff of Autodesk, Inc., in 1999. Mr. Bush also served as Corporate Controller for Autodesk, Inc. (Nasdaq: ADSK), a software company, from 1997 to 1999 and previously worked for seven years in public accounting with Ernst & Young LLP and PricewaterhouseCoopers LLP. Mr. Bush earned his B.S. in Business Administration from the University of California, Berkeley and is a Certified Public Accountant.

Saul R. Laureles. Mr. Laureles has served as our Chief Legal Officer and Corporate Secretary since May 2021. From 2007 to May 2021, he served in various leadership roles at SLB (formerly known as Schlumberger Limited), the world's largest oilfield services company, including most recently as Director, Corporate Legal Affairs and Assistant Corporate Secretary, from May 2007 to May 2021. Mr. Laureles earned his B.A. from the University of Chicago and his J.D. from the University of Michigan Law School.

Michael Carlson. Mr. Carlson has served as the Company's Chief Operating Officer since September 2022. Mr. Carlson served as a consultant at Koch Engineered Solutions ("KES"), which provides engineering, procurement and construction services, from April 2020 to August 2020, then as Vice President of KES from August 2020 to September 2022. Prior to that, he served as President, Digital Grid North America, of Siemens Industries, Inc., a digital grid services platform, from July 2014 to March 2019, and as General Manager, Global Software Solutions at General Electric ("GE"), a high-tech industrial company, from July 2010 to June 2014. Mr. Carlson has a B.S. in accounting and business management from Union College and an MBA in Finance and Marketing from Pepperdine University.

Kim Homenock. Ms. Homenock has served the Company as its Chief People Officer since March 2022. Ms. Homenock has 20 years' experience in senior human resources ("HR") leadership positions across a broad range of industries including Power, Water, Marine, Industry, Oil & Gas, Renewables, Transportation, Financial, and Tech services. Previously, Ms. Homenock served as the Director, Devices Software & Services HR, for Amazon, a technology company, from May 2021 to March 2022. Prior to that she was the Director, NA Transportation HR, from January 2018 to May 2021. She served as head of global HR in GE's Power Conversion division, an electrification and digital solutions business, from August 2014 to January 2018, and before that she served in various HR roles at GE since 2000. Ms. Homenock earned a B.A. from Brunel University, London.

Alan Russo. Mr. Russo has served as our Chief Revenue Officer since the closing of the Merger in April 2021, and served as the Chief Revenue Officer of Legacy Stem from February 2019 until the Merger. Mr. Russo is responsible for leading the expansion of the Company's markets, including in the U.S., Canada, Europe and Asia. Previously, Mr. Russo served as our Senior Vice President of Global Sales and Marketing from April 2018 to February 2019.

Mr. Russo was Senior Vice President of Sales and Marketing at REC Solar Holdings AS, a wholly owned subsidiary of Duke Energy, from 2015 to April 2018, and served in various leadership roles at Bloom Energy Corporation, a green energy company, from 2006 to 2015, including most recently as Vice President of Strategic Accounts. From 1999 to 2005, Mr. Russo led Asia commercial operations for American Power Conversion, a Schneider Electric company. Mr. Russo earned his B.S. in Aerospace Engineering from Boston University.

Larsh Johnson. Mr. Johnson has served as our Chief Technology Officer since the closing of the Merger in April 2021, and served as the Chief Technology Officer of Legacy Stem from January 2016 until the Merger. Mr. Johnson is responsible for leading hardware and software engineering to meet the unique needs of the Company's commercial, industrial, utility and energy market customers. Prior to joining the Company, Mr. Johnson served as Chief Technology Officer of Siemens Digital Grid from 2015 to 2016. Mr. Johnson joined Siemens via its 2012 acquisition of eMeter Corporation, a Bay Area software company of which he was co-founder and responsible for innovation and development of meter data management, analytics and advanced smart grid applications as Chief Technology Officer from 1999 to 2015. Prior to eMeter, Mr. Johnson co-founded CellNet Data Systems, Inc., a pioneer in wireless networks for smart metering and distribution automation, and served as Chief Technology Officer from 1985 to 1999. Mr. Johnson was a founding member of the Department of Energy's Gridwise Architecture Council and remains a member emeritus. Mr. Johnson earned his B.S. and an M.S. in Mechanical Engineering from Stanford University.

Prakesh Patel. Mr. Patel has served as our Chief Strategy Officer since the closing of the Merger in April 2021, and served as the Chief Strategy Officer of Legacy Stem from July 2020 until the Merger. Previously, Mr. Patel served as our Vice President of Capital Markets and Strategy from 2013 to July 2020. Mr. Patel has spent his career financing technology and energy ventures at the cross section of multiple industries. Before joining the Company, from 2010 to 2013, he served on the investment team at Angeleno Group, LLC, an energy and natural resources-focused private equity firm, during which time he led their investment in the Company. Previously, Mr. Patel built and managed a portfolio of private equity investments at New Bridge Investments, an investment company, from 2008 to 2010, and Deutsche Bank AG, from 2005 to 2008. Mr. Patel earned his B.A. from the University of California, Berkeley and his M.B.A. from Yale University.

Robert Schaefer. Mr. Schaefer has served as President of Transformational Initiatives since January 2023 and he served as President, AlsoEnergy following the Company's acquisition of AlsoEnergy in February 2022. Mr. Schaefer co-founded AlsoEnergy and served as its President from September 2007 to August 2017 and as its Chief Executive Officer from August 2017 to January 2022. Prior to AlsoEnergy, Mr. Schaefer held various positions at Breece Hill LLC from 2005 through 2007, including Chief Operating Officer, Vice President, Engineering, and Chief Executive Officer. Prior to Breece Hill, Mr. Schaefer developed leading products at Hertrich Development, MaxOptix and Digital Equipment Corporation. Mr. Schaefer earned his B.S. in Electrical Engineering from M.I.T and his M.S. in Control Systems from the University of Colorado, Boulder.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

This Compensation Discussion and Analysis (the "CD&A") describes our compensation policies and practices as they relate to our executive officers (our "named executive officers" or "NEOs"). The purpose of the CD&A is to explain the elements of our NEOs' 2022 compensation; the criteria for selecting these elements; the decisions our Compensation Committee made with respect to the 2022 compensation of our NEOs; and the reasons for those decisions.

Our named executive officers for 2022 are:

- John Carrington – Chief Executive Officer
- William Bush – Chief Financial Officer
- Saul Laureles – Chief Legal Officer and Secretary
- Kim Homenock – Chief People Officer
- Robert Schaefer – President, AlsoEnergy

Overview of Fiscal Year 2022

In 2022, we continued to grow our business, enter new markets and provide value to our customers, despite the strong headwinds we experienced as a result of supply chain disruptions and logistical issues due to COVID-related

shutdowns and general macroeconomic uncertainty. In particular, we accomplished the following notable achievements in 2022:

- We completed our acquisition of AlsoEnergy, solidifying our position as a global leader in clean energy intelligence and optimization software, and expanding our geographic footprint into more than 50 countries.
- We had record revenue of $363 million, up from $127 million in 2021, and the total value of our executed customer agreements, or bookings, in 2022 was $1.1 billion, up from $417 million in 2021.
- We launched our unified clean energy management platform, which combines Stem's Athena® platform with AlsoEnergy's PowerTrack application, representing a key milestone in our integration of AlsoEnergy.
- We were recognized as a leader in both energy storage and software, with Stem ranked as the Leader in Frost & Sullivan's Innovation in the Frost Radar™: Digital Platforms for Renewable Energy and Battery Storage Optimization and Trading report, and AlsoEnergy ranked #1 in Guidehouse Insights' Solar and Storage Monitoring and Control Vendors report.
- We announced several joint solar, storage and electric vehicle charging offerings with key partners in the electric vehicle industry.

Philosophy and Objectives

Our success is highly dependent on our ability to attract, engage and retain executives who possess the skills, competencies and passion that are consistent with our vision. To this end, we have developed our compensation program with the following overarching principles:

- the pay of our NEOs and other executive officers should be strongly linked to performance that is evaluated against pre-established financial and strategic objectives, and should balance incentivizing performance, promoting retention and maximizing stockholder value.
- the higher an executive's position in the Company, the greater the percentage of compensation that is "at risk." At-risk compensation refers to long-term incentive ("LTI") awards and annual cash incentive opportunity. We believe that having a significant portion of our executives' compensation at risk more closely aligns their interests with those of the Company and of our stockholders.
- our executive compensation program should enable us to recruit, develop, motivate and retain top talent, both in the short-term and long-term.
- stock ownership guidelines, which require our executive officers to hold Stem stock, should further align the interests of our executives with those of our other stockholders.

Periodically, the Compensation Committee reviews the objectives and components of our executive compensation program to ensure they continue to align with these principles. To establish compensation parameters for our NEOs, our Compensation Committee evaluated each element of compensation separately and the total direct compensation for each NEO, and considered the information provided by Pearl Meyer & Partners, LLC ("Pearl Meyer"), the Committee's independent compensation consultant. Based on this review and analysis, our Compensation Committee concluded that, for fiscal year 2022, overall base salaries, target annual cash incentives, and the target value of LTI awards were competitive as compared to companies in our compensation peer group (discussed below). Additionally, our Compensation Committee determined that our executive compensation pay mix is aligned with stockholder interests, with a significant portion of executive pay being at risk.

Best Practices

Our executive compensation program reflects our commitment to best practices in governance and the alignment of pay with our performance and furtherance of our values. We believe our executive compensation program includes features that align the interests of our executives with those of our stockholders.

What We Do	What We Don’t Do
Conduct an annual review of our compensation philosophy and our compensation practices as compared to a peer group.	No annual cash incentive payouts for below minimum performance achievement.
Use rigorous quantitative metrics in our short-term cash incentive program.	No hedging of Stem stock by executive officers or directors.
Have robust stock ownership guidelines requiring executives to hold Stem stock valued at 2x-5x base salary, with a requirement to retain 50% of the net shares until their guidelines are met.	No repricing or exchanging of stock options without stockholder approval. No liberal share counting in our Long-Term Incentive Plan.
Align the compensation of our NEOs to the long-term performance of our common stock, with 50% of LTI awards taking the form of stock options.	No pension or insurance plans exclusively for executive officers, and no excessive perquisites. No excise tax gross-ups.

Elements of 2022 Total Direct Compensation

Our 2022 executive compensation program consisted of three primary elements:

- base salary;
- annual (short-term) cash incentive awards; and
- LTI awards (restricted stock units (“RSUs”) and stock options).

The chart below sets out the primary elements of our NEOs’ 2022 total direct compensation, certain key features of each element, and how each of these compensation elements supports our strategy.

TYPE	ELEMENT	KEY FEATURES	HOW THIS ELEMENT SUPPORTS OUR STRATEGY	PERFORMANCE-BASED?	AT RISK?
Fixed	Base Salary	Only compensation element that is fixed.	Provides a base level of competitive cash compensation commensurate with the executive’s responsibilities and experience when all other pay elements are variable or contingent	No	No
Short-Term	AIP Award (Cash Bonus)	Payout is 100% based on achievement of rigorous quantitative financial goals.	Incentivizes performance of key objectives.	Yes	Yes
Long-Term	RSUs	Time vesting, subject to continued employment on the vesting date.	Promotes stability and retention of our executive team. Value is driven by our share price.	No	Yes
	Stock Options	Has value only when the stock price is higher than the exercise price.	Aligns interests of our executive officers with our stockholders	Yes	Yes

Base Salary

Base salary is the fixed portion of an executive's annual compensation. The Compensation Committee typically reviews base salaries on an annual basis, referring to market data to understand the marketplace for individuals in similar positions. The Committee does not use a formulaic approach when setting an executive officer's base salary. However, taking into account the recommendations of our CEO, the Compensation Committee considers the following factors when determining (or, in the case of the CEO, recommending to the Board) individual base salary levels:

- the nature and responsibility of the executive's position,
- market trends for individuals in similar positions at comparable companies,
- the executive's expertise, tenure, responsibilities and performance,
- competitiveness of the market for the executive's services, and
- the desire to maintain internal pay equity among our executives.

In February 2022, our Compensation Committee reviewed the base salaries of each of our NEOs (other than that of Ms. Homenock and Mr. Schaefer, who joined the Company later in 2022). Applying the factors above, the Committee determined to increase Mr. Bush's salary from $400,000 to $425,000 and Mr. Laureles' salary from 350,000 to $375,000. Also applying the criteria above, the Board in February 2022 approved an increase in Mr. Carrington's base from $515,000 to $550,000.

Mr. Schaefer's base salary of $425,000 per year was negotiated in connection with the Company's 2022 acquisition of AlsoEnergy, and was approved by the Board. The Committee approved Ms. Homenock's base salary of $350,000 in connection with her joining the Company in March 2022, based on internal pay equity and market data.

The following table summarizes base salary adjustments made for 2022.

NEO	2021 Base Salary	2022 Base Salary	% Increase
Mr. Carrington	$515,000	$550,000	7%
Mr. Bush	$400,000	$425,000	6%
Mr. Laureles	$350,000	$375,000	7%
Ms. Homenock (1)	N/A	$350,000	N/A
Mr. Schaefer (1)	N/A	$425,000	N/A

(1) Ms. Homenock and Mr. Schaefer joined the Company in 2022.

Annual Cash Incentive Awards

Our executives are eligible to earn performance-based annual cash incentive awards, based 100% on achievement of rigorous quantitative financial objectives, under our 2022 Annual Incentive Plan (the "2022 AIP"). The aim of this program is to foster a results-driven, pay-for-performance culture and to align executives' interests with those of our stockholders. Our Compensation Committee selects financial and performance objectives that it believes support our strategy and strike a balance between motivating our executives to increase near-term financial and operating results to drive profitable long-term Company growth and value for stockholders.

In April 2022, the Compensation Committee adopted 2022 AIP, which applies to our NEOs and our other executives. The 2022 AIP is intended to provide a meaningful link between the compensation of participants and Company performance, to motivate participants to achieve individual and corporate performance goals and objectives and to enable the Company to attract, motivate and retain high-quality executives.

The 2022 AIP contained performance metrics for the 2022 performance period that were based on the Company's contracted backlog, Contracted Annual Recurring Revenue ("CARR"), revenue and adjusted EBITDA. In 2021, the Compensation Committee included pipeline as a performance metric, but determined to replace pipeline in the 2022 AIP with CARR, because the Committee believes that CARR provides better visibility into our anticipated growth in services revenue and is a more appropriate metric, given its long-term view. The Committee approved final payouts under the 2022 Annual Plan based on Company performance relative to these metrics.

The Compensation Committee considered the following in selecting these metrics:

Why This Metric?			
Contracted Backlog	**Contracted Annual Recurring Revenue**	**Revenue**	**Adjusted EBITDA***
Shows how well the Company is positioned for growth and future success.	Reflects the Company's increased focus on software revenue because it includes accumulated higher margin software contracts on an annualized basis.	Provides a simple snapshot of the Company's ability to deliver in the current period.	Shows Company value across periods, with non-recurring events removed for a normalized view.
Aligns executive compensation with the Company's ability to secure long-term agreements with its customers.	Aligns executive compensation to the Company's ability to position itself for future cash flow.	Ties executive compensation to the Company's ability to generate cash.	Connects executive compensation to the Company's ability to manage operational expenses over the long term.

* For a reconciliation of Adjusted EBITDA to net loss on a GAAP basis, see Appendix A.

Upon review of market data, and taking into consideration internal pay equity and that the target annual cash incentive of our NEOs was already positioned competitively from a market perspective, the Compensation Committee determined in February 2022 to leave the target annual cash incentive opportunity for all NEOs unchanged from 2021, except for Mr. Schaefer and Ms. Homenock, who each joined Stem in 2022. The Committee approved Mr. Schaefer's annual bonus opportunity in connection with the acquisition of AlsoEnergy. The Committee approved Ms. Homenock's annual bonus opportunity when she joined Stem in March 2022.

The following table summarizes the 2022 performance metrics, weighting per metric, the threshold and target goals per metric, actual performance per metric and actual performance as a percentage of the target, all as approved by our Compensation Committee:

Metric	Weighting	Threshold*	Target*	Actual	Payout (1)
Contracted backlog	35%	$519.5M	$742.2M	$969.0M	120%
CARR	20%	$49.0M	$70.0M	$65.3M	93%
Revenue	25%	$271.2M	$387.5M	$363.0M	94%
Adjusted EBITDA (2)	20%	($57.1M)	($40.0M)	($46.0M)	87%
Payout		70%	100 %		101%

* Results between performance targets are interpolated.

(1) The maximum potential payout for each performance metric is 125% for above-target achievement.

(2) Adjusted EBITDA represents net loss before depreciation and amortization, including amortization of internally developed software, net interest expense, further adjusted to exclude stock-based compensation and other income and expense items, including the change in fair value of warrants and embedded derivatives. For a reconciliation of Adjusted EBITDA to net loss on a GAAP basis, see Appendix A.

Based on this performance, the Committee awarded bonuses to the NEOs under our 2022 AIP as follows:

NEO	Bonus Eligibility at 100% Target Performance Metrics [(1)]	Actual Bonus Payout [(1)]
Mr. Carrington	110%	111.15%
Mr. Bush	75%	75.79%
Mr. Laureles	65%	65.68%
Ms. Homenock	50%	50.52%
Mr. Schaefer	75%	75.79%

(1) Expressed as a percentage of base salary.

Long-Term Equity Incentive Awards

LTI awards are designed to give NEOs and our other executives a longer-term stake in the Company, provide incentives for the creation of sustained stockholder value, act as long-term retention and motivation tools, and directly tie employee and stockholder interests over the longer term. Our 2022 LTI awards to NEOs, which were granted under the Stem, Inc. 2021 Equity Incentive Plan (the "2021 Plan"), were in the form of 50% stock options and 50% RSUs. The Compensation Committee periodically evaluates the type and mix of LTI awards to be granted.

The Compensation Committee is actively considering the introduction of additional types of performance-based long-term incentive awards for all executives, as the Company matures. The Committee believes that establishing a longer record of performance as a public company will allow the Committee to better evaluate longer-term metrics and targets.

The Compensation Committee believes that RSUs are an important element in an executive's LTI mix because RSUs align the interests of our executive officers with those of our stockholders and help manage the dilutive effect of our equity compensation program. Our RSUs are subject to service-based vesting. Because RSUs have value even in the absence of stock price appreciation, RSUs help us retain and incentivize employees during periods of market volatility, and also result in our granting fewer shares of common stock than through stock options of equivalent grant date fair value. Our RSUs granted in 2022 vest annually over a four-year period. We believe that, as with stock options, they help incentivize our executive officers to build value that can be sustained over time.

The Compensation Committee also believes that stock options are a form of performance-based compensation since the value of a stock option is a result solely of increases in our common stock price. Furthermore, because these options typically vest over a four-year period and expire after 10 years, they incentivize our executive officers to increase stockholder value that can be sustained over time. Therefore, the Compensation Committee believes that options, with an exercise price equal to the closing price of our common stock on the date of grant, are inherently performance-based and are a very effective tool to motivate our executive officers to build stockholder value and reinforce our position as a growth company.

When determining the amount of LTI awards granted to an NEO, the Company considers the executive's experience, level of responsibilities, and contributions to the success of the Company, as well as market data and internal pay equity. In addition to rewarding our NEOs based on personal and Company performance, equity awards have also served to retain the services of such executives since they are subject to time-based vesting conditions.

The Compensation Committee approved the following LTI awards to our NEOs in 2022, based on market data and internal pay equity, and other factors set forth below the table. Except as described below, the awards were granted on March 1, 2022 in connection with the Company's annual LTI award cycle, will vest in four equal annual installments beginning on March 1, 2023, and, in the case of options, have an exercise price of $9.33.

NEO	Target Value of 2022 Grants [1]	Number of RSUs Granted	Number of Options Granted
Mr. Carrington	$2,000,000	107,181	167,470
Mr. Bush	$1,750,000	93,783	146,535
Mr. Laureles [2]	$1,650,000	106,672	113,042
Ms. Homenock [3]	$1,400,000	120,159	104,305
Mr. Schaefer [4]	$6,250,000	734,544	104,668

(1) See "Executive Compensation Tables—Grants of Plan-Based Awards" beginning on page 41 for the grant date fair value of each grant, computed in accordance with applicable accounting standards.

(2) 34,325 of Mr. Laureles' RSUs were awarded on July 28, 2022 and will vest 100% on January 28, 2024, subject to his continued employment with the Company through that date.

(3) Ms. Homenock's grants were made on March 14, 2022. Her stock options and 66,755 of her RSUs began vesting in four equal annual installments beginning March 14, 2023. Ms. Homenock's options have an exercise price of $7.49. 53,404 of Ms. Homenock's RSUs vested 100% on March 14, 2023. In addition to the amounts shown above, Ms. Homenock received a sign-on award of 53,404 shares of common stock, valued at approximately $400,000.

(4) 667,556 of Mr. Schaefer's RSUs were granted on March 14, 2022 as part of the previously negotiated acquisition of AlsoEnergy, and will vest 100% on March 14, 2025, subject to his continued employment with the Company through that date.

Amounts for Mr. Laureles in the table above include an award of RSUs with a target value of $300,000, granted on July 28, 2022 to recognize Mr. Laureles' differentiated impact to the Company in the first half of 2022. Amounts for Ms. Homenock represent an annual LTI grant and a sign-on award in connection with her joining the Company. The amounts for Mr. Schaefer in the table above include an RSU award with a target value of $5 million, which the Committee approved in connection with the AlsoEnergy Acquisition. Mr. Schaefer served as founder and chief executive officer of AlsoEnergy for many years, and the RSUs were awarded in order to recognize Mr. Schaefer's contributions in the closing of the AlsoEnergy Acquisition and to incentivize Mr. Schaefer to remain as an integral leader of AlsoEnergy as the Company integrated the newly-acquired company into our business.

Additional information regarding the stock options and RSUs granted to NEOs in 2022, 2021, and 2020 is set forth below in the "Summary Compensation Table" and the "Outstanding Equity Awards at 2022 Fiscal-Year End" table, below, beginning on pages 40 and 42, respectively.

Process for Setting Executive Compensation

Peer Group Companies

The Compensation Committee considers formal executive compensation survey data prepared by Pearl Meyer when it reviews and determines executive compensation. The Committee also considers the executive compensation practices at various "peer group" companies when evaluating changes to the Company's executive compensation program. To prepare for its executive compensation analysis, the Company's executive compensation department works with Pearl Meyer to match Company positions and responsibilities against survey positions and responsibilities and to compile the annual compensation data for each executive officer. The purpose of our peer group comparison is to ensure that our total executive compensation package operates effectively and remains both reasonable and competitive.

The Compensation Committee's selection criteria for companies comprising our 2022 peer group included:

- high-growth energy technology companies in the United States, with a focus on energy storage system and battery technology companies serving the utilities sectors or major commercial and industrial enterprises, or both;
- companies with similar valuation multiples and growth trajectories;
- companies with revenues up to $800 million and market capitalization between $1 billion and $10 billion; and
- potential competition for executive talent.

In arriving at these selection criteria, the Committee recognized that, due to the recently public nature of many companies reviewed for inclusion in the peer group, revenues at such companies were still growing, and markets capitalizations were very volatile. For these reasons, revenue and market capitalization ranges approved by the Compensation Committee were somewhat wider than would normally be seen for more mature companies.

The Compensation Committee, with the assistance of Pearl Meyer, annually reviews specific criteria and recommendations regarding companies to add to or remove from the comparator groups. As a general matter, the Company selects suitable comparator companies such that Stem is near the median of the companies in the peer group in terms of estimated revenue in the then-current year and then-current market capitalization.

Applying the criteria above, the Compensation Committee approved the following companies as our executive compensation peer group, effective for 2022 compensation decisions:

Array Technologies, Inc.	Eos Energy Enterprises, Inc.	Plug Power Inc.
Blink Charging Co.	EVgo, Inc.	Proterra Inc.
Bloom Energy Corporation	Romeo Power, Inc.[(1)]	Sunnova Energy International Inc.
ChargePoint Holdings, Inc.	FuelCell Energy, Inc.	Vicor Corporation
Enphase Energy, Inc.	Ormat Technologies, Inc.	Volta Inc.

(1) Romeo Power was acquired in October 2022 by Nikola Corporation.

The Committee reassesses the executive compensation peer group when appropriate, such as in the cases of consolidation between comparator companies or other industry changes.

Compensation Committee Review

Our Compensation Committee reviews the elements of our NEOs’ total direct compensation throughout the year, to evaluate whether each element remains competitive and is aligned with our internal pay equity. In making compensation decisions, the Committee relies on its own judgment after reviewing external market data, and also considers the following factors:

- the executive’s scope of responsibilities, as well as leadership, management and technical expertise, growth potential, and position in our reporting structure;
- overall Company and individual performance;
- retention needs;
- the recommendations of our CEO (except with respect to his own compensation); and
- internal pay equity.

In February, the Compensation Committee evaluates all elements of executive officer compensation, after reviewing the prior year’s results and the achievement of Company financial objectives. The purpose of this annual evaluation is to determine whether any changes in an officer’s compensation may be appropriate. The CEO does not participate in the Committee’s deliberations regarding his own compensation. At the Committee’s request, the CEO reviews with the Committee the performance of the other executive officers. Our Compensation Committee gives substantial weight to the CEO’s evaluations and recommendations because he is particularly able to assess the other executive officers’ performance and contributions. Our chief People Officer assists the CEO in developing the other executives’ performance reviews and reviewing external market data to determine the CEO’s executive compensation recommendations.

The Committee annually reviews the base salary of our CEO in executive session and recommends his base salary to the independent members of the Board for approval, based on the criteria described above. The CEO presents his recommendations for his leadership team for base salary adjustments to the Compensation Committee for their review and approval.

Independent Compensation Consultant

Our Compensation Committee has retained Pearl Meyer as its independent consultant with respect to executive compensation matters, as well as non-employee director compensation matters. Pearl Meyer works with our management team to:

- Review and develop our executive compensation peer group;
- Compile annual total direct compensation data for each executive officer, and to compare the compensation opportunities of our executive officers with those at comparable roles at companies in our peer group;
- Conduct an analysis of competitive non-employee director compensation levels and market trends using the same peer group;
- Assist in the design of the short- and long-term incentive plans;
- Work any other related compensation needs; and
- Participate in each compensation committee meeting.

Pearl Meyer reports only to, and acts solely at the direction of, our Compensation Committee. The Committee assessed the independence of Pearl Meyer pursuant to SEC rules and concluded that its work did not raise any conflict of interest that would prevent Pearl Meyer from independently representing our Compensation Committee.

Other Compensation Plans

401(k) Plan. The NEOs are eligible to participate in the Company's employee benefit plans and programs, including medical and dental benefits, flexible spending accounts, long-term care benefits, and short- and long-term disability and life insurance, to the same extent as the Company's other full-time employees, subject to the terms and eligibility requirements of those plans. The NEOs also participate in our 401(k) plan, subject to limits imposed by the Internal Revenue Code, to the same extent as the Company's other full-time employees Mr. Schaefer was entitled to participate in the AlsoEnergy 401(k) plan along with the legacy AlsoEnergy employees for a portion of 2022, until the Stem and AlsoEnergy plans were integrated.

Other Benefits. We do not maintain any defined benefit pension plans or any nonqualified deferred compensation plans.

Limited Perquisites. We provide only limited perquisites to our NEOs. None of our NEOs received an aggregate of $10,000 or more of perquisites or other personal benefits from the Company in 2022, except Ms. Homenock, who was reimbursed for relocation expenses in connection with her joining the Company.

Stock Ownership Guidelines

In April 2022, the Compensation Committee adopted Stock Ownership Guidelines that apply to our executive officers and directors. The guidelines are intended to further the Company's goal of promoting sound corporate governance practices by aligning the financial interests of the executive officers and directors with those of our stockholders.

Under the guidelines, our CEO is expected to maintain ownership of Stem common stock representing five times his annual base salary, and each other executive officer is expected to maintain ownership of Stem common stock representing two times his or her annual base salary. Board members are each expected to maintain ownership of Stem common stock representing four times his or her annual cash retainer. The guidelines acknowledge that it may take up to five years to achieve compliance. During such time, directors and executive officers are expected to retain 50% of the net shares acquired upon stock option exercises and RSU vesting, until they achieve their minimum requirement under the Guidelines.

Anti-Hedging and Pledging Policies

Our Insider Trading Policy prohibits hedging transactions and encourages our executive officers to exercise caution when pledging Company securities as collateral for a loan. As of April 1, 2023, no shares of Company common stock beneficially owned by a director or executive officer is subject to a pledge.

Compensation Program Risk Considerations

Our management, with the assistance of Pearl Meyer, periodically assesses our compensation plans and programs that apply throughout the Company, including those plans and programs in which our executives participate. The findings are reviewed by senior management prior to being reviewed and discussed with the Compensation Committee.

Plan elements that are reviewed include participants, performance measures, performance and payout curves or formulas, how target level performance is determined (including whether any thresholds and caps exist), how frequently payouts occur, maximum payout opportunities, and the mix of fixed and variable compensation that the plan delivers. The plans and programs are also reviewed from the standpoint of reasonableness (e.g., how payout amounts relate to the results which generate the payment), how well the plans and programs are aligned with Stem's goals and objectives, and from an overall standpoint, whether these plans and programs represent an appropriate mix of short- and long-term compensation.

The purpose of these reviews is to determine whether the risks related to the design and operation of these plans and programs, if present, are reasonably likely to have a material adverse effect on the company. We believe that our compensation policies and practices do not encourage excessive risk-taking and are not reasonably likely to have a material adverse effect on the Company.

The various mitigating factors that support this conclusion include:

- oversight of annual cash incentive awards and all stock-based compensation by the Compensation Committee;
- annual cash incentive award payouts capped at 125% of target;
- appropriate balance of short-term and long-term incentive awards;
- senior management oversight of key plans and programs, including approving target level payouts;
- setting financial and operating goals, and approving payouts;
- administration and oversight of plans and programs by multiple functions within the Company (e.g., finance, legal and human resources); and
- vesting and stock ownership requirements for executive officers, which encourage long-term perspectives among participants.

Executive Compensation Recoupment Policy

We intend to adopt a clawback policy in 2023 to comply with the listing standards adopted by the New York Stock Exchange implementing the SEC's recently finalized Exchange Act Rule 10-D-1.

Tax Considerations

Section 162(m) of the Internal Revenue Code limits the amount of compensation that may be deducted per covered employee, including each of our NEOs, to $1 million per taxable year. Thus, it is expected that compensation deductions for any covered individual will be subject to a $1 million annual deduction limitation. Although the deductibility of compensation is a consideration evaluated by our Compensation Committee, the Committee may conclude that the lost deduction on compensation for our NEOs is outweighed by the benefit of being able to attract and retain talented management. Accordingly, the Committee will continue to approve executive compensation that it believes is best for Stem without regard to whether the compensation is fully deductible.

REPORT OF THE COMPENSATION COMMITTEE

During 2022, only non-management directors comprised the Compensation Committee. The Board determined that each member of the Compensation Committee is independent under the NYSE listing standards. The Compensation Committee operates under a written charter adopted by the Board. As described more fully in its charter, the purpose of the Compensation Committee is to assist the Board in the review and approval of the compensation and other benefits for our executive officers and directors.

The Compensation Committee has reviewed and discussed the "Compensation Discussion and Analysis" section of this Proxy Statement with management. Based on this review and discussion, the Compensation Committee recommended to the Board, and the Board approved, the inclusion of the "Compensation Discussion and Analysis" section in the Company's 2022 Annual Report on Form 10-K for the year ended December 31, 2022 (incorporated by reference) and in this Proxy Statement.

Submitted by the Stem Compensation Committee

Michael C. Morgan (Chair)
David Buzby
Jane Woodward

EXECUTIVE COMPENSATION TABLES

Summary Compensation Table

The following table sets forth information concerning the compensation paid to our NEOs.

Name and Principal Position	Year	Salary ($)[1]	Stock Awards ($)[2]	Option Awards ($)[3]	Non-Equity Incentive Plan Compensation ($)[4]	All Other Compensation ($)[5]	Total ($)
John Carrington Chief Executive Officer	2022	550,215	999,999	978,778	611,340	—	3,140,333
	2021	475,795	37,815,664	1,654,948	594,825	24,760	40,565,992
	2020	395,521	—	4,210,065	350,625	—	4,956,211
William Bush Chief Financial Officer	2022	425,712	874,995	856,424	322,090	—	2,479,221
	2021	374,167	2,938,958	661,980	315,000	19,231	4,309,336
	2020	350,000	—	1,878,363	150,000	—	2,378,363
Saul Laureles Chief Legal Officer and Corporate Secretary	2022	374,844	1,041,932	660,674	246,304	—	2,323,754
Kim Homenock Chief People Officer	2022	281,834	1,299,987	493,394	176,834	38,246	2,290,295
Robert Schaefer President, AlsoEnergy	2022	314,423	5,624,992	611,732	322,090	—	6,873,238

(1) Amounts reflect salary actually paid to the NEOs in the years shown.

(2) Amounts reflect the aggregate grant date fair value of time-vested restricted stock units (“RSUs”) granted to the NEOs in the years shown, computed in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, Compensation—Stock Compensation (ASC Topic 718), and based on the closing price of our common stock on the date of grant. These amounts may not correspond to the actual value eventually realized by each NEO because the value depends on the market value of our common stock at the time the award vests. See Note 16, “Stock-Based Compensation,” to our audited financial statements contained in our Annual Report on Form 10-K for the year ended December 31, 2022 for additional information regarding these amounts.

(3) Amounts reflect the aggregate grant date fair value of option awards granted to the NEOs in the years shown, computed in accordance with FASB ASC Topic 718. This amount reflects an accounting expense and does not correspond to actual value that may be realized by the NEOs in the future. A description of the methodologies and assumptions we use to value option awards, and the manner in which we recognize the related expense, are described in Note 16, “Stock-Based Compensation,” to our audited financial statements contained in our Annual Report on Form 10-K for the year ended December 31, 2022. The NEOs may never realize any value from these stock options and, to the extent that they do, the amounts realized may have no correlation to the amounts reported above.

(4) Amounts reflect annual cash incentives earned by the NEOs for the years shown. As a result, we have excluded the “Bonus” column. The NEOs were each eligible to receive annual cash incentives determined as a percentage of their respective base salaries based on the achievement of pre-established financial and operational metrics.

(5) Amounts for 2022 reflect a relocation benefit paid to Ms. Homenock in connection with her joining the Company.

2022 Grants of Plan-Based Awards

The following table sets forth information with respect to plan-based awards granted to our named executive officers in 2022.

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards(1) Threshold ($)	Target ($)	Maximum ($)	All Other Stock Awards: Number of Shares of Stock or Units (#)	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards ($/Share)	Grant Date Fair Value of Stock and Option Awards ($)
Mr. Carrington		423,500	605,000	756,250				
	3/1/22					167,470[2]	9.33	978,778
	3/1/22				107,181[4]			999,999
Mr. Bush		223,125	318,750	398,438				
	3/1/22					146,535[2]	9.33	856,424
	3/1/22				93,783[5]			874,995
Mr. Laureles		170,625	243,750	304,688				
	3/1/22					113,042[2]	9.33	660,674
	3/1/22				72,347[5]			674,998
	7/28/22				34,325[6]			366,934
Ms. Homenock		122,500	175,000	218,750				
	3/14/22					104,305[7]	7.49	493,394
	3/14/22				120,159[7]			1,299,987
Mr. Schaefer		223,125	318,750	398,438				
	3/1/22					104,668[2]	9.33	611,732
	3/1/22				66,988[5]			624,998
	3/14/22				667,556[8]			4,999,994

(1) These columns show the possible cash incentive payouts for each NEO for fiscal year 2022 based on performance goals set for the year. Threshold, target and maximum possible payouts are based on the annual cash incentive range established for each NEO, which is expressed as a percentage of base salary for the year. Threshold amounts are payable only if minimum performance goals are met. Actual cash incentive amounts earned for 2022 are reflected in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table. For information about the 2022 cash incentive paid to our NEOs, see "Compensation Discussion and Analysis—Elements of 2022 Compensation—Annual Cash Incentive Awards."

(2) Stock options granted to the named executive officers on March 1, 2022 vest in equal annual instalments over a four-year period.

(3) Stock option exercise prices reflect the closing price of Stem common stock on the grant date.

(4) Dollar amount reported reflects the grant date fair value, in each case computed in accordance with FASB ASC Topic 718. See the footnotes to the Summary Compensation Table and Note 16, "Stock-Based Compensation," to our audited financial statements contained in our Annual Report on Form 10-K for the year ended December 31, 2022 for the relevant assumptions used to determine the valuation of our stock and option awards.

(5) The RSUs granted to the named executive officers on March 1, 2022 vest in equal annual instalments over a four-year period, subject to such executive's continued employment with the Company.

(6) The RSUs granted to Mr. Laureles on July 28, 2022 fully vest on January 28, 2024, subject to his continued employment with the Company.

(7) Ms. Homenock's grants were made on March 14, 2022 and vest as follows: (i) all options and 66,755 of her RSUs will vest in four equal annual installments beginning on March 14, 2023, subject to her continued employment with the Company (in the case of RSUs) and (ii) 53,404 RSUs fully vested on March 14, 2023.

(8) The RSUs granted to Mr. Schaefer on March 14, 2022 fully vest on March 14, 2025, subject to his continued employment with the Company.

Outstanding Equity Awards at 2022 Fiscal-Year End

The following table sets forth additional information regarding outstanding and unexercised stock options and outstanding RSU awards for each of our NEOs as of December 31, 2022.

		Option Awards[1]				Stock Awards[1]	
Name	**Grant Date**	**Number of Securities Underlying Unexercised Options (#)* Exercisable**	**Number of Securities Underlying Unexercised Options (#)* Unexercisable**	**Option Exercise Price ($)**	**Option Expiration Date**	**Number of Shares or Units of Stock That Have Not Vested (#)**	**Market Value of Shares or Units of Stock That Have Not Vested ($)****
John Carrington	02/08/2015	206,184	—	0.97	02/07/2025		
	02/08/2015	3,381	—	0.97	02/07/2025		
	10/28/2015	777,150	—	1.25	10/27/2025		
	10/22/2019	1,165,455	—	2.41	10/21/2029		
	12/03/2020	204,600	—	6.81	12/02/2030		
	12/03/2020	391,416	391,416	6.81	12/02/2030		
	05/28/2021	24,664	73,994	25.34	05/28/2031		
	03/01/2022		167,470	9.33	03/01/2032		
	7/2/2021 (2)					1,000,000	8,940,000
	7/2/2021					29,598	264,606
	03/01/2022					107,181	958,198
William Bush	05/30/2017	6	—	1.67	05/30/2027		
	10/22/2019	194,558	—	2.41	10/21/2029		
	12/03/2020	170,988	170,989	6.81	12/02/2030		
	12/03/2020	99,608	—	6.81	12/02/2030		
	05/28/2021	9,865	29,598	25.34	05/28/2031		
	03/01/2022	—	146,535	9.33	03/01/2032		
	7/2/2021 (3)					65,000	581,100
	7/2/2021					11,839	105,841
	03/01/2022					93,783	838,420
Saul Laureles	05/28/2021	8,632	25,898	25.34	05/28/2031		
	03/01/2022	—	113,042	9.33	03/01/2032		
	03/01/2022					72,347	646,782
	07/28/2022 (4)					34,325	306,866
	07/02/2021					10,359	92,609
Kim Homenock	03/14/2022	—	104,305	7.49	03/14/2032		
	03/14/2022					66,755	596,790
	03/14/2022 (5)					53,404	477,432
Robert Schaefer	03/01/2022	—	104,668	9.33	03/01/2032		
	03/01/2022					66,988	598,873
	03/14/2022 (6)					667,556	5,967,951

* Certain values included in the corresponding columns in last year's proxy statement reflected immaterial errors that have been corrected in the table above.

** Market values in the final column were determined by multiplying the number of units of stock by $8.94, the closing price of our common stock on December 30, 2022, the last trading day of the year.

(1) On April 27, 2021, our stockholders approved the 2021 Plan. Prior to that date, equity awards were granted under the Stem, Inc. 2009 Equity Incentive Plan (the "2009 Plan"). Following the adoption of the 2021 Plan, no further grants of awards have been made or will be made under the 2009 Plan. Unless otherwise noted below, options disclosed in this table generally vest over four years, with 25% of the option vesting on the one-year anniversary of the vesting commencement date and 1/48th of the option vesting monthly thereafter through the four-year anniversary of the vesting commencement date, subject to the named executive officer's continued employment with the Company through the applicable vesting dates; provided that stock options granted on March 1, 2022 vest in four equal annual installments beginning on the one-year anniversary of the grant date subject to the named executive officer's continued employment with the Company through the applicable vesting dates. Stock awards disclosed in this table are in the form of RSUs and, unless otherwise noted below, generally vest in four equal annual installments beginning on the anniversary of the grant date.

(2) Mr. Carrington was awarded a Closing Grant of 1,000,000 RSUs in recognition of his leadership in closing the Merger and for retention purposes. To promote retention of Mr. Carrington during our critical transition to a public company, his Closing Grant will vest over seven years, with the first 3/7 of his award (43%) "cliff" vesting on April 28, 2024, subject to Mr. Carrington's continued employment with the Company on such date.

(3) Mr. Bush was awarded a Closing Grant of 65,000 RSUs in recognition of his leadership in closing the Merger. The RSU award vests 100% on April 28, 2024, subject to his continued employment with the Company on such date.

(4) Mr. Laureles was awarded 34,325 RSUs that vest 100% on January 28, 2024, subject to his continued employment with the Company on such date.

(5) All of Ms. Homenock's 53,404 RSUs in this row vested 100% on March 14, 2023.

(6) Mr. Schaefer was awarded 667,556 RSUs in connection with the closing of the AlsoEnergy Acquisition, which vests 100% on the March 14, 2025, subject to his continued employment with the Company on such date.

Option Exercises and Stock Vested in 2022

The following table provides additional information about options exercised and RSU awards vested for our NEOs in the fiscal year ended December 31, 2022:

	Option Awards		RSU Awards	
Name	**Number of Shares Acquired on Exercise (#)**	**Value Realized on Exercise [(1)] ($)**	**Number of Shares Acquired on Vesting (#)**	**Value Realized on Vesting [(2)] ($)**
John Carrington	133,465	1,274,591	9,865	76,651
William Bush	180,000	1,077,387	3,946	30,660
Saul Laureles	—	—	22,198	172,478
Kim Homenock	—	—	—	—
Robert Schaefer	—	—	—	—

(1) Represents the amounts realized based on the difference between the market price of the Company's stock on the date of grant and the exercise price.

(2) Represents the amounts realized based on the fair market value of the Company's stock on the vesting date of the restricted stock units.

Potential Payments Upon Termination or Change in Control

Each NEO is party to an employment agreement (the "Employment Agreements") that provides for certain severance payments and benefits in connection with certain qualifying terminations of employment, as well as enhanced severance payments and benefits if qualifying terminations of employment occur in connection with a "Change in Control" (as defined in the 2021 Plan). In April 2022, the Compensation Committee conducted a review of its executive severance and change in control practices and concluded that they were in line with market practice.

Employment Agreements

The "Change in Control Period" in the Employment Agreements commences three months prior to the occurrence of the Change in Control and ends 12 months following the Change in Control. Upon a termination without "Cause" (other than a termination due to death or disability) or resignation for "Good Reason," in each case, outside of the Change in

Control Period, each NEO would be eligible to receive: (i) payment of any bonus earned, but not yet paid for the year prior to the year of termination; (ii) an amount equal to 12 months (in the case of Mr. Carrington and Mr. Schaefer) or nine months (in the case of Mr. Bush, Mr. Laureles and Ms. Homenock) of his or her annual base salary in effect immediately prior to termination; (iii) payment of a pro rata bonus for the year of termination based on actual performance; and (iv) payment or reimbursement for the premiums that the NEO would be required to pay to maintain continued health coverage under COBRA for a period of up to 12 months (in the case of Mr. Carrington) or nine months (in the case of Mr. Bush, Mr. Laureles, Ms. Homenock and Mr. Schaefer) following the date of termination. Mr. Carrington, Mr. Bush and Mr. Schaefer would also be entitled to accelerated vesting of the portion of the equity grant they received in connection with the closing of the Merger (in the case of Mr. Carrington and Mr. Bush) or the AlsoEnergy Acquisition (in the case of Mr. Schaefer) (each a "Closing Grant") that would have otherwise vested within 12 months (in the case of Mr. Carrington), six months (in the case of Mr. Bush) or three months (in the case of Mr. Schaefer) following the date of termination, assuming employment had continued through such date. Receipt of all such payments and benefits would be subject to the NEO's execution and non-revocation of a release of claims and his continued compliance with the covenants set forth in his Employment Agreement.

Upon a termination without Cause (other than a termination due to death or disability) or resignation for Good Reason, in each case, during the Change in Control Period, each named executive officer would be eligible to receive: (i) cash payment equal to two times (in the case of Mr. Carrington) or one times (in the case of Mr. Bush, Mr. Laureles, Ms. Homenock and Mr. Schaefer) the sum of the named executive officer's annual base salary plus target bonus; (ii) payment of any bonus earned, but not yet paid for the year prior to the year of termination; (iii) payment of a pro-rata bonus for the year of termination based on actual performance; and (iv) payment or reimbursement for the premium that the named executive officer would be required to pay to maintain continued health coverage under COBRA for a period of up to eighteen months (in the case of Mr. Carrington) or twelve months (in the case of Mr. Bush, Mr. Laureles, Ms. Homenock and Mr. Schaefer) following the date of termination. Mr. Carrington, Mr. Bush and Mr. Schaefer would also be entitled to full vesting of the Closing Grant. Receipt of all such payments and benefits would be subject to the named executive officer's execution and non-revocation of a release of claims and his continued compliance with the covenants set forth in the Employment Agreements.

The 2021 Plan

Pursuant to the terms of the 2021 Plan, and unless provided otherwise in an award agreement or other agreement between us or an affiliate and the participant, in the event of Change in Control (as defined in the 2021 Plan), our board of directors will take one or more of the following actions with respect to each outstanding award, contingent upon the closing or completion of the Change in Control:

- arrange for the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) to assume or continue the award or to substitute a similar stock award for the award (including, but not limited to, an award to acquire the same consideration per share paid to the stockholders of the company pursuant to the Change in Control);

- arrange for the assignment of any reacquisition or repurchase rights held by us in respect of common stock issued pursuant to the award to the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company);

- accelerate the vesting, in whole or in part, of the award (and, if applicable, the time at which the award may be exercised) to a date prior to the effective time of such Change in Control as determined by our board of directors, with such award terminating if not exercised (if applicable) at or prior to the effective time of the Change in Control, and with such exercise reversed if the Change in Control does not become effective;

- arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by us with respect to the award;

- cancel or arrange for the cancellation of the award, to the extent not vested or not exercised prior to the effective time of the Change in Control, in exchange for such cash consideration, if any, as our board of directors, in its reasonable determination, may consider appropriate as an approximation of the value of the cancelled award; and

- cancel or arrange for the cancellation of the award, to the extent not vested or not exercised prior to the effective time of the Change in Control, in exchange for a payment equal to the excess, if any, of (A) the value in the Change in Control of the property the participant would have received upon the exercise of the award immediately prior to the effective time of the Change in Control, over (B) any exercise price payable by such holder in connection with such exercise.

Our Board need not take the same action or actions with respect to all awards or portions thereof or with respect to all participants and may take different actions with respect to the vested and unvested portions of an award. In the absence of any affirmative determination by our board of directors at the time of a Change in Control, each outstanding award will be assumed or an equivalent award will be substituted by such successor corporation or a parent or subsidiary of such successor corporation, referred to as a successor corporation, unless the successor corporation does not agree to assume the award or to substitute an equivalent award, in which case the vesting of such award will accelerate in its entirety (along with, if applicable, the time at which the award may be exercised) to a date prior to the effective time of such Change in Control as our board of directors will determine (or, if our board of directors does not determine such a date, to the date that is five (5) days prior to the effective date of the Change in Control), with such award terminating if not exercised (if applicable) at or prior to the effective time of the Change in Control, and with such exercise reversed if the Change in Control does not become effective.

Estimated Payments as of December 31, 2022

The following table presents the estimated payments that each of our named executive officers would have been entitled to receive under the arrangements described above assuming that a termination of employment and, where applicable, a change in control of the company had occurred as of December 30, 2022 (the last trading day of 2022) and based on the closing price per share of our common stock on such date ($8.94 on December 30, 2022). Amounts actually received by an NEO (if any) upon termination of employment will vary based on factors such as the timing during the year of any such event, the company's stock price, and any changes to our benefit arrangements and policies. Amounts shown do not include: (i) benefits earned during the term of the named executive officer's employment that are available to all benefit-eligible salaried employees and (ii) the value of vested equity awards that the named executive officer is entitled to regardless of whether employment is terminated.

Name	Benefit	Termination Without Cause or For Good Reason ($)	Termination Without Cause or For Good Reason in connection with a Change in Control ($)
Mr. Carrington	Earned unpaid bonus [(1)]	—	—
	Base Salary Severance [(2)]	550,000	—
	Pro-rated bonus for year of termination [(3)]	611,340	611,340
	COBRA benefit [(4)]	58,452	87,677
	Base Salary plus Bonus Severance [(5)]	—	2,310,000
	Accelerated vesting of Closing Grant [(6)]	—	8,940,000
	Total	1,219,792	11,949,017
Mr. Bush	Earned unpaid bonus [(1)]	—	—
	Base Salary Severance [(2)]	318,750	—
	Pro-rated bonus for year of termination [(3)]	322,090	322,090
	COBRA benefit [(4)]	32,419	43,225
	Base Salary plus Bonus Severance [(5)]	—	743,750
	Accelerated vesting of Closing Grant [(6)]	—	581,100
	Total	673,259	1,690,165
Mr. Laureles	Earned unpaid bonus [(1)]	—	—
	Base Salary Severance [(2)]	281,250	—
	Pro-rated bonus for year of termination [(3)]	246,304	246,304
	COBRA benefit [(4)]	21,952	29,270
	Base Salary plus Bonus Severance [(5)]	—	618,750
	Total	549,506	894,324
Ms. Homenock	Earned unpaid bonus [(1)]	—	—
	Base Salary Severance [(2)]	262,500	—
	Pro-rated bonus for year of termination [(3)]	176,834	176,834
	COBRA benefit [(4)]	33,347	44,463
	Base Salary plus Bonus Severance [(5)]	—	525,000
	Total	472,681	746,297
Mr. Schaefer	Earned unpaid bonus [(1)]	—	—
	Base Salary Severance [(2)]	425,000	—
	Pro-rated bonus for year of termination [(3)]	322,090	322,090
	COBRA benefit [(4)]	10,029	13,372
	Base Salary plus Bonus Severance [(5)]	—	743,750
	Accelerated vesting of Closing Grant [(6)]	—	5,967,951
	Total	757,119	7,047,163

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(1) Represents the portion of each NEO's bonus for the year prior to their departure that was earned but unpaid as of the date of termination. There would have been no earned but unpaid amount for 2021 upon a departure as of December 31, 2022.

(2) With respect to a qualifying termination not in connection with a change in control, represents an amount equal to 12 months (in the case of Mr. Carrington and Mr. Schaefer) or nine months (in the case of Mr. Bush, Mr. Laureles and Ms. Homenock) of his or her annual base salary in effect immediately prior to termination.

(3) In light of the assumed date of termination of December 31, 2022, represents payment of the bonus earned for 2022 based on actual performance.

(4) With respect to a qualifying termination not in connection with a change in control, represents payment or reimbursement for the premiums that the officer would be required to pay to maintain continued health coverage under COBRA for a period of up to 12 months (in the case of Mr. Carrington) or nine months (in the case of Mr. Bush, Mr. Laureles, Ms. Homenock and Mr. Schaefer) following the date of termination. With respect to a qualifying termination in connection with a change in control, represents payment or reimbursement for the premium that the named executive officer would be required to pay to maintain continued health coverage under COBRA for a period of up to eighteen months (in the case of Mr. Carrington) or twelve months (in the case of Mr. Bush, Mr. Laureles, Ms. Homenock and Mr. Schaefer) following the date of termination.

(5) With respect to a qualifying termination in connection with a change in control, represents cash payment equal to two times (in the case of Mr. Carrington) or one times (in the case of Mr. Bush, Mr. Laureles, Ms. Homenock and Mr. Schaefer) the sum of the named executive officer's annual base salary plus target bonus.

(6) With respect to a qualifying termination of Messrs. Carrington, Bush and Schaefer not in connection with a change in control, represents the value of accelerated vesting of the portion of the equity grant they received in connection with the closing of the Merger (in the case of Messrs. Carrington and Bush) or the AlsoEnergy Acquisition (in the case of Mr. Schaefer) that would have otherwise vested within 12 months (in the case of Mr. Carrington), six months (in the case of Mr. Bush) or three months (in the case of Mr. Schaefer) following the date of termination, assuming employment had continued through such date. The value set forth in the event of a double trigger termination is the same value that would apply in the event of a change in control of the company where the awards are not assumed or substituted.

PAY VERSUS PERFORMANCE

The Company has prepared this disclosure in accordance with the SEC's pay versus performance rules in Item 402(v) of Regulation S-K under the 1934 Act ("Item 402(v)") and does not necessarily reflect value actually realized by our NEOs or how the Compensation Committee evaluates compensation decisions in light of Company or individual performance. For discussion of how the Compensation Committee seeks to align pay with performance when making compensation decisions, please review the Compensation Discussion and Analysis beginning on page 29.

Pay Versus Performance Table

The following table and related disclosure provide the information required for our NEOs for each of the fiscal years ended December 31, 2022 and December 31, 2021 along with the required financial information required for each fiscal year:

					Year-end value of $100 invested on 4/28/2021 in:			
Year (1)	**Summary Compensation Table Total for CEO $**	**Compensation Actually Paid to CEO (2) $**	**Average Summary Compensation Table Total for Non-CEO NEOs (3) $**	**Average Compensation Actually Paid to Non-CEO NEOs (2)(3) $**	**STEM $**	**NASDAQ Clean Edge Green Energy Index $**	**Net Income (in millions) $**	**Revenue (in millions) $**
2022	3,140,333	(13,241,250)	3,491,627	2,863,999	33.60	69.88	(124.1)	363.0
2021	40,565,992	40,826,778	4,178,677	6,916,368	71.29	100.67	(101.2)	127.4

(1) Due to the timing of the Merger, we are providing pay versus performance information for two years in accordance with the transitional rule for new registrants.

(2) Deductions from, and additions to, total compensation in the Summary Compensation Table by year to calculate Compensation Actually Paid include:

	2022		2021	
	John Carrington	Average Non-CEO NEOs	John Carrington	Average Non-CEO NEOs
Total Compensation from Summary Compensation Table	**$ 3,140,333**	**$ 3,491,627**	**$ 40,565,992**	**$ 4,178,677**
Adjustments for Equity Awards				
Adjustment for grant date values in the Summary Compensation Table	$ (1,978,777)	$ (2,866,033)	$ (39,470,612)	$ (3,523,673)
Year-end fair value of unvested awards granted in the current year	$ 2,046,816	$ 3,246,464	$ 20,990,331	$ 1,990,669
Year-over-year difference of year-end fair values for unvested awards granted in prior years	$ (14,647,716)	$ (739,217)	$ 9,142,970	$ 2,006,457
Fair values at vest date for awards granted and vested in current year	$ —	$ —	$ —	$ —
Difference in fair values between prior year-end fair values and vest date fair values for awards granted in prior years	$ (1,801,906)	$ (268,842)	$ 9,598,097	$ 2,264,238
Forfeitures during current year equal to prior year-end fair value	$ —	$ —	$ —	$ —
Dividends or dividend equivalents not otherwise included in total compensation	$ —	$ —	$ —	$ —
Total Adjustments for Equity Awards	**$ (16,381,583)**	**$ (627,628)**	**$ 260,786**	**$ 2,737,691**
Compensation Actually Paid (as calculated)	**$ (13,241,250)**	**$ 2,863,999**	**$ 40,826,778**	**$ 6,916,368**

(3) Non-CEO NEOs reflect the average Summary Compensation Table total compensation and average Compensation Actually Paid for the following executives by year:

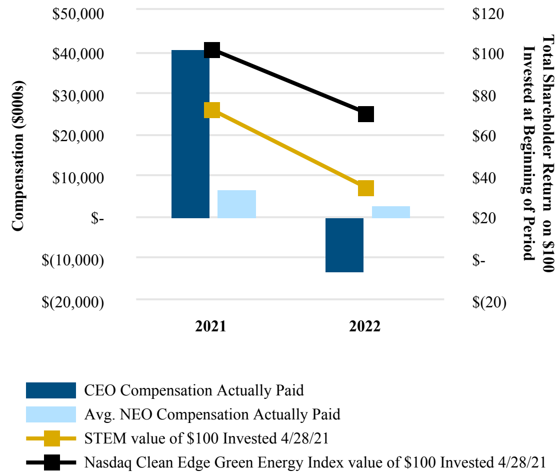
- 2022: William Bush, Saul Laureles, Kim Homenock and Robert Schaefer
- 2021: William Bush and Larsh Johnson

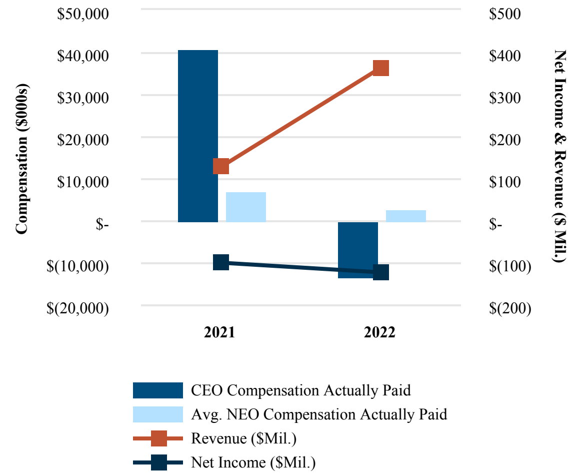
(4) Total Shareholder Return (TSR) is calculated by dividing (a) the sum of (i) the cumulative amount of dividends for the measurement period, assuming dividend reinvestment, and (ii) the difference between the Company's share price at the end of each fiscal year shown and the beginning of the measurement period, and the beginning of the measurement period by (b) the Company's share price at the beginning of the measurement period.

Relationship between CAP and Performance

The illustrations below provide a graphical description of CAP (as calculated in accordance with the SEC rules) and the following measures:

- Stem's cumulative TSR
- Stem's Net Income
- Stem's Revenue





The following table identifies the four financial performance measures that, in the Company's assessment, represent the four most important measures used to link CAP for our NEOs to Company performance for 2022. The role of each of these performance measures on our NEOs' compensation is discussed in the CD&A above:

Financial Performance Measures
Revenue
Adjusted EBITDA
Contracted Annual Recurring Revenue
Contracted Backlog

CEO PAY RATIO DISCLOSURE

Based on the methodology described below, our CEO's 2022 total compensation of $3,140,332 was 13.48 times our median employee's 2022 total compensation of $233,008.

The pay ratio reported above is a reasonable estimate calculated in a manner consistent with SEC rules based on our payroll and employment records and the methodology described below. For these purposes, we identified the median compensated employee using gross cash compensation reflected in our payroll records for all individuals who were employed by us on December 31, 2022, excluding our Chief Executive Officer. The SEC's rules also allow us to omit the employees of a newly-acquired entity from our pay ratio calculation for the fiscal year in which the acquisition occurs. As a result, when calculating our 2022 pay ratio, we excluded 398 employees acquired in connection with the AlsoEnergy Acquisition. We annualized wages for any employee who did not work for the entire year, unless such employee was designated as temporary, seasonal or other non-permanent category in our records.

The SEC's rules for identifying the median compensated employee and calculating the pay ratio based on that employee's annual total compensation allow companies to adopt a variety of methodologies, to apply certain exclusions, and to make reasonable estimates and assumptions that reflect their employee populations and compensation practices. As a result, the pay ratio reported by other companies may not be comparable to the pay ratio reported above, as other companies have different employee populations and compensation practices and may utilize different methodologies, exclusions, estimates, and assumptions in calculating their own pay ratios.

EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth information as of December 31, 2022 about our equity compensation plans, all of which have been approved by our stockholders. As of that date, we had outstanding awards under two equity compensation plans: our 2009 Equity Incentive Plan (the "2009 Plan") and the 2021 Plan. Awards currently may be granted only under our 2021 Plan.

Plan Category	Number of Securities to Be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available For Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by security holders	14,963,127	$ 6.88	14,737,772
Equity compensation plans not approved by security holders	—	—	—

(a) Reflects all shares of common stock subject to outstanding options and RSUs granted under the 2009 Plan and the 2021 Plan.

(b) The weighted average exercise price relates solely to outstanding stock options, since shares subject to the RSUs have no exercise price.

DIRECTOR COMPENSATION

The Compensation Committee is responsible for periodically reviewing and approving the form and amount of compensation paid to our non-employee directors for their service on our Board and its committees. Directors who are employees of the Company do not receive compensation for serving on the Board.

In making non-employee director compensation recommendations, the Compensation Committee takes various factors into consideration, including the responsibilities of directors generally, as well as committee chairs, and the form and amount of compensation paid to directors by peer companies.

The Compensation Committee performed its annual review of non-employee director compensation in April 2022. The Compensation Committee's independent consultants presented a comparison of the Company's non-employee director compensation program with that of the companies in the executive compensation peer group, which illustrated that the cash component of such compensation was below the median and the equity component was near the median.

In July 2022, the Compensation Committee increased the non-employee director annual cash retainer from $36,000 to $60,000 and increased the annual cash retainer for the Nominating Committee Chair from $8,000 to $10,000. No changes were made to the equity component of the non-employee director compensation program. These increases were effective July 1, 2022.

Cash Compensation. The following table shows the cash retainer for service on the Board and various committees after giving effect to the July 1, 2022 increases. Cash payments were made quarterly in arrears. Compensation for committee chair service is in lieu of compensation for committee membership, and not in addition to it.

Position	Cash Retainer ($)
Board Member	60,000
Additional Retainers	
Chairman of the Board	45,000
Audit Committee Chair	20,000
Compensation Committee Chair	12,000
Nominating Committee Chair	10,000
Audit Committee Member	10,000
Compensation Committee Member	6,000
Nominating Committee Member	4,000

Equity Compensation. Upon election or re-election to our Board and in connection with each annual meeting of stockholders, non-employee directors receive an annual equity grant of time-based RSUs with a target grant date fair value of $140,000, subject to an overall per-director limit of $600,000 on the total cash fees paid and value of equity granted in a single year. In 2022, each non-employee director was awarded 20,498 RSUs, which will vest in full on June 15, 2023, the anniversary of our 2022 annual meeting of stockholders.

The following table shows total compensation actually received by our non-employee directors for their service in 2022.

2022 Non-Employee Director Compensation Table

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($) [(1)]	All Other Compensation ($)	Total ($)
David Buzby	99,000	219,124	—	318,124
Adam E. Daley	58,000	219,124	—	277,124
Michael C. Morgan	60,000	219,124	—	279,124
Anil Tammineedi	62,000	219,124	—	281,124
Lisa L. Troe	68,000	219,124	—	287,124
Laura D'Andrea Tyson	57,000	219,124	—	276,124
Jane Woodward	58,000	219,124	—	277,124

(1) Amounts reported reflect the aggregate grant date fair value of RSUs, calculated in accordance with applicable accounting standards and based on the closing price of our common stock on July 28, 2022 (the date the Compensation Committee approved such awards) of $10.69. Amounts reported are greater than the target value of $140,000 due to an increase in the market value of our common stock between the target value date of June 15, 2022 (the date our Class I directors were re-elected to the Board at our 2022 annual stockholder meeting) and July 28, 2022. These amounts may not correspond to the actual value eventually realized by each director because the value depends on the market value of our common stock at the time the RSU award vests. As of December 31, 2022, none of our non-employee directors held outstanding equity awards, other than those shown in the table above, except for Mr. Buzby who holds 23,717 stock options that were awarded before the Merger.

Non-employee directors who begin their Board, Board Chair, committee or committee chair service after the Annual Meeting receive a prorated amount of annual compensation. Stem also reimburses non-employee directors for reasonable travel and other business expenses incurred in the performance of their services for Stem, in accordance with Stem's expense reimbursement policy as in effect from time to time.

CERTAIN INFORMATION ABOUT OUR COMMON STOCK

Security Ownership by Management and our Board

The following table and accompanying footnotes set forth information known to us with respect to the beneficial ownership of our common stock as of March 3, 2023 for (i) each director and director nominee, (ii) each of our named executive officers, and (iii) all directors and executive officers as a group.

Beneficial ownership for the purposes of the following table is determined in accordance with the rules and regulations of the SEC. A person is a "beneficial owner" of a security if that person has or shares "voting power," which includes the power to vote or to direct the voting of the security, or "investment power," which includes the power to dispose of or to direct the disposition of the security, or has the right to acquire such powers within 60 days.

The beneficial ownership percentages set forth in the table below are based on 155,003,356 shares of our common stock issued and outstanding as of March 3, 2023. The number of shares beneficially owned by each person or group as of March 3, 2023 includes shares of common stock that such person or group has the right to acquire within 60 days of March 3, 2023, including upon the exercise of options to purchase common stock or the vesting of RSUs. References to options in the footnotes to the table below include only options outstanding as of March 3, 2023 that are currently exercisable or that become exercisable within 60 days of March 3, 2023, and references to RSUs in the footnotes to the table below are only to RSUs outstanding as of March 3, 2023 and that vest within 60 days of March 3, 2023.

Unless otherwise noted in the footnotes to the following table, and subject to applicable community property laws, the persons and entities named in the table have sole voting and investment power with respect to the shares listed and the address of each individual is the Company's address set forth on the first page of this Proxy Statement.

Name and Address	Shares Beneficially Owned	Percentage of Total
Named Executive Officers and Directors		
John Carrington [(1)]	2,973,886	1.88 %
William Bush [(2)]	771,514	*
Saul Laureles [(3)]	78,206	*
Kim Homenock [(4)]	122,870	*
Robert Schaefer [(5)]	1,846,517	1.19 %
David Buzby [(6)]	558,711	*
Adam E. Daley [(7)]	275,800	*
Michael C. Morgan [(8)]	1,851,642	1.19 %
Anil Tammineedi [(9)]	4,295,373	2.77 %
Lisa L. Troe	5,524	*
Laura D'Andrea Tyson	5,524	*
Jane Woodward	5,524	*
All current directors and executive officers as a group (16 persons)	14,596,502	9.12 %

* Represents beneficial ownership of less than one percent.

(1) Includes 9,865 RSUs and options to purchase 2,839,382 shares.

(2) Includes 3,946 RSUs, and options to purchase 521,524 shares

(3) Includes 3,453 RSUs and options to purchase 45,525 shares.

(4) Includes 70,092 RSUs and options to purchase 26,076 shares.

(5) Includes options to purchase 26,167 shares.

(6) Includes 558,711 shares of common stock held by the David S. Buzby Revocable Trust, of which Mr. Buzby serves as trustee.

(7) Includes (a) 92,776 shares held by Daley Revocable Trust, of which Mr. Daley is a trustee, and (b) 96,251 shares held by Daley Investment Trust, of which Mr. Daley is a trustee.

(8) Includes (a) 37,500 shares of common stock held in a family trust (M GST) of which Mr. Morgan is an investment adviser; (b) 37,500 shares of common stock held in a family trust (C GST) of which Mr. Morgan is an investment adviser; (c) 542,181 shares of common stock held in a trust for which Mr. Morgan acts as trustee; (d) 1,178,937 shares of common stock held by Portcullis Investments, LP; and (e) 50,000 shares of common stock held by Portcullis Partners, LP. Mr. Morgan is Manager of the general partner of Portcullis Investments, LP and Portcullis Partners, L.P.

(9) Includes 4,289,849 shares of common stock held by Angeleno Investors III, L.P. Mr. Tammineedi is a Principal at Angeleno Group, an affiliate of Angeleno Investors III, L.P., and may be deemed to share voting and investment power with respect to all shares held by Angeleno Investors III, L.P.

Security Ownership of Certain Beneficial Owners

The following table sets forth information as of December 31, 2022, with respect to persons known by the Company to be the beneficial owners of more than 5% of our common stock, based solely on the information reported by such persons in their Schedule 13G filings with the SEC. For each entity included in the table below, percentage ownership is calculated by dividing the number of shares beneficially owned by such entity by the 155,003,356 shares of common stock outstanding on March 3, 2023.

Name and Address	Shares Beneficially Owned	Percentage of Total
The Vanguard Group [1] 100 Vanguard Blvd. Malvern, PA 19355	13,642,662	8.80 %
BlackRock, Inc. [2] 55 East 52nd Street New York, NY 10055	9,572,570	6.18 %

(1) Based solely on a Schedule 13G/A filed on February 9, 2023 by the Vanguard Group. Such filing indicates that The Vanguard Group has sole voting power with respect to 0 shares, shared voting power with respect to 223,945 shares, sole investment power with respect to 13,316,060 shares, and shared investment power with respect to 326,602 shares.

(2) Based solely on a Schedule 13G filed on February 3, 2023 by BlackRock, Inc. Such filing indicates that BlackRock, Inc. has sole voting power with respect to 9,451,991 shares, shared voting power with respect to 0 shares, sole investment power with respect to 9,572,570 shares, and shared investment power with respect to 0 shares.

Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act requires the Company’s executive officers and directors, among others, to file an initial report of ownership of Stem common stock on Form 3 and reports of changes in ownership on Form 4 or Form 5. The Company believes, based solely on a review of the forms filed with the SEC and on written representations from reporting persons, that with respect to the fiscal year ended December 31, 2022, all of its executive officers and directors filed on a timely basis the reports required to be filed under Section 16(a) of the Exchange Act except that a single transaction was reported late for each of Rahul Shukla, Robert Schaefer, Larsh Johnson, Michael Morgan and Michael Carlson, and Ms. Homenock's Form 3 was filed late.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Related Party Transactions

The following is a summary of each transaction or series of similar transactions since January 1, 2022, or any currently proposed transaction, to which we were or are a party in which:

- the amount involved exceeds $120,000; and
- any "related person," including our directors or executive officers, any holder of 5% or more of our common stock or any member of his or her immediate family, had or will have a direct or indirect material interest, other than compensation and other arrangements that are described under the sections titled "Executive Compensation" and "Director Compensation" or that were approved by our Compensation Committee.

Investor Rights Agreement

In connection with the Merger, Star Peak Sponsor LLC (the "Sponsor"), certain substantial holders of the Company's common stock (determined on an as-converted basis) (the "New Holders"), STPK's officers and directors and their affiliates, the Company's Chief Executive Officer and Chairman (together with the New Holders, the "Investors") entered into the Investor Rights Agreement, which became effective upon the consummation of the Merger. In accordance with the Investor Rights Agreement, the Sponsor and the Investors and their permitted transferees are entitled to, among other things, customary registration rights, including demand, piggy-back and shelf registration rights. The Investor Rights Agreement also provides that the Company will pay certain expenses relating to such registrations and indemnify the registration rights holders against (or make contributions in respect of) certain liabilities which may arise under the Securities Act.

Pursuant to the Investor Rights Agreement, the New Holders agreed, subject to certain exceptions, (i) not to transfer or dispose of their Common Stock until (x) the earlier of six months after the consummation of the Merger and (y) the date after the closing on which the Company completes a liquidation, merger, capital stock exchange, reorganization or other similar transaction that results in all of the Company's stockholders having the right to exchange their equity holdings in the Company for cash, securities or other property, and (ii) not engage, directly or indirectly, in any short sales or other hedging or derivative transactions involving the Company's common stock or warrants until six months after the consummation of the Merger. In addition, STPK's officers and directors and their affiliates, the Company's Chief Executive Officer and Chairman agreed, subject to certain exceptions, not to transfer or dispose of their common stock during the period from the date of the closing of the Merger through the earlier of (i) the first anniversary of the consummation of Merger, (ii) the date that the closing price of the common stock equals or exceeds $12.00 (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like), for twenty (20) trading days within any 30 trading day period following the 150th day following the Merger and (iii) the consummation of a liquidation, merger, capital stock exchange, reorganization or other similar transaction that results in all of the Company's stockholders having the right to exchange their shares of common stock for cash, securities or other property.

Related Party Transaction Policy

We have adopted a written related party transaction policy that sets forth our procedures for the identification, review, consideration, and approval or ratification of related person transactions. For purposes of our policy, a related person transaction is a transaction, arrangement or relationship, or any series of similar transactions, arrangements, or relationships, in which (i) the aggregate amount involved exceeds or is expected to exceed $100,000, (ii) the Company or any of its subsidiaries was, is or will be a participant, and (iii) any related person (as defined above) had, has or will have a direct or indirect interest. Transactions involving compensation for services provided to us as an employee or director, among other limited exceptions, are deemed to have standing pre-approval by the Nominating Committee but may be specifically reviewed if appropriate in light of the facts and circumstances.

Under the policy, if a transaction has been identified as a related party transaction, our management must present information regarding the related party transaction to our Nominating Committee for review, consideration, and approval or ratification. We will collect information that we deem reasonably necessary from each director, executive officer and, to the extent feasible, significant stockholder to enable us to identify any existing or potential related party transactions and to effectuate the terms of the policy. In addition, under our Code of Business Conduct and Ethics, our directors, officers, and employees have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest. In considering related party transactions, our Nominating Committee will take into account the relevant available facts and circumstances including, but not limited to: (i) whether the transaction is on terms

no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and (ii) the extent of the interest of the related person in the transaction.

The Investor Rights Agreement described above was entered into prior to our adoption of our formal, written policy, and, accordingly, the foregoing policies and procedures were not followed with respect to this transaction. However, we believe that the terms obtained were comparable to terms available in an arm's-length transaction at such time.

OTHER MATTERS

Stockholder Proposals and Director Nominations for Next Year's Annual Meeting

Pursuant to Rule 14a-8 of the Exchange Act, stockholders who wish to submit proposals for inclusion in the proxy statement for the 2024 Annual Meeting of Stockholders must send such proposals to our Corporate Secretary at the address set forth on the first page of this Proxy Statement. Such proposals must be received by us as of 6:00 p.m. Pacific Time on December 23, 2023 and must comply with Rule 14a-8 of the Exchange Act. The submission of a stockholder proposal does not guarantee that it will be included in the proxy statement.

As set forth in our bylaws, if a stockholder intends to make a nomination for director election or present a proposal for other business (other than pursuant to Rule 14a-8 of the Exchange Act) at the 2024 Annual Meeting of Stockholders, the stockholder's notice must be received by our Corporate Secretary at the address set forth on the first page of this Proxy Statement no earlier than the 120th day and no later than the 90th day before the anniversary of the last annual meeting; provided, however, that if the date of the annual meeting is more than 30 days before or more than 60 days after such anniversary date, the stockholder's notice must be delivered no earlier than the close of business on the 120th day before such annual meeting and no later than the close of business on the later of the 90th day before such annual meeting or the 10th day following the date on which the Company makes the first public announcement of the date of such annual meeting. Therefore, unless the 2024 Annual Meeting of Stockholders is more than 30 days before or more than 60 days after the anniversary of the Annual Meeting, notice of proposed nominations or proposals (other than pursuant to Rule 14a-8 of the Exchange Act) must be received by our Corporate Secretary no earlier than February 8, 2024 and no later than the 6:00 p.m. Pacific Time on March 9, 2024.

Any such director nomination or stockholder proposal must be a proper matter for stockholder action and must comply with the terms and conditions set forth in our Bylaws (which include the timing and information required under Rule 14a-19 of the Exchange Act). If a stockholder fails to meet these deadlines or fails to satisfy the requirements of Rule 14a-4 of the Exchange Act, we may exercise discretionary voting authority under proxies we solicit to vote on any such proposal as we determine appropriate. We reserve the right to reject, rule out of order or take other appropriate action with respect to any nomination or proposal that does not comply with these and other applicable requirements.

Delivery of Documents to Stockholders Sharing an Address

A number of brokerage firms have adopted a procedure approved by the SEC called "householding." Under this procedure, certain stockholders who have the same address and do not participate in electronic delivery of proxy materials will receive only one copy of the proxy materials, including this Proxy Statement, the Notice, and our Annual Report on Form 10-K for the year ended December 31, 2022, until such time as one or more of these stockholders notifies us that they wish to receive individual copies. This procedure helps to reduce duplicate mailings and save printing costs and postage fees, as well as natural resources. If you received a "householding" mailing this year and would like to have additional copies of the proxy materials mailed to you, please send a written request to our Corporate Secretary at the address set forth on the first page of this Proxy Statement, or call (877) 374-7836, and we will promptly deliver the proxy materials to you. Please contact your broker if you received multiple copies of the proxy materials and would prefer to receive a single copy in the future, or if you would like to opt out of "householding" for future mailings.

Availability of Additional Information

We will provide, free of charge, a copy of our Annual Report on Form 10-K for the year ended December 31, 2022, including exhibits, on the written or oral request of any stockholder of the Company. Please send a written request to our Corporate Secretary at the address set forth on the first page of this Proxy Statement, or call the number above.

ANNEX A

Adjusted EBITDA

This Proxy Statement includes a discussion of the non-GAAP financial measure Adjusted EBITDA. The expenses and other items that we exclude in our calculation of Adjusted EBITDA may differ from the expenses and other items, if any, that other companies may exclude when calculating Adjusted EBITDA.

We calculate Adjusted EBITDA as net loss before depreciation and amortization, including amortization of internally developed software, net interest expense, further adjusted to exclude stock-based compensation and other income and expense items, including transaction and acquisition related charges, the change in fair value of warrants and embedded derivatives, vesting of warrants, loss on extinguishment of debt, litigation settlement and income tax provision or benefit.

The following table provides a reconciliation of Adjusted EBITDA to net loss:

	Year Ended December 31,	
	2022	2021
	(in thousands)	
Net loss	$ (124,054)	$ (101,211)
Adjusted to exclude the following:		
Depreciation and amortization	48,783	29,098
Interest expense	10,468	17,395
Loss on extinguishment of debt	—	5,064
Stock-based compensation	28,661	13,546
Vesting of warrants	—	9,183
Change in fair value of warrants and embedded derivative	—	(3,424)
Transaction costs in connection with business combination	6,068	—
Litigation settlement	(727)	—
Benefit from (provision for) income taxes	(15,161)	—
Adjusted EBITDA	$ (45,962)	$ (30,349)

ANNEX B

Proposed Amendment to the Certificate of Incorporation to Declassify our Board of Directors over a Five-Year Period and Make Corresponding Updates to Director Removal Provisions

ARTICLE V BOARD OF DIRECTORS

Section 5.2 ~~Classification~~ Terms.

(a) Prior to the annual meeting of stockholders to be held in 2028, e~~E~~xcept as may be otherwise provided with respect to directors elected by the holders of any series of Preferred Stock provided for or fixed pursuant to the provisions of Article IV hereof (including any Preferred Stock Designation) (the "Preferred Stock Directors"), the Board shall be divided into three classes, designated Class I, Class II and Class III. At the annual meetings of stockholders to be held in 2024 and 2025, the director nominees designated as Class III and Class I directors, respectively, shall be elected to hold office for a term expiring at the annual meeting of stockholders held in the third year following the year of their election. At the annual meeting of stockholders to be held in 2026, the director nominees designated as Class II directors shall be elected to hold office for a term expiring at the next annual meeting of stockholders. At the annual meeting of stockholders to be held in 2027, the director nominees designated as Class II and Class III directors shall be elected to hold office for a term expiring at the next annual meeting of stockholders. Members of each class of directors shall hold office until the election and qualification of their respective successors in office, or until his or her death, resignation, retirement, disqualification or removal from office. If the number of directors is changed prior to the annual meeting of stockholders to be held in 2028, any increase or decrease shall be apportioned among the classes so as to maintain the number of directors in each class as nearly equally as possible, and any additional director of any class elected to fill a vacancy resulting from an increase in such class shall hold office for a term that coincides with the remaining term of that class.

(b) ~~Class I directors shall initially serve until the first annual meeting of stockholders following the initial effectiveness of this Second Amended and Restated Certificate; Class II directors shall initially serve until the second annual meeting of stockholders following the initial effectiveness of this this Second Amended and Restated Certificate; and Class III directors shall initially serve until the third annual meeting of stockholders following the initial effectiveness of this this Second Amended and Restated Certificate. Commencing with the first annual meeting of stockholders following the initial effectiveness of this Second Amended and Restated Certificate, each of the successors elected to replace the class of directors whose term expires at such annual meeting shall be elected to hold office for a three-year term and until the election and qualification of their respective successors in office. The Board is authorized to assign members of the Board already in office to Class I, Class II or Class III, with such assignment becoming effective as of the initial effectiveness of this Second Amended and Restated Certificate.~~ Beginning with the annual meeting of stockholders to be held in 2028, except as may be otherwise provided with respect to Preferred Stock Directors, each director nominee shall be elected for a term expiring at the next annual meeting of stockholders, and each director shall hold office until the election and qualification of his or her successor in office, or until his or her death, resignation, retirement, disqualification or removal from office.

(c) Subject to the rights of the holders of any outstanding series of Preferred Stock, and unless otherwise required by law, newly created directorships resulting from any increase in the authorized number of directors, ~~and~~ or any vacancies in the Board resulting from death, resignation, retirement, disqualification, removal from office or other cause, shall be filled solely by the affirmative vote of a majority of the remaining directors then in office, even though less than a quorum of the Board, or by the sole remaining director. Any director so chosen shall hold office: ~~until the next election of the class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified.~~ (i) in the case of any vacancy so filled prior to the annual meeting of stockholders to be held in 2028, until the next election of the class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified, and (ii) in the case of any vacancy so filled at or after the annual meeting of stockholders to be held in 2028, for a term expiring at the next annual meeting of stockholders and until his or her successor shall have been duly elected and qualified. No decrease in the authorized number of directors shall shorten the term of any incumbent director.

ANNEX C

Proposed Amendment to the Certificate of Incorporation to Remove Supermajority Voting Requirements to Amend our Certificate and Bylaws

ARTICLE VIII

AMENDMENT

Section 8.1 Amendment of Certificate of Incorporation. The Corporation reserves the right, at any time and from time to time, to amend, alter, change or repeal any provision contained in this Certificate of Incorporation (including any Preferred Stock Designation), and to add or insert other provisions authorized by the laws of the State of Delaware at the time in force, in the manner now or hereafter prescribed by the laws of the State of Delaware. All powers, preferences and rights of any nature conferred upon stockholders, directors or any other persons by and pursuant to this Certificate of Incorporation (including any Preferred Stock Designation) in its present form or as hereafter amended are granted subject to this reservation; provided, however, that, except as otherwise provided in this Certificate of Incorporation (including any provision of a Preferred Stock Designation that provides for a greater or lesser vote) and in addition to any other vote required by law, prior to the annual meeting of stockholders to be held in 2026, the affirmative vote of at least 66⅔% of the voting power of the stock outstanding and entitled to vote thereon, voting together as a single class, shall be required to amend or repeal, or adopt any provision inconsistent with, Section 5.2 of Article V, Article VI, Article VIII, Article IX, Article X or Article XI.

Section 8.2 Amendment of Bylaws. In furtherance and not in limitation of the powers conferred by the laws of the State of Delaware, but subject to the terms of any series of Preferred Stock then outstanding, the Board is expressly authorized to adopt, amend or repeal the Bylaws. Except as otherwise provided in this Certificate of Incorporation (including the terms of any Preferred Stock Designation that provides for a greater or lesser vote ~~require an additional vote~~) or the Bylaws, and in addition to any requirements of law, the affirmative vote of at least a majority of the voting power of the stock outstanding and entitled to vote thereon, voting together as a single class, shall be required for the stockholders to adopt, amend or repeal, or adopt any provision inconsistent with any provision of the Bylaws; provided, however, that, except as otherwise provided in this Certificate of Incorporation (including the terms of any Preferred Stock Designation that provides for a greater or lesser vote) or the Bylaws, and in addition to any requirements of law, prior to the annual meeting of stockholders to be held in 2026, the affirmative vote of at least 66⅔% of the voting power of the stock outstanding and entitled to vote thereon, voting together as a single class, shall be required for the stockholders to adopt, amend or repeal, or adopt any provision inconsistent with any provision of the Bylaws.

ANNEX D

Proposed Amendment to the Certificate of Incorporation to Limit the Liability of Certain Officers of the Company, in Accordance with Recent Amendments to Delaware Law

ARTICLE IX LIABILITY OF DIRECTORS AND OFFICERS

Section 9.1 No Personal Liability. To the fullest extent permitted by the DGCL as the same exists or as may hereafter be amended, no director or officer of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director or officer, as applicable.

BROADRIDGE CORPORATE SOLUTIONS
C/O STEM, INC.
P.O. BOX 1342
BRENTWOOD, NY 11717

SCAN TO
VIEW MATERIALS & VOTE

VOTE BY INTERNET
Before The Meeting - Go to **www.proxyvote.com** or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 p.m. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to **www.virtualshareholdermeeting.com/STEM2023**

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903
Use any touch-tone telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL
Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

V06602-P83582 KEEP THIS PORTION FOR YOUR RECORDS

DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

STEM, INC.

The Board of Directors recommends you vote FOR each of the director nominees and FOR Proposals 2 through 6:

1. To elect the three director nominees for terms expiring in 2026

Nominees:	**For**	**Withhold**
1a. Adam E. Daley	☐	☐
1b. Anil Tammineedi	☐	☐
1c. Lisa L. Troe	☐	☐

	For	**Against**	**Abstain**
2. To amend our Certificate of Incorporation to provide for the declassification of our Board of Directors over a five-year period and make corresponding updates to director removal provisions.	☐	☐	☐
3. To amend our Certificate of Incorporation to eliminate supermajority voting requirements to amend our Certificate of Incorporation and Bylaws.	☐	☐	☐
4. To amend our Certificate of Incorporation to provide for exculpation from liability for certain officers of the Company in accordance with recent amendments to Delaware law.	☐	☐	☐
5. To ratify Deloitte & Touche LLP as our independent registered public accounting firm for fiscal 2023.	☐	☐	☐
6. To approve, on an advisory basis, the compensation of our named executive officers.	☐	☐	☐

NOTE: Such other business as may properly come before the meeting or any adjournment or postponement thereof.

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

Signature [PLEASE SIGN WITHIN BOX]	Date	Signature (Joint Owners)	Date

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Notice and Proxy Statement and Form 10-K are available at www.proxyvote.com.

V06603-P83582

STEM, INC.
THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS
ANNUAL MEETING OF STOCKHOLDERS
JUNE 7, 2023

The shareholder(s) hereby appoint(s) Amy Lund and Kathy Medford, or either of them, as proxies, each with the power to appoint her substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this form, all of the shares of common stock of Stem, Inc. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held virtually at www.virtualshareholdermeeting.com/STEM2023, at 10:00 a.m., Pacific Time on Wednesday, June 7, 2023 and any adjournment or postponement thereof.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED AS DIRECTED BY THE STOCKHOLDER(S). IF NO SUCH DIRECTIONS ARE MADE, THIS PROXY WILL BE VOTED FOR THE ELECTION OF EACH OF THE NOMINEES LISTED ON THE REVERSE SIDE FOR THE BOARD OF DIRECTORS, AND FOR PROPOSALS 2, 3, 4, 5 AND 6. IN EITHER CASE, IF THIS FORM IS SIGNED AND RETURNED, THE PROXIES WILL BE AUTHORIZED TO VOTE IN THEIR DISCRETION UPON SUCH OTHER MATTERS AS MAY BE PROPERLY PRESENTED AT THE MEETING OR ANY ADJOURNMENT OR POSTPONEMENT THEREOF.

PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY CARD PROMPTLY USING THE ENCLOSED REPLY ENVELOPE.

CONTINUED AND TO BE SIGNED ON REVERSE SIDE