Risk Factors Comparison 2024-02-29 to 2023-03-01 Form: 10-K

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The following risk factors should be considered carefully in addition to the other information in this Annual Report on Form 10-K. The occurrence of any of the following material risks could harm our business and future results of operations and could result in the trading price of our common stock declining and a partial or complete loss of your investment. These risks are not the only ones that we face. Additional risks not presently known to us or that we currently consider immaterial may also impair our business operations and trading price of our common stock. The discussion contained in this Annual Report on Form 10- K contains " forward- looking statements " within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act, that involve risks and uncertainties. Refer to the section entitled " Forward- Looking Statements ~~.~~ " **.** A. MARKET RISKS We may be unable to successfully execute and operate our ~~green~~ hydrogen production projects and such projects may cost more and take longer to complete than we expect. As part of our vertical integration strategy, the Company is developing and constructing ~~green~~ hydrogen production facilities at locations across the United States and Europe. Our ability to successfully complete ~~and~~ **,** operate these projects **and obtain green certification for some of these facilities** is not guaranteed. These projects will impact our ability to meet and supplement the hydrogen demands for our products and services, for both existing and prospective customers. Our hydrogen production projects are dependent, in part, upon **our** ~~the Company' s~~ ability to meet our internal demand for electrolyzers required for such projects. ~~Electrolyzer demand by external customers may concurrently affect the Company' s ability to meet the internal electrolyzer demand from our hydrogen production projects.~~ The timing and cost to complete the construction of our hydrogen production projects are subject to a number of factors outside of our control and such projects may take longer and cost more to complete and become operational than we expect. **For example, construction at our Georgia plant took longer than we expected before becoming operational in 2024.** The viability and competitiveness of our ~~green~~ hydrogen production facilities will depend, in part, upon favorable laws, regulations, and policies related to hydrogen production **such as the Section 45V Credit for Production of Clean Hydrogen, among others** . Some of these laws, regulations, and policies are nascent, and there is no guarantee that they will be favorable to our projects. **For further information on risks associated with government regulations, see " Regulatory Risks ".** Additionally, our facilities will be subject to numerous and new permitting, regulations, laws, and policies, many of which might vary by jurisdiction. Hydrogen production facilities are also subject to robust competition from well- established multinational companies in the energy industry. There is no guarantee that our hydrogen production strategy will be successful, amidst this competitive environment. Our products and performance depend largely on the availability of hydrogen ~~gas and an~~ **and recent insufficient supplies of hydrogen have negatively affected, and any continued** insufficient supply of hydrogen could negatively affect our sales and deployment of our products and services. Our products and services depend largely on the availability of hydrogen ~~gas~~ . Although we are in the process of building multiple hydrogen production plants, our business could be materially and adversely affected by an inadequate availability of hydrogen or **our** failure to secure hydrogen supply at competitive prices. **We commenced producing liquid hydrogen at our Georgia facility in January 2024.** There is no assurance that our hydrogen production will scale at the rate we anticipate or that we will complete **additional** hydrogen production plants on schedule **or at all** . Additionally, we are dependent upon hydrogen suppliers to provide us with hydrogen ~~gas~~ for the commercialization of our products and services. **We have experienced supply chain issues relating to the availability of hydrogen, including but not limited to suppliers utilizing force majeure provisions under existing contracts, which has led to volume constraints, delay in our deployments and service margin improvements, and negatively impacted the amount of hydrogen we have been able to provide under certain of our supply and other agreements.** If **hydrogen suppliers elect not to participate in** ~~these~~ -- **the** ~~fuels are~~ **material handling market, or if supply chain issues relating to the availability of hydrogen continue, insufficient supplies of hydrogen may result. If hydrogen is** not readily available or if ~~their~~ **hydrogen** prices are such that energy produced by our products costs more than energy provided by other sources, then our products could be less attractive to potential users and our products' value proposition could be negatively affected **which** ~~. If hydrogen suppliers elect not to participate in the material handling market, there may be an insufficient supply of hydrogen for this market that~~ could **materially** ~~negatively affect our sales~~ and deployment of our products and services....... internationally and any of these factors could adversely affect our **sales** ~~results of operations~~ and ~~financial condition. The success of our international expansion will depend, in part, on our ability to succeed in navigating~~ the **deployment of our products** ~~different legal, regulatory, economic, social,~~ and **services** ~~political environments~~ . **Recent** ~~The current~~ inflationary trends, economic **uncertainty** ~~downturn and weakness in the economy~~ , market trends **, political instability** , and other conditions affecting the profitability and financial stability of **us and** our customers could negatively impact our sales growth and results of operations. ~~The~~ **Recent economic conditions and political instability in the geographic markets we serve, such as tight credit markets, inflation, low consumer confidence, limited capital spending, and changes in government priorities, could have a material adverse effect on our business, financial condition and results of operations. For example, factors such as increased interest rates have made it more difficult for us to find debt capital solutions efficiently. In addition, if there is a government shutdown in the United States, especially a prolonged shutdown, it could have a material adverse effect on our business, financial condition and results of operations. For example, the Inflation Reduction Act (" IRA "), which contains numerous credits and tax incentives that may be beneficial to us, was adopted in August 2022 and interagency guidance processes were ongoing through 2023, but final regulations are still pending. A prolonged U. S. government shutdown could cause uncertainty or delay in such determinations, which could impact the timing of any benefits we anticipate receiving under**

the IRA. In addition, a government shutdown may impact the availability and administration of government funding, which may impact our ability to secure a loan with the U. S. Department of Energy, or our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations. With respect to our customers, the demand for our products and services is sensitive to ~~the~~ **their** production activity, capital spending and demand for **their** products and services ~~of our customers worldwide~~. In ~~recent months~~ **the past couple of years**, we have observed increased economic uncertainty in the United States and abroad, including inflation and higher interest rates. Impacts of such economic weakness include falling overall demand for goods and services, leading to reduced profitability, reduced credit availability, higher borrowing costs, reduced liquidity, volatility in credit, equity and foreign exchange markets, and bankruptcies. These developments have led to supply chain disruption and transportation delays which have caused incremental freight charges, which have negatively impacted our business and our results of operations. In addition, as our customers react to global economic conditions ~~and the potential for a global recession~~, we have seen them reduce spending on our products and take additional precautionary measures to limit or delay expenditures and preserve capital and liquidity. **In recent months, we have pursued price increases across our offerings including equipment, service and hydrogen fuel, which may cause customers to change or delay their purchasing decisions with us.** Reductions in **customer** spending on our solutions, delays in **customer** purchasing decisions, lack of renewals, inability to attract new customers, uncertainty about business continuity as well as pressure for extended billing terms or pricing discounts, could limit our ability to grow our business and negatively affect our operating results and financial condition. Additionally, many of our customers operate in markets that may be impacted by market uncertainty, trade and tariff policies, costs of goods sold, currency exchange rates, central bank interest rate changes, foreign competition, ~~17offshoring~~ -- **offshoring** of production, oil and natural gas prices, geopolitical developments, labor shortages, inflation, and a variety of other factors beyond our control. Any of these factors could cause customers to idle or close facilities, delay purchases, reduce production levels, or experience reductions in the demand for their own products or services, and other conditions affecting the profitability and financial stability of our customers could negatively impact our sales growth and results of operations. **Inflation may adversely affect our financial results. Since 2008, the U. S. Federal Reserve System has generally maintained policies producing a historically low- interest- rate environment. The U. S. Federal Reserve System raised interest rates throughout 2022 and 2023 in response to concerns about inflation, and there can be no assurance as to what actions the U. S. Federal Reserve System will take in the future. To the extent such inflation continues or there is a market expectation that such inflation will continue or increase, it may increase our cost of borrowing and result in limitations on our ability to access credit or otherwise raise debt and equity capital. In addition, the market prices of certain materials and components used by us and / or our suppliers in manufacturing the products we sell can be volatile. Significant increases in inflation, particularly increases in the cost of raw materials, and the expenses associated with the distribution and transportation of these materials and products we sell, can have an adverse impact on the business, financial condition, and results of operations of us or our suppliers.** Our **17ability to pass on such increases in costs in a timely manner depends on market conditions, and the inability to pass along cost increases could result in lower gross margins. Increases in interest rates, especially if coupled with reduced government spending and volatility in financial markets, may have the effect of further increasing economic uncertainty and heightening these risks. In an inflationary environment, we may be unable to raise the sales prices of our** products and services **at** ~~face intense competition. The markets for~~ - **or** ~~energy products~~ **above the rate at which our costs increase**, **which could reduce our profit margins** ~~including PEM fuel cells, electrolyzers,~~ and ~~hydrogen production are intensely competitive~~ **have a material adverse effect on our financial results**. **For example, with respect to our service** ~~Our recent expansion into electrolyzer manufacturing and hydrogen production similarly faces robust competition — both from incumbent companies and new emerging~~ business **,** ~~interests in the United States and abroad. Some of our competitors are much larger than~~ we ~~are and may~~ have **experienced inflationary increases** ~~the manufacturing, marketing and sales capabilities to complete research, development, and commercialization of products more quickly and effectively than we can. There are many companies engaged~~ in **labor** ~~all areas of traditional and alternative energy generation in the United States and abroad~~, **parts** ~~including, among others, major electric, oil, chemical, natural gas, battery, generator~~ and ~~specialized electronics firms,~~ **related overhead. This** ~~as~~ **has contributed to** ~~well as universities, research institutions and foreign government- sponsored companies. These firms are engaged in forms of power generation such as advanced battery technologies, generator sets, fast charged technologies and other~~ -- **the** ~~types of~~ **increase in our estimated projected costs to service** fuel cell **systems and related infrastructure** ~~technologies. Well established companies might similarly seek to expand into new types of energy products~~, ~~including PEM fuel cells, electrolyzers,~~ **which resulted in an increase in the provision** ~~or~~ **for** ~~hydrogen production~~ **loss contracts related to service during the fourth quarter of 2023**. **If these trends continue, we may have to record** ~~Additionally~~ -- **additional** ~~, some competitors~~ **service loss provisions in the future. We also** may ~~rely~~ **experience lower than expected sales and potential adverse impacts** on ~~other different competing technologies for fuel cells, electrolyzers, or~~ **our** ~~hydrogen~~ **competitive position if there is a decrease in consumer spending or a negative reaction to our pricing. A** ~~production~~ - **reduction in** ~~. We believe~~ our ~~technologies~~ **revenue would be detrimental to our financial condition and could also** have **an adverse impact on our** ~~many advantages. In the near~~ future **growth**, we expect the demand for our...... products less attractive or render them obsolete. Volatility in commodity prices and product shortages may adversely affect our gross margins **and financial results**. Some of our products contain commodity- priced materials. Commodity prices and supply levels affect our costs. For example, nickel, platinum **, titanium** and iridium are key materials in our PEM fuel cells, electrolyzers, and hydrogen infrastructure. ~~Both platinum~~ **Platinum , titanium,** and iridium are scarce natural resources, and we are dependent upon a sufficient supply of these commodities. These resources may become increasingly difficult to source due to various cost, geopolitical, or other reasons, which in turn might have a material adverse effect on our business. While we do not anticipate significant near- or long- term **supply** shortages ~~in the supply~~ **with respect to our demand** of platinum **, titanium,** or iridium, a shortage could adversely affect our ability to produce commercially viable PEM fuel cells, PEM electrolyzers, or hydrogen production facilities, or raise our cost of producing such products and services. In addition, global inflationary pressures have recently increased, which could potentially increase commodity price volatility. Our ability to pass on such increases in costs in a timely manner depends on market conditions, and the inability to pass along cost increases could result in lower gross margins. We will continue to be dependent on certain...... operations, and financial condition. We depend on a concentration of pedestal customers for the majority of our revenues and the loss of any of these customers would adversely affect our business, financial condition, results of operations, and cash flows. We sell most of our products to a range of customers that include a ~~few~~ **concentration of** pedestal customers, and while we are continually seeking to expand our customer base, we expect this will continue for the next several years. **For example,** ~~Total~~ **total** revenue in ~~2022~~ **2023** ~~for Amazon~~ **associated with our top three customers** was $ ~~97~~ **390** . 5 million, which included a provision for warrant charges **in the aggregate** of $ ~~5~~ **11** . ~~6~~ **2** million. For the year ended December 31, ~~2022~~ **2023** , ~~Amazon~~ **such customers** accounted for ~~14~~ **43. 8** % of our total consolidated revenues. Total revenue in ~~2021~~ **2022** ~~for Amazon~~ **associated with our top three customers** was $ ~~205~~ **359** . ~~1~~ **0** million, which included a provision for warrant charges **in the aggregate** of $ ~~0~~ **12** . ~~5~~ **7** million. For the year ended December 31, ~~2021~~ **2022** , ~~Amazon~~ **such customers** accounted for ~~40~~ **51** . ~~8~~ **2** % of our total consolidated revenues. Any decline in business with **our** significant customers could have an adverse impact on our business, financial condition, and results of operations. Our future success is dependent upon the continued purchases of our products by a small number of customers. If we are unable to broaden our customer base and expand relationships with potential customers, our business will continue to be impacted by demand fluctuations due to our dependence on a small number of customers. Demand fluctuations can have a negative impact on our revenues, business, financial condition, results of operations and cash flows. Our dependence on a small number of major customers exposes us to additional risks. A slowdown, delay or reduction in a customer' s orders could result in excess inventories or unexpected quarterly fluctuations in our operating results and liquidity. Each of our major customers has significant purchasing leverage over us to require changes in sales terms including pricing, payment terms and product delivery schedules, which could adversely affect our business, financial condition, results of operations and cash flows. In addition, as of December 31, **2023, our top customer comprised approximately 21. 5 % of the total accounts receivable balance. At December 31,** 2022, ~~one~~ **our top** customer comprised approximately 24. 9 % of the total accounts receivable balance. ~~At December 31, 2021, one customer comprised approximately 46. 6 % of the total accounts receivable balance.~~ If ~~one of~~ our major customers ~~delays~~ - **delay** payment of or ~~is~~ **are** unable to pay their receivables, that could have a material adverse effect on our business, financial condition, results of operations and cash flows. ~~Rising inflation rates may adversely affect our financial results. Global inflationary pressures, particularly in the United States, have increased recently to levels not seen in recent years, which could potentially increase commodity price volatility, increased operating costs (including our labor costs) and reduced liquidity. In addition, the United States Federal Reserve has raised, and may again raise, interest rates in response to concerns about inflation, which may result in limitations on our ability to access credit or otherwise raise debt and equity capital. Our~~ **18Our** ~~ability to pass on such increases in costs in a timely manner depends on market conditions, and the inability to pass along cost increases could result in lower gross margins. Increases in interest rates, especially if coupled with reduced government spending and volatility in financial markets, may have the effect of further increasing economic uncertainty and heightening these risks. In an inflationary environment, we may be unable to raise the sales prices of our products and services at or above the rate at which our costs increase, which could reduce our profit margins and have a material adverse effect on our financial results. We also may experience lower than expected sales and potential adverse impacts on our competitive position if there is a decrease in consumer spending or a negative reaction to our pricing. A 19reduction in our revenue would be detrimental to our financial condition and could also have an adverse impact on our future growth. Our~~ ability to source parts and raw materials from our suppliers could be disrupted or delayed in our supply chain which could adversely affect our results of operations. Our operations require significant amounts of necessary parts and raw materials. ~~We deploy~~ **Most components essential to our business are generally available from multiple sources; however, we believe there are some component suppliers and manufacturing vendors, particularly those suppliers and vendors that supply materials in very limited supply worldwide or supply commodities that have high degree of volatility, whose loss to us or general unavailability could have** a ~~continuous, companywide process to source our parts and raw materials~~ - **material** ~~from fewer suppliers,~~ **adverse effect upon our business** and **financial condition** ~~to obtain parts from suppliers in low- cost countries where possible~~ . If we are unable to source these parts or raw materials, our operations may be disrupted, or we could experience a delay or halt in certain of our manufacturing operations. We believe that our supply management and production practices are based on an appropriate balancing of the foreseeable risks and the costs of alternative practices. Nonetheless, reduced availability or interruption in supplies, whether resulting from more stringent regulatory requirements, supplier financial condition, increases in duties and tariff costs, disruptions in transportation, an outbreak of a severe public health pandemic, ~~such as the COVID- 19 pandemic, including resurgences and the emergence of new variants,~~ severe weather, or the occurrence or threat of wars or other conflicts, could have an adverse effect on our financial condition, results of operations and cash flows. For example, **we have** ~~the Company has~~ experienced **and may continue to experience** supply chain issues ~~related to the COVID- 19 pandemic~~ , including but not limited **to shortages in the supply of liquid hydrogen due** to suppliers utilizing force majeure provisions under existing contracts. **These volume constraints have delayed our deployments and service margin improvements, and negatively impacted the amount of hydrogen we have been able to provide under certain of our supply and other agreements.** Furthermore, ~~the~~ ongoing global economic **trends have** ~~recovery from the COVID- 19 pandemic has~~ caused significant challenges for global supply chains resulting in inflationary cost pressures, component shortages, and transportation delays **, which have impacted our business** . We **face risks associated with our plans to market, distribute, and service our products and services internationally. We market, distribute, sell and service our product offerings internationally and** expect **to continue investing in our international operations. We have limited experience operating internationally, including developing and manufacturing our products**

to comply with the commercial and legal requirements of international markets. Our success in international markets will depend, in part, on our ability and that of our partners to secure relationships with foreign sub- distributors,and our ability to manufacture products that meet foreign regulatory and commercial requirements.Additionally,our planned international operations are subject to other inherent risks,including potential difficulties in enforcing contractual obligations and intellectual property rights in foreign countries,and could be adversely affected due to,among other things,fluctuations in currency exchange rates,political and economic instability,acts or threats of terrorism,changes in governmental policies or policies of central banks,expropriation,nationalization and / or confiscation of assets,price controls,fund transfer restrictions,capital controls,exchange rate controls,taxes,unfavorable political and diplomatic developments,changes in legislation or regulations and other additional developments or restrictive actions over which we will have no control.Doing business in foreign markets requires us to be able to respond to rapid changes in market,legal,and political conditions in these **countries. As we expand in international markets, including but not limited to joint ventures involving business activities in Europe and South Korea, and potential business activities in South America, Europe, Asia, the Middle East, Australia and elsewhere, we may face numerous** challenges .Such challenges might include unexpected changes in regulatory requirements;potential conflicts or disputes that countries may have to deal with,among other things,data privacy requirements;labor laws and anti- competition regulations;export or import restrictions;laws and business practices favoring local companies;fluctuations in currency exchange rates;longer payment cycles and difficulties in collecting accounts receivables;difficulties in managing international operations;potentially adverse tax consequences,tariffs,customs charges,bureaucratic requirements and other trade barriers;restrictions on repatriation of earnings;and the burdens of complying with a wide variety of international laws.We face risks associated with our plans to market,distribute,and service our products and services internationally and any of these factors could ~~continue to have~~ **adversely affect our results of operations** ~~an~~ **and** ~~impact~~ **financial condition. The success of our international expansion will depend, in part,** on our ~~businesses for~~ **ability to succeed in navigating** the ~~foreseeable future~~ **different legal, regulatory, economic, social, and political environments** . Our investments in joint ventures may involve numerous risks that may affect the ability of such joint ventures to make distributions to us. We currently conduct some of our operations through joint ventures, with such partners including SK E & S, Renault, Acciona, and Olin in which we share control with our joint venture participants. Investments in joint ventures may involve risks not present when a third party is not involved, including the possibility that our joint venture participants might experience business or financial stress that impact their ability to effectively operate the joint venture, or might ~~become~~ **19become** bankrupt or may be unable to meet their economic or other obligations, in which case **the** joint venture may be unable to access needed growth capital without additional funding from us. In addition, our joint venture participants may have economic, tax, business or legal interests or goals that are inconsistent with ours, or those of the joint venture, and may be in a position to take actions contrary to our policies or objectives. Furthermore, joint venture participants may take actions that are not within our control, which may expose our investments in joint ventures to the risk of lower values or returns. Disputes between us and co- venturers may result in litigation or arbitration that could increase our expenses and prevent our officers and / or directors from focusing their time and efforts on our day- to- day business. In addition, we may, in certain circumstances, be liable for the actions of our co- venturers. Each of these matters could have a material adverse effect on us. We made certain assumptions and projections regarding the future of the markets served by our joint venture investments that included projected raw materiality availability and pricing, production costs, market pricing and demand for the joint venture ~~'~~ **’** s products. These assumptions were an integral part of the economics used to evaluate these joint venture investment opportunities prior to consummation. To the extent that actual market performance varies from our models, our ability to achieve projected returns on our joint venture investments may be impacted in a materially adverse manner. Failure by us, or an entity in which we have a joint venture interest, to adequately manage the risks associated with such joint ventures could have a material adverse effect on the financial condition or results of operations of our joint ventures and, in turn, our business and operations. In addition, should any of these risks materialize, it could have a material adverse effect on the ability of the joint venture to make future distributions to us. **will continue to be dependent on certain third- party key suppliers for components in our products.The** failure of a supplier to develop and supply components in a timely manner or at all,or our inability to obtain substitute sources of these components on a timely basis or on terms acceptable to us,could impair our ability to manufacture our products ~~,~~ **or** could increase our cost of production ~~or could affect our ability to generate hydrogen,which would in turn negatively affect our sales and deployment of our products and services~~ .We rely on certain key suppliers for critical components in our products,and there are numerous other components for our products that are sole sourced.If we fail to maintain our relationships with our suppliers or build relationships with new suppliers,or if suppliers are unable to meet our demand,we may be unable to manufacture our products,or our products may be available only at a higher cost or after a delay.The Company has experienced and may continue to experience supply chain-related delays for components of ~~our products~~ - **product lines** ,hydrogen generation projects,and manufacturing facilities.In addition,to the extent that our supply partners use technology or manufacturing processes that are proprietary,we may be unable to obtain comparable components from alternative sources.Furthermore,we may ~~20become~~ -- **become** increasingly subject to domestic content sourcing requirements and Buy America preferences,as required by ~~federal~~ **18federal** infrastructure funding and various tax incentives in the United States,and we may become subject in the future to domestic sourcing requirements that may become relevant to the European Union.Domestic content preferences potentially mandate our Company to source certain components and materials from United States- based suppliers and manufacturers.Conformity with these provisions potentially depends upon our ability to increasingly source components or materials from within the United States.An inability to meet these requirements could have a material adverse effect on the Company’ s ability to successfully leverage tax incentives or compete for certain federal infrastructure funding sources imposing such mandates.In addition,the failure of a supplier to develop and supply components in a timely manner or at all,or to develop or supply components that meet our quality,quantity and cost requirements,or our inability to obtain substitute sources of these components on a timely basis or on terms acceptable to us,could impair our ability to manufacture our products or could increase our cost of production.If we cannot obtain substitute materials or components on a timely basis or on acceptable terms,we could be prevented from delivering our products to our customers within required timeframes.Any such delays have resulted and could continue to result in sales and installation delays,cancellations,penalty payments or loss of revenue and market share,any of which could have a material adverse effect on our business,results of operations, **and financial condition.We** B. FINANCIAL AND LIQUIDITY ~~RISKSIf~~ In order to achieve profitability,we must successfully execute our planned path to profitability in the early adoption markets on which we are focused.The profitability of our products depends largely on material and manufacturing costs and the market price of hydrogen.The hydrogen infrastructure that is needed to support our growth readiness and cost efficiency must be available and cost efficient.We must continue to shorten the cycles in our product roadmap with respect to improvement in product reliability and performance that our customers expect.We must execute on successful introduction of our products into the market.We must accurately evaluate our markets for,and react to,competitive threats in both other technologies (such as advanced batteries) and our technology field.Finally,we must continue to lower our products' build costs and lifetime service costs.If we are unable to successfully take these steps,we may never operate profitably,and,even if we do achieve profitability,we may be unable to sustain or increase our profitability in the future. ~~We~~ **21Our** we cannot obtain financing to support the sale of our products and service to our customers or our power purchase agreements with customers, such failure may adversely affect our liquidity and financial position. Customers representing most of our revenue access our products through Power Purchase Agreements (" PPAs "), rather than a direct purchase. **Historically** ~~These PPA arrangements require us to finance the purchase of such products~~ , ~~either ourselves~~ **we have obtained** or ~~through~~ **provided** third- party financing sources **to finance these PPA arrangements** . **We** ~~To date, we~~ have ~~been successful~~ **experienced, and may experience in the future, difficulty** in obtaining or providing **adequate** ~~the necessary~~ financing ~~arrangements. There is no certainty, however, that we will be able to continue to obtain or provide adequate 20financing~~ for these arrangements on acceptable terms, or at all ~~, in the future~~ . Failure to obtain or provide such financing **has impacted our product sales and results of operations, and** may result in the loss of material customers ~~and product sales~~ , which could have a material adverse effect on our business, financial condition, and results of operations. Further, ~~if~~ we ~~are~~ **have been** required **, and may be required in the future,** to continue to pledge or restrict substantial amounts of our cash to support these financing arrangements **. As a result** , such cash will not be available to us for other purposes, which may have a material adverse effect on our liquidity and financial position. For example, as of December 31, ~~2022~~ **2023** , approximately $ ~~858~~ **1** . ~~7~~ **0** ~~million~~ **billion** of our cash is restricted to support such leasing arrangements, comprised of cash deposits and collateralizing letters of credit, which prevents us from using such cash for other purposes. **Because** ~~We may require additional capital funding and such capital may not be available to us. As of December 31, 2022,~~ we ~~had~~ **are currently focusing more on** cash **generation, we have paused new PPAs in the fourth quarter of 2023** and **have shifted our approach to enable customers to deal directly with banks, which may temper short- term revenue growth. Although we expect PPAs to become a** cash ~~equivalents of $ 690. 6 million,~~ **source in the near- term and for** restricted cash **to be released over time, our ability to realize these benefits** ~~of $ 858. 7 million and net working capital of $ 2. 7 billion (which~~ is comprised of the net amount of current....... Sufficient sources of external financing may not ~~be available to us on cost effective terms. We have incurred losses and anticipate continuing to incur losses. We have not achieved operating profitability in any quarter since our formation and we will continue to incur net losses until we can produce sufficient revenue to cover our costs. Our net losses attributable to common stockholders were $ 724. 0 million in 2022, $ 460. 0 million in 2021, and $ 596. 2 million in 2020. As of December 31, 2022, we had an accumulated deficit of $ 3. 1 billion. We anticipate that we will continue to incur losses until we can produce and sell our products and services on a large- scale and cost- effective basis. We cannot guarantee~~ **guaranteed** ~~when we will operate profitably, if ever~~ . In order to achieve profitability, we...... our profitability in the future. 21Our **22Our** indebtedness could adversely affect our liquidity, financial condition and our ability to fulfill our obligations and operate our business. At December 31, ~~2022~~ **2023** , our total outstanding indebtedness was approximately $ ~~532~~ **567** . ~~2~~ **6** million, ~~193~~ **$ 195** . ~~9~~ **3** million of the $ 200. 0 **million** in aggregate principal amount of 3. 75 % Convertible Senior Notes due June 1, 2025 (the " 3. 75 % Convertible Senior Notes "), $ **3.** 9 ~~. 1~~ million of long- term debt, and $ ~~329~~ **368** . ~~2~~ **4** million of finance obligations consisting primarily of debt associated with sale of future revenues and sale / leaseback financings. Our indebtedness could have negative consequences on our future operations, including: ● we may have difficulty satisfying our obligations with respect to our outstanding debt; ● we may have difficulty obtaining financing in the future for working capital, capital expenditures, acquisitions, or other purposes; ● our vulnerability to general economic downturns and adverse industry conditions could increase; ● our flexibility in planning for, or reacting to, changes in our business and in our industry in general could be limited; **and** ● our amount of debt and the amount we must pay to service our debt obligations could place us at a competitive disadvantage compared to our competitors that may have less debt. Our ability to generate cash to repay our indebtedness is subject to the performance of our business, as well as general economic, financial, competitive, and other factors that are beyond our control. If our business does not generate sufficient cash flow from operating activities or if future borrowings are not available to us in amounts sufficient to enable us to fund our liquidity needs, our operating results, and financial condition may be adversely affected. The accounting method for convertible debt securities that may be settled in cash, such as the 3. 75 % Convertible Senior Notes, could have a material effect on our reported financial results. Under Accounting Standards Codification (" ASC ") 470- 20, Debt with Conversion and Other Options, or ASC 470- 20, an entity must separately account for the liability and equity components of the convertible debt instruments (such as the 3. 75 % Convertible Senior Notes **)** that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer' s economic interest cost. The effect of ASC 470- 20 on the accounting for the convertible senior notes is that the equity component is required to be included in the additional paid- in capital section of stockholders' equity on our consolidated balance sheet at the issuance date and the value of the equity component would be treated as debt discount for purposes of accounting for the debt component of the convertible senior notes. As a result, we are required to record a non- cash interest expense as a result of the amortization of the discounted carrying value of the convertible senior notes to their face amount over the term of the convertible senior notes. As a result, we report larger net losses (or lower net income) in our financial results because ASC 470- 20 requires interest to include the amortization of the debt discount, which could adversely affect our reported or future financial results or the trading price of our common stock. In addition, on January 1, 2021, we early adopted Accounting Standards Update (" ASU ") No. 2020- 06, Debt — Debt with Conversion and Other Options (Subtopic 470- 20) and Derivatives and Hedging — Contracts in Entity' s Own Equity (Subtopic 815- 40) using the modified retrospective approach. Consequently, the 3. 75 % Convertible Senior Notes is now accounted for as a single liability measured at its amortized cost. This accounting change removed the impact of recognizing the equity component of the Company' s convertible notes at issuance and the subsequent accounting impact of additional interest expense from debt discount amortization. The cumulative effect of the accounting change upon adoption on January 1, 2021 increased the carrying amount of the 3. 75 % Convertible Senior Notes by $ 120. 6 million, reduced accumulated deficit by $ 9. 6 million and reduced additional paid- in capital by $ 130. 2 million. Future interest expense of the convertible notes will be lower as a result of adoption of this guidance and net loss per share will be computed using the if-converted method for convertible instruments. The convertible note hedges may affect the value of our common stock. In conjunction with the pricing of the 3. 75 % Convertible Senior Notes, the Company entered into privately negotiated capped call transactions (the " 3. 75 % Notes Capped Call ") with certain counterparties at a price of $ 16. 3 million. The 3. 75 % Notes Capped Call cover, subject to anti- dilution adjustments, the aggregate number of shares of the Company' s common stock that underlie the initial 3. 75 % Convertible Senior Notes and is generally expected to reduce potential dilution to the Company' s common stock upon any conversion of the 3. 75 % Convertible Senior Notes and / or ~~22offset~~ -- **offset** any cash payments the Company is required to make in excess of the principal amount of the converted notes, as the ~~case~~ **23case** may be, with such reduction and / or offset subject to a cap based on the cap price. The cap price of the 3. 75 % Notes Capped Call is initially $ 6. 7560 per share, which represents a premium of approximately 60 % over the last then- reported sale price of the Company' s common stock of $ 4. 11 per share on the date of the transaction and is subject to certain adjustments under the terms of the 3. 75 % Notes Capped Call. The 3. 75 % Notes Capped Call becomes exercisable if the conversion option is exercised. 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 prior to the maturity of the 3. 75 % Convertible Senior Notes (and are likely to do so during any observation period related to a conversion of 3. 75 % Convertible Senior Notes or following any repurchase of 3. 75 % Convertible Senior Notes by us on any fundamental change repurchase date or otherwise). This activity could also cause or avoid an increase or a decrease in the market price of our common stock. In addition, if any such convertible note hedge transaction fails to become effective, the option counterparties may unwind their hedge positions with respect to our common stock, which could adversely affect the value of our common stock. The potential effect, if any, of these transactions and activities on the market price of our common stock will depend in part on market conditions and cannot be ascertained at this time. Any of these activities could adversely affect the value of our common stock. We are subject to counterparty risk with respect to the convertible note hedge transactions. The option counterparties are financial institutions or affiliates of financial institutions and are subject to the risk that one or more of such option counterparties may default under the convertible note hedge transactions. Our exposure to the credit risk of the option counterparties is not secured by any collateral. If any option counterparty becomes subject to bankruptcy or other insolvency proceedings, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at that time under our transactions with that option counterparty. Our exposure will depend on many factors but, generally, an increase in our exposure will be correlated to an increase in our common stock market price and in the volatility of the market price of our common stock. In addition, upon a default by an option counterparty, we may suffer adverse tax consequences and dilution with respect to our common stock. We can provide no assurance as to the financial stability or viability of any option counterparty. ~~C~~ **Unfavorable developments affecting the banking and financial services industry could adversely affect our business, liquidity and financial condition, and overall results of operations. Actual events, concerns or speculation about disruption or instability in the banking and financial services industry, such as liquidity constraints or lack of available credit, the failure of individual institutions, or the inability of individual institutions or the banking and financial service industry generally to meet their contractual obligations, could significantly impair our access to capital, delay access to deposits or other financial assets, or cause actual loss of funds subject to cash management arrangements. Similarly, these events, concerns or speculation could result in less favorable financing terms, including higher interest rates or costs and tighter financial and operating covenants, or systemic limitations on access to credit and liquidity sources, thereby making it more difficult for us to acquire financing on acceptable terms or at all. Additionally, our customers, suppliers and other business partners also could be adversely affected by these risks as described above, which in turn could result in their committing a breach or default under their contractual agreements with us, their insolvency or bankruptcy, or other adverse effects. Any decline in available funding, lack of credit in the market, or access to cash and liquidity resources, or non- compliance of banking and financial services counterparties with their contractual commitments to us, our customers, suppliers and other partners could, among other risks, have material adverse impacts on our ability to meet our operating expenses and other financial needs, could result in breaches of our financial and / or contractual obligations, and could have material adverse impacts on our business, financial condition and results of operations. 24C** . OPERATIONAL RISKSWe may not be able to expand our business or manage our future growth effectively. We may not be able to expand our business or manage future growth. We plan to continue to improve our manufacturing processes ~~and build additional manufacturing production over the next five years~~ , which will require successful execution of: ● expanding our existing customers and expanding to new markets ; ● ensuring manufacture, delivery, and installation of our products ; ● ensuring timely construction and completion of hydrogen generation projects, which may be delayed due to the Company' s inexperience with these project types, supply chain issues, and federal, state, and local permitting and regulatory issues; ● implementing and improving additional and existing administrative, financial and operations systems and procedures and controls ; ● integration of acquisitions; ● **leveraging existing personnel and / or** hiring additional employees ; ● expanding and upgrading our technological capabilities ; ● managing relationships with our customers and suppliers and strategic partnerships with other third parties ; ● maintaining adequate liquidity and financial resources ; and ● continuing to increase our revenues from operations. Ensuring delivery of our products is subject to many market risks, including scarcity, significant price fluctuations, and competition. Maintaining adequate liquidity is dependent upon a variety of factors, including continued revenues from operations, working capital improvements, and compliance with our debt instruments. We may not be able to achieve our growth strategy and increase production capacity as planned during the foreseeable future. If we are unable to manage our growth effectively, we may not be able to take advantage of market opportunities, develop new products, ~~23satisfy~~ -- **satisfy** customer requirements, execute our business plan, or respond to competitive pressures. For further information on risks associated with new business ventures, see ~~Item I. 3. E,~~ " ~~— Risk Factors " ("~~ Strategic Risks — We may be unable to successfully pursue **, integrate, or execute upon our** new business ventures. " **We identified material weaknesses in our internal control over financial reporting. If we do not effectively remediate these material weaknesses or if we otherwise fail to maintain effective internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud and be subject to fines, penalties or judgments, which can harm our reputation or otherwise cause a decline in investor confidence. Management identified material weaknesses in our internal control over financial reporting as of December 31, 2023 and previously identified material weaknesses in our internal control over financial reporting as of December 31, 2022, 2021, 2020, 2019, and 2018. See Item 9A, " Controls and Procedures ", in this Annual Report on Form 10- K for information regarding the identified material weaknesses and our actions to date to remediate the material weaknesses. If we do not effectively remediate these material weaknesses or if we otherwise fail to maintain effective internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud and be subject to fines, penalties or judgments, which can harm our reputation or otherwise cause a decline in investor confidence. Although we plan to complete the remediation process with respect to the material weaknesses in our internal control over financial reporting as of December 31, 2023 as quickly as possible, we cannot at this time estimate how long it will take, and our remediation measures may not prove to be successful in remediating these material weaknesses. If our remedial measures are insufficient to address the material weaknesses, or if additional material weaknesses or significant deficiencies in our internal control over financial reporting are discovered or occur in the future, our consolidated financial statements may contain material misstatements and we may be required to restate our financial results, which can subject us to fines, penalties or judgments, which can harm our reputation or otherwise cause a decline in investor confidence. In addition, if we are unable to successfully remediate our material weaknesses by June 30, 2024, we will have to pay the SEC an additional civil monetary penalty in the amount of $ 5. 0 million in connection with the SEC settlement. 25Delays in or not completing our product and project development goals or products experiencing technical defects may adversely affect our revenue and profitability. Delays in meeting our development goals (including delivery of electrolyzers to customers, as well as the completion of hydrogen generation projects**) ~~results of operations,financial condition and cash flows could be negatively impacted.We may not be able to protect important intellectual property and we could incur substantial costs defending against claims that our~~ products infringe on the proprietary rights of others.PEM fuel cell technology was first developed in the 1950s,and fuel processing technology has been practiced on a large scale in the petrochemical industry for decades.Accordingly,we do not believe that we can establish a significant proprietary position in the fundamental component technologies in these areas.However,our ability to compete effectively will depend,in part,on our ability to protect our proprietary system- level technologies,systems designs and manufacturing processes.We rely on patents,trademarks,trade secrets,and other policies and procedures related to confidentiality to protect our intellectual property.However,some of our intellectual property is not covered by any patent or patent application.Moreover,we do not know whether any of our pending patent applications will issue or,in the case of patents issued or to be issued,that the claims allowed are or will be sufficiently broad to protect our technology or processes.Even if all of our patent applications are issued and are sufficiently broad,our patents may be challenged or invalidated.We could incur substantial costs in prosecuting or defending patent infringement suits or otherwise protecting our intellectual property rights. ~~For example,we have been subject to a lawsuit against Joule Processing,LLC and Plug Power Inc.,which alleges misappropriation of trade secrets under the federal Defend Trade Secrets Act of 2016,among other complaints.See Part I,Item 3," Legal Proceedings ".~~ While we have attempted to safeguard and maintain our proprietary rights,we do not know whether we have been or will be completely successful in doing so.Moreover,patent applications filed in foreign countries may be subject to laws,rules and procedures that are substantially different from those of the United States,and any resulting foreign patents may be difficult and expensive to obtain and enforce.In addition,we do not know whether the USPTO will grant federal registrations based on our pending trademark applications.Even if federal registrations are granted to us,our trademark rights may be challenged.It is also possible that our competitors or others will adopt trademarks similar to ours,thus impeding our ability to build brand identity and possibly leading to customer confusion.We could incur substantial costs in prosecuting or defending trademark infringement suits.Furthermore,we might encounter difficulties protecting intellectual property rights in foreign jurisdictions.Certain jurisdictions do not favor the enforcement of patents,trade secrets,and other intellectual property protection.Enforcement of our intellectual property and proprietary rights in foreign jurisdictions could result in substantial costs and adverse impacts to our intellectual property rights.Further,our competitors may independently develop or patent technologies or processes that are substantially equivalent or superior to ours.If we are found to be infringing third party patents,we could be required to pay substantial royalties and / or damages,and we do not know whether we will be able to obtain licenses to use such patents on acceptable terms,if at all.Failure to obtain needed licenses could delay or prevent the development,manufacture or sale of our products,and could necessitate the expenditure of significant resources to develop or acquire non- infringing intellectual property.We may need to pursue lawsuits or legal action in the future to enforce our intellectual property rights,to protect our trade secrets and domain names,and to determine the validity and scope of the proprietary rights of others.If third parties prepare and file applications for trademarks used or registered by us,we may oppose those applications and be required to participate in proceedings to determine the priority of rights to the trademark.Similarly,competitors may have filed applications for patents,may have received patents and may obtain additional patents and proprietary rights relating to products or technology that block or compete with ours.We may have to participate in interference proceedings to determine the priority of invention and the right to a patent for the technology.Litigation and interference proceedings, ~~even~~ **27even** if they are successful,are expensive to pursue and time consuming,and we could use a substantial amount of our management and financial resources in either case. ~~29Confidentiality~~ -- **Confidentiality** agreements to which we are party may be breached,and we may not have adequate remedies for any breach.Our trade secrets may also be known without breach of such agreements or may be independently developed by competitors.Our inability to maintain the proprietary nature of our technology and processes could allow our competitors to limit or eliminate any competitive advantages we may have. ~~Our~~ **We are subject to legal proceedings and legal compliance risks that could harm our business.We are currently,and in the future may continue to be,subject to commercial disputes and litigation.In connection with any disputes or litigation in which we are involved,we may incur costs and expenses in connection with defending ourselves or in connection with the payment of any settlement or judgment or compliance with any ruling in connection therewith.The expense of defending litigation may be significant.The amount of time to resolve lawsuits is unpredictable and defending ourselves may divert management' s attention from the day- to- day operations of our business,which could adversely affect our business,** financial **condition,** results ~~may be adversely affected by changes in accounting principles generally accepted in the United States.Generally accepted accounting principles in the United States (" GAAP ") is subject to interpretation by the FASB,the American Institute~~ of ~~Certified~~ **operations and** . Our success depends on our ability to improve our financial and operational performance and execute our business strategy. If we fail to implement our business strategy, our financial condition and results of operations could be adversely affected. Our future financial performance and success depend in large part on our ability to successfully implement our ~~business~~ **30business** strategy. We cannot assure you that we will be able to successfully implement our business strategy or be able to continue improving our operating results. In particular, we cannot assure you that we will be able to successfully execute our ongoing, or any future, investments, achieve operating cost savings targeted through focused improvements and capacity optimization, including improvements to service performance through scale of manufacturing and vertical integration, and opportunistically pursue strategic transactions. Implementation of our business strategy may be impacted by factors outside of our control, including competition, commodity price fluctuations, industry, legal and regulatory changes or developments and general economic and political conditions. Any failure to successfully implement our business strategy could adversely affect our financial condition and results of operations. We may, in addition, decide to alter or discontinue certain aspects of our business strategy at any time. Although we have undertaken and expect to continue to undertake productivity and manufacturing system and process transformation initiatives to improve service performance, we cannot assure you that all of these initiatives will be completed or that any estimated cost savings from such activities will be fully realized. Even when we are able to generate new efficiencies in the short- to medium- term, we may not be able to continue to reduce costs and increase productivity over the long- term. There can be no assurance if and when any of these initiatives will be successfully and fully executed or completed. ~~Delays in~~ **D. REGULATORY RISKSThe reduction or elimination of government subsidies and economic incentives** ~~or~~ **for alternative energy technologies, or the failure to renew such subsidies and incentives, could reduce demand for our products, lead to a reduction in our revenues, and adversely impact our operating results and liquidity. The Company' s ability to benefit from these subsidies and incentives, in particular the Section 45V Credit for Production of Clean Hydrogen, is** not ~~completing~~ **guaranteed and is dependent upon the federal government' s forthcoming and ongoing implementation, guidance, regulations, and /** ~~our~~ - **or** ~~product~~ **rulemakings that have been the subject of substantial public interest** and ~~project~~ **debate. We believe that the near term growth of alternative energy technologies will be affected by the availability and size of government and economic incentives. Many of these government incentives expire, phase out over time, may be reduced or discontinued, no longer have available funding, may be implemented differently by changes in administrative agencies, or require renewal by the applicable authority. For example, in August 2022, President Biden signed the IRA into law. The IRA contains hundreds of billions in credits and incentives for the** development ~~goals~~ **of renewable energy, clean hydrogen, clean fuels, EVs and supporting infrastructure and carbon capture and sequestration, among other provisions. The IRA contains numerous credits and tax incentives that** may **be relevant to us, including: (i) a new Section 45V Credit for Production of Clean Hydrogen, which provides a production tax credit of up to $ 3 per kg of qualified clean hydrogen over a 10- year credit period for the production of qualified clean hydrogen at a qualified facility in the United States; (ii) an extension and amendment of the Section 48 Investment Tax Credit for Qualified Fuel Cell Properties, which provides a tax credit based on capital investment in a variety of renewable and conventional energy technologies to incentive investment in new energy resources and more efficient use of fuel, including fuel cell technology; (iii) a new Section 48 Investment Tax Credit for Energy Storage Technologies, which expands the applicability of the investment tax credit to include standalone energy storage projects, among other things; (iv) an amended Section 48C Qualified Advanced Energy Project Credit, which provides an investment tax credit through a competitive application process administered through the Department of Energy equal to 6 % or 30 % of the investment with respect to advanced energy projects; (v) a new Section 45X Advanced Manufacturing Production Credit, which provides varying credit amounts with respect to the production of certain components manufactured in the United States; and (vi) a new Section 48E Clean Electricity Investment Tax Credit, which provides a tax credit for investment in facilities that generate clean electricity, among other provisions. There is uncertainty as to how the provisions under the IRA will be interpreted and implemented. The**

Company’ s ability to ultimately benefit from IRA tax credits and incentives, including the aforementioned, is not guaranteed and is dependent upon the implementation, guidance, rulemakings, and / or regulations from the federal government. Several of these credits and tax incentives, in particular the new Section 45V Credit for Production of Clean Hydrogen, have received substantial public interest and have been subject to debate, and divergent views on potential implementation, guidance, rules, and regulatory principles by a diverse group of interested parties – some of whom are advocating for limitations to Section 45V that could be materially adverse to the Company and its near term hydrogen generation projects. Specifically, guidance, rules, or regulations limiting a hydrogen production facility’ s use of renewable energy credits, environmental attributes, and grid electricity could limit the Company’ s ability to benefit from the Section 45V Credit for Production of Clean Hydrogen. As the Company has endeavored numerous hydrogen generation projects prior to the promulgation of 31Section 45V’ s guidance, there is no guarantee that the Company’ s projects will comply with the final eligibility requirements of Section 45V. Furthermore, the U. S. Department of Treasury issued a notice of proposed rulemaking on the Section 45V Credit for Production of Clean Hydrogen in December 2023. The notice contained draft regulatory requirements that, if finalized, could have material adverse impacts to the Company’ s hydrogen generation projects – both current and planned. In particular, the draft regulation contains numerous provisions unfavorable for the use of grid electricity and renewable energy credits, which are essential to the Company’ s ability to claim the Section 45V credit for hydrogen produced at our projects. Relatedly, draft regulations on the Section 48 Investment Tax Credit for Energy Storage Technology contain provisions preventing taxpayers from claiming the energy storage credit for hydrogen storage property not exclusively used for energy- related purposes; and further, draft regulations on the Section 45X Advancement Manufacturing Production Credit are not favorable for fulsome inclusion of fuel cells, electrolyzer, and hydrogen technologies. There is no guarantee that the U. S. Treasury Department’ s final regulations will be more advantageous for the Company; and in fact, the final regulatory requirements could become less favorable than the draft regulation in the notice of proposed rulemaking. The effect of the final regulations on our business is not yet known but if we are not able to comply with the final eligibility requirements and our competitors are able to do so, our business may be adversely affected. Furthermore, future legislative enactments, administrative actions, changes or amendments to clean energy tax credits, policies or other incentives might be more favorable to other technologies or could limit, amend, repeal, or terminate policies or other incentives that the Company currently hopes to leverage. Any reduction, elimination, or discriminatory application of expiration of tax incentives or other government subsidies and economic incentives, or the failure to renew such tax credits, governmental subsidies, or economic incentives, may result in the diminished economic competitiveness of our products to our customers and could materially and adversely affect **the growth of alternative energy technologies,** ~~our revenue and profitability. If we experience delays in meeting our development goals (~~ including **our products** ~~delivery of electrolyzers to customers~~ , as well as ~~the completion of hydrogen generation projects), our products exhibit technical defects, or~~ **our** ~~if we are unable to meet cost or performance goals (including power output), useful life and reliability, the profitable commercialization of our products will be delayed. In this event, potential purchasers of our products may choose alternative technologies and any delays could allow potential competitors to gain market advantages. We cannot assure that we will successfully meet our commercialization schedule in the~~ future **operating** . Periodically, we may enter into...... the production of hydrogen through electrolysis also results in the generation of oxygen. As...... and prospects. In addition, an **and** ~~actual or perceived problem with~~ **liquidity. Changes in U. S.** ~~our~~ - **or foreign trade policies** ~~products could adversely affect the market’ s perception of our products resulting in a decline in demand for our products~~ , **treaties** ~~which may materially and adversely affect our business~~ , **tariffs** financial condition, results of operations and...... and prospects. In addition, an **and** actual or perceived problem could adversely affect...... are not limited to, government tax **taxes** policy, government funding programs, and...... third parties on which we rely, as well as ~~the development~~ **geopolitical conditions** and deployment of new information technology systems,...... investment in research and development, among other **factors** costs to the company. We have....... Any of these types of disruptions could have a material adverse effect on our **business** ~~net sales and profitability~~ . ~~In addition,~~ **Our business is dependent on** the ~~implementation~~ **availability** of **raw materials** ~~the new ERP system will require significant investment of human~~ and **components for our products** ~~financial resources. We may experience delays~~ , ~~increased costs~~ **particularly electrical components common in the semiconductor industry. Our business is subject to risks generally associated with doing business abroad, such as U. S. and foreign governmental regulation in the countries in which we operate and the countries in which our manufacturers, component suppliers,** and other ~~difficulties, including potential design defects, miscalculations, testing requirements, re- work due to changes in~~ business ~~plans~~ **partners are located.** ~~or~~ **For example** ~~reporting standards~~ , ~~and~~ **tensions between** the ~~diversion of management~~ **United States and China have led to the United States** ’ ~~s attention~~ **imposition of a series of tariffs, sanctions, and other restrictions on imports** from ~~day- to- day~~ **China and sourcing from certain Chinese persons or entities, as well as other** business ~~operations~~ **restrictions** . ~~Extended delays~~ **Additionally, an open conflict or war across any region** could ~~include operational risk, including cybersecurity risks,~~ **affect our ability to obtain raw materials. The extent** and **duration of** ~~other~~ -- **the** ~~complications. If we~~ **military conflict involving Russia and Ukraine, resulting sanctions and future market or supply disruptions in the regions** are ~~unable~~ **impossible** to **predict** ~~implement the new ERP system as planned~~ , **but** ~~the effectiveness of our internal control over financial reporting~~ could be **significant** ~~adversely affected, our ability to assess those controls adequately could be delayed,~~ and **may** our business, results of operations,...... be adversely impacted if we do not have a **severe adverse effect on the region. Separately** ~~sufficient number of shares available under our equity incentive plan to issue to our employees~~ , ~~or if our stockholders do~~ **in early October 2023, Hamas, a militant group in control of Gaza, and Israel began an armed conflict in Israel, the Gaza Strip, and surrounding areas, which threatens to spread to other Middle Eastern countries including Lebanon, Syria and Iran. The Hamas- Israel military conflict is ongoing, and its length and outcome are highly unpredictable. Although we**

have not ~~approve requested share increases or a new equity incentive. In general, our 26industry continues to experience change and be subject to significant competitive pressures with respect to the retention of top talent. The loss of key employees may occur due to perceived opportunity for promotion, compensation levels or composition of compensation, work environment or other individual reasons. In addition, we have from time- to- time~~ experienced **any** labor shortages and other labor- related......) or increased turnover could have a material adverse effect on our results of operations ~~. Our inability to hire qualified personnel on a timely basis~~ , ~~or the departure of key employees, could materially and adversely affect our development and profitable commercialization plans and, therefore, our business prospects, results of operations and~~ financial condition ~~. We may not be able to protect important intellectual property and we could incur substantial costs defending against claims that our~~ - **or** products infringe on the proprietary rights of...... financial condition, results of operations and cash flows **as** ~~. In addition, an unfavorable outcome in any such litigation could have~~ a ~~material adverse effect on our business, results~~ - **result** of ~~operations, financial condition and cash flows. See Part I, Item 3, “ Legal Proceedings. ” Our financial results may be adversely affected by changes in accounting principles generally accepted in the~~ **these conflicts** ~~United States. U. S. Generally Accepted Accounting Principles (“ GAAP ”) is subject to interpretation by the FASB, the American Institute of Certified Public Accountants, the SEC and various bodies formed to promulgate and interpret appropriate accounting principles. See Note 2, “ Summary of Significant Accounting Policies, ” to our~~ - **or** ~~consolidated financial statements included in~~ **the resulting volatility as of the date of** this Annual Report on Form 10- K ~~regarding~~ **, the broader consequences of** ~~the~~ **these conflicts remain uncertain and may include further sanctions, regional instability and geopolitical shifts, increased prevalence and sophistication of cyberattacks, heightened regulatory scrutiny related to sanctions compliance, further increases or fluctuations in commodity and energy prices, further disruptions to the global supply chain and other adverse** ~~effect~~ **effects** ~~of new accounting pronouncements~~ on **macroeconomic conditions** ~~our financial statements~~ . ~~Any difficulties in implementing these pronouncements~~ **Beyond tariffs and sanctions, countries also** could ~~cause us to fail to meet~~ **adopt other measures, such as taxes** ~~our~~ - **or** ~~financial reporting obligations~~ **controls on imports or exports of goods** , which could ~~result in~~ **adversely affect our operations and supply chain. We cannot predict whether, and to what extent, there may be changes to international trade agreements or whether quotas, duties, tariffs, exchange controls or other restrictions on our products will be changed or imposed. These kinds of restrictions could be adopted with little to no advanced notice, and we may not be able to effectively mitigate the adverse impacts from such measures. Although we currently maintain alternative sources for raw materials, if we are unable to source our products from the countries where we wish to purchase them, either because of the occurrence or threat of wars or other conflicts,** regulatory ~~discipline and harm investors’ confidence in us. Further, the implementation of new accounting pronouncements or a change~~ **changes** ~~in~~ **or for any** other ~~principles~~ **reason,** or ~~interpretations~~ **if the cost of doing so increases, it** could have a ~~significant~~ **material adverse** effect on our **business,** financial **condition and** results **of** ~~. If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our operating~~ **operations** ~~results~~ **. Disruptions in the supply of raw materials and components** could **temporarily impair** ~~fall below expectations of investors, resulting in a decline in~~ our **ability** ~~stock price. The preparation of financial statements in conformity with GAAP requires management~~ to **manufacture** ~~make estimates and assumptions that affect the amounts reported in~~ our **products** ~~consolidated financial statements and accompanying notes. For example, our revenue recognition, loss accrual~~ for **our customers** ~~service contracts, goodwill and impairment of long- lived assets policies are complex, and we often must make estimates and assumptions that could prove to be incorrect. We base our~~ - **or** ~~estimates on historical experience and on various~~ **require us to pay higher prices to obtain these raw materials or components from** other **sources** ~~assumptions that we believe to be reasonable under the circumstances. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to revenue recognition, loss accrual for service contracts, impairment of long- lived assets, and provision for common stock warrants. Our operating results may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions~~ , which could ~~cause~~ **have a material adverse effect on** our ~~operating~~ **business and our** results ~~to fall below the expectations~~ of ~~investors, resulting in a decline in our stock price. We identified material weaknesses in our internal control over financial reporting. If we do not effectively remediate these material weaknesses or if we otherwise fail to maintain effective internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. Management identified material weaknesses in our internal control over financial reporting as of December 31, 2022, 2021, 2020, 2019, and 2018. See Item 9A, “ Controls and Procedures, ” in this Annual Report on Form 10- K for information regarding the identified material weaknesses and our actions to date to remediate the material weaknesses. If we do not effectively remediate these material weaknesses or if we otherwise fail to maintain effective internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. 28D. REGULATORY RISKSThe reduction or elimination of government subsidies and economic incentives for alternative energy technologies, or the failure to renew such subsidies and incentives, could reduce demand for our products, lead to a reduction in our revenues, and adversely impact our operating results and liquidity. We believe that the near- term growth of alternative energy technologies is affected by the availability and size of government and economic incentives. Many of these government incentives expire, phase out over time, may exhaust the allocated funding, or require renewal by the applicable authority. In addition, these incentive programs could be reduced or discontinued for other reasons. The Inflation Reduction Act (“ IRA ”) adopted in August 2022 contains a number of tax incentive provisions including: (i) an extension and amendment of the Section 48 investment tax credit (“ ITC ”) for projects that “ begin construction ” before 2025; (ii) a new Section 48E clean electricity ITC; (iii) a new Section 45V Clean Hydrogen Production Tax Credit (“ PTC ”); and (iv) a new commercial clean vehicle tax credit, among other items. In many instances, the Company will have to comply with prevailing wage and apprenticeship requirements to maximize the value of these new clean energy tax credits. Furthermore, the ITC also have bonus credits for projects that are placed in service in certain “ energy community ” regions (specifically former oil, coal, and gas dependent geographies, and brownfield), or for projects that can meet domestic content~~

~~criteria for steel, iron, and manufactured products. For example, the baseline credit amount for the ITC for qualified fuel cell properties is six percent. If a taxpayer satisfied prevailing wage and apprenticeship requirements (or is exempt therefrom), the ITC amount is multiplied by five (equal to 30 %). Furthermore, if a project is placed in service in an " energy community " or can meet " domestic content" criteria, the taxpayer may be eligible for additional bonus credits beyond a 30 % ITC. We believe we are well positioned to capture incentives contained in the IRA; however, this legislation was adopted in August 2022, and forthcoming interagency guidance processes are still ongoing. We have not yet seen the impact these IRA- related incentives may have on our business and~~ operations ~~and cannot guarantee we will realize anticipated benefits of incentives under the IRA, particularly as our Company adapts to an ongoing and nascent regulatory guidance process regarding the detailed requirements of various new energy provisions~~ . **32We** ~~Furthermore, changes or amendments to clean energy tax credits might be more favorable to other technologies. Any reduction, elimination, or discriminatory application of expiration of the ITC or other government subsidies and economic incentives, or the failure to renew such tax credit, governmental subsidies, or economic incentives, may result in the diminished economic competitiveness of our products to our customers and could materially and adversely affect the growth of alternative energy technologies, including our products, as well as our future operating results and liquidity. We~~ are subject to various federal, state, ~~and~~ local and non- ~~US~~ **U. S.** environmental and human health and safety laws and regulations that could impose significant costs and liabilities on us. Our operations are subject to federal, state, ~~and~~ local **and non- U. S.** environmental and human health and safety laws and regulations, including laws and regulations relating to the use, handling, storage, transportation, disposal and human exposure to hazardous substances and wastes, product safety, emissions of pollution into the environment, and human health and safety. We have incurred **,** and expect to continue to incur, costs to comply with these laws and regulations. These costs and obligations are likely to expand and change as our Company grows, makes acquisitions, and conducts business in new locations. Furthermore, federal, state, and local governments are increasingly regulating and restricting the use of certain chemicals, substances, and materials. Some of these policy ~~initiative~~ **initiatives** could foreseeably be impactful to our business. For example, laws, regulations, or other policy initiatives might address substances found within component parts to our products, in which event our Company would be required to comply with such requirements. Our facilities in the U. S. are subject to regulation by OSHA, which regulates the protection of the health and safety of workers. In addition, the OSHA hazard communication standard requires that we maintain information about hazardous materials used or produced in our operations and that we provide this information to employees, state and local governmental authorities and local residents. We are also subject to occupational safety regulations in other countries. Our failure to comply with government occupational safety regulations, including OSHA requirements, or general industry standards relating to employee health and safety, keep adequate records or monitor occupational exposure to regulated substances could expose us to liability, enforcement, and fines and penalties, and could have a material adverse effect on our business, operating results, cash flows, or financial condition. Violation of these laws or regulations or the occurrence of an explosion or other accident in connection with our fuel cell systems at our properties or at third party locations could lead to injuries, property damage, litigation, substantial liabilities and sanctions, including fines and penalties, cleanup costs, manufacturing delays or the requirement to undertake corrective action. Further, environmental laws and human health and safety and regulations, and the administration, interpretation, and enforcement thereof, are subject to change ~~29and~~ -- **and** may become more stringent in the future, each of which could materially adversely affect our business, financial condition, and results of operations **. Each of these considerations is further magnified by our expansion into new regulatory jurisdictions with which we may be unfamiliar** . Additionally, certain environmental laws impose liability, which can be joint and several, as well as strict, on current and previous owners and operators of real property for the cost of removal or remediation of hazardous substances and damage to natural resources. These laws often impose liability even if the owner or operator did not know of, or was not responsible for, the release of such hazardous substances. They can also assess liability on persons who arrange for hazardous substances to be sent to disposal or treatment facilities when such facilities are found to be contaminated, and such persons can be responsible for cleanup costs even if they never owned or operated the contaminated facility. Our liabilities arising from past or future releases of, or exposure to, hazardous substances may adversely affect our business, financial condition, and results of operations. Our business may become subject to increased government regulation. Our products are subject to certain federal, state, local, and non- U. S. laws and regulations, including, for example, state and local ordinances relating to building codes, fire codes, public safety, electrical and gas pipeline connections, hydrogen transportation and siting and related matters. See Item 1, " Business — Government Regulations " for additional information. In certain jurisdictions, these regulatory requirements may be more stringent than those in the United States. Further, as products are introduced into the market commercially, governments may impose new regulations. We do not know the extent to which any such regulations may impact our ability to manufacture, distribute, install and service our products. Any regulation of our products, whether at the federal, state, local or foreign level, including any regulations relating to the production, operation, installation, and servicing of our products may increase our costs and the price of our products, and noncompliance with applicable laws and regulations could subject us to investigations, sanctions, enforcement actions, fines, damages, civil and criminal penalties, or injunctions. Furthermore, certain business activities may require the Company to navigate a myriad of state or local- level laws and regulations. If any governmental sanctions are imposed, our business, operating results, and financial condition could be materially adversely affected. In addition, responding to any action will likely result in a significant diversion of management' s attention and resources and an increase in professional fees. Enforcement actions and sanctions could harm our business, operating results and financial condition. **33There is no guarantee that local, state, federal, or international jurisdictions will adopt laws, regulations and policies that are favorable to hydrogen or fuel cell technologies. As various jurisdictions pursue climate change and decarbonization policies, hydrogen and fuel cell technologies may be subject to increased regulatory scrutiny and oversight.** Changes in tax laws or regulations or adverse outcomes resulting from examination of our income or other tax returns could adversely affect our operating results and financial condition. We are subject to income taxes in the United States and various foreign jurisdictions. A number of factors may adversely affect our future effective tax rates, such as the jurisdictions in which our profits are determined to be earned and taxed; changes in the valuation of our deferred tax assets and liabilities; adjustments to estimated taxes upon finalization of various tax returns; changes in available tax credits, grants and other incentives; changes in stock- based compensation expense; the availability of loss or credit carryforwards to offset taxable income; changes in tax laws, regulations, accounting principles or interpretations thereof; or examinations by US federal, state or foreign jurisdictions that disagree with interpretations of tax rules and regulations in regard to positions taken on tax filings. A change in **any of** our effective tax ~~rate~~ **rates** due to any of these factors may adversely affect the carrying value of our tax assets and our future results from operations. In addition, as our business grows, we are required to comply with increasingly complex taxation rules and practices. We are subject to tax in multiple U. S. tax jurisdictions and in foreign tax jurisdictions as we expand internationally, which requires additional expertise to ensure compliance with various domestic and international tax laws. The development of our global tax footprint and compliance with these laws may impact how we conduct our business and affect our financial position, operating results, and cash flows. The changes in the carryforward / carryback periods as well as the new limitation on use of net operating losses (“ NOLs ”) may significantly impact our valuation allowance assessments for NOLs. Changes in U. S. federal income or other tax laws or the interpretation of tax laws, including the Inflation Reduction Act, as passed by Congress in August 2022, may impact our tax liabilities. As of December 31, ~~2022~~ **2023** , we had federal NOL carryforwards of $ ~~1~~ **2** . ~~4~~ **2** billion, which begin to expire in various amounts and at various dates in 2034 through 2037 (other than federal NOL carryforwards generated after December 31, 2017, which are not subject to expiration). As of December 31, ~~2022~~ **2023** , we also had federal research and development tax credit carryforwards of $ ~~14~~ **20** . ~~9~~ **7** million, which begin to expire in 2033. Utilization of our NOLs and research and development tax credit carryforwards may be subject ~~30to~~ **to** a substantial annual limitation if the ownership change limitations under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the “ Code ”), and similar state provisions are triggered by changes in our ownership. In general, an ownership change occurs if there is a cumulative change in the ownership of the Company by “ 5- percent shareholders ” that exceed 50 percentage points over a rolling three- year period. Based on studies of the changes in ownership of the Company, it has been determined that a Section 382 ownership change occurred in 2013 that limited the amount of pre- change NOLs that can be used in future years. NOLs incurred after the most recent ownership change are not subject to Section 382 of the Code and are available for use in future years. If we undergo any ownership changes, our ability to utilize our NOL carryforwards or research and development tax credit carryforwards could be further limited by Sections 382 and 383 of the Code. In addition, future changes in our stock ownership, many of which are outside of our control, could result in an ownership change under Sections 382 and 383 of the Code. Any such limitation may significantly reduce our ability to utilize our NOL carryforwards and research and development tax credit carryforwards before they expire. Our NOL carryforwards and research and development tax credit carryforwards may also be impaired under state law. Accordingly, we may not be able to utilize a material portion of our NOL carryforwards or research and development tax credit carryforwards. The Coronavirus Aid, Relief and Economic Security Act modified, among other things, rules governing NOLs. NOLs arising in tax years beginning after December 31, 2017 are subject to an 80 % of taxable income limitation (as calculated before taking the NOLs into account) for tax years beginning after December 31, 2020. In addition, NOLs arising in tax years 2018, 2019, and 2020 are subject to a five year carryback and indefinite carryforward, while NOLs arising in tax years beginning after December 31, 2020 also are subject to indefinite carryforward but cannot be carried back. In future years, if and when the valuation allowance related to our NOLs is partially or fully released, the changes in the carryforward / carryback periods as well as the new limitation on use of NOLs may significantly impact our valuation allowance assessments for NOLs generated after December 31, 2017. ~~Trade policies, treaties, and tariffs could have a material adverse effect on our business. Our business is dependent on the availability of raw materials and components for our products, particularly electrical components common in the semiconductor industry. There is continued uncertainty about the future relationship between the United States and various other countries, most significantly China, with respect to trade policies, treaties, tariffs, and taxes. Under the Biden administration, changes in U. S. administrative policy could lead to changes in existing trade agreements, greater restrictions on free trade generally, and significant increases in tariffs on goods imported into the United States, particularly tariffs on products manufactures in China and Mexico, among other possible changes. These developments, or the perception that any of them could occur, could have a material effect on global economic conditions and the stability of global financial markets, and could significantly reduce global trade and, in particular, trade between the impacted nations and the United States. This uncertainty includes: (i) the possibility of altering the existing tariffs or penalties on products manufactured outside the United States, including the U. S. government' s 25 % tariff on a range of products from China; (ii) the effects stemming from the removal of such previously imposed tariffs; (iii) subsequent tariffs imposed by the United States on any other U. S. trading partners such as Russia; and (iv) potential tariffs imposed by trading partners on U. S. goods. The institution of trade tariffs on items imported by us from other countries could increase our costs, which could have a negative impact on our business.~~ We ~~cannot predict whether, and to what extent, there may be changes to international trade agreements or whether quotas, duties, tariffs, exchange controls or other restrictions on our products will be changed or imposed. In addition, an open conflict or war across any region could affect our ability to obtain raw materials. For example, the current military conflict between Russia and Ukraine, and related sanctions, export controls or other actions that may be initiated by nations, including the United States, the European Union or Russia (e. g., potential cyberattacks, disruption of energy flows, etc.) or potential sanctions or relevant export controls related to China or Taiwan could adversely affect our business and / or our supply chain or our business partners or customers in other countries beyond Russia and Ukraine. Although we currently maintain alternative sources for raw materials, if we are unable to source our products from the countries where we wish to purchase them, either because of the occurrence or threat of wars or other conflicts, regulatory changes or for any other reason, or if the cost of doing so increases, it could have a material adverse effect on our business, financial condition and results of operations. Disruptions in the supply of raw materials and components could temporarily impair our ability to manufacture~~

~~our products for our customers or require us to pay higher prices to obtain these raw materials or components from other sources, which could have a material adverse effect on our business and our results of operations. 31We~~ are exposed to fluctuations in currency exchange rates, which could negatively affect our operating results. ~~Our~~ **34Our** contracts are primarily denominated in U. S. dollars, and therefore substantially all of our revenue is not subject to foreign currency risk. However, a strengthening of the U. S. dollar could increase the real cost of our offerings to our customers outside of the United States, which could adversely affect our operating results. In addition, an increasing portion of our operating revenues and operating expenses are earned or incurred outside of the United States, and an increasing portion of our assets ~~is~~ **are** held outside of the United States. These operating revenues, expenses, and assets are denominated in foreign currencies and are subject to fluctuations due to changes in foreign currency exchange rates. If we are not able to successfully hedge against the risks associated with currency fluctuations, our operating results could be adversely affected. Additionally, global events as well as geopolitical developments, including regional conflicts in Europe, fluctuating commodity prices, trade tariff developments, and inflation have caused, and may in the future cause, global economic uncertainty and uncertainty about the interest rate environment, which could amplify the volatility of currency fluctuations. We have not engaged in the hedging of foreign currency transactions to date, so we may not be able to effectively offset the adverse financial impacts that may result from unfavorable movements in foreign currency exchange rates, which could adversely affect our operating results **. Climate change and climate change policies might affect our business, our industry, and the global economy. We acknowledge the significant challenge presented by climate change, and see our transformational work in developing cost- effective, renewable hydrogen, and fuel cell energy as part of the solution. Our commitment to sustainability is deeply rooted in our products, mission, core values, and people. However, we acknowledge that climate change will potentially have wide-ranging impacts, including potential impacts to our Company. Unanticipated environmental, societal, economic, or geopolitical effects of climate change might affect business operations. For example, increasingly severe and frequent weather events might disrupt our supply chain or adversely affect our customers. Relatedly, government policies addressing climate change could similarly impact our business operations. We believe that many of these policies will be favorable for our fuel cell systems and hydrogen solutions. However, there is no guarantee that such potential changes in laws, regulations, or policies will be favorable to our Company, our technologies, to existing or future customers, or to large- scale economic, environmental, or geopolitical conditions** . E. STRATEGIC RISKSWe may be unable to establish or maintain relationships with third parties for certain aspects of continued ~~product~~ development, manufacturing, distribution, sale, servicing, and the supply of key components for our products **and projects** . We will need to maintain and may need to enter into additional strategic relationships in order to complete our current ~~product~~ development and commercialization plans regarding our fuel cell products, electrolyzers, hydrogen production, and potential new business markets. We may also require partners to assist in the sale, servicing, and supply of components for our current ~~products~~ and anticipated products **and projects** , which are in development. If we are unable to identify, negotiate, enter into, and maintain satisfactory agreements with potential partners, including those relating to the supply, distribution, service and support of our current ~~products~~ and anticipated products **and projects** , we may not be able to complete our product development and commercialization plans on schedule or at all. We may also need to scale back these plans in the absence of needed partners, which could adversely affect our future prospects for development and commercialization of future products **and projects** . While we have entered into relationships with suppliers of some key components for our products, we do not know when or whether we will secure supply relationships for all required components and subsystems for our products, or whether such relationships will be on terms that will allow us to achieve our objectives. Our business prospects, results of operations, and financial condition could be harmed if we fail to secure relationships with entities that can develop or supply the required components for our products and provide the required distribution and servicing support. Additionally, the agreements governing our current relationships allow for termination by our partners under certain circumstances, some of which are beyond our control. If any of our current strategic partners were to terminate any of its agreements with us, there could be a material adverse impact on the continued development and profitable commercialization of our products and the operation of our business, financial condition, results of operations, and prospects. **35We may be unable to successfully pursue,integrate,or execute upon our new business ventures.As part of our vertical integration strategy,we may pursue,acquire or execute upon our new business ventures.For example,in 2022** and 2021,we acquired two subsidiaries of Cryogenic Industrial Solutions,LLC,which are Alloy Custom Products,LLC and WesMor Cryogenics,LLC (collectively,“ CIS ”),as well as the entities Joule **Processing LLC (“ Joule ”)** ,Applied Cryo Technologies, **Inc.(“ Applied Cryo ”),** and Frames Holding B.V.(“ Frames ”) ~~.There can be no assurances that we will be able to successfully implement our new business ventures or successfully operate within this industry~~ .The execution of the Company’ s vertical integration strategy,as well as scaling its manufacturing capabilities,is impactful to the performance of the Company and customer experience.Failure to improve overall service performance and scale sourcing effectively can limit growth and adversely impact our customer experience.Each aspect of ~~this~~ **our** vertical integration strategy,including manufacturing of electrolyzers,mobility fuel cell products,stationary fuel cell products, ~~and~~ liquefaction **equipment,and cryogenic** equipment,as well as servicing customer sites,is dependent upon **our** ~~the Company’ s~~ ability to integrate and execute these new business ventures.This vertical integration strategy may be unsuccessful,or **we** ~~the Company~~ may be unable to successfully or timely execute **upon** its vertical integration strategy,which may adversely impact customer experience and,in turn, **our** ~~the Company’ s~~ operations,business,or financial results. ~~Additionally,the ability~~ **There can be no assurances that we will be able** to successfully integrate ~~and execute these projects is dependent upon our~~ **or execute new business ventures or** ~~ability to manufacture and supply each project with a sufficient number of electrolyzers.The successful~~ **successfully operate within this industry** ~~integration of our electrolyzer manufacturing objectives will affect our ability to meet demands for electrolyzers — both internally for our hydrogen production projects,and externally for third- party electrolyzer customers~~ .Furthermore,we may expend substantial time and resources in research and development for new potential markets.There is no guarantee that these research and development initiatives will be successful or implemented as commercial products.For further information on risks associated with acquisitions,see **the** ~~Item I.3.F " Risk~~ **risk** ~~Factors~~ - **factor** ~~(~~ **entitled** " ~~Strategic Risks —~~ We may be unable to make attractive acquisitions or successfully integrate acquired businesses,assets or properties,and any inability to do so may disrupt our business and hinder our ability to grow,divert the **attention of key personnel,disrupt our business and impair our financial results."** We may be unable to make attractive acquisitions or successfully integrate acquired businesses, assets or properties, and any inability to do so may disrupt our business and hinder our ability to grow, divert the attention of key personnel, disrupt our business, and impair our financial results. As part of our business strategy, we intend to consider acquisitions of companies, technologies, and products. We may not be able to identify such attractive acquisition opportunities. Acquisitions, involve numerous risks, any of which could harm our business, including, among other things: ● difficulty in integrating the technologies, products, operations, and existing contracts of a target company and realizing the anticipated benefits of the combined businesses; ● mistaken assumptions about volumes or the timing of those volumes, revenues or costs, including synergies; ● negative perception of the acquisition by customers, financial markets or investors; ● difficulty in supporting and transitioning customers, if any, of the target company; ● inability to achieve anticipated synergies or increase the revenue and profit of the acquired business; ● the assumption of unknown liabilities; ~~32~~ ● exposure to potential lawsuits; ● limitations on rights to indemnity from the seller; ● the diversion of management' s and employees' attention from other business concerns; ● unforeseen difficulties operating in new geographic areas; ● customer or key employee losses at the acquired businesses; ● the price we pay or other resources that we devote may exceed the value we realize; or ● the value we could have realized if we had allocated the purchase price or other resources to another opportunity and inability to generate sufficient revenue to offset acquisition costs. In addition, if we finance acquisitions by issuing equity securities, our existing stockholders may be diluted. As a result, if our forecasted assumptions for these acquisitions and investments are not accurate, we may not achieve the anticipated benefits of any such acquisitions, and we may incur costs in excess of what we had anticipated. **36F** We may be unable to successfully pursue...... financial results. "). F . RISKS RELATED TO THE OWNERSHIP OF OUR COMMON STOCKOur stock price and stock trading volume have been and could remain volatile, and the value of your investment could decline. The market price of our common stock has historically experienced and may continue to experience significant volatility. ~~In~~ **During** 2022 **and 2023** , the sales price of our common stock fluctuated from a high of $ ~~32~~ **31** . ~~05~~ **75** per share to a low of $ ~~11~~ **3** . ~~49~~ **42** per share. Our progress in developing and commercializing our products, our quarterly operating results, announcements of new products by us or our competitors, our perceived prospects, changes in securities analysts' recommendations or earnings estimates, changes in general conditions in the economy or the financial markets, adverse events related to our strategic relationships, significant sales of our common stock by existing stockholders, including one or more of our strategic partners, events relating to our determination to restate certain of our previously issued consolidated financial statements, and other developments affecting us or our competitors could cause the market price of our common stock to fluctuate substantially. In addition, in recent years, the stock market has experienced significant price and volume fluctuations. This volatility has affected the market prices of securities issued by many companies for reasons unrelated to their operating performance and may adversely affect the price of our common stock. Such market price volatility could ~~33adversely~~ -- **adversely** affect our ability to raise additional capital. Furthermore, technical factors in the public trading market for our common stock may produce price movements that may or may not comport with macro, industry or company- specific fundamentals, including, without limitation, the sentiment of retail investors (including as may be expressed on financial trading and other social media sites), the amount and status of short interest in our securities, access to margin debt, trading in options and other derivatives on our common stock and any related hedging or other technical trading factors. ~~In addition~~ **For example** , we are subject to securities class action litigation filed after a drop in the price in our common stock in March 2021 **and March 2023** , which could result in substantial costs and diversion of management' s attention and resources and could harm our stock price, business, prospects, results of operations and financial condition. Sales of substantial amounts of our common stock in the public markets, or the perception that such sales might occur, could reduce the price that our common stock might otherwise attain and may dilute your voting power and your ownership interest in us. Sales of a substantial number of shares of our common stock in the public market, or the perception that such sales could occur, could adversely affect the market price of our common stock and may make it more difficult for you to sell your common stock at a time and price that you deem appropriate. As of December 31, ~~2022~~ **2023** , there were approximately 39, 170, 766 shares of common stock issuable upon conversion of the 3. 75 % Convertible Senior Notes at a conversion price of $ 5. 03 per share. In addition, as of December 31, ~~2022~~ **2023** , we had outstanding options exercisable for an aggregate of ~~8~~ **39** , ~~052~~ **261** , ~~969~~ **362** shares of common stock at a weighted average exercise price of $ ~~11~~ **16** . ~~61~~ **93** per share and ~~88~~ **78** , ~~774~~ **561** , ~~725~~ **263** shares of common stock issuable upon the exercise of warrants, of which ~~46~~ **42** , ~~131~~ **192** , ~~376~~ **479** were vested as of December 31, ~~2022~~ **2023** . Moreover, subject to market conditions and other factors, we may conduct future offerings of equity or debt securities. Sales of substantial amounts of our common stock in the public market, or the perception that these sales could occur, could reduce the market price of our common stock to decline. In addition, the conversion of the notes or preferred stock or the exercise of outstanding options and warrants and future equity issuances will result in dilution to investors. The market price of our common stock could fall as a result of resales of any of these shares of common stock due to an increased number of shares available for sale in the market. If securities analysts do not ~~publish research or reports~~ **maintain coverage of us** or if they publish unfavorable or inaccurate research **or reports** about our business ~~and~~ **,** our stock **, or our industry** , the price of our stock and the trading volume could decline. We expect that the trading market for our common stock will be affected by research or reports that industry or financial analysts publish about us or our business. There are many large, well- established companies active in our industry and portions of the markets in which we compete, which may mean that we receive less widespread analyst coverage than our competitors. If one or more of the analysts who covers us downgrades their evaluations ~~of our~~ - **or lowers their expectations of our** ~~company~~ **Company** ~~or~~ **,** our stock **, or our industry** , the price of our stock could decline. If one or more of these analysts cease coverage of our ~~company~~ **Company** , our stock may lose visibility in the market, which in turn could cause our stock price to decline. ~~Provisions~~ **37Provisions** in our charter documents and Delaware law may discourage or delay an acquisition of the Company by a third party that stockholders may consider favorable. Our amended and restated certificate of incorporation, our amended and restated bylaws, and Delaware corporate law contain provisions that could have an anti- takeover effect and make it harder for a third party to acquire us without the consent of our Board. These provisions may also discourage proxy contests and make it more difficult for our stockholders to take some corporate actions, including the election of directors. These provisions include, but are not limited to: the ability of our Board to issue shares of preferred stock in one or more series and to determine the terms of those shares, including preference and voting rights, without a stockholder vote; the exclusive right of our Board to elect a director to fill a vacancy created by the expansion of our Board or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our Board; the inability of stockholders to call a special meeting of stockholders; the prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders; advance notice informational and procedural requirements for nominations for election to our Board or for proposing business to be brought before a stockholder meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer' s own slate of directors or otherwise attempting to obtain control of us; a prohibition against stockholders nominating a number of their own nominees at the annual meeting of the stockholders that exceeds the number of directors to be elected at such annual meeting; the ability of our Board ~~of Directors~~ , by majority vote and without shareholder approval, to amend the bylaws, which may allow our Board to take additional actions to prevent an unsolicited takeover and inhibit the ability of an ~~34acquirer~~ -- **acquirer** to amend the bylaws to facilitate an unsolicited takeover attempt; and staggered terms for our directors, which effectively prevents stockholders from electing a majority of the directors at any one annual meeting of stockholders. In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15 % or more of our outstanding voting stock, from merging or combining with us for a certain period of time. We do not anticipate paying any dividends on our common stock. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. If we do not pay cash dividends, you would receive a return on your investment in our common stock only if the market price of our common stock is greater at the time you sell your shares than the market price at the time you bought your shares. Our amended and restated bylaws provide for an exclusive forum in the Court of Chancery of the State of Delaware for certain disputes between us and our stockholders, and the exclusive forum in the Delaware federal courts for the resolution of any complaint asserting a cause of action under the Securities Act, which may limit a stockholder' s ability to bring a claim in a forum a stockholder finds favorable. Our amended and restated bylaws provide that unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any state law claims for: (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action asserting a claim of, or a claim based on, a breach of a fiduciary duty owed by any director, officer or other employee of the Company to the Company or the Company' s stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or the Company' s amended and restated certificate of incorporation or amended and restated bylaws, or (iv) any other action asserting a claim governed by the internal affairs doctrine. The amended and restated bylaws further provide that unless the Company consents in writing to the selection of an alternative forum, the federal district courts of the United States of America will be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act and any person or entity purchasing or otherwise acquiring or holding any interest in shares of capital stock of the Company will be deemed to have notice of and consented to these provisions. We believe these provisions may benefit us by providing increased consistency in the application of Delaware law and federal securities laws by chancellors and judges, as applicable, particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi- forum litigation. If a court were to find the choice of forum provision that is contained in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially adversely affect our business, results of operations, and financial condition. For example, Section 22 of the Securities Act provides that state and federal courts have concurrent **38** ~~jurisdiction over claims to enforce any duty or liability created by the Securities Act or the rules and regulations promulgated thereunder. Accordingly, there is uncertainty as to whether a court would enforce such a forum selection provision as written in connection with claims arising under the Securities Act. Because the choice of forum provisions in our amended and restated bylaws may have the effect of severing certain causes of action between federal and state courts, stockholders seeking to assert claims against us or any of our current or former director, officer, other employee, agent, or stockholder, may be discouraged from bringing such claims due to a possibility of increased litigation expenses arising from litigating multiple related claims in two separate courts. The choice of forum provisions may therefore limit a stockholder' s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our current or former director, officer, other employee, agent, or stockholder. Alternatively, if a court were to find the choice of forum provisions contained in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations, and financial condition. 35~~