



2022

ANNUAL REPORT

FTCSOLAR.COM

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2022

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE
TRANSITION PERIOD FROM TO

Commission File Number 001-40350

FTC SOLAR, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

9020 N Capital of Texas Hwy, Suite I-260,

Austin, Texas

(Address of principal executive offices)

81-4816270

(I.R.S. Employer
Identification No.)

78759

(Zip Code)

Registrant's telephone number, including area code: (737) 787-7906

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.0001 par value	FTCI	The Nasdaq Stock Market LLC

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. YES NO

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

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

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input checked="" type="checkbox"/>		

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

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

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, based on the closing price of the shares of common stock on June 30, 2022 was \$158,437,496.

The number of shares of registrant's Common Stock outstanding as of January 31, 2023, was 106,195,459.

DOCUMENTS INCORPORATED BY REFERENCE

List hereunder the following documents if incorporated by reference and the Part of the Form 10-K (e.g., Part I, Part II, etc.) into which the document is incorporated:

Portions of the registrant's 2023 Proxy Statement for the Annual Meeting of Stockholders, to be filed on or before April 30, 2023, are incorporated by reference into Part III of this report.



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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (“Annual Report”) contains forward-looking statements. All statements other than statements of historical or current facts contained in this Annual Report may be forward-looking statements. Statements regarding our future results of operations and financial position, business strategy and plans and objectives of management for future operations, including, among others, liquidity, growth and profitability strategies and factors and trends affecting our business are forward-looking statements. Forward-looking statements can be identified in some cases by the use of words such as “believe,” “can,” “could,” “potential,” “plan,” “predict,” “goals,” “seek,” “should,” “may,” “may have,” “would,” “estimate,” “continue,” “anticipate,” “intend,” “expect,” the negative of these words, other similar expressions or by discussions of strategy, plans or intentions.

The forward-looking statements in this Annual Report are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. Forward-looking statements involve known and unknown risks, uncertainties, and other important factors that may cause our actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. We believe that these factors include, but are not limited to, the factors set forth under Item 1A. “Risk Factors”. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur, and actual results could differ materially from those projected in the forward-looking statements.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Annual Report, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and investors are cautioned not to unduly rely upon these statements.

You should read this Annual Report with the understanding that our actual future results may be materially different from what we expect. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements.

These forward-looking statements speak only as of the date of this Annual Report. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained in this Annual Report, whether as a result of any new information, future events, or otherwise.

PART I

Item 1. Business.

Development of the business

FTC Solar, Inc. (the “Company”, “we”, “our”, or “us”) was founded in 2017 and is incorporated in the state of Delaware. We are a global provider of advanced solar tracker systems, supported by proprietary software and value-added engineering services. Our mission is to provide differentiated products, software, and services that maximize energy generation and cost savings for our customers, and to help facilitate the continued growth and adoption of solar power globally. Trackers significantly increase the amount of solar energy produced at a solar installation by moving solar panels throughout the day to maintain an optimal orientation relative to the sun. Our primary tracker system is currently marketed under the Voyager brand name (“Voyager”). Voyager is a next-generation two-panel in-portrait (“2P”) single-axis tracker solution that we believe offers industry-leading performance and ease of installation. In September 2022, we announced the introduction of Pioneer, a new and differentiated one module-in-portrait (“1P”) solar tracker solution that allows for a pile count reduction per megawatt compared to similar industry-leading solutions, as well as providing what we believe to be other benefits, such as faster assembly capability, giving potential customers the possibility for increased flexibility and additional cost savings. We have also launched a new solution for thin-film modules, filling a gap in our offering for certain U.S. modules. We have a team of dedicated renewable energy professionals with significant project installation experience focused on delivering cost reductions to our U.S. and worldwide clients across the solar project development and construction cycle. The Company is headquartered in Austin, Texas, and has international subsidiaries in Australia, China, India and South Africa.

In April 2021, we completed an initial public offering ("IPO") of 19,840,000 shares of our common stock receiving proceeds of \$241.2 million, net of underwriting discounts and commissions, but before offering costs, and began trading on the Nasdaq Global Market under the symbol "FTCI". Prior to the completion of the IPO, the board of directors and stockholders approved an approximately 8.25-for-1 forward stock split (the "Forward Stock Split") of the Company's shares of common stock which became effective on April 28, 2021. Proceeds from the IPO were used for general corporate purposes, with \$54.2 million used to purchase an aggregate of 4,455,384 shares of our common stock, including shares resulting from the settlement of certain vested restricted stock units ("RSUs") and exercise of certain options in connection with the IPO at the IPO price, less underwriting discounts and commissions.

On June 14, 2022, we closed on the acquisition of all of the outstanding stock of Shanghai Han Xiang New Energy Technology Co., Ltd. ("HX Tracker"), a China-based supplier of 1P tracker systems, in order to extend our international market presence. The purchase price included approximately \$3.5 million of cash, paid in July 2022, and the issuance in June 2022 of 1,000,000 shares of the Company's common stock valued at approximately \$4.4 million. In addition, as part of the purchase price, we paid the existing debt of HX Tracker owed to the previous owners, totaling approximately \$0.8 million as of the acquisition date during the third quarter of 2022. In addition, certain former employees of HX Tracker, who became employees of the Company were eligible to receive up to 2.2 million RSUs which will vest over a two to four-year period based on future performance or service conditions. The goodwill recognized as part of the acquisition is attributable to expected synergies in the acquired company's tracker offering and cross selling opportunities in various international markets and is not deductible for tax purposes. Certain former key employees of HX Tracker became employees of the Company following the closing.

On July 1, 2022, we closed on an acquisition of certain assets from Standard Sun, Inc. relating to their pile testing and equipment installation business. Total purchase price was approximately \$0.8 million. Two employees of this business became employees of the Company following the acquisition.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups (JOBS) Act. Under the JOBS Act, we elected to use the allowed extended transition period to delay adopting new or revised accounting standards until such time as those standards apply to private companies.

Description of the business

We currently offer trackers and software solutions targeting the utility-scale solar energy markets to current and potential customers in the United States, Asia, the Middle East, North Africa, South Africa and Australia. Our Voyager tracking system is built upon a self-powered, 2P design utilizing a 60-meter independent row architecture, which we believe provides numerous advantages to our customers. In addition, our recently announced Pioneer 1P solar tracker solution leverages technological advantages of Voyager and provides what we believe to be numerous cost savings benefits to our potential customers relative to other 1P solutions including faster assembly capability, a reduced pile count and embedment depth, and higher slope tolerance. In September 2022, we announced that Pioneer had been selected by a customer for use on multiple future project sites to supply a target of at least 500 megawatts of power.

In addition, in August 2022, we entered into an agreement with a solar contracting company to provide our Voyager 2P solar tracking solution to the distributed generation market for sites providing under 20 megawatts of power in North America. We and our partner company are targeting multiple segments with this turnkey solution offering, including commercial and industrial, community solar programs, projects for independent power producers and smaller one-off projects for sectors such as agriculture.

We also continued to expand our international footprint during 2022 with our acquisition of HX Tracker, as described above, and receipt of our first project awards in Kenya, South Africa, Malaysia and Thailand and our largest project award to date in Australia, a 128 megawatt hybrid solar project.

Our customers include project developers, solar asset owners and engineering, procurement and construction ("EPC") contractors that design and build solar energy projects. The vast majority of our revenue in the periods presented in this Annual Report was attributable to sales in the United States and Australia.

We currently operate in one business segment and derive our revenue primarily from the sale of: (i) solar trackers and customized components of solar tracker systems, (ii) individual parts of solar tracker systems for certain specific transactions, (iii) shipping and handling services, (iv) term-based software licenses, (v) maintenance and support services for the term-based software licenses, and (vi) subscription services.

We report both product and service revenue in our consolidated financial statements. Product revenue includes revenue from the sale of our solar tracking systems and customized components of those systems, individual part sales for certain specific transactions, and sale of term-based software licenses. Service revenue includes revenue from shipping and handling services, subscription fees from licensing subscription services, and maintenance and support services in connection with the term-based software licenses.

We incur costs associated with the revenues generated related to (i) the raw materials used in our solar tracker systems, including parts and components, (ii) personnel costs attributable to procurement, installation and delivery of finished products and services, (iii) freight and delivery, (iv) product warranty, (v) insurance, and (vi) customer support.

We currently outsource all manufacturing to contract manufacturing partners who rely largely on raw materials obtained from international sources. Based on the U.S. dollar amount of purchase orders we issued during the year ended December 31, 2022, the percentage of our spending involves partners located in the following countries:

Vendor location	Year ended December 31, 2022
Thailand	52%
China	20%
United States	16%
India	12%
Total	100%

We are focused on growing our U.S. manufacturing supply partners in 2023 in order to reduce lead times for our customers, as well as other potential benefits. As an example, in February 2023, we entered into an agreement with Taihua New Energy (Thailand) Co., LTD, a leading steel fabricator, for the creation of Alpha Steel LLC, a manufacturing partnership that will include a facility to be based in Sealy, Texas that will be dedicated to producing steel components, including torque tubes, for utility scale projects. For further discussion, see Note 22 "Subsequent events" included in our consolidated financial statements in Part II, Item 8 of this Annual Report.

We, and our contract manufacturing partners, were impacted by global logistics issues and increasing costs to obtain and deliver materials during the last nine months of 2021 and through the first nine months of 2022. Although overall transportation costs are still higher than pre-COVID-19 pandemic rates, there has been a decline in recent months in costs for both charter vessels and in the premium container market. In addition, steel prices also started to stabilize and decline during the fourth quarter of 2022. We continue to focus on improving product margins by seeking ways to further reduce our costs.

Market factors

Our global market opportunity is driven by two primary factors: overall growth in utility-scale solar projects and the increased usage of trackers as the preferred mounting system in utility-scale solar projects.

Governments across the globe have established policies to support a transition away from fossil fuels and towards low-carbon forms of energy, such as solar power. In the United States, various states have implemented Renewable Portfolio Standards, which require a specified percentage of the electricity sold by utilities to come from renewable sources by a certain date, as described further below. Additionally, the Inflation Reduction Act of 2022, passed by the U.S. Congress and signed into law by President Biden on August 16, 2022, expanded and extended the tax credits and other tax benefits available to solar energy projects and the solar energy supply chain, however we note that implementing regulations for this law are still in process, which creates uncertainty about the extent of its impact on our Company and the solar energy industry. Other policies and actions of the federal government have had a negative impact on demand through creation of uncertainty as to the ability to import solar modules into the United States, as discussed below. Globally, renewable energy support has accelerated since the Paris Agreement under the United Nations Framework Convention on Climate Change, which became effective in 2016. These factors, along with efficiency improvements and cost reductions in the underlying photovoltaic cell technology used in solar energy production, have contributed to solar energy becoming the fastest growing and most affordable source of new electricity in America, according to the U.S. Department of Energy.

Solar trackers have been gaining market share versus fixed-tilt mounting systems due to their ability to optimize energy production, accommodate more varied terrain and offer a more attractive return on investment. The United States currently represents the largest portion of the solar tracker market while continued growth is expected in Europe, the Middle East, Africa, Asia and Australia. We believe we are well positioned to benefit from the accelerating adoption of both one and two-panel in-portrait tracker systems, bifacial panels and larger-format or higher-powered bifacial panels.

Our growth strategy is based on (i) increasing our market share in the United States, (ii) continuing our international expansion, (iii) enhancing our tracker product offerings, (iv) reducing our operating costs through operating leverage, (v) expanding our software offering by supporting operating, maintenance and lifecycle management and improving the attachment rate of enhanced software to tracker sales, (vi) expanding our sales to the distributed generation market, and (vii) identifying additional strategic acquisitions.

Government policies and regulations

Federal, state, local and foreign government bodies provide incentives to owners, end-users, distributors, system integrators and manufacturers of solar energy systems to promote solar electricity in the form of rebates, tax credits and other financial incentives such as system performance payments, payments of renewable energy credits associated with renewable energy generation and manufacturing of specific solar components, as well as exclusions of solar energy systems from property tax assessments.

The most notable incentive program impacting our U.S. business has been the investment tax credit ("ITC") for solar energy projects, which allows taxpayers to offset their U.S. federal income tax liability by a certain percentage of their cost basis in solar energy systems placed in service for commercial use. The Inflation Reduction Act of 2022, passed by the U.S. Congress and signed into law by President Biden on August 16, 2022, expanded and extended the tax credits and other tax benefits available to solar energy projects and the solar energy supply chain. ITCs have been extended for such projects through at least 2032 and, depending on the location of a particular project and its ability to satisfy certain labor and domestic content requirements, the ITC percentage can range between 30% and 50%. Manufacturers of specific solar components are also now eligible to claim production tax credits as an alternative to the ITC. Implementing regulations for this law are still in process.

Renewable portfolio standards ("RPS") are a set of policies designed to increase the use of renewable energy sources for electricity generation. In general, RPS set a minimum requirement for the share of electricity supply that comes from designated renewable energy resources by a certain date or year. According to information provided by the U.S. Energy Information Administration, as of November 2022, 36 states and the District of Columbia had established an RPS or renewable energy goal. In 12 of those states and the District of Columbia, the requirement is for 100% clean energy by 2050 or earlier. A common feature of RPS policies is a renewable electricity credit trading system that reduces the cost to comply with the RPS.

Other policies and actions of the federal government have had a negative impact on demand through creation of uncertainty as to the ability to import solar modules into the United States.

The Uyghur Forced Labor Prevention Act ("UFLPA") was passed by the U.S. Congress and signed into law by President Biden on December 23, 2021. The UFLPA establishes a rebuttable presumption that the importation of any goods, wares, articles, and merchandise mined, produced, or manufactured wholly or in part in the Xinjiang Uyghur Autonomous Region of the People's Republic of China, or that are produced by certain entities, is prohibited by Section 307 of the Tariff Act of 1930 and that such goods, wares, articles, and merchandise are not entitled to entry to the United States. U.S. Customs and Border Protection ("CBP") began implementing the provisions of UFLPA on June 21, 2022, resulting in new rules for solar module importers and reviews by CBP. There continues to be uncertainty in the market around achieving full compliance with UFLPA for the importation of solar modules, whether related to sufficient traceability of materials or other factors.

On March 25, 2022, the U.S. Department of Commerce, in response to a petition by Auxin Solar, Inc., initiated an investigation of claims related to alleged circumvention of U.S. antidumping and countervailing duties ("AD/CVD") by solar manufacturers in certain Southeast Asian countries in an effort to determine whether or not solar cells and/or modules made in those Southeast Asian nations use parts originating from China in order to circumvent the AD/CVD tariffs. On June 6, 2022, President Biden issued an Executive Order allowing U.S. solar deployers the ability to import solar modules and cells from Cambodia, Malaysia, Thailand and Vietnam free from certain duties for 24 months, along with other incentives designed to accelerate U.S. domestic production of clean energy technologies.

Since 2016, CBP has issued a number of withhold release orders ("WRO") directed at forced labor in China, including WROs directed specifically at activity in the Xinjiang Uyghur Autonomous Region. In addition, recent WROs related to polysilicon requires panel importers to demonstrate that polysilicon used in their panels has not been sourced using forced labor. To date, CBP has used the WROs to detain solar panels, which has disrupted the U.S. solar installation market and caused additional uncertainty on future projects.

These policies and actions have resulted in some developers deferring projects due to the uncertainty of panel supply and costs, which has negatively impacted our 2022 revenues and cash flows and may continue to negatively impact our anticipated revenues and our cash flows in 2023.

Environmental, social and governance ("ESG")

Our mission and core values -

Our mission is to drive energy independence through effective and efficient solar engineering and innovation.

The following three central pillars are what we were founded on and what currently guides our company:

- **Sustainability**, as we were born from sustainable products
- **Innovation** in the energy transition
- **Asset-light** to provide efficient and flexible capacity

We accelerate the adoption of renewable energy by reducing the cost of construction, simplifying the installation process and improving the energy yield of solar projects, thus supporting the transition away from fossil fuels. We make solar energy generation more efficient and attainable with our software, engineering and differentiated products.

We are committed to the following core values in the way we do business:

- **Integrity** - We do the right thing. We are humble and listen to new ideas. We respect our customers and our teammates.
- **Accountability** - We are all accountable and act with urgency. We are transparent and deliver on our commitments. We come together to solve problems.
- **Innovation** - We collaborate to create world class solutions. We foster a learning culture. We turn great ideas into our future.
- **Excellence** - We are committed to high quality. We plan well and execute flawlessly. We are focused on results.

Environmental management -

We are committed to protecting our environment for the benefit of current and future generations. We design our products and operations to reduce environmental impacts and maximize environmental savings.

Beginning in August 2018, several of our functional groups achieved ISO 14001:2015 certification through third-party assurance. The standard from the International Organization for Standardization ("ISO") details the requirements for an environmental management system that we use to measure and manage our environmental performance. Specifically, our tracker business is ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 certified, and through Intertek has met the standards necessary to qualify for the UL certification for solar trackers. Our contract manufacturing partners also undergo a qualification process to remain on our approved vendor list, which includes a review and assessment of their environmental performance.

In 2021, we performed a greenhouse gas ("GHG") emissions accounting exercise to assess emissions across our global operations, focusing initially on Scope 1 and Scope 2 emissions from our owned operations, including purchased electricity and heating. Through this exercise, we identified strategic and operational opportunities to reduce emissions and confirmed most of our GHG emissions are associated with our supply chain.

We continue to shift away from nonrenewable materials, especially those derived from petroleum, such as plastics and Styrofoam, and have established a waste management program to promote collection and processing of recyclable materials within the organization, including seeking out trusted electronics recycling partners. Additionally, we designed our solar tracker offerings to minimize steel content, to require no specialized tools and to reduce labor hours needed for installation and maintenance.

Social -

In addition to providing training to our employees and regular reinforcement of our core values, we have also invested resources in developing a workforce where our teams can enjoy a collaborative environment.

Personal health and safety of each employee is of utmost importance, and we work to continually improve our safety policies and procedures. Our employees do not directly perform solar installations, but we consider the safety of the on-site installers when designing our products and installation procedures.

ISO 45001 is a framework that was developed to address occupational health and safety risks in the workplace using best practices from international labor standards and regulatory agencies. As noted above, we hold ISO 45001:2018 certification and use a separate but aligned qualification process with our contract manufacturing partners.

We provide competitive medical, dental, vision, life and disability insurance and savings plan benefits to our employees and regularly publicly recognize individual and team work and innovations in company-wide meetings.

Governance -

We are governed by a board of directors comprising eight members, including five independent members. Our board has established an audit committee, compensation committee and nominating and governance committee, consisting solely of independent members, to advise the full board on various matters. The audit committee will also periodically meet separately with our independent auditors, without the presence of management, to discuss any matters of importance or concern to our auditors. Additionally, our Director of Internal Audit organizationally reports directly to the audit committee.

Our executive officers serve at the discretion of our board of directors and hold office until his or her successor is duly appointed or until his or her earlier resignation or removal. There are no family relationships among any of our directors or executive officers. The following table sets forth the names, ages and positions of our executive officers as of the date of this Annual Report:

Name	Age	Position
Sean Hunkler	60	President and Chief Executive Officer, Director
Sasan Aminpour	59	Chief Operating Officer ^(a)
Phelps Morris	49	Chief Financial Officer
Patrick M. Cook	39	Chief Commercial Officer
Nagendra Cherukupalli	63	Chief Technology Officer
Kristian Nolde	45	Vice President, Marketing and Strategy

^(a) - Effective March 1, 2023

In addition to our executive officers, our global executive leadership team also includes other individuals, such as our Chief Accounting Officer, CIO & Chief Data Officer, Chief People Officer, General Counsel and certain others. Additional biographical information on our executive officers will be set forth in the 2023 Proxy Statement for the Annual Meeting of Stockholders and is incorporated herein by reference.

Outlined below under "Human capital resources", is information on the diversity in gender, age and ethnicity of our board of directors, executive leadership team and employee population as of December 31, 2022.

Climate change

Climate change has primarily impacted our business operations by increasing demand for solar power generation and, as a result, for use of our products. While climate change has not resulted in any material negative impact to our operations to date, we recognize the risk of disruptions to our supply chain due to extreme weather events. This has led us to expand the diversity of our supplier base and to partner with more local suppliers to reduce shipping and transportation needs. We are also increasingly partnering with larger scale steel producers rather than smaller suppliers to facilitate scaling of our operations while remaining conscious of the environmental impacts of steel manufacturing as the regulatory landscape around these high-emitting industries evolves.

We also attempt to mitigate the climate-related risks from the use of our products by designing our equipment and systems to have a high-slope tolerance and wind mitigation capabilities, while at the same time reducing the required foundation/pile count needed. This allows our trackers to be installed in increasingly hostile environments with minimal disturbance to the surrounding land.

Seasonality

Our revenue may be impacted by seasonality and variability related to the timing of construction activity. Based on historical experience, we have experienced lower levels of customer purchasing during winter months in cold-weather climates as it is more costly to our customers to set foundations when the ground is frozen.

Competition

The tracker industry is highly specialized and dominated by a relatively small number of companies. Our direct tracker competitors include Array Technologies, Inc. and Nextracker Inc. We also compete indirectly with manufacturers of fixed-tilt mounting systems. We compete on the basis of product performance and features, total cost of ownership (usually measured by the levelized cost of energy), reliability and duration of product warranty, sales, manufacturing and distribution capabilities, training, customer support and the ability to identify, hire and retain qualified personnel.

Several of our existing and potential competitors are significantly larger than we are and may have greater financial, marketing, manufacturing, distribution and customer support resources, as well as broader brand recognition and greater market penetration, especially in certain markets.

Patents, trademarks and trade names

We maintain a robust program of research and development to continue to enhance and expand our product offerings to our customers. During the year ended December 31, 2022, our research and development costs totaled \$9.9 million, including employee salaries and benefit costs.

Our trademarks and trade names include, but are not limited to, Voyager Tracker, Pioneer Tracker, SunDAT, SunPath, Atlas and FTC Solar, which are protected under applicable intellectual property laws. This Annual Report also may contain trademarks, service marks, trade names and copyrights of other companies, which are the property of their respective owners. Solely for convenience, the trademarks, service marks, trade names and copyrights referred to in this Annual Report are listed without the TM, SM, © and ® symbols, but we will assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensors, if any, to these trademarks, service marks, trade names and copyrights.

As of December 31, 2022, we had 5 U.S. trademark registrations, 11 U.S. applications for trademark registration, and 7 foreign applications for trademark registration. We had 46 issued U.S. patents, 9 issued non-U.S. patents, and 10 patent applications pending for examination in the United States (including 3 allowed) and 21 patent applications pending for examination in other countries related to panel attachments, solar tracking algorithms, related design and assembly methods, and software solutions. Our issued U.S. patents are expected to expire between 2023 and 2041.

Human capital resources

Our year-end headcount by department for each period was as follows:

Department	December 31, 2022	December 31, 2021	December 31, 2020
Operations and support	103	104	90
Research and development	44	47	43
Sales and marketing	20	22	13
General and administrative	54	50	32
Total headcount at period end	221	223	178

At December 31, 2022, approximately 90% of our employees were located in North America and India with the remainder based primarily in China, Australia and other Southeast Asian or Middle Eastern countries. We believe we have a diverse employee base in terms of gender, age, experience, background and ethnicity. As an example, the self-identified gender of our board of directors and global employee workforce at December 31, 2022, was as follows:

Gender	Board of Directors	Global Executive Leadership Team	Global employees
Male ^(a)	7	10	183
Female	1	4	38
Non-Binary	—	—	—
Total at period end	8	14	221

(a) - One member of the board of directors is also on the Executive Leadership Team

As described further in Note 22, "Subsequent events" included in our consolidated financial statements in Part II, Item 8 of this Annual Report, in January 2023, the composition of our board of directors changed with the resignation of Thurman J. "T.J." Rodgers and the appointment of a second female member, Tamara Mullings, to the board of directors. Mrs. Mullings' ethnicity is African American.

The age range for our board of directors and global employee workforce at December 31, 2022, was as follows:

Age range of directors and employees	Board of Directors	Global Executive Leadership Team	Global employees
18 - 24	—	—	5
25 - 34	1	—	53
35 - 44	—	4	92
45 - 54	2	4	46
55 and over	5	6	25
Total at period end	<u>8</u>	<u>14</u>	<u>221</u>

Additionally, we gather ethnicity information on our U.S. employees, which at December 31, 2022, was as follows:

Ethnicity	Board of Directors	U.S. based Executive Leadership Team	United States employees
African American or Black ^(a)	—	—	7
Asian	2	3	16
Hispanic or Latinx	1	—	11
White (not Hispanic or Latino) ^{(a), (b), (c)}	5	9	69
Two or more races (not Hispanic or Latino)	—	—	5
Total at period end	<u>8</u>	<u>12</u>	<u>108</u>

(a) - Effective in January 2023, one member of the board of directors will be African American and the number of white members will be four.

(b) - One member of the board of directors self-identifies as Middle Eastern

(c) - One member of the board of directors is also on the Executive Leadership Team

We also seek to attract, advance and empower women in advancing their skills and career opportunities through networking, mentorship and professional development. As an example, we sponsor an internal Women's Innovation Network (WIN) which is focused on attracting, empowering and investing in women's skill and career opportunities. This group holds periodic on-line meetings and events open to the entire employee population at various times during each year. At December 31, 2022, women held the following leadership positions within the Company:

Leadership positions held by women	Global
Women on the board of directors ^(a)	1
Women on the compensation committee of the board of directors ^(a)	1
Women on the audit committee of the board of directors	1
Women on the executive leadership team	4
Female program managers	14
Female people managers	9

^(a) - We added an additional woman to the board of directors and compensation committee in January 2023.

We use a mix of competitive base salary, performance-based equity compensation awards and other employee benefits to attract, retain and motivate highly qualified employees and executives. The health and safety of our employees are of primary concern. During the COVID-19 pandemic, we have taken significant steps to protect our workforce, including but not limited to, working remotely when feasible and implementing social distancing protocols consistent with guidelines issued by federal, state and local governments.

We encourage our employees to take appropriate precautions in accordance with guidance from public health organizations and in following company guidelines to protect their health and safety. Employees are expected to report all instances of unsafe working conditions or safety incidents that occur. We also provide training to employees on safety measures they are expected to follow, as well as providing appropriate personal protective equipment as needed. Our Executive Leadership Team frequently reviews and monitors safety statistics on our workforce and takes appropriate corrective action when necessary.

None of our employees are represented by a labor union, and we consider relations with our employees to be good.

Available information

We disseminate information about the Company through required filings we make with the U.S. Securities and Exchange Commission (“SEC”) and, at our discretion, on our website at www.ftcsolar.com.

Information contained on or connected to our website is not incorporated by reference into this Annual Report and should not be considered part of this Annual Report or other filings we make with the SEC. The SEC maintains a site that contains reports, proxy and information statements, and other information regarding reporting issuers. Our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K are filed electronically and are available free of charge at <http://www.sec.gov>. Additionally, these reports are available free of charge on our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Paper copies may also be obtained at no cost upon request to our General Counsel at 9020 North Capital of Texas Hwy., Building 1, Suite 260, Austin, TX 78759 or by calling (737) 787-7906.

Item 1A. Risk Factors.

In conducting our business, we may face risks and uncertainties that may interfere with our business objectives. You should carefully consider the following risk factors, as well as all of the other information contained in this Annual Report, including “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes thereto included elsewhere in this Annual Report. The risks and uncertainties below are not the only ones that we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business. The occurrence of any of the following risks, or others specified below, could materially and adversely affect our business, strategies, prospects, financial condition, results of operations and cash flows. In such case, the market price of our common stock could decline, and you could lose all or part of your investment.

Executive Summary

As noted above, we are subject to a number of risks that in some cases have and moving forward if realized could further adversely affect our business, strategies, prospects, financial condition, results of operations and cash flows. Some of the more significant risks and uncertainties we face include those summarized below. The summary below is not exhaustive and is qualified by reference to the full set of risk factors set forth in this "Risk Factors" section. Please carefully consider all of the information in this Annual Report, including the full set of risks set forth in this "Risk Factors" section, and in our other filings with the SEC before making an investment decision regarding us.

- [Risks related to our business and our industry](#) – We are a relatively new public company with a history of losses that provides products and services to the solar industry, which is rapidly changing and dependent on being competitive with the price of electricity generated from other sources. We face competition from other companies that may be larger than us and have more financial resources than we have which could impact our ability to compete for new business.
- [Risks related to government regulations and legal compliance](#) – We face risks to the demand for our products from our customers due to changes in, or expiration of, governmental incentives and existing tax credits and other benefits. Additionally, changes in the trade environment and tax treaties between the United States and other countries, such as China, as well as import tariffs and other laws and regulations that impact the ability to import our products or other products necessary for the construction of solar energy projects, have adversely and could continue to adversely affect our business.
- [Risks related to manufacturing and supply chain](#) – We face risks in meeting the needs of our customers due to our reliance on contract manufacturers, including on their ability to obtain raw materials in a cost effective and timely manner and to provide timely deliveries of finished products to us and our customers.
- [Risks related to intellectual property](#) – We face the risk of not being able to adequately protect or defend our intellectual property and property rights in the various countries in which we do business.
- [Risks related to information technology and data privacy](#) – We face reputational and monetary risks from cybersecurity incidents and the unauthorized disclosure of personal or sensitive data relating to our employees, customers, vendors and others.

- [Risks related to ownership of our common stock](#) – The holders of our common stock face a risk of loss in their investment in us due to fluctuations in our stock price as a result of changing market conditions, any future issuances of stock, our future financial performance, our corporate legal structure and the substantial ownership in our stock by our directors, executive officers and principal stockholders.
- [Risks related to COVID-19 and other health epidemics](#) – We face risks of our business being adversely impacted by the effects of a widespread outbreak of contagious disease, including the recent COVID-19 pandemic. COVID-19 caused significant supply chain disruptions beginning in 2020 that resulted in delays in product delivery and completion and caused increased transportation costs, as well as labor shortages. As a result of its multiple variants, the duration and intensity of the impact of the COVID-19 pandemic remains uncertain and continues to evolve.

Risks Related to Our Business and Our Industry

Our limited operating history and the rapidly changing solar industry make it difficult to evaluate our current business and future prospects and we may not achieve profitability in the future.

We have only been in existence since January 3, 2017, and the first installation of Voyager was in the third quarter of 2019. In September 2022, we announced the introduction of Pioneer, a new and differentiated 1P solar tracker solution and launched a new solution for thin-film modules, filling a gap in our offering for certain U.S. modules. Our solar tracker systems and other solar energy products and services are used primarily in utility-scale ground-mounted solar energy projects. As a result, our future success depends on continued demand for utility-scale solar energy products and services and the ability of solar equipment manufacturers and suppliers to meet this demand. The solar industry is an evolving industry that has experienced substantial changes in recent years, and consumers and businesses ultimately may not adopt solar energy as an alternative energy source at levels sufficient to grow our business. Some of the factors that may impact the demand for solar energy include:

- the cost competitiveness, reliability and performance of solar energy systems compared to conventional and non-solar renewable energy sources and products, including the pricing and availability of component parts (e.g., panels) used in solar energy systems;
- the availability, scale and scope of federal, state, local and foreign government subsidies and incentives to support the development and deployment of solar energy products;
- the changes in the trade environment and tax treaties between the United States and other countries, such as China, as well as import tariffs and other laws and regulations that impact the ability to import our products or other products necessary for the construction of solar energy projects;
- prices of traditional carbon-based energy sources and government subsidies for these sources;
- the extent to which the electric power industry and broader energy industries are deregulated to permit broader adoption of solar electricity generation;
- investment by end-users of solar energy products, which tends to decrease when economic growth slows; and
- the emergence, continuance or success of, or increased government support for, other alternative energy generation technologies and products.

We have encountered and will continue to encounter risks and difficulties frequently experienced by growing companies in rapidly changing industries, including unpredictable and volatile revenue. If demand for solar energy fails to develop sufficiently or is not sustained, demand for our products and services will suffer, which would have an adverse impact on our ability to increase our revenue and grow our business.

We have a history of losses that may continue in the future, and we may not achieve profitability or generate positive cash flow.

We had a net loss of \$99.6 million for the year ended December 31, 2022. We have incurred substantial net losses from our inception, and we may not be able to achieve profitability and may incur additional losses in the future. At December 31, 2022, we had an accumulated deficit of \$248.8 million. In addition, during the three year period ended December 31, 2022, we used \$186.7 million of cash to fund our operating activities and have \$44.4 million of cash and cash equivalents remaining on hand at December 31, 2022.

Our revenue growth may slow or revenue may decline for a number of reasons, including governmental tariffs or restrictions on imports, a decline in demand for our offerings, increased competition, a lack of success in converting sales leads into binding purchase orders, loss of existing customers, our inability to sell software and other

complementary products, a decrease in the growth of the solar industry or our market share, future decline in average selling prices of our products and services, our inability to enter certain international markets or our failure to capitalize on growth opportunities. We may not achieve profitability for a number of reasons, including any declines in revenue, as discussed above, as well as increases in costs to manufacture our products, the impact of U.S. trade tariffs and the imposition of additional tariffs applicable to our industry or our products. In addition, we expect to incur additional costs and expenses related to the continued development and expansion of our business, including in connection with any future acquisitions, as well as ongoing development and marketing of our products and services, expanding into new markets and geographies with respect to both manufacturing and sales of our products, maintaining and enhancing our research and development operations, hiring additional personnel, incurring additional overhead costs and incurring greater costs from professional third-party advisors as necessary in connection with the expansion of our business and public company operations. We do not know whether our revenue will grow rapidly enough to absorb such costs and expenses, or the extent of such costs and expenses and their impact on our results of operations. If we fail to generate sufficient revenue to support our operations, we may not be able to achieve profitability or generate sufficient cash flow to meet our financial obligations and our liquidity position will be negatively impacted. See "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources" for a further discussion of the other factors that may impact our liquidity position.

As a result, we may need to issue additional debt or obtain new equity financing to fund our operations. We may be unable to obtain any desired additional debt or equity financing on terms favorable to us, or at all, depending on interest rates, our stock price and then existing market or other conditions. The ability to raise additional financing depends on numerous factors that are outside our control, including general economic and market conditions, the health of financial institutions, investors' and lenders' assessments of our prospects and the prospects of the solar industry in general.

The market for our products and services is highly competitive and rapidly evolving and we expect to face increased competition.

The market for solar energy products and services is highly competitive with relatively low barriers to entry. We principally compete with other solar tracker equipment suppliers, as well as fixed-tilt suppliers. A number of companies have developed or are developing solar tracker systems and other products and services that compete or will compete directly with our products and services in the utility-scale solar energy market. Public competitors in the solar tracker market include, among others, Array Technologies, Inc. and Nextracker Inc. In addition, there are numerous private company competitors, both domestically and internationally. We expect competition to intensify as new competitors enter the market and existing competitors attempt to increase their market shares. Any failure by us to develop or adopt new or enhanced technologies or processes, or to adapt or react to changes in existing technologies, could result in product obsolescence, the loss of competitiveness of our products, including offering lower cost savings or return on investment relative to competing products, decreased revenue and a loss of market share to competitors.

Several of our existing and potential competitors are significantly larger than we are and may have greater financial, marketing, manufacturing, distribution and customer support resources, as well as broader brand recognition and greater market penetration, especially in certain markets. For example, certain of our competitors have greater capacity and ability to manufacture their products in the United States, which can provide a competitive advantage. In addition, our competitors' existing or future products may result in higher energy production and lower cost of energy for the solar energy projects to which they are deployed, either broadly or in certain conditions. Some of our competitors have more resources and experience in developing or acquiring new products and technologies and creating market awareness for these offerings, as well as more established customer relationships due to their longer operating histories. Because we are a fairly new participant in the solar tracker market, both in the United States and globally, it is essential that we acquire market share from our competitors, and our failure to do so could impact our ability to continue to grow our business.

Further, technological advances in the tracker industry are developing rapidly and certain competitors may be able to develop or deploy new products and services more quickly than we can, or that are more reliable or that provide more functionality than ours. For example, we intend to continue to develop and deploy products that can withstand higher wind speeds, are adaptable to irregular site boundaries and undulating terrain and can support larger-format panels; however, our competitors may do so more quickly or effectively. In addition, some of our competitors have the financial resources to offer competitive products at aggressive pricing levels, which could cause us to lose sales or market share, or prevent us from gaining sales or market share, or require us to lower prices for our products and services to compete effectively. If we have to reduce our prices, or if we are unable to offset any future reductions in our average selling prices by increasing our sales volume, reducing our costs and expenses, or introducing new products and services, our revenue and gross profit would suffer.

We also may face competition from some of our customers or potential customers or other participants in the solar energy industry who evaluate our capabilities against the merits of manufacturing products internally or as a

complementary offering to their other products. For example, solar panel manufacturers or project developers could develop or acquire competing technology and, in the case of project developers, use such technology in their solar energy projects. Due to the fact that such customers may not seek to make a profit directly from the manufacture of these products, they may have the ability to manufacture competitive products at a lower cost than we would charge such customers. As a result, our customers or potential customers may purchase fewer of our systems or sell products that compete with our systems, which would negatively impact our revenue and gross profit.

Our solar tracker systems and associated products and services may not achieve broader market acceptance, which would prevent us from increasing our revenue and market share.

If we fail to achieve broader market acceptance of our products and services, including international acceptance of Voyager and Pioneer, our ability to increase our revenue, gain market share and achieve profitability would be adversely impacted. Our ability to achieve broader market acceptance for our products and services may be affected by a number of factors, including:

- our ability to produce solar tracker systems that compete favorably against other products on the basis of price, quality, cost of installation, overall cost savings, reliability and performance;
- the rate and extent of deployment of tracker systems versus fixed-tilt ground-mounted systems within the solar industry, especially in international markets;
- our ability to timely introduce new products and complete new designs, and qualify and certify our products;
- whether project developers, solar asset owners, EPC contractors and solar financing providers will continue to adopt and finance our solar tracker systems and other products and services, including as a result of the quality, reliability and performance of our tracker systems that are in operation, which have a relatively limited history;
- the ability of prospective customers to obtain financing, including tax equity financing, for solar energy installations using our products on acceptable terms or at all;
- our ability to develop products and related processes that comply with local standards and regulatory requirements, as well as local content requirements; and
- our ability to develop and maintain successful relationships with our customers and contract manufacturers.

In addition, our reputation and our relationship with our customers is paramount to us, and we have invested heavily in building a brand and solutions associated with high quality, differentiated product offerings and strong customer service. We believe that maintaining the quality of our products and the strength of our reputation is critical to our existing customer relationships and our ability to win new customers and achieve broader market acceptance. Any negative publicity can adversely affect our reputation, and may arise from many sources, including actual or alleged misconduct, errors or improper business practices by employees, officers or current or former directors, including for activities external to FTC Solar, employee claims against us, product defects or failures, future litigation or regulatory actions, matters affecting our financial reporting or compliance with SEC or exchange listing requirements, media coverage, whether accurate or not, governance lapses or workplace misconduct. In addition, we and our officers, directors and/or employees could be involved in future litigation or claims which could result in negative publicity and adversely impact our business, even if without merit. Any such reputational damage could reduce demand for our products, undermine the loyalty of our customers or reduce our ability to attract new customers and recruit and retain employees, and adversely impact our ability to increase our market share and revenue.

A decrease in the price of electricity may harm our business, prospects, financial condition and results of operations.

Decreases in the price of electricity, whether in organized electric markets or with contract counterparties, may negatively impact the owners of solar energy projects or make the purchase of solar energy systems less economically attractive and would likely result in lower sales of our products and services. The price of electricity could decrease as a result of:

- construction of a significant number of new, lower-cost power generation plants, including plants utilizing natural gas, renewable energy or other generation technologies;
- relief of transmission constraints that enable distant, lower-cost generation to transmit energy less expensively or in greater quantities;
- reductions in the price of natural gas or other fuels;

- utility rate adjustment and customer class cost reallocation;
- decreased electricity demand, including from energy conservation technologies and public initiatives to reduce electricity consumption;
- development of smart-grid technologies that lower peak energy requirements;
- development of new or lower-cost customer-sited energy storage technologies that have the ability to reduce a customer's average cost of electricity by shifting load to off-peak times; and
- development of new energy generation technologies that provide less expensive energy.

If the cost of electricity generated by solar energy installations incorporating our systems or similar tracker systems is high relative to the cost of electricity from other sources, then our business, financial condition and results of operations may be harmed.

Our success in providing panel agnostic versions of our solar tracker systems will depend in part upon our ability to continue to work closely with leading solar panel manufacturers.

We continue to work on variants of our solar tracker systems that enable direct attachment to solar panels produced by various solar panel manufacturers. The market success of such panel agnostic tracker solutions will depend in part on our ability to continue to work closely with solar panel manufacturers to design solar tracker systems that are compatible with their solar panels, including new larger-format solar panels that are entering the market. The solar panel manufacturer market is large and diversified, with many market participants, and we may not be able to effectively work with all necessary solar panel manufacturers on the development of such compatible tracker solutions for a variety of reasons, including differences in marketing or selling strategy, our relatively limited operating history, competitive considerations, engineering challenges, lack of competitive pricing and technological compatibility. For example, prior to September 2022, we did not have a solution for certain thin-film U.S. produced modules, which limited the potential market for our products. In addition, our ability to form effective partnerships with solar panel manufacturers may be adversely affected by the substantial challenges faced by many of these manufacturers due to declining prices and revenue from sales of solar panels and the tariffs in the United States.

If potential owners of solar energy systems incorporating our solar tracker systems are unable to secure financing on acceptable terms, we could experience a reduction in the demand for our products.

Voyager, and more recently Pioneer, are relatively new to the market, with Voyager having achieved product certification and first installation in 2019 and Pioneer being introduced to potential customers in September 2022. We believe our Voyager tracker allowed us to quickly build a strong reputation in the industry, resulting in us becoming the fourth largest tracker supplier in the United States in 2021, with an estimated market share of approximately 7% in 2021 (based on an estimate from a December 2022 Wood Mackenzie report). However, the limited deployment of Voyager and the short operating history to date for systems that have been installed, coupled with our relatively smaller size and capitalization compared to some of our competitors, could result in lenders or tax equity providers refusing to provide the financing to our customers that is necessary for them to purchase solar energy systems based on our product platform on favorable terms, or at all. Additionally, a further increase in interest rates, or a reduction in the supply of, or change in the market terms offered for project debt or tax equity financing, could make it more difficult for our customers to secure the necessary financing on favorable terms, or at all. Any of these events could result in reduced demand for our products, which could have a material adverse effect on our financial condition and results of operations.

Our dependence on a limited number of customers as well as the payment terms we agree to with such customers may impair our ability to operate profitably.

We have been dependent in each year since our inception on a small number of customers who generate a significant portion of our business. During the year ended December 31, 2022, three customers accounted for approximately 23%, 20% and 11%, respectively, of total revenue. During the year ended December 31, 2021, three customers accounted for approximately 37%, 20% and 15%, respectively, of total revenue. During the year ended December 31, 2020, four customers accounted for approximately 21%, 19%, 10% and 10%, respectively, of total revenue. Further, our trade accounts receivable are all from companies within or those that serve the solar industry. Three customers accounted for approximately 82% of our total receivables at December 31, 2022, including one customer that accounted for approximately 55% of our total receivables at December 31, 2022.

As a result, we may have difficulty operating profitably if there is a delay or default in payment by any of our customers, we lose an existing order or we are unable to generate new orders from new or existing customers. In addition, we make significant expenditures in fulfilling an order prior to being paid in full by our customer for such order, and therefore any delay or default in payment by a customer may result in our business, prospects, financial condition and results of operations being materially adversely affected. Furthermore, to the extent that any one

customer or a small number of customers continues to account for a large percentage of our revenue, the loss of any such customer or that customer's inability to meet its payment obligations could materially affect our ability to operate profitably. We anticipate that our dependence on a limited number of customers in any given fiscal year, as well as being required to make significant expenditures in fulfilling an order prior to being paid in full by our customer for such order, will continue for the foreseeable future. There is always a risk that existing customers will elect not to do business with us in the future or will experience financial difficulties, and the nature of our business requires us to take credit risk on behalf of our customers. If we do not book more orders with existing customers, or develop relationships with new customers, we may not be able to increase, or even maintain, our revenue, and our business, prospects, financial condition and results of operations may be materially adversely affected.

We invest significant time, resources and management attention to identifying and developing project leads that are subject to our sales and marketing focus, and if we are unsuccessful in converting such project leads (or awarded orders) into binding purchase orders, our business, financial condition or results of operations could be materially adversely affected.

The commercial contracting and bidding process for solar project development is long and has multiple steps and uncertainties. We closely monitor the development of potential sales leads through this process. Project leads may not be converted into binding purchase orders at any stage of the bidding process because either (i) a competitor's product is selected to fulfill some or all of the order due to price, functionality or other reasons or (ii) the project does not progress to the stage involving the purchase of tracker systems. In addition, there is a risk that an awarded order (which is an order for which we are in the process of documenting a contract but for which a contract has not yet been signed, or that have been awarded in writing or verbally with a mutual understanding that the order will be contracted in the future) will not be converted into a binding purchase order, or the time for converting such awarded order to a binding purchase order will be longer than expected. In particular, we have seen awarded orders take a longer period of time than expected to convert to binding purchase orders, and expect this trend to continue in the future in respect of currently awarded orders and future awarded orders, as a result of developers deferring projects due to the uncertainty of panel supply and costs related to UFLPA, AD/CVD and WROs, as described elsewhere, which has negatively impacted our 2022 revenues and cash flows and may continue to negatively impact our anticipated revenues and our cash flows in 2023. There is also a risk that an awarded order once converted to a binding purchase order will not be subject to the same pricing as we originally anticipated. If we fail to convert a significant number of project leads that are subject to our sales and marketing focus (or awarded orders) into binding purchase orders, or the time for converting awarded orders to a binding purchase order is longer than expected, or the pricing in binding purchase orders is not as favorable to us as originally anticipated in the awarded order, our business, financial condition or results of operations could be materially adversely affected.

Due to the seasonality of construction in the United States, our results of operations may fluctuate significantly from quarter to quarter, which could make our future performance difficult to predict and could cause our results of operations for a particular period to fall below expectations, resulting in a decline in the price of our common stock.

Our quarterly results of operations are difficult to predict and may fluctuate significantly in the future. Because a substantial majority of our sales since inception have been concentrated in the U.S. market, we have experienced seasonal and quarterly fluctuations in the past as a result of seasonal fluctuations in our customers' businesses. Additionally, our end-users' ability to install solar energy systems is affected by weather. For example, during the winter months in cold-weather climates in the United States, construction may be delayed in order to let the ground thaw to reduce costs. Such installation delays can impact the timing of orders for our products. We have expanded into areas with traditionally warmer climates which has resulted in less pronounced seasonal variations in our revenue profile, and we expect this trend to continue as we continue to expand into such areas.

Given that we are an early-stage company operating in a rapidly growing industry, the true extent of historic fluctuations due to the seasonality of construction may have been masked by recent impacts from tariff and other regulatory issues, as well as rising inflation and challenging supply chain conditions and consequently may not be readily apparent from our historical results of operations and may be difficult to predict. Any substantial decrease in revenue would have an adverse effect on our financial condition, results of operations, cash flows and stock price. Seasonality and fluctuations in sales as described herein may also present cash flow challenges as well as place strain on our supply chain.

We plan to continue expanding into additional international markets, which will expose us to additional regulatory, economic, political, reputational and competitive risks.

We have been, and plan to continue, expanding our operations to other countries, which requires significant resources and management attention and subjects us to regulatory, economic, political and competitive risks in

addition to those we already face in the United States. There are significant risks and costs inherent in doing business in international markets, including:

- difficulty in establishing and managing international operations, including establishment of local customer service operations and local sales operations, and the associated legal compliance costs;
- risks related to the usage of international sales representatives, who we do not presently engage but may in the future, who would not be our employees and would not be under our direct control, including legal compliance risks and reputational risks;
- acceptance of our current tracker systems or other solar energy products and services in markets in which they have not traditionally been used;
- our ability to accurately forecast product demand and manage manufacturing capacity and production;
- willingness of our potential customers to incur a higher upfront capital investment for Voyager than may be required for competing fixed-tilt ground-mounted systems;
- our ability to obtain timely qualification and certification of Pioneer or other new products in new markets and subsequent adoption challenges, including overcoming potentially higher upfront capital investments compared to competing fixed-tilt ground-mounted systems;
- our ability to reduce production costs to price our products competitively;
- availability of government subsidies and economic incentives for solar energy products and services;
- our ability to protect and enforce intellectual property rights abroad;
- compliance with sanctions laws and anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act ("FCPA"), by us, our employees, our sales representatives and our business partners;
- import and export controls and restrictions and changes in trade regulations;
- tariffs and other non-tariff barriers, tax consequences and local content requirements;
- fluctuations in currency exchange rates and the requirements of currency control regulations, which might restrict or prohibit conversion of other currencies into U.S. dollars; and
- political or social unrest, military conflict or economic instability in a specific country or region in which we operate.

We have limited experience with certain international regulatory environments and market practices and may not be able to penetrate or successfully operate in the markets we may choose to enter or have entered or otherwise effectively mitigate the regulatory, economic, political, reputational and competitive risks that are inherent when operating in such environments. In addition, we may incur significant expenses as a result of our international expansion, and we may not be successful. Our failure to successfully manage these risks could harm our international operations and have an adverse effect on our business, financial condition and operating results.

We may acquire other companies or technologies, which could divert our management's attention, result in dilution to our stockholders, reduce our available cash that could be used for other purposes and otherwise disrupt our operations and harm our results of operations.

We may decide to continue to grow our business through additional acquisitions of businesses and technologies rather than through internal development. The identification of suitable acquisition candidates can be difficult, time consuming and costly, and we may not be able to successfully complete newly identified acquisitions, or successfully integrate our 2022 acquisition of Shanghai Han Xiang New Energy Technology Co., Ltd. (commonly known as, and referred to herein, as "HX Tracker") or other new acquisitions such that they become long-term profitable operations. The risks we face in connection with acquisitions include, but are not limited to:

- diversion of management time and focus from operating our business, as well as use of Company resources (including cash) to addressing acquisition integration challenges;
- retention of key employees from the acquired company;
- failure to realize long-term value and synergies from the acquisition;
- failure to realize incremental revenue that was anticipated to result from the acquisition;

- failure to synchronize and integrate the operations of the acquired company with our operations, including blending of corporate cultures;
- assumption of unanticipated liabilities for activities of the acquired company before the acquisition; and
- litigation or other claims in connection with the acquisition, including claims from terminated employees, customers, former stockholders or other third parties.

Our failure to address these risks or other risks encountered in connection with currently completed or future acquisitions and investments could cause us to fail to realize the anticipated benefits of these acquisitions or investments and incur unanticipated liabilities, or otherwise harm our business. Currently completed or future acquisitions also could result in dilutive issuances of our equity securities, use of our cash in payment of cash consideration, the incurrence of debt, contingent liabilities or amortization expenses, any of which could harm our financial condition. For example, we funded the acquisition of HX Tracker using \$3.5 million of cash and by issuing 1,000,000 shares of our common stock valued at approximately \$4.4 million, along with paying the existing debt of HX Tracker owed to previous owners totaling approximately \$0.9 million following the acquisition. In addition, certain former employees of HX Tracker, who became employees of the Company were eligible to receive up to 2.2 million RSUs which will vest over a two to four-year period based on future performance or service conditions. Any of these risks, if realized, could materially and adversely affect our business, financial condition and results of operations.

Defects or quality or performance problems in our products could result in loss of customers, reputational damage and decreased revenue, and we may face warranty, indemnity and product liability claims arising from defective products.

Although we set stringent quality standards for our products, they may contain errors or defects, especially when first introduced or when new generations are released. Errors, defects or poor performance can arise due to design flaws, defects in raw materials or components, manufacturing difficulties and quality control failures, which can affect both the quality and the yield of the product. Any actual or perceived errors, defects or poor performance in our products could result in replacements or recalls, remediation requests and warranty claims, shipment delays, rejection of our products, damage to our reputation, lost revenue, diversion of our engineering personnel from our product development efforts, diversion of our sales personnel from sales efforts and increases in customer service and support costs, all of which could have a material adverse effect on our business, financial condition and results of operations.

Furthermore, defective products may give rise to warranty, indemnity, product liability, liquidated damages or other contractual claims against us that exceed any revenue or profit we receive from the affected products, including claims for damages related to aspects or components of a solar energy project that go beyond the scope of our product offerings. Our limited warranties cover defects in materials and workmanship of our products. As a result, we bear the risk of warranty claims long after we have sold products and recognized revenue. Our accrued reserves for warranty claims are based on our assumptions and we do not have a long history of making such assumptions. As a result, these assumptions could prove to be materially different from the warranty obligations that we may be required to compensate customers for in the case of defective products. Our failure to accurately predict future warranty claims could result in unexpected volatility in, and have a material adverse effect on, our financial condition. In addition, while we seek to support our warranty obligations with warranties from our contract manufacturers, such warranties may not be of the same scope as our warranty obligations, or we may not be able to effectively enforce our rights thereunder.

If one of our products were to cause injury to someone or cause property damage, including as a result of product malfunctions, defects or improper installation, then we could be exposed to product liability claims. We could incur significant costs and liabilities if we are sued and if damages are awarded against us, which could far exceed the revenue we recognize in connection with the related project. Further, any product liability claim we face could be expensive to defend and could divert management's attention. The successful assertion of a product liability claim against us could result in potentially significant monetary damages, penalties or fines, subject us to adverse publicity, damage our reputation and competitive position and adversely affect sales of our products. In addition, product liability claims, injuries, defects or other problems experienced by other companies in the solar energy industry could lead to unfavorable market conditions for the industry as a whole and may have an adverse effect on our ability to attract new customers, thus harming our growth and financial performance.

If we fail to retain key personnel or if we fail to attract additional qualified personnel, we may not be able to achieve our anticipated level of growth and our business could suffer.

Our future success and ability to implement our business strategy depend, in part, on our ability to attract and retain key personnel, and on the continued contributions of members of our senior management team and key technical personnel, each of whom would be difficult to replace. All of our employees, including our senior management, are

free to terminate their employment relationships with us at any time. Competition for highly skilled individuals with technical expertise is extremely intense in our industry, and we face challenges identifying, hiring and retaining qualified personnel in many areas of our business. Such challenges intensified during the second half of 2021 and extended into 2022 as a result of disruptions in the labor force due to the COVID-19 pandemic. Additionally, as a response to adverse market and regulatory conditions during much of 2022, we froze all non-essential hiring during the year and implemented a reduction in workforce in December 2022. We also converted payment of earned incentive compensation from cash to stock in mid-2022. These factors may create additional challenges in retaining our personnel. As we unfreeze our hiring efforts in the future as a response to expected growth, integrating new employees into our team could be disruptive to our operations, requiring substantial resources and management attention and ultimately prove unsuccessful. An inability to retain our senior management and other key personnel or to attract additional qualified personnel could limit or delay our strategic efforts, which could have a material adverse effect on our business, prospects, financial condition and results of operations.

Risks Related to Government Regulations and Legal Compliance

The reduction, elimination or expiration of government incentives for, or regulations mandating the use of, as well as corporate commitments to the use of, renewable energy and solar energy specifically could reduce demand for solar energy systems and harm our business.

Federal, state, local and foreign government bodies provide incentives to owners, end-users, distributors, system integrators and manufacturers of solar energy systems to promote solar electricity in the form of rebates, tax credits and other financial incentives such as system performance payments, payments of renewable energy credits associated with renewable energy generation and manufacturing of specific solar components, as well as exclusions of solar energy systems from property tax assessments.

The most notable incentive program impacting our U.S. business has been the ITC for solar energy projects, which allows taxpayers to offset their U.S. federal income tax liability by a certain percentage of their cost basis in solar energy systems placed in service for commercial use. The Inflation Reduction Act of 2022, passed by the U.S. Congress and signed into law by President Biden on August 16, 2022, expanded and extended the tax credits and other tax benefits available to solar energy projects and the solar energy supply chain. ITCs have been extended for such projects through at least 2032 and, depending on the location of a particular project and its ability to satisfy certain labor and domestic content requirements, the ITC percentage can range between 30% and 50%. Manufacturers of specific solar components are also now eligible to claim production tax credits as an alternative to the ITC. Implementing regulations for this law are still in process. We believe this law will bolster and extend future demand for our products in the United States, however we note that implementing regulations for this law are still in process, which creates uncertainty about the extent of its impact on our Company and the solar energy industry.

In addition, similar incentives may exist in, or be developed outside of, the United States, which could impact demand for our products and services as we expand our business into foreign jurisdictions. For example, a feed-in-tariff ("FIT") is a type of incentive that pays owners of renewable energy systems, including solar energy systems, a certain amount per unit of electricity they generate and provide to the grid. While FITs are relatively rare as a solar policy mechanism in the United States, they are more common internationally. Our international customers and end-users may have access to FITs, tax deductions and grants toward equipment purchases. Our ability to successfully penetrate new geographic markets may depend on new countries adopting, to the extent such incentives are not currently in place, and maintaining such incentives to promote solar electricity.

The range and duration of these incentives vary widely by jurisdiction. Our customers typically use our systems for utility scale grid-connected electric power generation projects that sell solar power under a power purchase agreement or into an organized electric market. This segment of the solar industry has historically depended in large part on the availability and size of government incentives and regulations mandating the use of renewable energy. Consequently, the reduction, elimination or expiration of government incentives for grid-connected solar electricity or regulations mandating the use of renewable energy may negatively affect the competitiveness of solar electricity relative to conventional and non-solar renewable sources of electricity, and could harm or halt the growth of the solar electricity industry and our business. These subsidies and incentives may expire (i) on a particular date, (ii) end when the allocated funding is exhausted or may be reduced or terminated as solar energy adoption rates increase or as a result of legal challenges, (iii) upon the adoption of new statutes or regulations or (iv) with the passage of time. These reductions or terminations may occur without warning, which would negatively impact our business, financial condition and results of operations.

Corporate social responsibility efforts, such as net zero emission pledges, have fostered private sector investment in solar energy systems in recent years. To the extent that these corporate policies are redirected away from renewable energy in general or solar energy in particular, our business, financial condition and results of operation may be negatively impacted.

In addition, federal, state, local and foreign government bodies have implemented various policies that are intended to promote renewable electricity generally or solar electricity in particular. RPS are a set of policies designed to increase the use of renewable energy sources for electricity generation. In general, RPS set a minimum requirement for the share of electricity supply that comes from designated renewable energy resources by a certain date or year. According to information provided by the U.S. Energy Information Administration, as of November 2022, 36 states and the District of Columbia had established an RPS or renewable energy goal. In 12 of those states and the District of Columbia, the requirement is for 100% clean energy by 2050 or earlier. A common feature of RPS policies is a renewable electricity credit trading system that reduces the cost to comply with the RPS.

The cost of solar power may exceed retail electricity rates. Electric utility companies or generators of electricity from other non-solar renewable sources of electricity may successfully lobby for changes in the relevant legislation in their markets that are harmful to the solar industry. Furthermore, electric utility companies may establish pricing structures or interconnection requirements that could adversely affect our sales and be harmful to the solar generation industry.

The concentration of our sales in a limited number of specific markets increases risks associated with the reduction, elimination or expiration of governmental subsidies and economic incentives for solar energy products.

The majority of our revenue during the periods covered by this Annual Report resulted from sales within the United States. For example, in the years ended December 31, 2022, 2021 and 2020, 80%, nearly 100% and nearly 100%, respectively, of total third-party revenues resulted from sales within the United States. We expect to continue to generate a substantial amount of our revenue from the United States in the future.

There are a number of important incentives, including those provided in the Inflation Reduction Act of 2022, as described above, that have a certain time limit and are expected to phase down or terminate in the future, which could adversely affect sales of our products in the United States. Additionally, as we further expand to other countries, changes in incentive programs or electricity policies could negatively affect returns on our investments in those countries as well as our business, financial condition and results of operations.

Existing electric utility industry policies and regulations, and any subsequent changes, may present technical, regulatory and economic barriers to the purchase and use of solar energy systems that may significantly reduce demand for our products and services or harm our ability to compete.

Federal, state, local and foreign government regulations and policies concerning the broader electric utility industry, as well as internal policies and regulations promulgated by electric utilities and organized electric markets with respect to fees, practices and rate design, heavily influence the market for electricity generation products and services. These regulations and policies often affect electricity pricing and the interconnection of generation facilities, and can be subject to frequent modifications by governments, regulatory bodies, utilities and market operators. For example, changes in fee structures, electricity pricing structures and system permitting, interconnection and operating requirements can deter purchases of renewable energy products, including solar energy systems, by reducing anticipated revenue or increasing costs or regulatory burdens for would-be system purchasers. The resulting reductions in demand for solar energy systems could harm our business, prospects, financial condition and results of operations.

A significant recent development in renewable energy pricing policies in the United States occurred on July 16, 2020, when the Federal Energy Regulatory Commission (“FERC”) issued a final rule amending regulations that implement the Public Utility Regulatory Policies Act (“PURPA”). The net effect of these changes is uncertain, however, in general, FERC’s PURPA reforms have the potential to reduce prices for the output from certain new renewable generation projects while also narrowing the scope of PURPA eligibility for new projects. These effects could reduce demand for PURPA-eligible solar energy systems and could harm our business, prospects, financial condition and results of operations.

In addition, changes in our products or changes in export and import laws and implementing regulations may create delays in the introduction of new products in international markets, prevent our customers from deploying our products internationally or, in some cases, prevent the export or import of our products to certain countries altogether. Any such event could have a material adverse effect on our business, financial condition and results of operations.

Actions addressing determinations of forced labor practices in China and legislation and policies adopted to address such practices may disrupt the global supply of solar panels and affect our business.

Since 2016, CBP has issued a number of WROs directed at forced labor in China, including WROs directed specifically at activity in the Xinjiang Uyghur Autonomous Region. As a result of these orders, certain products, including solar panels manufactured with polysilicon from Xinjiang, are effectively barred from entering the United States. Despite our due diligence efforts, as well as contractual provisions we put in place that forbid our suppliers from using forced labor or components that were produced using forced labor, we cannot determine with certainty whether our suppliers may violate our contracts or become subject to a WRO, which could subject us to legal,

reputational, and other risks. If this were to occur, we might have to find alternative suppliers on short notice, resulting in construction delays and disruption and higher costs. Additionally, WROs have and could continue to impact the importation of solar panels. While we are not directly involved in the importation of solar panels, such WROs can negatively impact the global solar market and the timing and viability of solar projects to which we sell our products, which could have a material adverse effect on our business, financial condition and results of operations.

The UFLPA was passed by the U.S. Congress and signed into law by President Biden on December 23, 2021. The UFLPA establishes a rebuttable presumption that the importation of any goods, wares, articles, and merchandise mined, produced, or manufactured wholly or in part in the Xinjiang Uyghur Autonomous Region of the People's Republic of China, or that are produced by certain entities, is prohibited by Section 307 of the Tariff Act of 1930 and that such goods, wares, articles, and merchandise are not entitled to entry to the United States. CBP began implementing the provisions of UFLPA on June 21, 2022, resulting in new rules for solar module importers and reviews by CBP. There continues to be uncertainty in the market around achieving full compliance with UFLPA for the importation of solar modules, whether related to sufficient traceability of materials or other factors.

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

Trade policies and international disputes at times result in increased tariffs, trade barriers and other restrictive measures. In particular, China and the United States have imposed significant tariffs on imports of goods from each other's respective countries in recent years. These developments and any further tariff increases could potentially impact our suppliers' hardware component prices and impact any plans to provide services in China and other international markets. These developments could have a material adverse effect on global economic conditions and the stability of global financial markets.

China is a major producer of solar cells and other solar products. Certain solar cells, modules, laminates and panels from China are subject to tariffs imposed by the United States. Tariffs on solar cells, modules and inverters from China may put upwards pressure on prices of energy products in other countries.

On March 25, 2022, the U.S. Department of Commerce, in response to a petition by Auxin Solar, Inc., initiated an investigation of claims related to alleged circumvention of U.S. AD/CVD duties by solar manufacturers in certain Southeast Asian countries in an effort to determine whether or not solar cells and/or modules made in those Southeast Asian nations use parts originating from China in order to circumvent the AD/CVD tariffs. On June 6, 2022, President Biden issued an Executive Order allowing U.S. solar deployers the ability to import solar modules and cells from Cambodia, Malaysia, Thailand and Vietnam free from certain duties for 24 months, along with other incentives designed to accelerate U.S. domestic production of clean energy technologies.

Furthermore, the United States continues to impose tariffs on goods imported from China under Section 301 of the Trade Act of 1974 (the "Section 301 Tariffs"). Although these tariffs were reduced in connection with the "Phase One" Agreement between the United States and China, which was signed in January 2020, the United States continues to impose tariffs ranging from 7.5% to 25% on more than \$300 billion in Chinese imports. These tariffs apply to a range of products, including solar products such as modules, inverters, and non-lithium-ion batteries. Since these tariffs impact the purchase price of solar products, they raise the cost associated with purchasing these solar products from China and reduce the competitive pressure on providers of solar products not subject to these tariffs.

In 2018, the President of the United States announced the imposition of tariffs on certain imported solar cells and modules under Section 201 of the Trade Act of 1974 (the "Section 201 Tariffs"). These tariffs apply on a global basis, to cells and modules from a variety of jurisdictions. The amount of these tariffs has declined over time, and is currently 15% ad valorem. On February 4, 2022, President Biden announced the extension of these tariffs through 2026, but exempted bifacial solar modules from the tariffs and doubled the annual amount of cells that can be imported before tariffs apply from 2.5 GW to 5 GW.

Finally, in March 2018, the United States imposed a 25% tariff on steel imports and a 10% tariff on aluminum imports pursuant to Section 232 of the Trade Expansion Act of 1962. While these tariffs are no longer in place with respect to imports from many countries, any additional tariff actions affecting steel and aluminum could result in interruptions in the supply chain and impact costs and our gross margins.

Tariffs currently in place and the possibility of additional tariffs in the future have created uncertainty in the industry. If the price of solar systems in the United States increases further, the use of solar systems could become less economically feasible and could further reduce our gross margin or reduce demand for solar systems manufactured and sold, which in turn may decrease demand for our products. Additionally, existing or future tariffs may negatively affect our customers and manufacturing partners. Such outcomes could adversely affect the amount or timing of our revenue, results of operations or cash flows, and continuing uncertainty could cause sales volatility, price fluctuations or supply shortages or cause our customers to advance or delay their purchase of our products. Governments may take

further trade-related actions, which may include additional or increased tariffs and trade restrictions, and we may be unable to quickly and effectively react to such actions. While we have taken actions with the intention of mitigating the effect of tariffs on our business by reducing our reliance on China, we may not succeed or be able to continue to do so on attractive terms or at all. For example, in 2019, 90% of our supply chain was sourced from China. However, by the end of 2022, we had qualified suppliers outside of China for all our commodities and reduced the extent to which our supply chain for U.S.-based projects is subject to existing tariffs, as we have entered into partnerships with manufacturers in many other countries worldwide that will be able to independently supply our U.S. customers. However, despite these partnerships, we may still be required to use suppliers in China and other jurisdictions that will subject us to existing tariffs.

Changes in tax laws or regulations that are applied adversely to us or our customers could materially adversely affect our business, prospects, financial condition and results of operations.

Changes in corporate tax rates, tax incentives for renewable energy projects, the realization of net deferred tax assets relating to our U.S. operations, the taxation of foreign earnings and the deductibility of expenses under future tax reform legislation could have a material impact on the value of our deferred tax assets, could result in significant one-time charges in the current or future taxable years, and could increase our future U.S. tax expense, which could have a material adverse effect on our business, prospects, financial condition and results of operations.

We could be adversely affected by any violations of the FCPA and other foreign anti-bribery laws, as well as of export controls and economic sanctions laws.

The FCPA generally prohibits companies and their intermediaries from making improper payments to foreign government officials for the purpose of obtaining or retaining business. Other countries in which we operate also have anti-bribery laws, some of which prohibit improper payments to government and non-government persons and entities. We have adopted policies that mandate compliance with these anti-bribery laws. However, we currently operate in and intend to further expand into, many parts of the world that have experienced governmental corruption to some degree and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. In addition, due to the level of regulation in our industry, our entry into certain jurisdictions requires substantial government contact where norms can differ from U.S. standards. It is possible that our employees, subcontractors, agents and partners may take actions in violation of our policies and anti-bribery laws. Furthermore, we are subject to rules and regulations of the United States and other countries relating to export controls and economic sanctions, including, but not limited to, trade sanctions administered by the Office of Foreign Assets Control within the U.S. Department of the Treasury, as well as the Export Administration Regulations administered by the Department of Commerce. These regulations may limit our ability to market, sell, distribute or otherwise transfer our products or technology to prohibited countries or persons. Any violation of such laws, even if prohibited by our policies, could subject us to criminal or civil penalties or other sanctions, which could have a material adverse effect on our business, financial condition, cash flows and reputation.

Risks Related to Manufacturing and Supply Chain

We depend upon a limited number of outside contract manufacturers, and our operations could be disrupted if our relationships with these contract manufacturers are compromised.

We do not have internal manufacturing capabilities, and currently rely on contract manufacturers to build all of our products. Based on the U.S. dollar amount of purchase orders we issued during the year ended December 31, 2022, 52%, 20%, 16% and 12% of our spending involved contract manufacturers located in Thailand, China, the United States and India, respectively.

Our reliance on a limited number of contract manufacturers in a limited number of countries makes us vulnerable to possible capacity constraints and reduced control over component availability, quality, delivery schedules, manufacturing yields and costs. At December 31, 2022, we did not have long-term supply contracts with any of our contract manufacturers although we did enter into a three-year supply agreement in February 2023 with the partner in our manufacturing venture, Taihua New Energy (Thailand) Co., LTD, that requires certain minimum purchase thresholds over each 12-month period during the term of the supply agreement. Our other contract manufacturers are not obligated to supply products to us for any period, in any specified quantity or at any certain price beyond the single delivery contemplated by the relevant purchase order. While we may enter into long-term master supply agreements with our contract manufacturers in the future if the volume of our business grows in a way that makes such additional arrangements economically feasible, we may not be successful in negotiating such agreements on favorable terms or at all. With respect to any such long-term master supply agreements, we could be subject to terms that may be harmful to our business, including in the event that we do not have the customer demand necessary to utilize the products that we are required to purchase or have made deposits for, or in the event that we are required to purchase products at a price in excess of the prevailing market rate. Any change in our relationships with our contract manufacturers or

changes to contractual terms of our agreements with them could adversely affect our financial condition and results of operations.

The revenue that certain of our contract manufacturers generate from our orders represents a relatively small percentage of their overall revenue. As a result, fulfilling our orders may not be considered a priority in the event of constrained ability to fulfill all of their customer obligations in a timely manner. Our use of international facilities may increase supply risk, including the risk of supply interruptions or reductions in manufacturing quality or controls.

We may be negatively impacted by the deterioration in financial conditions of our limited number of contract manufacturers. If any of our contract manufacturers were unable or unwilling to manufacture the components that we require for our products in sufficient volumes, at high-quality levels, on a timely basis and pursuant to existing supply agreement or purchase order terms, due to financial conditions or otherwise, we would have to identify, qualify and select acceptable alternative contract manufacturers. An alternative contract manufacturer may not be available to us when needed or may not be in a position to satisfy our quality or production requirements on commercially reasonable terms, including price and timing. Any significant interruption or delays in manufacturing would require us to reduce or delay our supply of products to our customers or increase our shipping costs to make up for delays in manufacturing, if possible, which in turn could reduce our revenue, cause us to incur delay liquidated damages or other liabilities to our customers, harm our relationships with our customers, damage our reputation or cause us to forego potential revenue opportunities. While we may have contractual remedies against our contract manufacturers for the supply chain malfunctions noted above to support any liabilities to our customers, such remedies may not be sufficient in scope, we may not be able to effectively enforce such remedies and we may incur significant costs in enforcing such remedies.

We may experience delays, disruptions or quality control problems in our contract manufacturers' manufacturing operations, which could result in reputational damage and other liabilities to our customers.

Our product development, manufacturing and testing processes are complex and require significant technological and production-related expertise. Such processes involve a number of precise steps from design to production. Any change in our processes could cause one or more production errors, requiring a temporary suspension or delay in a manufacturer's production line until the errors can be researched, identified, analyzed and properly addressed and rectified. This may occur particularly as we introduce new products, modify our engineering and production techniques and/or expand our capacity. In addition, delays, disruptions or our failure to maintain appropriate quality assurance processes could result in increased product failures, loss of customers, increased warranty claims, delay liquidated damages claims or other liabilities to our customers, increased production and logistics costs and delays. While we may have contractual remedies against our contract manufacturers for such quality assurance failures to support any liabilities to our customers, such remedies may not be sufficient in scope, we may not be able to effectively enforce such remedies and we may incur significant costs in enforcing such remedies. Any of these developments could have a material adverse effect on our business, financial condition and results of operations.

We depend on a limited number of contract manufacturers for key components of our products to adequately meet anticipated demand. Due to the limited number of such contract manufacturers, any cessation of operations or production or any shortage, delay, price change, imposition of tariffs or duties or other limitation on our ability to obtain the components we use could result in sales delays, cancellations and loss of market share.

We depend on a limited number of contract manufacturers for certain key components used to manufacture our products, making us susceptible to quality issues, shortages and price changes. Some of our contract manufacturers have in the past stopped producing or limited their production of our components, faced supply constraints or increased prices on the raw materials for their component, ceased operations or been acquired by, or entered into exclusive arrangements with, one or more of our competitors, and such actions may occur again in the future. Additionally, these manufacturers could stop selling to us at commercially reasonable prices, or at all. Because there are a limited number of contract manufacturers of the key components used to manufacture our products, it may be difficult to quickly identify alternate manufacturers or to qualify alternative components on commercially reasonable terms, and our ability to satisfy customer demand may be adversely affected. Transitioning to or redesigning a product to accommodate a new contract manufacturer would result in additional costs and delays. These outcomes could harm our business or financial performance.

Any interruption in the supply of limited source components for our products would adversely affect our ability to meet scheduled product deliveries to our customers, could result in lost revenue or higher expenses and would harm our business.

The interruption of the flow of components from international contract manufacturers could disrupt our supply chain, including as a result of the imposition of additional laws, duties, tariffs and other charges on imports and exports.

We purchase some of our components outside of the United States through arrangements with various international contract manufacturers. Political, social or economic instability in these regions, or in other regions where our products are made, could cause disruptions in trade, including, without limitation, exports to the United States. As detailed previously, trade disputes between various countries, particularly China and the United States, have created uncertainty with respect to the ability to import certain technologies and products into the United States, as well as in respect of tariff impacts on the costs of some of our components. In addition, recent WROs related to polysilicon requires panel importers to demonstrate that polysilicon used in their panels has not been sourced using forced labor. To date, CBP has used the WROs to detain solar panels, which has disrupted the U.S. solar installation market and caused additional uncertainty on future projects. These WRO actions, as well as other governmental actions that have or may impact the importation of solar panels (including the UFLPA), have and could continue to negatively impact the global solar market and the timing and viability of solar projects to which we sell our products, which has negatively impacted our 2022 revenues and cash flows and may continue to negatively impact our anticipated revenues and cash flows in 2023, and which could have a material adverse effect on our business, financial condition and results of operations. While our products do not contain polysilicon, the degree of our exposure is dependent on, among other things, the impact of these measures on the projects that are also intended to use our products, with such impact being largely out of our control. Other events that could also cause disruptions to our supply chain include, but are not limited to:

- additional trade enforcement actions that lead to imposition of additional tariffs and other charges on imports and exports that could relate to imports from a number of different countries;
- the potential imposition of restrictions on our acquisition, importation or installation of equipment under future U.S. regulations implementing the Executive Order on Securing the United States Bulk-Power System;
- quotas imposed by bilateral trade agreements;
- foreign currency fluctuations;
- public health issues and epidemic diseases, their effects (including any disruptions they may cause) or the perception of their effects, such as the ongoing COVID-19 pandemic;
- wars, military operations or other hostilities, including Russia's recent invasion of Ukraine; and
- significant labor disputes, such as transportation worker strikes.

Failure by our contract manufacturers to use ethical business practices and comply with applicable laws and regulations may adversely affect our business.

While our contract manufacturers are required to adhere to certain business practices to remain on our approved vendor list, which we monitor on a continuous basis, we do not control our contract manufacturers' operations or their business practices. The travel restrictions and shelter-in-place orders in response to the COVID-19 pandemic have hindered and may continue to hinder our ability to monitor our contract manufacturers, even with the use of local third-party contractors. Additionally, our contract manufacturers may not follow ethical business practices, such as fair wage practices or comply with environmental, safety, labor, sanctions and anti-corruption laws and other local laws or other regulations of which we may not be aware. For example, as we continue to expand our business into foreign jurisdictions, the manufacture of our products may be subject to local content requirements, which require our products to incorporate materials from certain local providers. A lack of demonstrated compliance could damage our reputation and lead us to seek alternative manufacturers, which could increase our costs and result in delayed delivery of our products, product shortages or other disruptions of our operations. Violation of labor or other laws by our contract manufacturers or the divergence of a contract manufacturer's labor or other practices from those generally accepted as ethical in the United States or other markets in which we do business could also attract negative publicity for us and harm our business.

We may not have sufficient insurance coverage to cover business continuity.

We rely on a limited number of contract manufacturers and, as a result, a sustained or repeated interruption in the manufacturing of our products by such outsourced manufacturers due to fire, flood, war, pandemic or natural disasters, and/or an interruption in the provision of the required components for our business by these manufacturers may interfere with our ability to sell our products to our customers in a timely manner. The nature of our business and

our size makes it difficult to insure some or all of the possible harms that could result if we fail to sell and deliver our products in a timely manner, which may adversely affect our financial results.

We and our contract manufacturers are dependent on domestic and international transportation and logistics markets to deliver our products. If we or our contract manufacturers experience disruptions, unavailability or escalated pricing in the transportation and logistics markets, which include trucking, vessels, ports and related infrastructure and logistics, our business, results of operations and financial condition could be materially and adversely impacted.

We and our contract manufacturers rely on domestic and international transportation and logistics markets to deliver our products to customers. Our ability and the ability of our contract manufacturers to deliver our products could be adversely impacted by shortages in available cargo capacity, changes by carriers and transportation companies in policies and practices, such as scheduling, pricing, payment terms and frequency of service or increases in the cost of fuel, taxes and labor, and other factors, such as labor strikes and work stoppages, not within their control. For example, the COVID-19 pandemic resulted in diminished cargo capacity and port detainment of vessels which caused delays in delivery of our products to project sites during 2020 and into 2022. Material interruptions in service or stoppages in transportation and logistics markets, whether caused by strike, work stoppage, lock-out, slowdown or otherwise, and escalated pricing in transportation and logistics markets could materially and adversely impact our business, results of operations and financial condition.

Risks Related to Intellectual Property

If we fail, in whole or in part, to obtain, maintain, protect, defend or enforce our intellectual property and other proprietary rights, our business and results of operations could be materially harmed.

Our success partly depends on our ability to protect our intellectual property and other proprietary rights. We rely on a combination of patents, trademarks, copyrights, and trade secrets to establish and protect our intellectual property and other proprietary rights, as well as unfair competition laws, confidentiality and license agreements and other contractual arrangements. As of December 31, 2022, we had 5 U.S. trademark registrations, 11 U.S. applications for trademark registration, and 7 foreign applications for trademark registration. We had 46 issued U.S. patents, 9 issued non-U.S. patents, and 10 patent applications pending for examination in the United States (including 3 allowed) and 21 patent applications pending for examination in other countries related to panel attachments, solar tracking algorithms, related design and assembly methods, and software solutions. Our issued U.S. patents are expected to expire between 2023 and 2041. Our trademarks and trade names include, but are not limited to, Voyager Tracker, Pioneer Tracker, SunDAT, SunPath, Atlas and FTC Solar, which are protected under applicable intellectual property laws. Our pending patent and trademark applications or other applications for intellectual property registrations may not be approved, issued or granted, and our existing and future intellectual property rights may not be valid, enforceable or sufficiently broad to prevent competitors from using technology similar to or the same as our proprietary technology, to prevent our contract manufacturers from providing similar technology to our competitors or to sufficiently allow us to develop and maintain recognized brands. Additionally, our intellectual property rights may afford only limited protection of our intellectual property and may not (i) prevent our competitors or contract manufacturers from duplicating our processes or technology, (ii) prevent our competitors from gaining access to our proprietary information and technology or (iii) permit us to gain or maintain a competitive advantage. Any impairment or other failure to obtain sufficient intellectual property protection could impede our ability to market our products and services, negatively affect our competitive position and harm our business and operating results, including forcing us to, among other things, rebrand or re-design our affected products and services. In countries where we have not applied for patent protection or trademark or other intellectual property registration or where effective patent, trademark, trade secret and other intellectual property laws and judicial systems may not be available to the same extent as in the United States, we may be at greater risk that our proprietary rights will be circumvented, misappropriated, infringed or otherwise violated.

To protect our unregistered intellectual property, including our trade secrets and know-how, we rely in part on trade secret laws and confidentiality and invention assignment agreements with our employees and independent contractors. We also require third parties, such as our customers and contract manufacturers, which may have access to our proprietary technologies and information to enter into non-disclosure agreements or other contracts containing obligations to maintain the confidentiality of our intellectual property. Such measures, however, provide only limited protection, and our confidentiality and non-disclosure agreements and other agreements containing confidentiality provisions may not prevent unauthorized disclosure or use of our confidential information, especially after our employees or third parties end their employment or engagement with us, and may not provide us with an adequate remedy in the event of such disclosure. Furthermore, competitors or other third parties may independently discover our trade secrets, copy or reverse engineer our products or services or portions thereof, or develop similar technology. If we fail to protect our intellectual property and other proprietary rights, or if such intellectual property and proprietary

rights are infringed, misappropriated or otherwise violated, our business, results of operations or financial condition could be materially harmed.

We may need to defend ourselves against third-party claims that we are infringing, misappropriating or otherwise violating third-party intellectual property rights, which could divert management's attention, cause us to incur significant costs and prevent us from selling or using the products, services or technologies to which such rights relate.

Our competitors and other third parties hold numerous patents related to technologies used in our industry, and may hold or obtain patents, copyrights, trademarks or other intellectual property rights that could prevent, limit or interfere with our ability to make, use, develop, sell or market our products and services, which could make it more difficult for us to operate our business. From time to time, we may be subject to claims of infringement, misappropriation or other violation of patents or other intellectual property rights or licensing fee and royalty claims and related litigation, and, if we gain greater recognition in the market, we face a higher risk of being the subject of these types of claims. For example, in early 2021 we learned that a claim had been filed against us seeking damages for alleged breach of contract and other claims related to a patent license agreement and consulting relationship, and the same plaintiff subsequently filed a separate lawsuit against us alleging a claim for patent infringement in respect of the same underlying technology. As described further in "Part I, Item 3, Legal Proceedings" in this Annual Report we reached a settlement agreement with the plaintiff in December 2022. Regardless of their merit, responding to such claims can be time consuming, can divert management's attention and resources, and may cause us to incur significant expenses in litigation or settlement. While we believe that our products and services do not infringe in any material respect upon any valid intellectual property rights of third parties, we may not be successful in defending against any such claims. If we do not successfully defend or settle an intellectual property claim, we could be liable for significant monetary damages and could be prohibited from continuing to use certain technology, business methods, content or brands, could be prohibited from continuing to sell certain products or services, or could be required to license such intellectual property from the applicable third party, which could require us to pay significant royalties, increasing our operating expenses. Even if we do reach a settlement agreement to resolve an intellectual property claim, such settlement agreement could also result in our making a significant monetary payment or paying significant royalties. For example, as described further in "Part I, Item 3. Legal Proceedings" in this Annual Report, we recently reached a settlement agreement with a plaintiff in the above described litigation that required both cash payments and the issuance of our common stock to the plaintiff. If a license is not available at all or not available on reasonable terms, we may be required to develop or license a non-infringing alternative, either of which could require significant effort and expense. If we cannot license or develop a non-infringing alternative, we would be forced to limit or stop sales of our offerings and may be unable to effectively compete. Any of these results would adversely affect our business, financial condition and results of operations.

We use "open-source" software, and any failure to comply with the terms of one or more open-source licenses could negatively affect our business.

Our products and services use certain software licensed by its authors or other third parties under so-called "open-source" licenses. Some of these open-source licenses may contain requirements that we make available source code for modifications or derivative works that we create based upon the open-source software, and that we license such modifications or derivative works under the terms of a particular open-source license or other license granting third parties rights with respect to such software. In certain circumstances, if we combine our proprietary software with certain open-source software, we could be required to release the source code for such proprietary software. Additionally, to the extent that we do not comply with the terms of the open-source licenses to which we are subject, or such terms are interpreted by a court in a manner different than our own interpretation of such terms, then we may be required to disclose certain of our proprietary software or take other actions that could negatively impact our business. Further, the use of open-source software can lead to vulnerabilities that may make our software susceptible to attack, and open-source licenses generally do not provide warranties or controls on the origin of the software. While we attempt to utilize open-source software in a manner that helps alleviate these risks, our attempts may not be successful.

Risks Related to Information Technology and Data Privacy

A significant cybersecurity incident or other disruption to our technology infrastructure could disrupt our business operations and cause financial and reputational damage.

We rely extensively on various information technology systems, including data centers, hardware, software and applications to manage many aspects of our business, including to operate and provide our products and services, to process and record transactions, to enable effective communication systems, to pay our employees, to track inventory flow, to manage logistics and to generate performance and financial reports. Some of our most critical systems are

provided and hosted by third-party software vendors in arrangements commonly known as software as a service. We are dependent on the integrity, security and consistent operations of these systems and related back-up systems. Our computer and information technology systems and the third-party systems upon which we rely are also subject to unauthorized access, damage, interruption or shutdown from a number of causes, including computer viruses, ransomware, malware, phishing or distributed denial-of-service attacks, security breaches or cyber-attacks, which could lead to delays in our business operations or subject us to liability and, if significant or extreme, negatively affect our results of operations. In addition, any interruption in the operation of our website or information technology systems could cause us to suffer reputational harm, lose sales, and expose us to litigation or government action, including penalties, fines or judgments.

Unauthorized disclosure of personal or sensitive data or confidential information, whether through a breach of our computer or information technology systems or otherwise, could severely hurt our business.

Some aspects of our business involve the collection, receipt, use, storage, processing and transmission of personal information, including that of our customers' and end-users of our customers' solar energy systems, website visitors, employees, contract manufacturers and other third parties. We may collect personal information, including names, addresses, e-mail addresses, credit information, and energy production statistics and consumer preferences, some of which is entrusted to third-party service providers. We increasingly rely on commercially available systems, software, tools (including encryption technology) and monitoring technologies to provide security and oversight for processing, transmission, storage and protection of confidential information and personal data. Despite the security measures we have in place, our facilities and systems, and those of third parties with which we do business, may be vulnerable to security breaches, acts of vandalism and theft (including misappropriation of our financial resources), computer viruses, misplaced or lost data, programming and/or human errors, or other similar events, and an inadvertent or unauthorized use or disclosure could occur or third parties could gain unauthorized access to this type of confidential information and personal data.

Electronic security attacks designed to gain access to personal, sensitive or confidential data by breaching mission critical systems of large organizations are constantly evolving, and high-profile electronic security breaches leading to unauthorized disclosure of confidential information or personal data have occurred recently at a number of major U.S. companies.

Despite our precautions, an electronic security breach in our systems (or in the systems of third parties with which we do business) that results in the unauthorized release of personally identifiable information regarding customers, employees or other individuals or other sensitive data could nonetheless lead to a serious disruption of our operations, financial losses from remedial actions, loss of business or potential liability, including possible punitive damages. As a result of such a breach, we could also be subject to demands, claims and litigation by private parties, and investigations, related actions and penalties by regulatory authorities. Moreover, we could incur significant costs in notifying affected persons and entities and otherwise complying with the multitude of foreign, federal, state and local laws and regulations relating to the unauthorized access to, or use or disclosure of, personal information. In addition, any perceived or actual unauthorized access to, or use or disclosure of, such information could harm our reputation, substantially impair our ability to attract and retain customers and have an adverse impact on our business, financial condition and results of operations.

Finally, as the regulatory environment relating to our obligations to protect such sensitive data becomes increasingly rigorous, with continually developing and growing requirements applicable to our business, compliance with those requirements could result in additional costs. A material failure on our part to comply with such requirements could subject us to regulatory sanctions, including fines and potentially lawsuits. Any of the foregoing could have a material adverse effect on our business, prospects, financial condition and results of operations.

Failure to comply with current or future federal, state, local and foreign laws and regulations and industry standards relating to privacy, data protection and consumer protection, or the expansion of current or the enactment of new laws or regulations relating to privacy, data protection and consumer protection, as well as our actual or perceived failure to comply with such laws and regulations could adversely affect our business, prospects, financial condition and results of operations.

There are numerous federal, state, local and foreign laws regarding privacy and the collection, processing, storing, sharing, disclosing, using and protecting of personal information and other data. We are also subject to specific contractual requirements contained in agreements with third parties governing our use and protection of personal information and other data. We generally comply with industry standards and are subject to the terms of our privacy policy and the privacy- and security-related obligations agreed to with third parties. We strive to comply with applicable laws, policies, legal obligations and industry standards relating to privacy and data protection, to the extent possible. However, it is possible that these obligations may be interpreted and applied in new ways or in a manner that

is inconsistent from one jurisdiction to another and may conflict with other rules or our practices. Additionally, new laws or regulations could be enacted with which we are not familiar or with which our practices do not comply.

We expect that new industry standards, laws and regulations will continue to be proposed regarding privacy, data protection and information security in many jurisdictions, including the California Consumer Privacy Act (“CCPA”), which came into effect on January 1, 2020, and the California Privacy Rights Act (“CPRA”), which amends the CCPA and has many provisions that took effect on January 1, 2023. Certain other states also have passed privacy laws that went into effect during 2023. Additionally, the Federal Trade Commission and many state attorneys general are interpreting federal and state consumer protection laws to impose standards for the online collection, use, dissemination and security of data. The impact of the CCPA, CPRA or other future laws, regulations and standards may have on our business is uncertain. Complying with these evolving obligations is costly. For instance, expanding definitions and interpretations of what constitutes “personal data” (or the equivalent) in the United States or other countries may increase our compliance costs and legal liability.

Any failure, or perceived failure, by us to comply with any federal, state, local or foreign privacy or consumer protection-related laws, regulations or other principles or orders to which we may be subject or other legal obligations relating to privacy or consumer protection could adversely affect our reputation, brand and business, and may result in claims, investigations, proceedings or actions against us by governmental entities or others or other penalties or liabilities or require us to change our operations and/or cease using certain data sets.

Risks Related to Ownership of Our Common Stock

An active, liquid trading market for our common stock may not be sustained.

An active public market for our common stock may not be sustained. If an active and liquid trading market is not sustained, you may have difficulty selling or may not be able to sell any of the shares of our common stock that you purchase.

Our stock price has been volatile and may continue to be volatile or may decline regardless of our operating performance, and you may not be able to resell your shares of common stock at or above the public offering price.

Our stock price has fluctuated in the past and may continue to be volatile in the future. From January 3, 2022 to December 30, 2022, the trading price of our common stock fluctuated between a high of \$7.75 and a low of \$1.78 per share, closing at \$2.68 per share on December 30, 2022. The market price of our common stock could continue to be subject to significant fluctuations. The price of our common stock may change in response to fluctuations in our results of operations in future periods and also may change in response to other factors, including factors specific to companies in our industry. As a result, our share price may experience significant volatility and may not necessarily reflect the value of our expected performance. Among other factors that could affect our stock price are:

- changes in laws or regulations applicable to our industry or offerings;
- speculation about our business in the press or investment community;
- price and volume fluctuations in the overall stock market;
- volatility in the market price and trading volume of companies in our industry or companies that investors consider comparable;
- share price and volume fluctuations attributable to inconsistent trading levels of our common stock;
- our ability to protect our intellectual property and other proprietary rights and to avoid infringement, misappropriation or violation of the intellectual property and other proprietary rights of third parties or claims by third parties of such infringement, misappropriation or violation;
- sales of our common stock by us or our principal stockholders, officers and directors;
- the sustainability of an active trading market for our common stock;
- success of competitive products or services;
- the public’s response to press releases or other public announcements by us or others, including our filings with the SEC, announcements relating to litigation or significant changes in our key personnel;
- the effectiveness of our internal controls over financial reporting;
- changes in our capital structure, such as future issuances of debt or equity securities;
- our entry into new markets;

- tax developments in the U.S. or other markets;
- strategic actions by us or our competitors, such as acquisitions or restructurings; and
- changes in accounting principles.

Further, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. In addition, the stock prices of many renewable energy companies have experienced wide fluctuations that have often been unrelated to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as inflation, recessions, interest rate changes or international currency fluctuations, may cause the market price of our common stock to decline. As a result, you may not be able to resell any of your shares of our common stock at or above the price paid.

We do not intend to pay dividends on our common stock for the foreseeable future.

We have never declared or paid any cash dividends on our common stock. We currently intend to retain any future earnings and do not expect to declare or pay any cash dividends for the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, after taking into account our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant. As a result, capital appreciation in the price of our common stock, if any, may be your only source of gain on an investment in our common stock.

The price of our common stock could decline if securities analysts do not publish research or if securities analysts or other third parties publish inaccurate or unfavorable research about us.

Our stock price and trading volume are heavily influenced by the way analysts and investors interpret our financial information and other disclosures. If securities or industry analysts do not publish research or reports about our business, delay publishing reports about our business, or publish negative reports about our business, regardless of accuracy, our common stock price and trading volume could decline.

The trading market for our common stock depends, in part, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. Currently, several analysts cover our company. If the number of analysts that cover us declines, demand for our common stock could decrease and our common stock price and trading volume may decline.

Even if our common stock is actively covered by analysts, we do not have any control over the analysts or the measures that analysts or investors may rely upon to forecast our future results. Over-reliance by analysts or investors on any particular metric to forecast our future results may result in forecasts that differ significantly from our own.

Our directors, executive officers and principal stockholders will continue to have substantial control over our company, which could limit your ability to influence the outcome of key transactions, including a change of control.

Our directors, executive officers and each of our 5% stockholders and their affiliates, in the aggregate, beneficially own approximately 51% of the outstanding shares of our common stock, based on the number of shares outstanding as of December 31, 2022. As a result, these stockholders, if acting together, will be able to influence or control matters requiring approval by our stockholders, including the election of directors and the approval of mergers, acquisitions or other extraordinary transactions. They may also have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. This concentration of ownership may have the effect of delaying, preventing or deterring a change of control of our company, could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company and might ultimately affect the market price of our common stock.

Anti-takeover provisions in our governing documents and under Delaware law could make an acquisition of us more difficult, limit attempts by our stockholders to replace or remove our current management and depress the market price of our common stock.

Our certificate of incorporation, bylaws and Delaware law contain provisions that could have the effect of rendering more difficult, delaying or preventing an acquisition deemed undesirable by our board of directors. Among others, our amended and restated certificate of incorporation and amended and restated bylaws include the following provisions:

- a staggered board, which means that our board of directors is classified into three classes of directors with staggered three-year terms;

- limitations on convening special stockholder meetings, which could make it difficult for our stockholders to adopt desired governance changes;
- advance notice procedures, which apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders;
- a prohibition on stockholder action by written consent, which means that our stockholders will only be able to take action at a meeting of stockholders;
- a forum selection clause, which means certain litigation against us can only be brought in Delaware;
- no authorization of cumulative voting, which limits the ability of minority stockholders to elect director candidates;
- directors will only be able to be removed for cause;
- certain amendments to our certificate of incorporation will require the approval of two-thirds of the then outstanding voting power of our capital stock;
- the affirmative vote of two-thirds of the then outstanding voting power of our capital stock, voting as a single class, is required for stockholders to amend or adopt any provision of our bylaws; and
- the authorization of undesignated or “blank check” preferred stock, the terms of which may be established and shares of which may be issued without further action by our stockholders.

In addition, we are governed by the provisions of Section 203 of the Delaware General Corporation Law (“DGCL”), which generally prohibits a Delaware corporation from engaging in a broad range of business combinations with any “interested” stockholder for a period of three years following the date on which the stockholder becomes an “interested” stockholder.

Any provision of our amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying, preventing or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock and could also affect the price that some investors are willing to pay for our common stock.

Our governing documents also provide that the Delaware Court of Chancery will be the sole and exclusive forum for substantially all disputes between us and our stockholders and federal district courts will be the sole and exclusive forum for Securities Act claims, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation provides that, unless we consent to the selection of an alternative forum, the Delaware Court of Chancery is the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a breach of fiduciary duty owed by any of our directors, officers or other employees to us or to our stockholders, (iii) any action asserting a claim against us arising pursuant to the DGCL, our certificate of incorporation or our bylaws, (iv) any action to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws, (v) any action asserting a claim against us that is governed by the internal affairs doctrine or (vi) any action asserting an “internal corporate claim” as defined in Section 115 of the DGCL; provided, however, that the exclusive forum provisions will not apply to suits brought to enforce any liability or duty created by the Exchange Act or to any claim for which the federal courts have exclusive jurisdiction. Our certificate of incorporation further provides that, unless we consent in writing to the selection of an alternative forum, the federal district courts are the sole and exclusive forum for the resolution of any complaint asserting a right under the Securities Act of 1933, as amended (the “Securities Act”), subject to a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision. We note that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. The choice of forum provisions may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the choice of forum provisions contained in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially and adversely affect our business, financial condition and results of operations.

We are an “emerging growth company” and have taken advantage of the reduced disclosure requirements applicable to emerging growth companies which may make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act. As an emerging growth company, we are not required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, we have

reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and we are exempt from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. Additionally, as an emerging growth company, we have elected to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. As such, our consolidated financial statements may not be comparable to companies that comply with public company effective dates. Investors may find our shares of common stock less attractive because we rely on these provisions. If some investors find our shares of common stock less attractive as a result of the foregoing, there may be a less active trading market for our shares and our share price may be more volatile.

The requirements of being a public company may strain our resources and distract our management, which could make it difficult to manage our business, particularly after we are no longer an “emerging growth company.”

As a public company, we are subject to the reporting requirements of the Exchange Act and the requirements of the Sarbanes-Oxley Act. These requirements may place a strain on our systems and resources. The Exchange Act requires that we file annual, quarterly and current reports with respect to our business and financial condition. The Sarbanes-Oxley Act requires that we maintain effective disclosure controls and procedures and internal controls over financial reporting. Section 404(a) of the Sarbanes-Oxley Act requires that management assess and report annually on the effectiveness of our internal control over financial reporting and identify any material weaknesses in our internal controls over financial reporting. Our assessment and report by management for the year ended December 31, 2022, may be found in "Part II, Item 9A. Controls and Procedures" of this Annual Report. To maintain and improve the effectiveness of our disclosure controls and procedures, we have committed significant resources, hired additional staff and provided additional management oversight. We have implemented additional procedures and processes for the purpose of addressing the standards and requirements applicable to public companies. Sustaining our growth also will require us to commit additional management, operational and financial resources to identify new professionals to join our firm and to maintain appropriate operational and financial systems to adequately support expansion. These activities may divert management's attention from other business concerns and will result in increased costs to us, which could have a material adverse effect on our results of operations, financial condition or business.

As an “emerging growth company” as defined in the JOBS Act, we have taken advantage of certain temporary exemptions from various reporting requirements including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. We have elected to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies, as permitted by the JOBS Act.

We had previously identified material weaknesses in our internal controls over financial reporting which we determined have been remediated as of December 31, 2022. If we experience additional material weaknesses or otherwise fail to maintain effective internal controls over financial reporting in the future, our ability to timely and accurately report our financial condition and results of operations or comply with applicable laws and regulations could be impaired, which may adversely affect investor confidence in us and, as a result, the market price of our common stock.

As a public company, our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. generally accepted accounting principles. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented or detected on a timely basis.

During 2021 and 2022, management initiated actions to remediate material weaknesses identified in 2019 and 2020. Material weaknesses were noted in three key areas (i) lack of key experienced personnel, (ii) inadequate controls over our period-end close and financial reporting process, and (iii) ineffective information technology general controls. Based on the results of that evaluation as described further in "Part II, Item 9A. Controls and Procedures" of this Annual Report, our principal executive officer and our principal financial officer have concluded that our internal control over financial reporting was effective as of December 31, 2022.

If we were to fail to maintain effective internal controls over financial reporting or identify additional material weaknesses in the future, failure to remediate those material weaknesses could prohibit us from producing timely and accurate financial statements, which may adversely affect the market price of our common stock and we could become subject to litigation or investigations by the stock exchange on which our securities are listed, the SEC, or other regulatory authorities, which could require additional financial and management resources.

Risks Related to COVID-19 and Other Health Epidemics

We face risks related to actual or threatened health epidemics, such as the COVID-19 pandemic, and other outbreaks, which could significantly disrupt our operations.

Our business has been and could continue to be adversely impacted by the effects of a widespread outbreak of contagious disease, including the recent COVID-19 pandemic. Any widespread outbreak of contagious diseases, or other adverse public health developments, has in the past caused and in the future could cause disruption to, among other things, our contract manufacturers located in the United States and elsewhere around the world, which has in the past caused and in the future could cause delays in our supply chain and product shipments and delays in project completion, as well as reductions in customer support trainings and monitoring of our contract manufacturers, which could adversely affect our business, operations and customer relationships.

During 2020, 2021 and a portion of 2022, we experienced significant supply chain disruptions that caused delays in product deliveries due to diminished vessel capacity, diminished supplier capacity (including local shutdowns and capacity restrictions), port detainment of vessels, port congestion, labor shortages and other stresses on cargo infrastructure (including ports, warehouses, trucking and rail transportation), in each case, as a consequence of the COVID-19 pandemic (including as a result of multiple COVID-19 variants), which contributed to increased shipping costs and increased lead times for delivery of our tracker systems. Although overall transportation costs are still higher than pre-COVID-19 pandemic rates, there has been a decline in recent months in costs for both charter vessels and in the premium container market. In addition, steel prices also started to stabilize and decline during the fourth quarter of 2022. Also, strict shutdowns in China during the latter part of 2022, intended to further control the spread of COVID-19, caused certain administrative delays in our efforts to fully integrate our acquisition of HX Tracker into our systems and processes.

Many of our contracts with customers include liquidated damages that are payable for shipment delays, and we have in the past incurred and may in the future incur liabilities under such provisions if we continue to face challenges from new variants of COVID-19 or future health epidemics.

Additionally, the COVID-19 pandemic negatively impacted ground operations at project sites due to health-related restrictions and worker absenteeism, which resulted in delays in project completions in 2020 and 2021. Although we are not primarily responsible for the construction or installation process at project sites, any further delays due to the COVID-19 pandemic, particularly in international locations that may experience a resurgence in infection or transmission rates, could negatively impact our customer relationships and adversely affect our business.

The residual macroeconomic effects of the COVID-19 pandemic and the resulting economic downturn that began in 2020, including a continuing tight labor market, are continuing to evolve as of the date of this Annual Report and may also have the effect of heightening other risks described in this “Risk Factors” section, that could adversely impact our ability to meet the needs of our customers.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our corporate headquarters located in Austin, Texas, consists of approximately 9,278 square feet of office space, the lease for which expires on October 31, 2025. We also have a lease expiring in 2026 for an applications laboratory located in Austin, Texas, consisting of 4,700 square feet.

In addition, we also lease approximately 5,300 square feet of warehouse space and 1,100 square feet of sales and support office space in Brendale, Australia, and 2,500 and 2,860 square feet of sales and support office space in Hyderabad and Bangalore, India, respectively. We are also a member of SolarTAC, a collaborative research facility aimed at advancing proprietary and collaborative research projects to support the growth of individual solar energy companies as well as the solar industry as a whole. Through our SolarTAC membership, we have access to a development sandbox of 174,240 square feet in Aurora, Colorado, that we primarily use for customer training, product development and certification. We expect to relocate the Colorado operations to Texas during 2023. Our SolarTAC Chennai, India facility has approximately 43,560 square feet of space. We also entered into a new lease in January 2023 for 7,522 square feet of additional office space in Chennai, India.

We outsource all manufacturing to contract manufacturing partners and currently do not own or lease any manufacturing facilities. We are in the process of leasing a manufacturing facility outside of Houston in Sealy, Texas

through our partnership with Taihua New Energy (Thailand) Co., LTD dedicated to producing steel components, including torque tubes, for utility scale projects. This facility is expected to begin commercial production in mid-2023.

We believe that our existing properties are in good condition and are sufficient and suitable for the conduct of our business for the foreseeable future. To the extent our needs change as our business grows, we expect that additional space and facilities will be available.

Item 3. Legal Proceedings.

The Company may be involved in various claims, lawsuits, investigations, and other proceedings, arising from the normal course of its business. As of the date of this Annual Report, we are not involved in any material legal proceedings.

We were a party to certain litigation styled FCX Solar, LLC v. FTC Solar, Inc., Case Nos. 1:21-cv-03556-RA and 1:21-cv-08766-RA, in the United States District Court for the Southern District of New York, pursuant to which FCX Solar, LLC (“FCX”) filed a lawsuit alleging breach of contract, fraud and unjust enrichment claims related to a patent license agreement and consulting relationship between us and FCX, and seeking damages of approximately \$134 million. On December 29, 2022, we entered into a settlement agreement with FCX (the “Settlement Agreement”), pursuant to which, in full settlement of this litigation, (i) we agreed to (a) pay FCX an aggregate of \$1.5 million in certain installments, and (b) issue to FCX 797,396 shares of our common stock, par value \$0.0001 per share, valued at \$2.0 million, based on a daily volume weighted average share price of our common stock on The Nasdaq Global Market in the ten consecutive trading days prior to entry into the Settlement Agreement, which was \$2.508163 per share, and (ii) we and FCX agreed to an arrangement whereby FCX has granted us a worldwide license under certain of FCX's patents to make, have made, use, sell, offer for sale, lease, import, export, or otherwise dispose of any and all our products for an initial term of three years, subject to annual renewals at our option. An initial cash payment and the shares of stock were issued to FCX in January 2023, pursuant to the terms of the Settlement Agreement.

Item 4. Mine Safety Disclosures.

N/A.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

(a) Market information

Our common stock, \$0.0001 par value, is currently trading on the Nasdaq Global Market under the symbol “FTCI”.

(b) Holders

At January 31, 2023, there were 46 holders of record of our common stock.

(c) Dividends

We have not paid any cash dividends on our common stock to date. The payment of any cash dividends in the future is within the discretion of our board of directors and is subject to certain limitations under our Senior Secured Revolving Credit Facility Credit Agreement entered into on April 30, 2021, with various lenders, including Barclays Bank PLC, as amended.

(d) Securities authorized for issuance under equity compensation plans

Shares of our common stock were issuable under our 2017 Stock Incentive Plan (the "2017 Plan") and our 2021 Stock Incentive Plan (the "2021 Plan"), both of which were adopted by our board of directors, as of December 31, 2022 as follows:

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders:			
Stock options	6,809,850	\$ 4.29	N/A
Restricted stock units and awards	7,072,663	—	N/A
Total	13,882,513	\$ 4.29	14,109,003

On July 1, 2022, we filed a registration statement on Form S-8 to register 5,000,000 shares of common stock for issuance upon the settlement of RSUs and the exercise of stock options previously granted under the 2017 Plan that remain outstanding. No new awards have been or will be granted under the 2017 Plan following the effectiveness of our 2021 Plan on April 27, 2021. As part of this registration statement on July 1, 2022, we also registered an additional 3,704,785 shares of common stock issuable under the 2021 Plan, which were in addition to the 12,645,239 shares previously registered in April 2021.

Our board of directors also adopted the 2021 Employee Stock Purchase Plan ("2021 ESPP Plan") immediately after our IPO in April 2021 in order to provide our employees and our designated subsidiaries with an opportunity to purchase our common stock through accumulated payroll deductions at 85% of the stock's fair market value. As of December 31, 2022, this plan had not yet been implemented internally within the Company and no purchases of common stock have been made pursuant to the 2021 ESPP Plan.

(e) Recent Sales of Unregistered Securities

In the three years preceding the date of this Annual Report, we have sold the following securities without registration under the Securities Act:

Common Stock Issuances

In March 2020, we issued an aggregate of 1,111,112 pre-split shares of our common stock to South Lake One LLC at a pre-split purchase price of \$27.00 per share, for an aggregate purchase price of \$30,000,024.

On June 14, 2022, we issued 1,000,000 shares of common stock to certain former stockholders of HX Tracker as partial consideration for our acquisition of this business as described further in Note 3 "Acquisitions" included in our consolidated financial statements in Part II, Item 8 of this Annual Report. These shares were issued in a private placement exempt from the registration requirements of the Securities Act, in reliance on the exemptions set forth in Section 4(a)(2) of the Securities Act and Rule 506 under Regulation D.

The shares must be held indefinitely and may not be resold, transferred or otherwise disposed of without either (i) registration under the Securities Act and registration or qualification under applicable U.S. state securities laws or (ii) an exemption from the registration requirements of the Securities Act, and compliance with U.S. state securities laws and the applicable laws of any other jurisdiction, and such appropriate legends were affixed to the shares.

Plan-Related Issuances

In the three years preceding the date of this Annual Report, we granted to our directors, officers and employees options to purchase an aggregate of 525,723 shares (on a post-split basis) of our common stock at an exercise price of \$0.48 per share (on a post-split basis). In addition, we granted 18,488,192 RSUs (on a post-split basis) having estimated grant date values ranging from \$3.26 to \$13.50 per share (on a post-split basis).

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. We believe the offers, sales and issuances of the above securities were exempt from registration under the Securities Act (or Regulation D or Regulation S promulgated thereunder) by virtue of Section 4(a)(2) of the Securities Act because the issuance of securities to the recipients did not involve a public offering, or in reliance on Rule 701 because the transactions were pursuant to a written compensatory plan or contract relating to compensation as provided under such rule. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

(f) Use of proceeds from IPO

On April 30, 2021, the Company completed an IPO (Commission file number 333-254797) of 19,840,000 shares of its common stock receiving proceeds of \$241.2 million, net of underwriting discounts and commissions, but before offering costs. Prior to the completion of the IPO, the board of directors and stockholders approved an approximately 8.25-for-1 forward stock split of the Company's shares of common stock which became effective on April 28, 2021. Proceeds from the IPO were used to purchase an aggregate of 4,455,384 shares of our common stock at a cost of \$54.2 million, including shares resulting from the settlement of certain vested restricted stock units and exercise of certain options in connection with the IPO at the IPO price, less underwriting discounts and commissions. The remaining proceeds have been used and continue to be used for general corporate purposes, including working capital, capital expenditures and operating expenses. There has been no material change in our planned use of the net proceeds from the IPO as described in our final prospectus filed with the SEC pursuant to Rule 424(b).

(g) Purchases of equity securities by the issuer and affiliated purchasers

No purchases of equity securities were made during the fourth quarter of 2022.

Item 6. [Reserved]

Not applicable.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes and other information included elsewhere in this Annual Report. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from such forward-looking statements. Factors that could cause or contribute to those differences include, but are not limited to, those identified below and those discussed in Part I, Item 1A. "Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements" included elsewhere in this Annual Report. Additionally, our historical results are not necessarily indicative of the results that may be expected in any future period.

Overview

FTC Solar, Inc. (the “Company”, “we”, “our”, or “us”) was founded in 2017 and is incorporated in the state of Delaware. We are a global provider of advanced solar tracker systems, supported by proprietary software and value-added engineering services. Our mission is to provide differentiated products, software, and services that maximize energy generation and cost savings for our customers, and to help facilitate the continued growth and adoption of solar power globally. Trackers significantly increase the amount of solar energy produced at a solar installation by moving solar panels throughout the day to maintain an optimal orientation relative to the sun. Our primary tracker system is currently marketed under the Voyager brand name (“Voyager”). Voyager is a next-generation two-panel in-portrait (“2P”) single-axis tracker solution that we believe offers industry-leading performance and ease of installation. In September 2022, we announced the introduction of Pioneer, a new and differentiated one module-in-portrait (“1P”) solar tracker solution that allows for a pile count reduction per megawatt compared to similar industry-leading solutions, as well as providing what we believe to be other benefits, such as faster assembly capability, giving potential customers the possibility for increased flexibility and additional cost savings. We have also launched a new solution for thin-film modules, filling a gap in our offering for certain U.S. modules. We have a team of dedicated renewable energy professionals with significant project installation experience focused on delivering cost reductions to our U.S. and worldwide clients across the solar project development and construction cycle. The Company is headquartered in Austin, Texas, and has international subsidiaries in Australia, China, India and South Africa.

In April 2021, we completed an initial public offering (“IPO”) of 19,840,000 shares of our common stock receiving proceeds of \$241.2 million, net of underwriting discounts and commissions, but before offering costs, and began trading on the Nasdaq Global Market under the symbol “FTCI”. Prior to the completion of the IPO, the board of directors and stockholders approved an approximately 8.25-for-1 forward stock split (the “Forward Stock Split”) of the Company’s shares of common stock which became effective on April 28, 2021. Proceeds from the IPO were used for general corporate purposes, with \$54.2 million used to purchase an aggregate of 4,455,384 shares of our common stock, including shares resulting from the settlement of certain vested restricted stock units (“RSUs”) and exercise of certain options in connection with the IPO at the IPO price, less underwriting discounts and commissions.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups (JOBS) Act. Under the JOBS Act, we elected to use the allowed extended transition period to delay adopting new or revised accounting standards until such time as those standards apply to private companies.

Key Factors Affecting Our Performance

Government Regulations. Changes in the U.S. trade environment, including the imposition of import tariffs, AD/CVD investigations and the UFLPA, which became effective in June 2022, can have an impact on the timing of developer projects. The UFLPA resulted in new rules for module importers and reviews by CBP. There is currently uncertainty in the market around achieving full compliance with UFLPA, whether related to sufficient traceability of materials or other factors. Escalating trade tensions, particularly between the United States and China, have led to increased tariffs and trade restrictions, including tariffs applicable to certain raw materials and components for our products. We have taken measures with the intention of mitigating the effect of tariffs and the impact of AD/CVD and UFLPA on our business by reducing our reliance on China. In 2019, 90% of our supply chain was sourced from China. As of December 31, 2022, we have qualified suppliers outside of China for all our commodities and reduced the extent to which our supply chain for U.S.-based projects is subject to existing tariffs. We have entered into agreements with manufacturers in the United States, Mexico, Canada, Spain, Brazil, Turkey, Saudi Arabia, India, Thailand, Vietnam and Korea to diversify our supply chain and optimize costs. On June 6, 2022, President Biden issued an Executive Order allowing U.S. solar deployers the ability to import solar modules and cells from Cambodia, Malaysia, Thailand and Vietnam free from certain duties for 24 months, along with other incentives designed to accelerate U.S. domestic production of clean energy technologies.

The most notable incentive program impacting our U.S. business has been the ITC for solar energy projects, which allows taxpayers to offset their U.S. federal income tax liability by a certain percentage of their cost basis in solar energy systems placed in service for commercial use. The Inflation Reduction Act of 2022, passed by the U.S. Congress and signed into law by President Biden on August 16, 2022, expanded and extended the tax credits and other tax benefits available to solar energy projects and the solar energy supply chain. ITCs have been extended for such projects through at least 2032 and, depending on the location of a particular project and its ability to satisfy certain labor and domestic content requirements, the ITC percentage can range between 30% and 50%. Manufacturers of specific solar components are also now eligible to claim production tax credits as an alternative to the ITC. Implementing regulations for this law are still in process. We believe this law will bolster and extend future demand for our products in the United States, however we note that implementing regulations for this law are still in process, which creates uncertainty about the extent of its impact on our Company and the solar energy industry.

Disruptions in Transportation and Supply Chain. Our costs are affected by certain component costs including steel, motors and micro-chips, as well as transportation costs. Current market conditions and international conflicts that constrain supply of materials and disrupt the flow of materials from international vendors impact the cost of our products and services, along with overall rates of inflation in the global economy, which have been higher than recent historical rates. We have also seen increases in domestic fuel prices and transportation costs in the past couple of years. These cost increases impact our operating margins. We have taken steps to expand and diversify our manufacturing partnerships and have in the past employed alternative modes of transportation to mitigate the impact of the current headwinds in the global supply chain and logistics markets. Although overall transportation costs are higher than pre-pandemic rates, there has been a decline in recent months in costs for both charter vessels and in the premium container market, as well as an easing of congestion in U.S. ports. However, recent COVID-19 shutdowns in China have created a backlog of exports and increased demand for container shipments from China. We continue to monitor the logistics markets and have adjusted our use of various modes of transportation when warranted to optimize our transportation costs. Additionally, in February 2022, we contracted with a related-party consulting firm to support us in making ongoing improvements to our processes and performance in various areas, including design, sourcing, logistics, pricing, software and our distributed generation business. Further information may be found in Note 17 "Related parties" included in our consolidated financial statements in Part II, Item 8 of this Annual Report with regard to the related-party consulting firm. We intend to maintain a sharp focus on our design to value initiative to improve margins by reducing manufacturing and material costs of our products.

Megawatts ("MW") Shipped and Average Selling Price ("ASP"). The primary operating metric we use to evaluate our sales performance and to track market acceptance of our products is the change in quantity of MW shipped from period to period. MW are measured for each individual project and are calculated based on the expected output of that project once installed and fully operational. We also utilize metrics related to price and cost of goods sold per watt, including the change in ASP from period to period and cost per watt. ASP is calculated by dividing total revenue by total watts and cost per watt is calculated by dividing total costs of goods sold by total watts. These metrics enable us to evaluate trends in pricing, manufacturing and logistics costs and profitability. Events such as the COVID-19 pandemic, global inflation rates and international conflicts can impact the U.S. economy, global supply chains, and our business. These impacts can cause significant shipping delays and cost increases, as well as offsetting ASP increases, and also raise the price of inputs like steel and logistics, affecting our cost per watt.

Investment in technology and personnel. We invest in both the people and technology behind our products. We intend to continue making significant investments in the technology for our products and expansion of our patent portfolio to attract and retain customers, expand the capabilities and scope of our products, and enhance user experience. We also intend over time to make significant investments to attract and retain employees in key positions, including sales leads, engineers, software developers, quality assurance personnel, supply chain personnel, product management, and operations personnel, to help us drive additional efficiencies across our marketplace and, in the case of sales leads, to continue to enhance and diversify our sales capabilities, including international expansion.

Impact of the COVID-19 Pandemic. In March 2020, the World Health Organization declared that the worldwide spread and severity of a new coronavirus, referred to as COVID-19, was severe enough to be characterized as a pandemic. In response to the initial and continued spread of COVID-19, governmental authorities in the United States and around the world imposed, and in some cases continue to impose, various restrictions designed to slow the pace of the pandemic, including restrictions on travel and other restrictions that prohibited employees from going to work, including in cities where we have offices, employees, and customers, causing severe disruptions in the worldwide economy. The continued implications of the COVID-19 pandemic on our business, financial condition and results of operations remain uncertain and will depend on certain developments, including the duration and severity of the COVID-19 pandemic, the impact of virus variants, the rate of vaccinations, the COVID-19 pandemic's impact on our customers and suppliers and the range of governmental and community reactions to the pandemic. While our day-to-day operations have been affected, the impact has been less pronounced as most of our staff has worked remotely and continued to develop our product offerings, source materials and install our products. However, we have

experienced significant supply chain disruptions that have caused delays in product deliveries due to diminished vessel capacity and port detainment of vessels as a consequence of the COVID-19 pandemic (including as a result of multiple COVID-19 variants), which have contributed to an increase in lead times for delivery of our tracker systems. For instance, we experienced a COVID-19-related supplier production slowdown in India at the end of March 2021, which continued throughout 2021 due to the emergence of the Omicron variant. In addition, recent COVID-19 shutdowns in China have created a backlog of exports and increased demand for container shipments from China. The reduced capacity for logistics has caused increases in logistics costs compared to pre-pandemic rates, although certain costs have begun to decline in recent months. Additionally, ground operations at project sites have been impacted by health-related restrictions, shelter-in-place orders and worker absenteeism, which has resulted in delays in project completions, and these restrictions have also hindered our ability to provide on-site support to our customers and conduct inspections of our contract manufacturers. The disruptions in the global supply chain have resulted in extended lead times for some of our component parts. Management will continue to monitor the impact of the global situation on our financial condition, cash flows, operations, contract manufacturers, industry, workforce and customer relationships.

Impact of Climate Change. Climate change has primarily impacted our business operations by increasing demand for solar power generation and, as a result, for use of our products. While climate change has not resulted in any material negative impact to our operations to date, we recognize the risk of disruptions to our supply chain due to extreme weather events. This has led us to expand the diversity of our supplier base and to partner with more local suppliers to reduce shipping and transportation needs. We are also increasingly partnering with larger scale steel producers rather than smaller suppliers to facilitate scaling of our operations while remaining conscious of the environmental impacts of steel manufacturing as the regulatory landscape around these high-emitting industries evolves.

We also attempt to mitigate the climate-related risks from the use of our products by designing our equipment and systems to have a high-slope tolerance and wind mitigation capabilities, while at the same time reducing the required foundation/pile count needed. This allows our trackers to be installed in increasingly hostile environments with minimal disturbance to the surrounding land.

Liquidity. See "Liquidity and Capital Resources" below for a discussion of the impact of the items above on our liquidity position.

Non-GAAP Financial Measures

Adjusted EBITDA, adjusted net loss and adjusted earnings per share ("EPS")

We utilize Adjusted EBITDA, Adjusted Net Loss, and Adjusted EPS as supplemental measures of our performance. We define Adjusted EBITDA as net loss plus (i) provision (benefit) for income taxes, (ii) interest expense, net, (iii) depreciation expense, (iv) amortization of intangibles, (v) stock-based compensation, (vi) non-routine legal fees, certain severance and other costs (credits), and (vii) the loss (income) from our unconsolidated subsidiary. We also deduct the gains from the disposal of our investment in unconsolidated subsidiary and from extinguishment of our debt from net loss in arriving at Adjusted EBITDA. We define Adjusted Net Loss as net loss plus (i) amortization of debt issue costs and intangibles, (ii) stock-based compensation, (iii) non-routine legal fees, severance and certain other costs (credits), (iv) the loss (income) from our unconsolidated subsidiary, and (v) the income tax expense (benefit) of those adjustments. We also deduct the gains or add back the losses from the disposal of our investment in unconsolidated subsidiary and from extinguishment of our debt from net loss in arriving at Adjusted Net Loss. Adjusted EPS is defined as Adjusted Net Loss on a per share basis using the weighted average diluted shares outstanding.

Adjusted EBITDA, Adjusted Net Loss, and Adjusted EPS are intended as supplemental measures of performance that are neither required by, nor presented in accordance with, U.S. generally accepted accounting principles ("GAAP"). We present Adjusted EBITDA, Adjusted Net Loss and Adjusted EPS, because we believe they assist investors and analysts in comparing our performance across reporting periods on an ongoing basis by excluding items that we do not believe are indicative of our core operating performance. In addition, we use Adjusted EBITDA, Adjusted Net Loss and Adjusted EPS to evaluate the effectiveness of our business strategies.

Among other limitations, Adjusted EBITDA, Adjusted Net Loss, and Adjusted EPS do not reflect (i) our cash expenditures, or future requirements, for capital expenditures or contractual commitments, and (ii) the impact of certain cash charges resulting from matters we consider not to be indicative of our ongoing operations. Further, the adjustments noted in Adjusted EBITDA do not reflect the impact of any income tax expense or benefit. Additionally, other companies in our industry may calculate Adjusted EBITDA, Adjusted Net Loss, and Adjusted EPS differently than we do, which limits its usefulness as a comparative measure.

Because of these limitations, Adjusted EBITDA, Adjusted Net Loss, and Adjusted EPS should not be considered in isolation or as substitutes for performance measures calculated in accordance with GAAP, and you should not rely on any single financial measure to evaluate our business. These non-GAAP financial measures, when presented, are reconciled to the most closely applicable GAAP measure as disclosed below:

	Year ended December 31,					
	2022		2021		2020	
(in thousands, except shares and per share data)	Adjusted EBITDA	Adjusted Net Loss	Adjusted EBITDA	Adjusted Net Loss	Adjusted EBITDA	Adjusted Net Loss
Net loss per GAAP	\$ (99,613)	\$ (99,613)	\$ (106,589)	\$ (106,589)	\$ (15,924)	\$ (15,924)
Reconciling items -						
Provision (benefit) for income taxes	435	—	169	—	(83)	—
Interest expense, net	978	—	814	—	364	—
Amortization of debt issue costs in interest expense	—	703	—	461	—	—
Depreciation expense	631	—	232	—	14	—
Amortization of intangibles	269	269	—	—	33	33
Stock-based compensation	20,303	20,303	61,765	61,765	1,818	1,818
Gain from disposal of investment in unconsolidated subsidiary ^(a)	(1,745)	(1,745)	(20,829)	(20,829)	—	—
Gain on extinguishment of debt	—	—	(790)	(790)	116	116
Non-routine legal fees ^(b)	8,495	8,495	2,791	2,791	—	—
Severance ^(c)	1,478	1,478	1,298	1,298	—	—
Other costs ^(d)	2,353	2,353	4,927	4,927	—	—
(Income) loss from unconsolidated subsidiary ^(a)	—	—	354	354	(1,399)	(1,399)
Income tax benefit attributable to adjustments	—	—	—	—	—	(3)
Adjusted Non-GAAP amounts	<u>\$ (66,416)</u>	<u>\$ (67,757)</u>	<u>\$ (55,858)</u>	<u>\$ (56,612)</u>	<u>\$ (15,061)</u>	<u>\$ (15,359)</u>
GAAP net loss per share:						
Basic	N/A	\$ (0.98)	N/A	\$ (1.24)	N/A	\$ (0.23)
Diluted	N/A	\$ (0.98)	N/A	\$ (1.24)	N/A	\$ (0.23)
Adjusted Non-GAAP net loss per share (Adjusted EPS):						
Basic	N/A	\$ (0.67)	N/A	\$ (0.66)	N/A	\$ (0.22)
Diluted	N/A	\$ (0.67)	N/A	\$ (0.66)	N/A	\$ (0.22)
Weighted-average common shares outstanding:						
Basic	N/A	101,408,263	N/A	86,043,051	N/A	68,810,533
Diluted	N/A	101,408,263	N/A	86,043,051	N/A	68,810,533

- (a) Our management excludes the gain from current year collections of contingent contractual amounts arising from the sale in 2021 of our investment in our unconsolidated subsidiary, as well as the gain from the 2021 sale, when evaluating our operating performance, along with the (income) loss from operations of our unconsolidated subsidiary prior to the sale.
- (b) Non-routine legal fees represent legal fees and settlement costs incurred for matters that were not ordinary or routine to the operations of the business.
- (c) Severance costs were incurred related to agreements with certain executives and a 2022 workforce reduction due to restructuring changes.
- (d) Other 2022 costs include certain amounts related to our acquisition of HX Tracker, costs attributable to settlement of stock-based compensation awards in 2022 resulting from our IPO, shareholder follow-on registration costs and other items pursuant to our IPO, write-off of deferred costs relating to certain uncompleted transactions and installment payments relating to a 2021 CEO transition event. Other costs during 2021 include consulting fees in connection with operations and finance, costs associated with our IPO and a 2021 CEO transition.

Key Components of Our Results of Operations

The following discussion describes certain line items in our consolidated statements of operations.

Revenue

Revenue from the sale of our solar tracker systems and customized components of those systems is recognized over time, as work progresses, utilizing an input measure of progress determined by cost incurred to date relative to total expected cost on these projects to correlate with our performance in transferring control over the tracker systems and their components. Revenue from the sale of individual parts is recognized point-in-time as and when control transfers based on the terms of the contract. Revenue from sale of term-based software licenses is recognized upon transfer of control to the customer. Revenue for shipping and handling services is recognized over time based on progress in meeting shipping terms of the arrangements. Subscription revenue, which is derived from our subscription-based enterprise licensing model, and support revenue, which is derived from ongoing security updates and maintenance, are generally recognized on a straight-line basis over the term of the contract.

Our customers include project developers, solar asset owners and engineering, procurement and construction (“EPC”) contractors that design and build solar energy projects. For each individual solar project, we enter into a contract with our customers covering the price, specifications, delivery dates and warranty for the products being purchased, among other things. Our contractual delivery period for our solar tracker systems and related parts can vary depending on size of the project and availability of vessels and other means of delivery. Contracts can range in value from tens of thousands to tens of millions of dollars.

Our revenue is affected by changes in the volume and ASP of our solar tracking systems purchased by our customers and volume of sales of software products and engineering services, among other things. The ASP of our solar tracker systems and quarterly volume of sales is driven by the supply of, and demand for, our products, changes in product mix, geographic mix of our customers, strength of competitors’ product offerings, tariff and import restrictions, supply chain issues and availability of government incentives to the end-users of our products. Additionally, our revenue may be impacted by seasonality due to cold weather, which can cause variability in site construction activity.

The vast majority of our revenue in the periods presented in this Annual Report was attributable to sales in the United States and Australia. Our revenue growth is dependent on continued growth in the number of solar tracker projects and engineering services we win in competitive bidding processes and growth in our software sales each year, as well as our ability to increase our market share in each of the geographies in which we currently compete, expand our global footprint to new emerging markets, grow our production capabilities to meet demand and continue to develop and introduce new and innovative products that address the changing technology and performance requirements of our customers, among other things.

Cost of revenue and gross profit (loss)

We subcontract with third-party manufacturers to manufacture and deliver our products directly to our customers. Our product costs are affected by the underlying cost of raw materials procured by these contract manufacturers, including steel and aluminum; component costs, including electric motors and gearboxes; technological innovation in manufacturing processes; and our ability to achieve economies of scale resulting in lower component costs. We do not currently hedge against changes in the price of raw materials, but we continue to explore opportunities to mitigate the risks of foreign currency and commodity fluctuations through the use of hedges and foreign exchange lines of credit. Some of these costs, primarily personnel, are not directly affected by sales volume.

We have made changes to our headcount over the last three years as we initially scaled up our business and, more recently, in response to current market conditions. Our gross profit may vary period-to-period due to changes in our headcount, ASP, product costs, product mix, customer mix, geographical mix, shipping methods, warranty costs and seasonality. Pursuant to the Coronavirus Aid, Relief, and Economic Security Act (the “CARES Act”), we received employee retention credits during 2021, which reduced the impact of increased personnel costs on our operating results during the prior year comparative period.

Operating expenses

Operating expenses consist of research and development expenses, selling and marketing expenses and general and administrative expenses. Personnel-related costs are the most significant component of our operating expenses and include salaries, benefits, bonuses, commissions and stock-based compensation expenses.

Our increased headcount over a good portion of the last three years has contributed to increased operating costs both in absolute dollars and as a percentage of revenue. While we have recently frozen non-essential hiring in response to current regulatory issues that are negatively impacting solar project activity levels, we expect to resume hiring new employees in the future as needed to support our future expected growth and in response to expected turnover. In addition, our operating costs have been impacted by (i) our level of research activities to originate, develop and enhance our products, (ii) our sales and marketing efforts as we expand our development activities in other parts of the world, and (iii) increased legal and professional fees, compliance costs, insurance, facility costs and other costs associated with our expected growth and in being a public company.

Results of Operations – 2022 Compared to 2021

(in thousands, except percentages)	Year ended December 31,			
	2022		2021	
	Amounts	Percentage of revenue	Amounts	Percentage of revenue
Revenue:				
Product	\$ 63,760	51.8%	\$ 227,397	84.1%
Service	59,306	48.2%	43,128	15.9%
Total revenue	123,066	100.0%	270,525	100.0%
Cost of revenue:				
Product	84,766	68.9%	239,149	88.4%
Service	65,528	53.2%	63,921	23.6%
Total cost of revenue	150,294	122.1%	303,070	112.0%
Gross profit (loss)	(27,228)	(22.1%)	(32,545)	(12.0%)
Operating expenses				
Research and development	9,949	8.1%	11,540	4.3%
Selling and marketing	8,659	7.0%	6,823	2.5%
General and administrative	53,736	43.7%	75,896	28.1%
Total operating expenses	72,344	58.8%	94,259	34.8%
Loss from operations	(99,572)	(80.9%)	(126,804)	(46.9%)
Interest expense, net	(978)	(0.8%)	(814)	(0.3%)
Gain from disposal of investment in unconsolidated subsidiary	1,745	1.4%	20,829	7.7%
Gain on extinguishment of debt	—	0.0%	790	0.3%
Other income (expense), net	(373)	(0.3%)	(67)	0.0%
Loss from unconsolidated subsidiary	—	0.0%	(354)	(0.1%)
Loss before income taxes	(99,178)	(80.6%)	(106,420)	(39.3%)
(Provision) benefit for income taxes	(435)	(0.4%)	(169)	(0.1%)
Net loss	\$ (99,613)	(80.9%)	\$ (106,589)	(39.4%)

Revenue

We generate our revenue in two streams – Product revenue and Service revenue. Product revenue is derived from the sale of solar tracker systems, customized components for those systems, individual part sales for certain specific transactions and the sale of term-based software licenses. Service revenue includes revenue from shipping and handling services, our subscription-based enterprise licensing model and maintenance and support services in connection with the term-based software licenses.

(in thousands)	Year ended December 31,			
	2022	2021	\$ Change	% Change
Product	\$ 63,760	\$ 227,397	\$ (163,637)	(72.0)%
Service	59,306	43,128	16,178	37.5%
Total revenue	\$ 123,066	\$ 270,525	\$ (147,459)	(54.5)%

Product revenue

The decrease in product revenue for the year ended December 31, 2022, as compared to the year ended December 31, 2021, was primarily due to (i) a 56% decrease in MW produced, (ii) a decrease of approximately 35% in ASP, and (iii) a customer concession charge during the year ended December 31, 2022.

The decrease in MW produced was due to the impact of supply chain availability and concerns by project developers and owners over regulatory and tariff issues described below under "Liquidity and Capital Resources", which slowed or pushed out demand for our trackers in comparison to higher production levels for various large projects during the year ended December 31, 2021. We believe the regulatory concerns regarding module availability, among other things, slowed new and existing project activity during the year ended December 31, 2022, by pushing some activity out into 2023 and beyond. The decrease in ASP for our products was the result of a change in the mix of projects between the periods.

Service revenue

The increase in service revenue for the year ended December 31, 2022, as compared to the year ended December 31, 2021, was primarily due to increased shipping and logistics activity levels in 2022 resulting from high production activity in the fourth quarter of 2021, and an increase in ASP for shipping and logistics services due to higher pricing required to cover higher costs. During the year ended December 31, 2021, increases in shipping and logistics costs were not fully recoverable under existing contracts at that time. The differential between service revenues and costs during the year ended December 31, 2022, was largely due to a customer concession charge recorded against revenues during the first quarter of 2022 and higher warehousing costs for products in transit to customers.

Cost of revenue and gross (loss) profit

Cost of revenue consists primarily of costs related to raw materials, freight and delivery, product warranty, and personnel costs (salaries, bonuses, benefits, and stock-based compensation). Personnel costs in cost of revenue include both direct labor costs as well as costs attributable to any individuals whose activities relate to the procurement, installment, and delivery of the finished product and services. Personnel costs during 2021 are reported net of federal employee retention credits received.

Gross profit may vary from period-to-period and is primarily affected by our ASP, product costs, product mix, customer mix, geographical mix, shipping method, logistics costs, warranty costs and seasonality.

(in thousands)	Year ended December 31,			
	2022	2021	\$ Change	% Change
Product	\$ 84,766	\$ 239,149	\$ (154,383)	(64.6)%
Service	65,528	63,921	1,607	2.5%
Total cost of revenue	\$ 150,294	\$ 303,070	\$ (152,776)	(50.4)%
Gross profit (loss)	\$ (27,228)	\$ (32,545)	\$ 5,317	(16.3)%
Gross profit (loss) percentage of revenue	(22.1%)	(12.0%)		

The decrease in cost of revenue for the year ended December 31, 2022, as compared to the year ended December 31, 2021, was primarily driven by (i) a decrease of 56% in MW produced, and (ii) lower stock-based compensation cost as a result of accelerated vesting of stock-based awards following our IPO in 2021. This was partially offset by increases in shipping and logistics costs in 2022 based on higher logistics activity, as well as higher product costs due to project mix changes compared to last year and higher employee costs due to headcount increases.

Our gross profit (loss) percentage of revenue for 2022 was a negative 22.1%, as compared to a negative 12.0% in 2021. We had a gross margin loss in our products for the years ended December 31, 2022 and 2021, as (i) current year volumes were not sufficient to cover certain relatively fixed overhead costs, and (ii) due to certain projects that were in a loss position during the year ended December 31, 2021, due to our inability to pass on significant cost increases to our customers on fixed price contracts. The decline in the gross profit (loss) percentage was largely due to a \$5.0 million customer concession and lower production levels in relation to certain relatively fixed costs during the year ended December 31, 2022. This was partially offset by (i) an increase in shipping and logistics activity levels, as well as increased shipping and logistics revenues in order to cover increased costs, which improved our service margins, despite higher warehousing costs for product in transit to customers, and (ii) lower stock-based compensation costs.

Research and development

Research and development expenses consist primarily of salaries (net of federal employee retention credits received during 2021), employee benefits, stock-based compensation expenses and travel expenses related to our engineers performing research and development activities to originate, develop and enhance our products. Additional expenses include consulting charges, component purchases and other costs for performing research and development on our software products.

(in thousands)	Year ended December 31,			
	2022	2021	\$ Change	% Change
Research and development	<u>\$ 9,949</u>	<u>\$ 11,540</u>	<u>\$ (1,591)</u>	<u>(13.8%)</u>

The decrease in research and development expenses in 2022, as compared to 2021, was primarily attributable to \$2.2 million of lower stock-based compensation expense as a result of accelerated vesting of stock-based awards following our IPO in 2021. This was partially offset by \$0.4 million of higher personnel-related expenses due to higher headcount for much of 2022, as well as severance costs associated with our reduction in force in December 2022. Research and development expenses as a percentage of revenue were 8.1% for the year ended December 31, 2022, compared to 4.3% for the year ended December 31, 2021.

Selling and marketing

Selling and marketing expenses consist primarily of salaries (net of federal employee retention credits received during 2021), employee benefits, stock-based compensation expenses and travel expenses related to our sales and marketing and business development personnel. Additionally, selling and marketing expenses include costs associated with professional fees and support charges for software subscriptions and licenses, trade shows and conventions.

(in thousands)	Year ended December 31,			
	2022	2021	\$ Change	% Change
Selling and marketing	<u>\$ 8,659</u>	<u>\$ 6,823</u>	<u>\$ 1,836</u>	<u>26.9%</u>

The increase in selling and marketing expenses in 2022, as compared to 2021, was primarily attributable to higher provisions for uncollectible receivables totaling \$1.3 million, as well as higher payroll, marketing and travel costs. Selling and marketing expenses as a percentage of revenue were 7.0% for the year ended December 31, 2022, compared to 2.5% for the year ended December 31, 2021.

General and administrative

General and administrative expenses consist primarily of salaries (net of federal employee retention credits received during 2021), employee benefits, stock-based compensation expenses, and travel expenses related to our executives, finance team, and administrative employees. It also consists of legal, consulting, and professional fees, rent and lease expenses pertaining to our headquarters and international offices, business insurance costs and other costs.

(in thousands)	Year ended December 31,			
	2022	2021	\$ Change	% Change
General and administrative	<u>\$ 53,736</u>	<u>\$ 75,896</u>	<u>\$ (22,160)</u>	<u>(29.2%)</u>

The decrease in general and administrative expense in 2022, as compared to 2021, was primarily attributable to \$34.3 million of lower stock-based compensation expense as a result of accelerated vesting of stock-based awards following our IPO in 2021. This was partially offset by (i) higher costs of \$6.3 million for legal fees and settlement of litigation with FCX Solar, LLC in December 2022, as described further in Note 14 "Commitments and contingencies" included in our consolidated financial statements in Part II, Item 8 of this Annual Report, (ii) higher payroll-related costs \$2.8 million due to headcount increases, including costs associated with our December 2022 reduction in force, and (iii) higher insurance and other operating costs of \$1.8 million primarily as a result of being a public company since April 2021. General and administrative expenses as a percentage of revenue were 43.7% for the year ended December 31, 2022, compared to 28.1% for the year ended December 31, 2021.

Interest expense, net

(in thousands)	Year ended December 31,			
	2022	2021	\$ Change	% Change
Interest expense, net	<u>\$ 978</u>	<u>\$ 814</u>	<u>\$ 164</u>	<u>20.1%</u>

Interest expense primarily consists of commitment fees on our revolving credit facility with Barclays Bank that we entered into in April 2021, along with associated debt issue cost amortization and lender fees paid in connection with a June 2022 amendment to our revolving credit facility. Interest income earned on our cash equivalents during the year ended December 31, 2022, totaled approximately \$0.4 million.

Gain from disposal of investment in unconsolidated subsidiary

(in thousands)	Year ended December 31,			
	2022	2021	\$ Change	% Change
Gain from disposal of investment in unconsolidated subsidiary	\$ 1,745	\$ 20,829	\$ (19,084)	(91.6%)

We sold our interest in our unconsolidated subsidiary, Dimension Energy LLC ("Dimension"), on June 24, 2021, recognizing a gain of \$20.6 million on the sale. Dimension is a community solar developer based in Atlanta, Georgia that provides renewable energy solutions for local communities in the United States. The sales agreement with Dimension includes an earnout provision which provides the potential to receive additional contingent consideration of up to approximately \$14.0 million through December 2024, based on Dimension achieving certain performance milestones. The sales agreement also includes a projects escrow release which is an additional contingent consideration to receive \$7 million based on Dimension's completion of certain construction projects in progress at the time of the sale.

During the years ended December 31, 2022 and 2021, we received \$1.7 million and \$0.2 million, respectively, from escrow for subsequent completion of certain construction projects that were in progress at the time of the sale. Prior to the sale of our investment, we incurred a loss from our investment in this unconsolidated subsidiary in 2021 of \$0.4 million.

Gain (loss) on extinguishment of debt

(in thousands)	Year ended December 31,			
	2022	2021	\$ Change	% Change
Gain on extinguishment of debt	\$ —	\$ 790	\$ (790)	(100.0%)

In January 2021, our Paycheck Protection Program ("PPP") loan that was received in April 2020 pursuant to the CARES Act, was forgiven, resulting in a gain on extinguishment of debt. The terms of the CARES Act provided for loan forgiveness if the proceeds were used to retain and pay employees and for other qualifying expenditures.

Results of Operations – 2021 Compared to 2020

(in thousands, except percentages)	Year ended December 31,			
	2021		2020	
	Amounts	Percentage of revenue	Amounts	Percentage of revenue
Revenue:				
Product	\$ 227,397	84.1%	\$ 158,925	84.8%
Service	43,128	15.9%	28,427	15.2%
Total revenue	270,525	100.0%	187,352	100.0%
Cost of revenue:				
Product	239,149	88.4%	155,967	83.2%
Service	63,921	23.6%	27,746	14.8%
Total cost of revenue	303,070	112.0%	183,713	98.1%
Gross profit (loss)	(32,545)	(12.0%)	3,639	1.9%
Operating expenses				
Research and development	11,540	4.3%	5,222	2.8%
Selling and marketing	6,823	2.5%	3,545	1.9%
General and administrative	75,896	28.1%	11,798	6.3%
Total operating expenses	94,259	34.8%	20,565	11.0%
Loss from operations	(126,804)	(46.9%)	(16,926)	(9.0%)
Interest expense, net	(814)	(0.3%)	(364)	(0.2%)
Gain from disposal of investment in unconsolidated subsidiary	20,829	7.7%	—	0.0%
Gain (loss) on extinguishment of debt	790	0.3%	(116)	(0.1%)
Other expense	(67)	0.0%	—	0.0%
Income (loss) from unconsolidated subsidiary	(354)	(0.1%)	1,399	0.7%
Loss before income taxes	(106,420)	(39.3%)	(16,007)	(8.5%)
(Provision) benefit for income taxes	(169)	(0.1%)	83	0.0%
Net loss	\$ (106,589)	(39.4%)	\$ (15,924)	(8.5%)

Revenue

(in thousands)	Year ended December 31,			
	2021	2020	\$ Change	% Change
Product	\$ 227,397	\$ 158,925	\$ 68,472	43.1%
Service	43,128	28,427	14,701	51.7%
Total revenue	\$ 270,525	\$ 187,352	\$ 83,173	44.4%

Product revenue

The increase in product revenue for the year ended December 31, 2021, as compared to the year ended December 31, 2020, was primarily due to a 25% increase in MW shipped, as well as an increase of approximately 15% in ASP.

Service revenue

The increase in service revenue for the year ended December 31, 2021, as compared to the year ended December 31, 2020, was primarily due to an increase in shipping and logistics revenue on Voyager Tracker sales as a result of a 25% increase in MW shipped and by increased contract prices which helped partially offset a portion of the rising shipping and logistics costs, much of which was not fully recoverable.

Cost of revenue and gross (loss) profit

(in thousands)	Year ended December 31,			
	2021	2020	\$ Change	% Change
Product	\$ 239,149	\$ 155,967	\$ 83,182	53.3%
Service	63,921	27,746	36,175	130.4%
Total cost of revenue	\$ 303,070	\$ 183,713	\$ 119,357	65.0%
Gross profit (loss)	\$ (32,545)	\$ 3,639	\$ (36,184)	(994.3%)
Gross profit (loss) percentage of revenue	(12.0%)	1.9%		

The increase in cost of revenue for the year ended December 31, 2021, as compared to the year ended December 31, 2020, was primarily driven by the aforementioned increase in MW shipped as well as increases in steel costs and shipping and logistics costs. Cost per MW increased 32% due to increases in steel prices and shipping and logistics

costs. Overhead costs were higher year over year due to increased headcount to support our growth and the higher stock-based compensation expense due to our IPO triggering vesting of a significant number of shares in the second quarter of 2021, as well as awards granted to new employees in 2021. Cost of revenue in 2021 was also impacted by approximately \$8.6 million in expenditures related to certain retrofits, remediations and product reconfigurations for certain of our solar tracker systems that had been previously installed, or were in the process of being installed, at customer sites.

Our gross profit (loss) percentage of revenue for 2021 was a negative 12.0%, as compared to a positive 1.9% in 2020. The decrease was due primarily to increased logistics costs that were not passed on to our customers, increases in headcount as we scaled up our operating structure and higher stock-based compensation triggered by the IPO and grants to new employees.

Research and development

(in thousands)	Year ended December 31,			
	2021	2020	\$ Change	% Change
Research and development	\$ 11,540	\$ 5,222	\$ 6,318	121.0%

The increase in research and development expenses in 2021, as compared to 2020, was primarily attributable to (i) \$3.6 million of higher stock-based compensation expense mainly triggered by our 2021 IPO, along with grants to new employees during 2021, (ii) \$1.3 million in higher personnel-related expenses, as headcount increased allowing for expansion of our research and development activities designed to enhance our products, (iii) an increase of \$0.7 million in professional services largely related to increased patent protection costs, and (iv) higher expenditures related to our design-to-value initiatives to reduce the costs of our tracker product. Research and development expenses as a percentage of revenue were 4.3% for the year ended December 31, 2021, compared to 2.8% for the year ended December 31, 2020.

Selling and marketing

(in thousands)	Year ended December 31,			
	2021	2020	\$ Change	% Change
Selling and marketing	\$ 6,823	\$ 3,545	\$ 3,278	92.5%

The increase in selling and marketing expenses in 2021, as compared to 2020, was primarily attributable to (i) \$2.0 million of higher stock-based compensation expense triggered by our 2021 IPO and grants to new employees in 2021, and (ii) \$0.9 million in higher personnel-related expenses, as headcount increased to support our international expansion plans. Selling and marketing expenses as a percentage of revenue were 2.5% for the year ended December 31, 2021, compared to 1.9% for the year ended December 31, 2020.

General and administrative

(in thousands)	Year ended December 31,			
	2021	2020	\$ Change	% Change
General and administrative	\$ 75,896	\$ 11,798	\$ 64,098	543.3%

The increase in general and administrative expense in 2021, as compared to 2020, was primarily attributable to (i) \$46.6 million of higher stock-based compensation expense triggered by our 2021 IPO and grants to new employees in 2021, (ii) \$5.9 million of higher personnel-related expenses related to headcount increases, (iii) \$7.1 million of higher professional fees for consulting, legal and accounting services, and (iv) higher costs for business insurance, rent, and other office expenses. General and administrative expenses as a percentage of revenue were 28.1% for the year ended December 31, 2021, compared to 6.3% for the year ended December 31, 2020.

Interest expense, net

(in thousands)	Year ended December 31,			
	2021	2020	\$ Change	% Change
Interest expense, net	\$ 814	\$ 364	\$ 450	123.6%

Interest expense primarily consisted of interest on our revolving line of credit with Western Alliance Bank, which was paid off during the quarter ended March 31, 2021, and a commitment fee on our revolving credit facility with Barclays Bank that we entered into in April 2021, along with associated debt issue cost amortization.

Gain (loss) on extinguishment of debt

(in thousands)	Year ended December 31,			
	2021	2020	\$ Change	% Change
Gain (loss) on extinguishment of debt	<u>\$ 790</u>	<u>\$ (116)</u>	<u>\$ 906</u>	<u>781.0%</u>

In January 2021, our Paycheck Protection Program ("PPP") loan that was received in April 2020 pursuant to the CARES Act, was forgiven, resulting in a gain on extinguishment of debt. The terms of the CARES Act provided for loan forgiveness if the proceeds were used to retain and pay employees and for other qualifying expenditures. In 2020, we incurred a loss on debt extinguishment in connection with our Secured Promissory Notes which we had repaid the principal in full as of December 31, 2020.

Income (loss) from unconsolidated subsidiary

(in thousands)	Year ended December 31,			
	2021	2020	\$ Change	% Change
Income (loss) from unconsolidated subsidiary	<u>\$ (354)</u>	<u>\$ 1,399</u>	<u>\$ (1,753)</u>	<u>(125.3%)</u>

We sold our interest in our unconsolidated subsidiary, Dimension, on June 24, 2021. Our share of the loss from this unconsolidated subsidiary for the period from January 1, 2021, to the disposal date was \$0.4 million. For the year ended December 31, 2020, we recognized a gain of \$1.4 million as our share of the income from this equity investment. Upon sale of our interest in June 2021, we recognized a gain of \$20.8 million, which is reflected in the Consolidated Statement of Operations and Comprehensive Loss as a "Gain from disposal of investment in unconsolidated subsidiary".

Liquidity and Capital Resources

Since our inception, we have financed our operations primarily through sales of shares of common stock and payments from our customers. During the years ended December 31, 2020 and 2021, we received proceeds of \$28.9 million and \$235.2 million, respectively, net of offering costs, from issuances of our common stock, including our IPO in April 2021. We also incurred new debt in the form of a PPP loan in 2020 pursuant to the CARES Act which was forgiven in 2021. We had no debt outstanding at December 31, 2022 and 2021. Our ability to generate positive cash from operations in the future is dependent on anticipated improvements in market conditions during the second half of 2023 that are expected to create sufficient revenue and gross margin volumes to cover certain relatively fixed cost outlays, further product cost reductions, and better working capital management, such as obtaining improved contract payment terms and more timely collections from our customers.

We have incurred cumulative losses since inception and have a history of cash outflows from operations. During the three-year period ended December 31, 2022, we used \$186.7 million of cash in our operations, inclusive of \$54.5 million utilized during the year ended December 31, 2022. We had no long-term borrowings or other material obligations requiring the use of cash and had positive working capital of \$58.4 million as of December 31, 2022.

At December 31, 2022, we had \$44.4 million of cash remaining on hand and \$1.8 million in outstanding letters of credit applied against our existing revolving credit facility described in "Note 11. Debt" included in our consolidated financial statements in Part II, Item 8 of this Annual Report.

The UFLPA was passed by the U.S. Congress and signed into law by President Biden on December 23, 2021. The UFLPA establishes a rebuttable presumption that the importation of any goods, wares, articles, and merchandise mined, produced, or manufactured wholly or in part in the Xinjiang Uyghur Autonomous Region of the People's Republic of China, or that are produced by certain entities, is prohibited by Section 307 of the Tariff Act of 1930 and that such goods, wares, articles, and merchandise are not entitled to entry to the United States. CBP began implementing the provisions of UFLPA on June 21, 2022, resulting in new rules for solar module importers and reviews by CBP. There continues to be uncertainty in the market around achieving full compliance with UFLPA for the importation of solar modules, whether related to sufficient traceability of materials or other factors.

On March 25, 2022, the U.S. Department of Commerce, in response to a petition by Auxin Solar, Inc., initiated an investigation of claims related to alleged circumvention of U.S. AD/CVD duties by solar manufacturers in certain Southeast Asian countries in an effort to determine whether or not solar cells and/or modules made in those Southeast Asian nations use parts originating from China in order to circumvent the AD/CVD tariffs. On June 6, 2022, President Biden issued an Executive Order allowing U.S. solar deployers the ability to import solar modules and cells from Cambodia, Malaysia, Thailand and Vietnam free from certain duties for 24 months, along with other incentives designed to accelerate U.S. domestic production of clean energy technologies.

Since 2016, CBP has issued a number of WROs directed at forced labor in China, including WROs directed specifically at activity in the Xinjiang Uyghur Autonomous Region. In addition, recent WROs related to polysilicon

requires panel importers to demonstrate that polysilicon used in their panels has not been sourced using forced labor. To date, CBP has used the WROs to detain solar panels, which has disrupted the U.S. solar installation market and caused additional uncertainty on future projects.

These policies and actions have resulted in some developers deferring projects due to the uncertainty of panel supply and costs, which has negatively impacted our 2022 revenues and cash flows and may continue to negatively impact our anticipated revenues and our cash flows in 2023.

The most notable incentive program impacting our U.S. business has been the ITC for solar energy projects, which allows taxpayers to offset their U.S. federal income tax liability by a certain percentage of their cost basis in solar energy systems placed in service for commercial use. The Inflation Reduction Act of 2022, passed by the U.S. Congress and signed into law by President Biden on August 16, 2022, expanded and extended the tax credits and other tax benefits available to solar energy projects and the solar energy supply chain. ITCs have been extended for such projects through at least 2032 and, depending on the location of a particular project and its ability to satisfy certain labor and domestic content requirements, the ITC percentage can range between 30% and 50%. Manufacturers of specific solar components are also now eligible to claim production tax credits as an alternative to the ITC. Implementing regulations for this law are still in process.

Our costs are affected by certain component costs including steel, motors and micro-chips, as well as transportation costs. Current market conditions and international conflicts that constrain supply of materials and disrupt the flow of materials from international vendors impact the cost of our products and services, along with overall rates of inflation in the global economy, which have been higher than recent historical rates. We have also seen increases in domestic fuel prices and transportation costs in the past couple of years. These cost increases impact our operating margins. We have taken steps to expand and diversify our manufacturing partnerships and have in the past employed alternative modes of transportation to mitigate the impact of the current headwinds in the global supply chain and logistics markets. Although overall transportation costs are higher than pre-pandemic rates, there has been a decline in recent months in costs for both charter vessels and in the premium container market, as well as an easing of congestion in U.S. ports. COVID-19 shutdowns in China during 2022 created a backlog of exports and increased demand for container shipments from China but, such shutdowns are now being eased by the government there. We continue to monitor the logistics markets and have adjusted our use of various modes of transportation when warranted to optimize our transportation costs. Additionally, in February 2022, we contracted with a related-party consulting firm to support us in making ongoing improvements to our processes and performance in various areas, including design, sourcing, logistics, pricing, software and our distributed generation business.

In accordance with ASC 205-40, Going Concern, we have evaluated whether there are conditions and events, considered in the aggregate, which raise substantial doubt about our ability to continue as a going concern within one year after the date these consolidated financial statements are issued. While AD/CVD and UFLPA have created uncertainty in the market in recent periods, we believe the Executive Order providing for a 24-month holiday on duties for importation of solar modules and cells from certain countries and the passage of the Inflation Reduction Act of 2022, as described above, have reduced the level of uncertainty among solar project owners and developers with regard to new project development, however we note that implementing regulations for the Inflation Reduction Act are still in process, which creates uncertainty about the extent of its impact on our Company and the solar energy industry. We also took significant steps in 2022, and are continuing to take further steps in 2023, to address the recent market challenges and our historical use of cash through the following actions:

- certain members of our senior management team elected to forego certain cash compensation during the second half of 2022 in exchange for equity compensation;
- the members of our board of directors have agreed to take equity compensation in lieu of cash compensation during 2023;
- we began making certain incentive compensation payments to all employees in stock rather than cash beginning at the end of the second quarter of 2022;
- as described further in "Note 4. Reduction in force" included in our consolidated financial statements in Part II, Item 8 of this Annual Report, we reduced our workforce by approximately 8% near the end of 2022;
- we have frozen non-essential hiring, placed restrictions on certain travel, decreased the future use of consultants and are deferring non-critical initiatives;
- we have initiated frequent, consistent communication with our customers, which allowed us to resolve issues preventing timely collection of certain past due outstanding receivables;

- we have emphasized cash collections from customers, and continue to negotiate improved payment terms with both our customers and vendors;
- we launched Pioneer, a one module-in-portrait (1P) solar tracker solution, and a new solution for thin-film modules not subject to UFLPA;
- we filed a prospectus supplement in September 2022, as described further in "Note 15. Stockholders' equity" included in our consolidated financial statements in Part II, Item 8 of this Annual Report, which has provided us with the ability to sell from time to time, and in one or more transactions, newly issued shares of our common stock with an aggregate offering price of up to \$100 million in future "at the market" offerings ("ATM Program") however, our conclusions around liquidity are not dependent on us transacting off the ATM;
- we reached a settlement agreement with FCX Solar, LLC in December 2022, regarding a lawsuit filed against us relating to claims of patent infringement in order to eliminate future time and expense involved in defending ourselves in this action. As described further in "Note 14. Commitments and contingencies" included in our consolidated financial statements in Part II, Item 8 of this Annual Report, a portion of the settlement payment was made in stock; and
- we continue to actively explore options to obtain additional sources of capital through either the issuance of new debt or equity.

Management believes that our existing cash on hand, as well the continuing impact of certain of the actions described above, along with our expectations of improved market conditions and positive results from our efforts to increase gross margins, will allow us to grow profitably and generate positive cash flow from operations during the second half of 2023 in amounts that will be sufficient for us to fund our operations for at least one year from the date of issuance of these consolidated financial statements. Accordingly, the accompanying financial statements assume we will continue as a going concern through the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

We have achieved success in executing certain of the initiatives above and we continue to work to further reduce our use of cash to fund our operations. We expect the two-year holiday on duties announced by President Biden in June 2022 will reduce the level of uncertainty in the market due to the ongoing AD/CVD investigation by the U.S. Department of Commerce, as described above, and we believe passage of the Inflation Reduction Act of 2022 will also benefit demand for our products in the United States. At the same time, however, new rules for module importers and reviews by CBP pursuant to achieving full compliance with UFLPA are expected to continue creating uncertainty in the market. However, once there is additional clarity around compliance with UFLPA and customers get line-of-sight to module deliveries, we believe the market will see a recovery. While there are already many underlying drivers of growth in the solar industry, the expected positive impact on demand for our products could take longer than expected to occur. In addition, market conditions could deteriorate significantly from what we currently expect, and regulatory and international trade policies could become more stringent as a result of (i) findings from the U.S. Department of Commerce's AD/CVD investigation, (ii) the level of enforcement of regulations issued under UFLPA, and (iii) other factors, which may result in a need for us to issue additional debt or obtain new equity financing to fund our operations beyond the next twelve months. We may be unable to obtain any desired additional financing on terms favorable to us, or at all, depending on market and other conditions. The ability to raise additional financing depends on numerous factors that are outside of our control, including macroeconomic factors such as the impact of the COVID-19 pandemic, inflation, the ongoing conflict in the Ukraine, market conditions, the health of financial institutions, investors' and lenders' assessments of our prospects and the prospects of the solar industry in general.

Our cash flows from operating, investing and financing activities were as follows:

(in thousands)	Year ended December 31,		
	2022	2021	2020
Net cash provided by (used in) operating activities	\$ (54,510)	\$ (132,854)	\$ 629
Net cash provided by (used in) investing activities	(4,247)	21,307	1,868
Net cash provided by financing activities	903	180,369	22,644
Effect of exchange rate changes on cash, cash equivalents and restricted cash	54	(10)	(3)
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ (57,800)	\$ 68,812	\$ 25,138

Operating activities

During the year ended December 31, 2022, we used approximately \$63.3 million of cash to fund (i) losses on certain of our projects, largely related to increased material and logistics costs due to supply chain disruptions since 2021 that were not fully recoverable, and (ii) expenditures for personnel and facilities, legal and professional fees, insurance, research and development and various other operating activities. Economic conditions during 2022 and 2021 caused our industry to experience rapid commodity price increases and significant increases in transportation costs which negatively impacted our margins and thus our cash flow from operations. Additionally, the level of project activity significantly decreased in 2022 as compared to 2021 due to concerns by project developers and owners over regulatory and tariff issues, including AD/CVD and WROs pursuant to UFLPA.

We generated approximately \$8.8 million of cash in 2022 from reductions in working capital and other items, primarily customer receivables, due to lower project activity levels and from settlements with certain customers earlier in the year to collect past due receivables owed which partially offset our use of cash described above.

During the year ended December 31, 2021, we used \$57.3 million of cash to fund losses on certain of our projects, as well as for operating costs and expenses as we continued to expand our presence to additional countries. In addition, we used \$75.6 million of cash to fund increases in working capital and other items largely related to increased project activity and making deposits to ensure steel capacity for our projects and to acquire inventory that had a longer lead time due to global market supply and logistics constraints. Our working capital at December 31, 2021, was also impacted by a slowdown in collections from a major customer during the latter part of 2021.

During the year ended December 31, 2020, net cash provided by operating activities was \$0.6 million, as cash generated from working capital and other reductions totaling nearly \$9.1 million more than offset \$8.4 million of cash used to fund operating expenses. Increases in accounts payable and accruals and other liabilities due to increased procurement and supply chain activity levels, as well as a decrease in inventory from higher sales more than offset increased levels of customer receivables, which were also impacted by increased sales in 2020.

Investing activities

During the year ended December 31, 2022, we paid approximately \$1.0 million in cash for new lab equipment to be used for product testing, as well as new tooling, computer and IT equipment, nearly one-half of which was acquired during the latter part of 2021.

On June 14, 2022, we closed on the acquisition of HX Tracker for a total purchase price of \$8.7 million consisting of cash and stock. Additionally, on July 1, 2022, we acquired certain assets from Standard Sun, Inc., constituting their pile testing and equipment installation business, for approximately \$0.8 million. The cash portion of the purchase price for both businesses, totaled approximately \$5.1 million.

Additionally, during 2022, we received net proceeds of \$1.7 million from escrow as contingent payments for subsequent completion of certain construction projects that were in progress at the time of the sale in 2021 of our 23% equity investment in Dimension.

During the year ended December 31, 2021, we received net proceeds of \$22.3 million from the sale of our equity investment in Dimension. This was partially offset by \$1.0 million spent for new lab, computer and IT equipment.

During the year ended December 31, 2020, net cash provided by investing activities was \$1.9 million, of which \$2.1 million was attributable to distributions received from our unconsolidated subsidiary, Dimension, as a return of investment, offset by over \$0.2 million used to purchase property and equipment.

Financing activities

During the year ended December 31, 2022, we received proceeds from exercise of stock options totaling \$0.9 million.

During the year ended December 31, 2021, we received \$235.2 million of proceeds, net of offering costs, from our IPO in April 2021. A portion of these proceeds, totaling \$54.2 million, were subsequently used to purchase an aggregate of 4,455,384 shares of our common stock. We also repaid the outstanding balance on our revolving line of credit with Western Alliance Bank during 2021, totaling \$1.0 million, after which this facility was closed and a new facility was entered into with various lenders, including Barclays Bank (see "Revolving credit facility" below). We also received cash from the exercise of stock options during 2021.

During the year ended December 31, 2020, we received \$28.9 million of proceeds from issuance of our common stock, net of offering costs, and repaid the outstanding balance on certain private placement promissory notes totaling \$7.0 million. We also received a PPP loan pursuant to the CARES Act in the amount of \$0.8 million in 2020.

Revolving credit facility

On April 30, 2021, we entered into a Senior Secured Revolving Credit Facility with various lenders, including Barclays Bank PLC, as issuing lender, the swingline lender and as administrative agent (the "Credit Facility Agreement"). The facility has an initial three-year term and is secured by a first priority lien on substantially all of our assets, subject to certain exclusions, and customary guarantees.

On June 2, 2022, we entered into Amendment No. 2 to the Credit Facility Agreement (the "Amendment") which, among other things, amended certain terms of the Credit Facility Agreement, including without limitation, to (i) reduce the minimum liquidity level in the minimum liquidity financial covenant from \$125.0 million to \$50.0 million until March 31, 2023, and (ii) set forth additional financial condition covenants and reporting requirements that apply if the Company does not maintain specified minimum liquidity from the effectiveness of the Amendment until the earlier of (x) March 31, 2023, and (y) the occurrence of certain specified conditions. The new financial condition covenants include the following: (i) if loans are outstanding, (x) the Company shall not have more than \$25.0 million in unrestricted cash and cash equivalents for longer than three business days, and (y) the ratio of the amount of (A) 75% of specified third party accounts receivables to (B) outstanding loans shall not be less than 1.10:1.00 at the end of each month and (ii) the Company shall limit the amount of cash it pays to third parties (net of all cash received by the Company (subject to certain exclusions)) to not more than \$50.0 million, with the financial covenants described in the foregoing clauses (i)(y) and (ii) only being applicable if the Company fails to maintain specified minimum liquidity, with the Company currently maintaining such specified minimum liquidity as of December 31, 2022. Additionally, prior to March 31, 2023, the Company and its restricted subsidiaries under the Credit Facility Agreement are not permitted to (i) incur additional indebtedness for borrowed money, other than through the Credit Facility Agreement or specified permitted unsecured debt, or (ii) pay dividends, subject to specified exceptions. The Amendment also sets forth certain informational rights of the lenders.

We had no debt outstanding under our revolving credit facility at December 31, 2022 and 2021.

Critical Accounting Policies and Significant Management Estimates

Preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported revenue and expenses during the period. Estimates are used for calculating the measure of progress of our solar tracker projects and deriving the standalone selling prices of the individual performance obligations when determining amounts to recognize for revenue, estimating allowances for doubtful accounts and slow-moving and obsolete inventory, determining useful lives of long-lived assets and the estimated fair value of those assets for impairment assessments, and estimating the fair value of investments, stock compensation awards, warranty liabilities and federal and state taxes, including tax valuation allowances, as well as other contingencies. We base our estimates on historical experience and anticipated results, trends, and various other assumptions that we believe are reasonable under the circumstances, including assumptions as to future events. Actual results could differ from those estimates due to risks and uncertainties. To the extent that there are differences between our estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates. Critical accounting policies and estimates are those that we consider the most important to the portrayal of our financial condition and results of operations because they require our most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effects of matters that are inherently uncertain.

We believe that the accounting policies described below involve a significant degree of judgment and complexity. Accordingly, we believe these are the most critical to aid in fully understanding and evaluating our consolidated financial condition and results of operations. For further information, see Note 2 "Summary of significant accounting policies" included in our consolidated financial statements in Part II, Item 8 of this Annual Report.

Revenue recognition

Policy description

We recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration to which we expect to be entitled to in exchange for those goods or services by following a five-step process: (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when or as the Company satisfies a performance obligation, as further described below.

Identify the contract with a customer: A contract with a customer exists when (i) the Company enters into an enforceable contract with a customer that defines each party's rights regarding the products and services to be transferred and identifies the payment terms related to these products and services, (ii) the contract has commercial substance, and (iii) the Company determines that collection of substantially all consideration for products and services that are transferred is probable based on the customer's intent and ability to pay the promised consideration. In assessing the recognition of revenue, we also evaluate whether two or more contracts should be combined and accounted for as one contract and if the combined or single contract should be accounted for as multiple performance obligations which could change the amount of revenue and profit (loss) recorded in a period. Change orders may include changes in specifications or design, manner of performance, equipment, materials, scope of work, and/or the period of completion of the project. We analyze change orders to determine if they should be accounted for as a modification to an existing contract or a new stand-alone contract.

Contracts we enter into with our customers for sale of solar tracker systems are generally under two different types of arrangements: (1) purchase agreements and equipment supply contracts ("Purchase Agreements"), and (2) sale of individual parts for those systems.

Change orders from our customers are generally modifications to existing contracts and are included in the total estimated contract revenue when it is probable that the change order will result in additional value that can be reliably estimated and realized.

Identify the performance obligations in the contract: We enter into contracts that can include various combinations of products and services, which are either capable of being distinct and accounted for as separate performance obligations or as one performance obligation since the majority of tasks and services are part of a single project or capability. However, determining whether products or services are considered distinct performance obligations that should be accounted for separately versus together may sometimes require significant judgment.

Our Purchase Agreements typically include two performance obligations: 1) our solar tracker systems or customized components of those systems, and 2) shipping and handling services. The deliverables included as part of our solar tracker systems are predominantly accounted for as one performance obligation, as these deliverables are part of a combined promise to deliver a project.

The revenue for shipping and handling services will be recognized over time based on progress in meeting shipping terms of the arrangements, as this faithfully depicts the Company's performance in transferring control.

Sales of individual parts of our solar tracker systems for certain specific transactions include multiple performance obligations consisting of individual parts of those systems. Revenue is recognized for parts sales at a point in time when the obligations under the terms of the contract with our customer are satisfied. Generally, this occurs with the transfer of control of the asset, which is in line with shipping terms.

Determine the transaction price: The transaction price is determined based on the consideration to which we will be entitled in exchange for transferring services to the customer. Such amounts are typically stated in the customer contract, and to the extent that we identify variable consideration, we will estimate the variable consideration at the onset of the arrangement as long as it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. The majority of our contracts do not contain variable consideration provisions as a continuation of the original contract. None of our contracts contain a significant financing component. Taxes collected from customers and remitted to governmental authorities are not included in revenue.

Allocate the transaction price to performance obligations in the contract: Once we have determined the transaction price, we allocate the total transaction price to each performance obligation in a manner depicting the amount of consideration to which we expect to be entitled in exchange for transferring the good(s) or service(s) to the customer. We allocate the transaction price to each performance obligation identified in the contract on a relative standalone selling price basis.

We use the expected cost-plus margin approach based on hardware, labor, and related overhead cost to estimate the standalone selling price of our solar tracker systems, customized components of those systems, and individual parts for certain specific transactions. We use the adjusted market assessment approach for all other performance obligations except shipping, handling, and logistics. For shipping, handling, and logistics performance obligations, we use a residual approach to calculate the standalone selling price, because of the nature of the highly variable and broad range of prices we charge to various customers for this performance obligation in the contracts.

Recognize revenue when or as the Company satisfies a performance obligation: For each performance obligation identified, we determine at contract inception whether we satisfy the performance obligation over time or at a point in time. The performance obligations in the contracts for our solar tracker systems and customized components of those systems are satisfied over-time as work progresses, utilizing an input measure of progress

determined by cost-to-cost measures on these projects as this faithfully depicts our performance in transferring control. Additionally, our performance does not create an asset with an alternative use, due to the highly customized nature of the product, and we have an enforceable right to payment for performance completed to date. Our performance obligations for individual part sales for certain specific transactions are recognized point-in-time as and when control transfers based on the Incoterms for the contract. Our performance obligations for term-based software licenses are recognized point-in-time as and when control transfers, either upon delivery to the customer or the software license start date, whichever is later. Our performance obligations for shipping and handling services are satisfied over-time as the services are delivered over the term of the contract. We recognize revenue for subscription and other services on a straight-line basis over the contract period. With regard to support revenue, a time-elapsed method is used to measure progress because we transfer control evenly over the contractual period. Accordingly, the fixed consideration related to support revenue is generally recognized on a straight-line basis over the contract term.

Contract accounting: The timing of revenue recognition, billing, and cash collection results in the recognition of accounts receivable, unbilled receivables for revenue recognized in excess of billings, and deferred revenue in the Consolidated Balance Sheets. We may receive advances or deposits from our customers before revenue is recognized, resulting in contract liabilities, which are reflected as “deferred revenue” in our Consolidated Balance Sheets.

Judgments and assumptions

The timing and amounts of revenue and cost of revenue recognition, as well as recording of related receivables and deferred revenue, is highly dependent on our identification of performance obligations in each contract and our estimates by contract of total project cost and our progress toward project completion as of each period end. Certain estimates are subject to factors outside of our control that may impact our suppliers and the global supply chain. As an example, we began to experience increases in steel prices and shipping and logistics costs, as well as delays in delivery of our products to customers during 2021, which negatively impacted our results of operations as we were not able to recover all of the additional costs under certain of our fixed fee contracts. We base our estimates on the best information available at each period end, but future events and their effects cannot be determined with certainty, and actual results could differ materially from our assumptions and estimates.

Accounts receivable, net

Policy description

Trade receivables are recorded at invoiced amounts, net of allowances for doubtful accounts if applicable, and do not bear interest. We generally do not require collateral from our customers; however, in certain circumstances, we may require letters of credit, other collateral, additional guarantees or advance payments. The allowance for doubtful accounts is based on our assessment of the collectability of our customer accounts.

We adopted Accounting Standard Update ("ASU") No. 2016-13, Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments effective January 1, 2023. For the years ended December 31, 2022, 2021 and 2020, we utilized the incurred loss model in estimating our allowance for doubtful accounts.

Judgments and assumptions

We regularly review our accounts receivable that remain outstanding past their applicable payment terms and establish allowances or make potential write-offs by considering certain factors such as historical experience, industry data, credit quality, age of balances and current economic conditions that may affect a customer's ability to pay.

Adjustments to our allowance for doubtful accounts are made through bad debt expense when changes in customer credit risk or a customer's expected ability to pay amounts previously invoiced occurs and through write-off of uncollectible receivables.

Adjustments to the amount of receivables due are made through a reduction in revenue when amounts originally estimated to be collectible are impacted by price concessions as a result of a dispute regarding performance or other matters affecting customer relationships.

In connection with a price concession provided to a certain customer to resolve an outstanding dispute, we recognized a \$5.0 million reduction in revenue during the first quarter of 2022. Additionally, as part of our regular periodic assessments of customer credit risk and ability to pay, we also recognized an additional \$1.3 million of bad debt expense during 2022 as compared to 2021.

Warranty

Policy description

Typically, the sale of solar tracker projects includes parts warranties to customers as part of the overall price of the product. We provide standard assurance type warranties for our products for periods generally ranging from two to ten years. We record a provision for estimated warranty expenses in cost of sales, net of amounts recoverable from manufacturers under their warranty obligations to us. We do not maintain general or unspecified reserves; all warranty reserves are related to specific projects. All actual or estimated material costs incurred for warranty services in subsequent periods are charged to those established reserves.

Judgments and assumptions

We base our estimated warranty obligations on available industry data relating to the nature and frequency of product failure rates and, where possible, on our historical experience, to make estimates of costs to address future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may result in material changes to our warranty reserves in the future. Additionally, we make estimates of what costs we believe will be recoverable from the manufacturers of our products that we use to offset our obligations to our customers.

While we periodically monitor our warranty activities and claims, if actual costs incurred were to be different from our estimates, we would recognize adjustments to our warranty reserves in the period in which those differences arise or are identified. Such adjustments could be material to our results of operations in the period the adjustments are made.

Stock-based compensation

Policy description

We recognize compensation expense for all share-based payment awards made, including stock options and RSUs, based on the estimated fair value of the award on the grant date. We calculate the fair value of stock options using the Black-Scholes option pricing model for awards with service-based vesting or through use of a lattice model or a Monte Carlo simulation for awards with market conditions. The fair value of RSUs is based on the estimated fair value of the Company's common stock on the date of grant. Since completion of our IPO, we consider the closing price of our stock, as reported on the Nasdaq Global Market, to be the fair value of our stock on the grant date.

Forfeitures are accounted for as they occur. For service-based awards, stock-based compensation is recognized using the straight-line attribution approach over the requisite service period. For performance-based awards, stock-based compensation is recognized based on graded vesting over the requisite service period when the performance condition is probable of being achieved. Stock compensation expense for market-based awards is recognized over the derived service period determined in the valuation model, inclusive of any vesting conditions.

Judgments and assumptions

The Black-Scholes model relies on various assumptions, in addition to the exercise price of the option and the value of our common stock on the date of grant. These assumptions include:

Expected Term: The expected term represents the period that the Company's stock-based awards are expected to be outstanding and is calculated as the average of the option vesting and contractual terms, based on the simplified method. The simplified method deems the term to be the average of the time-to-vesting and the contractual life of the options. The contractual life of an option may be up to 10 years.

Expected Volatility: Since the Company did not have a trading history of its common stock prior to our IPO and since such trading history subsequent to our IPO is limited, the expected volatility is derived from the average historical stock volatilities of several public companies within the Company's industry that it considers to be comparable to its business over a period equivalent to the expected term of the stock option grants.

Risk-Free-Interest-Rate: The Company bases the risk-free interest rate on the implied yield available on U.S. Treasury zero-coupon issues with a remaining term equivalent to the expected term.

Expected Dividend: The Company has not issued any dividends in its history and does not expect to issue dividends over the life of the options and, therefore, has estimated the dividend yield to be zero.

We used Monte Carlo simulations for certain awards granted with market conditions which provided an estimated average present value for each award based on a simulation assuming Geometric Brownian Motion in a risk-neutral framework using 100,000 simulation paths to determine the derived service and vesting periods.

Changes to any of our assumptions, but particularly our estimates of expected term and volatility, could change the fair value of our options and impact the amount of stock-based compensation expense we report each period.

Impairment

Policy description - long-lived assets and intangible assets

We review our long-lived assets that are held for use for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable or that its useful life may be shorter than previously expected. If such impairment indicators are present or other factors exist that indicate the carrying amount of the asset may not be recoverable, the Company determines whether an impairment has occurred through the use of an undiscounted cash flow analysis of the asset at the lowest level for which identifiable cash flows exist. If an impairment has occurred, the Company recognizes a loss for the difference between the carrying amount and the fair value of the asset, which in most cases is estimated based upon Level 3 unobservable inputs. If the asset is determined to have a remaining useful life shorter than previously expected, an adjustment for the shorter remaining life will be made for purposes of recognizing future depreciation expense. Assets are classified as held for sale when the Company has a plan, approved by the appropriate levels of management, for disposal of such assets, as well as other considerations, and those assets are stated at the lower of carrying value or estimated fair value less estimated costs to sell.

Policy description - goodwill

Goodwill is not amortized but is subject to a periodic assessment for impairment at least annually, or whenever events and circumstances indicate an impairment may exist. Our assessments may include qualitative factors such as current or expected industry and market conditions, our overall financial performance, share price trends, market capitalization and other company-specific events.

We operate in one segment, being the consolidated entity, which we have also determined is the reporting unit for goodwill impairment.

Judgments and assumptions

Key judgments and assumptions may include:

- Determination of whether events or changes in circumstances indicate that the carrying value of our long-lived assets or goodwill might be impaired. Such factors to consider may include an evaluation of changes in the business or regulatory climate, market conditions or other events impacting our operations;
- Estimating future cash flows of our long-lived assets or asset groups and intangible assets, which may involve assumptions as to the lowest level of our assets at which cash flows are generated, as well as future growth and risk-adjusted discount rates, as well as a terminal growth rate or value and future market conditions;
- Estimates of assumptions a market participant would use in determining the fair value of the affected long-lived assets or asset groups; and
- Estimating the fair value of the consolidated company.

In estimating the fair value of the consolidated company, we used our market capitalization based on our closing stock price on Nasdaq at December 31, 2022.

Other than writing off certain deferred costs relating to uncompleted transactions, we did not identify any impairments of our long-lived assets, intangible assets or goodwill for the years ended December 31, 2022 and 2021.

JOBS Act accounting election

We are an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We elected to use the allowed extended transition period for adopting new or revised accounting standards.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Fair value of financial instruments

Our financial instruments consist of cash, cash equivalents, accounts receivable, accounts payable, and debt obligations, if any. Cash, cash equivalents, accounts receivable and accounts payable are stated at their carrying value, which approximates fair value due to the short time to the expected receipt or payment date. The carrying values of debt obligations bearing variable rates of interest, if any, are also considered to approximate fair value due to applicable interest rates resetting to market rates periodically. The fair value of our fixed-rate debt obligations, if any, will be impacted by changes in market rates for similar debt subsequent to our initial borrowings.

We had \$44.4 million of cash and cash equivalents on hand, the vast majority of which was located in the United States, and no debt outstanding at December 31, 2022.

We have no other financial instruments at December 31, 2022 and 2021, other than certain non-functional currency intercompany and third-party receivables and payables, which are subject to foreign exchange, interest rate or market risks.

Concentrations of major customers

Our customers include project developers, solar asset owners and EPC contractors that design and build solar energy projects. We do not require collateral on our accounts receivables.

At December 31, 2022, three customers accounted for approximately 55%, 15%, and 12%, respectively, of our total accounts receivable. At December 31, 2021, four customers accounted for approximately 29%, 23%, 19% and 18%, respectively, of total accounts receivable.

During the year ended December 31, 2022, three customers accounted for approximately 23%, 20% and 11%, respectively, of total revenue. During the year ended December 31, 2021, three customers accounted for approximately 37%, 20% and 15%, respectively, of total revenue. During the year ended December 31, 2020, four customers accounted for approximately 21%, 19%, 10% and 10%, respectively, of total revenue.

Further, our accounts receivables are from companies within or serving the solar industry and, as such, we are exposed to normal industry credit risks. We continually evaluate our reserves for potential credit losses and establish reserves for such losses.

Commodity Price Risk

We subcontract to various contract manufacturers, who manufacture and deliver products directly to our customers. We, therefore, do not procure raw materials and commodities directly. We are subject to indirect risk from fluctuating market prices of certain commodity raw materials, including steel and aluminum, which are used in our products, through our contract manufacturers, as increases in these commodity prices would increase our cost of procuring subcontracting services. Prices of these raw materials may be affected by supply restrictions or other market factors from time to time. Significant price increases for these raw materials could reduce our operating margins if we are unable to recover such increases in costs from our customers, and could harm our business, financial condition and results of operations.

Item 8. Financial Statements and Supplementary Data.

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of FTC Solar, Inc.

Opinion on the Financial Statements

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

Basis for Opinion

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

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Emphasis of Matter

As discussed in Note 2 to the consolidated financial statements, the Company has incurred cumulative losses since inception and has a history of cash outflows from operations. Management’s evaluation of the events and conditions and management’s plans to mitigate these matters are also described in Note 2.

/s/ PricewaterhouseCoopers LLP
Austin, Texas
February 28, 2023

We have served as the Company’s auditor since 2020.

FTC Solar, Inc.
Consolidated Balance Sheets

(in thousands, except shares and per share data)	December 31, 2022	December 31, 2021
ASSETS		
Current assets		
Cash and cash equivalents	\$ 44,385	\$ 102,185
Accounts receivable, net	49,052	107,548
Inventories	14,949	8,860
Prepaid and other current assets	10,304	17,186
Total current assets	118,690	235,779
Operating lease right-of-use assets	1,154	1,733
Property and equipment, net	1,702	1,582
Intangible assets, net	1,113	—
Goodwill	7,538	—
Other assets	4,201	3,926
Total assets	\$ 134,398	\$ 243,020
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	\$ 15,801	\$ 39,264
Accrued expenses	23,896	47,860
Income taxes payable	443	47
Deferred revenue	11,316	1,421
Other current liabilities	8,884	4,656
Total current liabilities	60,340	93,248
Operating lease liability, net of current portion	786	1,340
Other non-current liabilities	6,822	5,566
Total liabilities	67,948	100,154
Commitments and contingencies (Note 14)		
Stockholders' equity		
Preferred stock par value of \$0.0001 per share, 10,000,000 shares authorized; none issued as of December 31, 2022 and December 31, 2021	—	—
Common stock par value of \$0.0001 per share, 850,000,000 shares authorized; 105,032,588 and 92,619,641 shares issued and outstanding as of December 31, 2022 and December 31, 2021	11	9
Treasury stock, at cost; 10,762,566 shares as of December 31, 2022 and December 31, 2021	—	—
Additional paid-in capital	315,345	292,082
Accumulated other comprehensive income (loss)	(61)	7
Accumulated deficit	(248,845)	(149,232)
Total stockholders' equity	66,450	142,866
Total liabilities and stockholders' equity	\$ 134,398	\$ 243,020

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

FTC Solar, Inc.
Consolidated Statements of Operations and Comprehensive Loss

(in thousands, except shares and per share data)	Year ended December 31,		
	2022	2021	2020
Revenue:			
Product	\$ 63,760	\$ 227,397	\$ 158,925
Service	59,306	43,128	28,427
Total revenue	123,066	270,525	187,352
Cost of revenue:			
Product	84,766	239,149	155,967
Service	65,528	63,921	27,746
Total cost of revenue	150,294	303,070	183,713
Gross profit (loss)	(27,228)	(32,545)	3,639
Operating expenses			
Research and development	9,949	11,540	5,222
Selling and marketing	8,659	6,823	3,545
General and administrative	53,736	75,896	11,798
Total operating expenses	72,344	94,259	20,565
Loss from operations	(99,572)	(126,804)	(16,926)
Interest expense, net	(978)	(814)	(364)
Gain from disposal of investment in unconsolidated subsidiary	1,745	20,829	—
Gain (loss) on extinguishment of debt	—	790	(116)
Other income (expense), net	(373)	(67)	—
Income (loss) from unconsolidated subsidiary	—	(354)	1,399
Loss before income taxes	(99,178)	(106,420)	(16,007)
(Provision) benefit for income taxes	(435)	(169)	83
Net loss	(99,613)	(106,589)	(15,924)
Other comprehensive income (loss):			
Foreign currency translation adjustments	(68)	10	(3)
Comprehensive loss	\$ (99,681)	\$ (106,579)	\$ (15,927)
Net loss per share:			
Basic	\$ (0.98)	\$ (1.24)	\$ (0.23)
Diluted	\$ (0.98)	\$ (1.24)	\$ (0.23)
Weighted-average common shares outstanding:			
Basic	101,408,263	86,043,051	68,810,533
Diluted	101,408,263	86,043,051	68,810,533

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

FTC Solar, Inc.
Consolidated Statements of Changes in Stockholders' Equity

	Preferred stock		Common stock		Treasury stock		Additional paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Total stockholders' equity
	Shares	Amount	Shares	Amount	Shares	Amount				
(in thousands, except shares)										
Balance as of December 31, 2019	—	\$ —	63,633,981	\$ —	1	\$ —	18,273	\$ —	(26,719)	\$ (8,445)
Shares issued during the period for vested restricted stock awards	—	—	3,255,049	—	—	—	—	—	—	—
Repurchase of common stock, held in treasury	—	—	(9,896,666)	—	—	9,896,666	—	—	—	—
Issuance of common stock	—	—	9,162,976	—	—	—	30,000	—	—	30,000
Stock-based compensation	—	—	—	—	—	—	1,823	—	—	1,823
Net loss	—	—	—	—	—	—	—	(15,924)	—	(15,924)
Other comprehensive loss	—	—	—	—	—	—	—	(3)	—	(3)
Balance as of December 31, 2020	—	—	66,155,340	—	1	9,896,666	50,096	(3)	(42,643)	7,451
Shares issued during the period for vested restricted stock awards	—	—	9,107,121	—	—	—	—	—	—	—
Repurchase of treasury stock	—	—	(865,900)	—	—	865,900	—	—	—	—
Issuance of common stock upon exercise of stock options	—	—	2,838,464	—	1	—	316	—	—	317
Repurchase and retirement of common stock held by related parties	—	—	(4,455,384)	—	(1)	—	(54,154)	—	—	(54,155)
Issuance of common stock in connection with IPO	—	—	19,840,000	—	2	—	241,153	—	—	241,155
Impact of stock split	—	—	—	—	6	—	(6)	—	—	—
Deferred offering costs	—	—	—	—	—	—	(7,088)	—	—	(7,088)
Stock-based compensation	—	—	—	—	—	—	61,765	—	—	61,765
Net loss	—	—	—	—	—	—	—	(106,589)	—	(106,589)
Other comprehensive income	—	—	—	—	—	—	—	10	—	10
Balance as of December 31, 2021	—	—	92,619,641	—	9	10,762,566	292,082	7	(149,232)	142,866
Shares issued during the period for vested restricted stock awards	—	—	8,096,868	—	1	—	4,061	—	—	4,062
Issuance of common stock upon exercise of stock options	—	—	3,316,079	—	1	—	902	—	—	903
Shares issued for HX Tracker acquisition	—	—	1,000,000	—	—	—	4,370	—	—	4,370
Stock-based compensation	—	—	—	—	—	—	13,930	—	—	13,930
Net loss	—	—	—	—	—	—	—	(99,613)	—	(99,613)
Other comprehensive income	—	—	—	—	—	—	—	(68)	—	(68)
Balance as of December 31, 2022	—	\$ —	105,032,588	\$ —	11	10,762,566	315,345	(61)	(248,845)	\$ 66,450

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

FTC Solar, Inc.
Consolidated Statements of Cash Flows

(in thousands)	Year ended December 31,		
	2022	2021	2020
Cash flows from operating activities			
Net loss	\$ (99,613)	\$ (106,589)	\$ (15,924)
Adjustments to reconcile net loss to cash used in operating activities:			
Stock-based compensation	20,303	61,765	1,818
Depreciation and amortization	900	232	47
Loss from sale of property and equipment	183	—	—
Amortization of debt issue costs	703	461	—
Provision for litigation settlement	4,493	—	—
Provision for obsolete and slow-moving inventory	1,813	90	—
(Gain) loss from unconsolidated subsidiary	—	354	(1,399)
Gain from disposal of investment in unconsolidated subsidiary	(1,745)	(20,829)	—
(Gain) loss on extinguishment of debt	—	(790)	116
Warranty provision	8,228	8,588	7,866
Warranty recoverable from manufacturer	(302)	(928)	(1,021)
Bad debt expense (credit)	1,159	(91)	24
Deferred income taxes	(135)	—	(3)
Lease expense and other	705	458	50
Impact on cash from changes in operating assets and liabilities:			
Accounts receivable, net	57,337	(83,723)	(9,710)
Inventories	(7,902)	(7,264)	2,819
Prepaid and other current assets	7,189	(10,237)	(2,847)
Other assets	(1,019)	(2,137)	(1,672)
Accounts payable	(22,940)	21,659	10,076
Accruals and other current liabilities	(32,670)	34,095	7,162
Accrued interest – related party debt	—	—	(78)
Deferred revenue	9,895	(21,559)	3,107
Other non-current liabilities	(599)	(6,016)	496
Lease payments and other, net	(493)	(393)	(298)
Net cash provided by (used in) operating activities	(54,510)	(132,854)	629
Cash flows from investing activities:			
Purchases of property and equipment	(985)	(1,025)	(256)
Proceeds from sale of property and equipment	86	—	—
Acquisitions, net of cash acquired	(5,093)	—	—
Proceeds from disposal of investment in unconsolidated subsidiary	1,745	22,332	2,124
Net cash provided by (used in) investing activities	(4,247)	21,307	1,868
Cash flows from financing activities:			
Proceeds from borrowings	—	—	784
Repayments of borrowings	—	(1,000)	(7,000)
Repurchase and retirement of common stock held by related parties	—	(54,155)	—
Offering costs paid	—	(5,948)	(1,140)
Proceeds from stock issuance	—	241,155	30,000
Proceeds from stock option exercises	903	317	—
Net cash provided by financing activities	903	180,369	22,644
Effect of exchange rate changes on cash, cash equivalents and restricted cash	54	(10)	(3)
Net increase (decrease) in cash, cash equivalents and restricted cash	(57,800)	68,812	25,138
Cash, cash equivalents and restricted cash at beginning of period	102,185	33,373	8,235
Cash, cash equivalents and restricted cash at end of period	\$ 44,385	\$ 102,185	\$ 33,373
Supplemental disclosures of cash flow information:			
Purchases of property and equipment included in ending accounts payable and accruals	\$ 11	\$ 478	\$ —
Offering costs in period end accruals	\$ —	\$ —	\$ 449
Commencement of new operating leases	\$ —	\$ 1,540	\$ 688
Cash paid during the period for third party interest	\$ 784	\$ 254	\$ —
Cash paid during the period for related party interest	\$ —	\$ 207	\$ 350
Cash paid during the period for taxes, net of refunds	\$ 123	\$ 76	\$ —

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

FTC Solar, Inc.
Notes to Consolidated Financial Statements
December 31, 2022

Note 1. Description of business

FTC Solar, Inc. (the “Company”, “we”, “our”, or “us”) was founded in 2017 and is incorporated in the state of Delaware. We are a global provider of advanced solar tracker systems, supported by proprietary software and value-added engineering services. Our mission is to provide differentiated products, software, and services that maximize energy generation and cost savings for our customers, and to help facilitate the continued growth and adoption of solar power globally. Trackers significantly increase the amount of solar energy produced at a solar installation by moving solar panels throughout the day to maintain an optimal orientation relative to the sun. Our primary tracker system is currently marketed under the Voyager brand name (“Voyager”). Voyager is a next-generation two-panel in-portrait (“2P”) single-axis tracker solution that we believe offers industry-leading performance and ease of installation. In September 2022, we announced the introduction of Pioneer, a new and differentiated one module-in-portrait (“1P”) solar tracker solution that allows for a pile count reduction per megawatt compared to similar industry-leading solutions, as well as providing what we believe to be other benefits, such as faster assembly capability, giving potential customers the possibility for increased flexibility and additional cost savings. We have also launched a new solution for thin-film modules, filling a gap in our offering for certain U.S. modules. We have a team of dedicated renewable energy professionals with significant project installation experience focused on delivering cost reductions to our U.S. and worldwide clients across the solar project development and construction cycle. The Company is headquartered in Austin, Texas, and has international subsidiaries in Australia, China, India and South Africa.

In April 2021, we completed an initial public offering (“IPO”) of 19,840,000 shares of our common stock receiving proceeds of \$241.2 million, net of underwriting discounts and commissions, but before offering costs, and began trading on the Nasdaq Global Market under the symbol “FTCI”. Prior to the completion of the IPO, the board of directors and stockholders approved an approximately 8.25-for-1 forward stock split (the “Forward Stock Split”) of the Company’s shares of common stock which became effective on April 28, 2021. Proceeds from the IPO were used for general corporate purposes, with \$54.2 million used to purchase an aggregate of 4,455,384 shares of our common stock, including shares resulting from the settlement of certain vested restricted stock units (“RSUs”) and exercise of certain options in connection with the IPO at the IPO price, less underwriting discounts and commissions.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups (JOBS) Act. Under the JOBS Act, we elected to use the allowed extended transition period to delay adopting new or revised accounting standards until such time as those standards apply to private companies.

Note 2. Summary of significant accounting policies

Basis of presentation and principles of consolidation

These consolidated financial statements include the results of the Company and its wholly owned subsidiaries and have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”). Intercompany balances and transactions have been eliminated in consolidation.

On April 28, 2021, we effected an approximately 8.25-for-1 forward split of our issued and outstanding shares of common stock, par value \$0.0001 per share. As a result of the forward stock split, one (1) share of common stock issued and outstanding was automatically increased to approximately 8.25 shares of issued and outstanding common stock, without any change in the par value per share. All information related to common stock, stock options, restricted stock awards and earnings per share have been retroactively adjusted to give effect to the forward stock split for all periods presented, unless otherwise indicated.

We currently operate in one business segment, the manufacturing and servicing of solar tracker systems.

Liquidity

We have incurred cumulative losses since inception and have a history of cash outflows from operations. During the three-year period ended December 31, 2022, we used \$186.7 million of cash in our operations, inclusive of \$54.5 million utilized during the year ended December 31, 2022. We had no long-term borrowings or other material obligations requiring the use of cash and had positive working capital of \$58.4 million as of December 31, 2022.

At December 31, 2022, we had \$44.4 million of cash remaining on hand and \$1.8 million in outstanding letters of credit applied against our existing revolving credit facility described in “Note 11. Debt” below.

The Uyghur Forced Labor Prevention Act ("UFLPA") was passed by the U.S. Congress and signed into law by President Biden on December 23, 2021. The UFLPA establishes a rebuttable presumption that the importation of any goods, wares, articles, and merchandise mined, produced, or manufactured wholly or in part in the Xinjiang Uyghur Autonomous Region of the People's Republic of China, or that are produced by certain entities, is prohibited by Section 307 of the Tariff Act of 1930 and that such goods, wares, articles, and merchandise are not entitled to entry to the United States. U.S. Customs and Border Protection ("CBP") began implementing the provisions of UFLPA on June 21, 2022, resulting in new rules for solar module importers and reviews by CBP. There continues to be uncertainty in the market around achieving full compliance with UFLPA for the importation of solar modules, whether related to sufficient traceability of materials or other factors.

On March 25, 2022, the U.S. Department of Commerce, in response to a petition by Auxin Solar, Inc., initiated an investigation of claims related to alleged circumvention of U.S. antidumping and countervailing duties ("AD/CVD") by solar manufacturers in certain Southeast Asian countries in an effort to determine whether or not solar cells and/or modules made in those Southeast Asian nations use parts originating from China in order to circumvent the AD/CVD tariffs. On June 6, 2022, President Biden issued an Executive Order allowing U.S. solar deployers the ability to import solar modules and cells from Cambodia, Malaysia, Thailand and Vietnam free from certain duties for 24 months, along with other incentives designed to accelerate U.S. domestic production of clean energy technologies.

Since 2016, CBP has issued a number of withhold release orders ("WRO") directed at forced labor in China, including WROs directed specifically at activity in the Xinjiang Uyghur Autonomous Region. In addition, recent WROs related to polysilicon requires panel importers to demonstrate that polysilicon used in their panels has not been sourced using forced labor. To date, CBP has used the WROs to detain solar panels, which has disrupted the U.S. solar installation market and caused additional uncertainty on future projects.

These policies and actions have resulted in some developers deferring projects due to the uncertainty of panel supply and costs, which has negatively impacted our 2022 revenues and cash flows and may continue to negatively impact our anticipated revenues and our cash flows in 2023.

The most notable incentive program impacting our U.S. business has been the investment tax credit ("ITC") for solar energy projects, which allows taxpayers to offset their U.S. federal income tax liability by a certain percentage of their cost basis in solar energy systems placed in service for commercial use. The Inflation Reduction Act of 2022, passed by the U.S. Congress and signed into law by President Biden on August 16, 2022, expanded and extended the tax credits and other tax benefits available to solar energy projects and the solar energy supply chain. ITCs have been extended for such projects through at least 2032 and, depending on the location of a particular project and its ability to satisfy certain labor and domestic content requirements, the ITC percentage can range between 30% and 50%. Manufacturers of specific solar components are also now eligible to claim production tax credits as an alternative to the ITC. Implementing regulations for this law are still in process.

Our costs are affected by certain component costs including steel, motors and micro-chips, as well as transportation costs. Current market conditions and international conflicts that constrain supply of materials and disrupt the flow of materials from international vendors impact the cost of our products and services, along with overall rates of inflation in the global economy, which have been higher than recent historical rates. We have also seen increases in domestic fuel prices and transportation costs in the past couple of years. These cost increases impact our operating margins. We have taken steps to expand and diversify our manufacturing partnerships and have in the past employed alternative modes of transportation to mitigate the impact of the current headwinds in the global supply chain and logistics markets. Although overall transportation costs are higher than pre-pandemic rates, there has been a decline in recent months in costs for both charter vessels and in the premium container market, as well as an easing of congestion in U.S. ports. COVID-19 shutdowns in China during 2022 created a backlog of exports and increased demand for container shipments from China but, such shutdowns are now being eased by the government there. We continue to monitor the logistics markets and have adjusted our use of various modes of transportation when warranted to optimize our transportation costs. Additionally, in February 2022, we contracted with a related-party consulting firm to support us in making ongoing improvements to our processes and performance in various areas, including design, sourcing, logistics, pricing, software and our distributed generation business. For further information regarding this consulting firm, see "Note 17. Related parties" below.

In accordance with ASC 205-40, Going Concern, we have evaluated whether there are conditions and events, considered in the aggregate, which raise substantial doubt about our ability to continue as a going concern within one year after the date these consolidated financial statements are issued. While AD/CVD and UFLPA have created uncertainty in the market in recent periods, we believe the Executive Order providing for a 24-month holiday on duties for importation of solar modules and cells from certain countries and the passage of the Inflation Reduction Act of 2022, as described above, have reduced the level of uncertainty among solar project owners and developers with regard to new project development, however we note that implementing regulations for the Inflation Reduction Act

are still in process, which creates uncertainty about the extent of its impact on our Company and the solar energy industry. We also took significant steps in 2022, and are continuing to take further steps in 2023, to address the recent market challenges and our historical use of cash through the following actions:

- certain members of our senior management team elected to forego certain cash compensation during the second half of 2022 in exchange for equity compensation;
- the members of our board of directors have agreed to take equity compensation in lieu of cash compensation during 2023;
- we began making certain incentive compensation payments to all employees in stock rather than cash beginning at the end of the second quarter of 2022;
- as described further in "Note 4. Reduction in force" below, we reduced our workforce by approximately 8% near the end of 2022;
- we have frozen non-essential hiring, placed restrictions on certain travel, decreased the future use of consultants and are deferring non-critical initiatives;
- we have initiated frequent, consistent communication with our customers, which allowed us to resolve issues preventing timely collection of certain past due outstanding receivables;
- we have emphasized cash collections from customers, and continue to negotiate improved payment terms with both our customers and vendors;
- we launched Pioneer, a one module-in-portrait (1P) solar tracker solution, and a new solution for thin-film modules not subject to UFLPA;
- we filed a prospectus supplement in September 2022, as described further in "Note 15. Stockholders' equity" below which has provided us with the ability to sell from time to time, and in one or more transactions, newly issued shares of our common stock with an aggregate offering price of up to \$100 million in future "at the market" offerings ("ATM Program") however, our conclusions around liquidity are not dependent on us transacting off the ATM;
- we reached a settlement agreement with FCX Solar, LLC in December 2022, regarding a lawsuit filed against us relating to claims of patent infringement in order to eliminate future time and expense involved in defending ourselves in this action. As described further in "Note 14. Commitments and contingencies" below, a portion of the settlement payment was made in stock; and
- we continue to actively explore options to obtain additional sources of capital through either the issuance of new debt or equity.

Management believes that our existing cash on hand, as well the continuing impact of certain of the actions described above, along with our expectations of improved market conditions and positive results from our efforts to increase gross margins, will allow us to grow profitably and generate positive cash flow from operations during the second half of 2023 in amounts that will be sufficient for us to fund our operations for at least one year from the date of issuance of these consolidated financial statements. Accordingly, the accompanying financial statements assume we will continue as a going concern through the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

We have achieved success in executing certain of the initiatives above and we continue to work to further reduce our use of cash to fund our operations. We expect the two-year holiday on duties announced by President Biden in June 2022 will reduce the level of uncertainty in the market due to the ongoing AD/CVD investigation by the U.S. Department of Commerce, as described above, and we believe passage of the Inflation Reduction Act of 2022 will also benefit demand for our products in the United States. At the same time, however, new rules for module importers and reviews by CBP pursuant to achieving full compliance with UFLPA are expected to continue creating uncertainty in the market. However, once there is additional clarity around compliance with UFLPA and customers get line-of-sight to module deliveries, we believe the market will see a recovery. While there are already many underlying drivers of growth in the solar industry, the expected positive impact on demand for our products could take longer than expected to occur. In addition, market conditions could deteriorate significantly from what we currently expect, and regulatory and international trade policies could become more stringent as a result of (i) findings from the U.S. Department of Commerce's AD/CVD investigation, (ii) the level of enforcement of regulations issued under UFLPA, and (iii) other factors, which may result in a need for us to issue additional debt or obtain new equity financing to fund our operations beyond the next twelve months. We may be unable to obtain any desired additional financing on terms favorable to us, or at all, depending on market and other conditions. The ability to raise additional financing depends on numerous factors that are outside of our control, including macroeconomic factors such as the impact of the

COVID-19 pandemic, inflation, the ongoing conflict in the Ukraine, market conditions, the health of financial institutions, investors' and lenders' assessments of our prospects and the prospects of the solar industry in general.

Use of estimates

Preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported revenue and expenses during the period. Estimates are used for calculating the measure of progress of our solar tracker projects and deriving the standalone selling prices of the individual performance obligations when determining amounts to recognize for revenue, estimating allowances for doubtful accounts and slow-moving and obsolete inventory, determining useful lives of long-lived assets and the estimated fair value of those assets for impairment assessments, and estimating the fair value of investments, stock compensation awards, warranty liabilities and federal and state taxes, including tax valuation allowances, as well as other contingencies. We base our estimates on historical experience and anticipated results, trends, and various other assumptions that we believe are reasonable under the circumstances, including assumptions as to future events. Actual results could differ from those estimates due to risks and uncertainties.

Cash and cash equivalents

We consider all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents.

Restricted cash

Cash balances that are legally, contractually or otherwise restricted as to withdrawal or usage are considered restricted cash. We had no restricted cash balances at either December 31, 2022 or December 31, 2021.

Accounts receivable, net

Trade receivables are recorded at invoiced amounts, net of allowances for doubtful accounts if applicable, and do not bear interest. We generally do not require collateral from our customers; however, in certain circumstances, we may require letters of credit, other collateral, additional guarantees or advance payments. The allowance for doubtful accounts is based on our assessment of the collectability of our customer accounts. We regularly review our accounts receivable that remain outstanding past their applicable payment terms and establish allowances or make potential write-offs by considering certain factors such as historical experience, industry data, credit quality, age of balances and current economic conditions that may affect a customer's ability to pay.

Receivables arising from revenue recognized in excess of billings represents our unconditional right to consideration before customers are invoiced due to the level of progress obtained as of period end on our contracts to install solar tracker systems and related equipment. Further information may be found below in our revenue recognition policy.

Inventories, net

Inventories are stated at the lower of cost or net realizable value, with costs computed on a first-in, first-out basis. The Company periodically reviews its inventories for excess and obsolete items and adjusts carrying costs to estimated net realizable values when they are determined to be less than cost.

Leases

In accordance with ASC 842, we make a determination whether a contract is a lease or contains a lease at the inception of the contract and will reassess that conclusion if the contract is modified. All leases are assessed for classification as an operating lease or a finance lease. Operating lease right-of-use ("ROU") assets are reflected on the Company's Consolidated Balance Sheets. Operating lease liabilities are separated into a current portion, which is included in other current liabilities, and a noncurrent portion which is reflected separately on the Company's Consolidated Balance Sheets. The Company does not have any finance lease ROU assets or liabilities.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. The Company does not obtain and control its right to use the identified asset until the lease commencement date.

Our lease liabilities are recognized at the applicable lease commencement date based on the present value of the lease payments required to be paid over the lease term. Because the rate implicit in the lease is not readily determinable, we generally use our incremental borrowing rate to discount the lease payments to present value. The estimated

incremental borrowing rate is derived from information available at the lease commencement date. We factor in publicly available data for instruments with similar characteristics when calculating our incremental borrowing rates. The Company's ROU assets are also recognized at the applicable lease commencement date. The ROU asset equals the carrying amount of the related lease liability, adjusted for any lease payments made prior to lease commencement and lease incentives provided by the lessor. Variable lease payments are expensed as incurred and do not factor into the measurement of the applicable ROU asset or lease liability.

The term of our leases equals the non-cancellable period of the lease, including any rent-free periods provided by the lessor, and also include options to renew or extend the lease (including by not terminating the lease) that we are reasonably certain to exercise. We establish the term of each lease at lease commencement and reassess that term in subsequent periods when one of the triggering events outlined in ASC 842 occurs. Our operating lease cost for the lease payments is recognized on a straight-line basis over the lease term.

Our lease contracts often include lease and non-lease components. For facility leases, we elected the practical expedient offered by the standard to not separate lease from non-lease components and, therefore, account for them as a single lease component. For our other contracts that include leases, the Company accounts for the lease and non-lease components separately.

We have elected, for all classes of underlying assets, not to recognize ROU assets and lease liabilities for leases with a term of twelve months or less. Lease cost for short-term leases is recognized on a straight-line basis over the lease term.

Property and equipment, net

Cost

Property and equipment are stated at cost, net of accumulated depreciation. When assets are retired or otherwise disposed of, the cost and accumulated depreciation and amortization are removed from the accounts and any resulting gain or loss is recorded in the Consolidated Statements of Operations and Comprehensive Loss. Maintenance and repair costs that do not extend the useful life or improve an asset, are expensed as incurred.

Third-party and internal personnel costs during the application development stage of software developed or obtained for internal use are capitalized. Costs incurred during the preliminary planning stage and post-implementation of new software systems projects, including data conversion and training costs, are expensed as incurred.

Depreciation

We depreciate our property and equipment using the straight-line method over their estimated useful lives, which generally are as follows:

Category	Depreciation period (in years)
Leasehold improvements	3
Field equipment	5
Information technology equipment	3
Tooling	3
Capitalized software	3

Impairment

We review our long-lived assets that are held for use for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable or that its useful life may be shorter than previously expected. If such impairment indicators are present or other factors exist that indicate the carrying amount of the asset may not be recoverable, the Company determines whether an impairment has occurred through the use of an undiscounted cash flow analysis of the asset at the lowest level for which identifiable cash flows exist. If an impairment has occurred, the Company recognizes a loss for the difference between the carrying amount and the fair value of the asset, which in most cases is estimated based upon Level 3 unobservable inputs. If the asset is determined to have a remaining useful life shorter than previously expected, an adjustment for the shorter remaining life will be made for purposes of recognizing future depreciation expense. Assets are classified as held for sale when the Company has a plan, approved by the appropriate levels of management, for disposal of such assets, as well as other considerations, and those assets are stated at the lower of carrying value or estimated fair value less estimated costs to sell.

Intangible assets, net

Intangible assets consist of developed technology in the form of software tools, licenses, and intellectual property, which are amortized over the period of their estimated useful lives, generally 2.5 - 3.0 years, using the straight-line method. We evaluate intangible assets for impairment using the method described above under "Impairment".

Goodwill

We recognize goodwill as the excess of the purchase price over the estimated fair value of the identified assets and liabilities acquired in a business combination accounted for using the acquisition method. Goodwill is not amortized but is subject to a periodic assessment for impairment at least annually, or whenever events and circumstances indicate an impairment may exist. Our assessments may include qualitative factors such as current or expected industry and market conditions, our overall financial performance, share price trends, market capitalization and other company-specific events.

We operate in one segment, being the consolidated entity, which we have also determined is the reporting unit for goodwill impairment.

At December 31, 2022, in accordance with the provisions of ASU 2017-04, Intangibles - Goodwill and Other (Topic 350), we determined that we had no impairment of our goodwill at that date.

Equity method investments

We use the equity method of accounting for investment in which we have the ability to exercise significant influence, but not control, over operating and financial policies of the investee. Our proportionate share of the net income or loss of these investees is included in our Consolidated Statements of Operations and Comprehensive Loss. Judgment regarding the level of influence over each equity method investment includes considering key factors such as our ownership interest, legal form of the investee, representation on the board of directors, participation in policy-making decisions and material intra-entity transactions.

We evaluate equity method investments for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment might not be recoverable. Factors considered by the Company when reviewing an equity method investment for impairment include the length of time and the extent to which the fair value of the equity method investment has been less than its cost, the investee's financial condition and near-term prospects and the intent and ability to hold the investment for a period of time sufficient to allow for anticipated recovery. An impairment that is other-than temporary is recognized in the period identified.

We account for distributions received from equity method investees under the "nature of the distribution" approach. Under this approach, distributions received from equity method investees are classified on the basis of the nature of the activity or activities of the investee that generated the distribution as either a return on investment (classified as cash inflows from operating activities) or a return of investment (classified as cash inflows from investing activities).

We made an accounting policy election that, upon the sale of our equity method investments, we will recognize contractual contingent gains arising from earnout provisions and project escrow releases when such amounts are realizable in periods subsequent to the disposal date.

Deferred costs

Debt issue costs

Legal, consulting, banking, accounting and other fees that are incremental and directly related to establishment of our revolving line of credit agreement have been capitalized and included as a component of other assets. These costs are being amortized to interest expense over the term of the revolving line of credit agreement on a straight-line basis. Debt discount and issue costs paid to lenders and third parties relating to outstanding debt, if any, are deferred and included as a reduction in the carrying amount of the debt. These deferred costs will be amortized as additional interest expense over the life of the debt using the interest method or on a straight-line basis, if not materially different.

Offering costs

Legal, consulting, banking, accounting and other fees that are incremental and directly related to anticipated equity offerings are capitalized as incurred and offset against proceeds received upon consummation of the offering as a component of additional paid-in capital. In the event an anticipated offering is terminated, such costs will be expensed.

Warranty

Typically, the sale of solar tracker projects includes parts warranties to customers as part of the overall price of the product. We provide standard assurance type warranties for our products for periods generally ranging from two to ten years. We record a provision for estimated warranty expenses in cost of sales, net of amounts recoverable from manufacturers under their warranty obligations to us. We do not maintain general or unspecified reserves; all warranty reserves are related to specific projects. All actual or estimated material costs incurred for warranty services in subsequent periods are charged to those established reserves.

While we periodically monitor our warranty activities and claims, if actual costs incurred were to be different from our estimates, we would recognize adjustments to our warranty reserves in the period in which those differences arise or are identified.

Stock-based compensation

We recognize compensation expense for all share-based payment awards made, including stock options and RSUs, based on the estimated fair value of the award on the grant date. We calculate the fair value of stock options using the Black-Scholes option pricing model for awards with service-based vesting or through use of a lattice model or a Monte Carlo simulation for awards with market conditions. The fair value of RSUs is based on the estimated fair value of the Company's common stock on the date of grant. Since completion of our IPO, we consider the closing price of our stock, as reported on the Nasdaq Global Market, to be the fair value of our stock on the grant date.

The Black-Scholes model relies on various assumptions, in addition to the exercise price of the option and the value of our common stock on the date of grant. These assumptions include:

Expected Term: The expected term represents the period that the Company's stock-based awards are expected to be outstanding and is calculated as the average of the option vesting and contractual terms, based on the simplified method. The simplified method deems the term to be the average of the time-to-vesting and the contractual life of the options. The contractual life of an option may be up to 10 years.

Expected Volatility: Since the Company did not have a trading history of its common stock prior to our IPO and since such trading history subsequent to our IPO is limited, the expected volatility is derived from the average historical stock volatilities of several public companies within the Company's industry that it considers to be comparable to its business over a period equivalent to the expected term of the stock option grants.

Risk-Free-Interest-Rate: The Company bases the risk-free interest rate on the implied yield available on U.S. Treasury zero-coupon issues with a remaining term equivalent to the expected term.

Expected Dividend: The Company has not issued any dividends in its history and does not expect to issue dividends over the life of the options and, therefore, has estimated the dividend yield to be zero.

Forfeitures are accounted for as they occur. For service-based awards, stock-based compensation is recognized using the straight-line attribution approach over the requisite service period. For performance-based awards, stock-based compensation is recognized based on graded vesting over the requisite service period when the performance condition is probable of being achieved. Stock compensation expense for market-based awards is recognized over the derived service period determined in the valuation model, inclusive of any vesting conditions.

Income taxes

Pursuant to ASC 740, Accounting for Income Taxes, we use the asset and liability method for accounting for income taxes. Under this method, we recognize deferred tax liabilities and assets for the expected future tax consequences of temporary differences between the respective carrying amounts and tax basis of our assets and liabilities. Deferred tax balances are adjusted to reflect tax rates based on currently enacted tax laws, which will be in effect in the years in which the temporary differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period of the enactment date.

We establish valuation allowances when necessary to reduce deferred tax assets to the amounts expected to be realized. On a quarterly basis, we evaluate the need for, and the adequacy of, valuation allowances based on the expected realization of our deferred tax assets. The factors used to assess the likelihood of realization include our latest forecast of future taxable income, available tax planning strategies that could be implemented, reversal of taxable temporary differences and carryback potential to realize the net deferred tax assets.

We account for uncertain tax positions in accordance with authoritative guidance which prescribes a minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. Our evaluations of tax positions consider various factors including, but not limited to, changes in tax law, the measurement of tax positions taken or expected to be taken in tax returns, the effective settlement of matters subject to audit,

information obtained during in-process audit activities and changes in facts or circumstances related to a tax position. We accrue interest and penalties related to unrecognized tax benefits as a component of income tax expense.

Functional currency

The reporting currency of the Company is the U.S. dollar. We determine the functional currency of each subsidiary in accordance with ASC 830, Foreign Currency Matters, based on the currency of the primary economic environment in which each subsidiary operates. We translate the assets and liabilities of our non-U.S. dollar functional currency subsidiaries into U.S. dollars using exchange rates in effect at the end of each period. Revenues and expenses for these subsidiaries are translated using rates that approximate those in effect during the period. Gains and losses from these translations are recognized as a cumulative translation adjustment in "Accumulated other comprehensive loss" in stockholders' equity (deficit) in the Consolidated Balance Sheets.

The Company remeasures monetary assets and liabilities that are not denominated in the functional currency at exchange rates in effect at the end of each period.

Revenue recognition

Product revenue includes revenue from the sale of solar tracker systems and customized components of those systems, individual part sales for certain specific transactions, and sale of term-based software licenses. Term-based software licenses are deployed on the customers' own servers and have significant standalone functionality.

Service revenue includes revenue from shipping and handling services, subscription fees from licensing subscription services, and maintenance and support services in connection with the term-based software licenses. Our subscription-based enterprise licensing model typically has contract terms ranging from one to two years and consists of subscription fees from the licensing of subscription services. Our hosted on-demand service arrangements do not provide customers with the right to take possession of the software supporting the hosted services. Support services include ongoing security updates, upgrades, bug fixes, and maintenance.

We recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration to which we expect to be entitled to in exchange for those goods or services by following a five-step process: (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when or as the Company satisfies a performance obligation, as further described below.

Identify the contract with a customer: A contract with a customer exists when (i) the Company enters into an enforceable contract with a customer that defines each party's rights regarding the products and services to be transferred and identifies the payment terms related to these products and services, (ii) the contract has commercial substance, and (iii) the Company determines that collection of substantially all consideration for products and services that are transferred is probable based on the customer's intent and ability to pay the promised consideration. In assessing the recognition of revenue, we also evaluate whether two or more contracts should be combined and accounted for as one contract and if the combined or single contract should be accounted for as multiple performance obligations which could change the amount of revenue and profit (loss) recorded in a period. Change orders may include changes in specifications or design, manner of performance, equipment, materials, scope of work, and/or the period of completion of the project. We analyze change orders to determine if they should be accounted for as a modification to an existing contract or a new stand-alone contract.

Contracts we enter into with our customers for sale of solar tracker systems are generally under two different types of arrangements: (1) purchase agreements and equipment supply contracts ("Purchase Agreements"), and (2) sale of individual parts for those systems.

Change orders from our customers are generally modifications to existing contracts and are included in the total estimated contract revenue when it is probable that the change order will result in additional value that can be reliably estimated and realized.

Identify the performance obligations in the contract: We enter into contracts that can include various combinations of products and services, which are either capable of being distinct and accounted for as separate performance obligations or as one performance obligation since the majority of tasks and services are part of a single project or capability. However, determining whether products or services are considered distinct performance obligations that should be accounted for separately versus together may sometimes require significant judgment.

Our Purchase Agreements typically include two performance obligations: 1) our solar tracker systems or customized components of those systems, and 2) shipping and handling services. The deliverables included as part of our solar tracker systems are predominantly accounted for as one performance obligation, as these deliverables are part of a combined promise to deliver a project.

The revenue for shipping and handling services will be recognized over time based on progress in meeting shipping terms of the arrangements, as this faithfully depicts the Company's performance in transferring control.

Sales of individual parts of our solar tracker systems for certain specific transactions include multiple performance obligations consisting of individual parts of those systems. Revenue is recognized for parts sales at a point in time when the obligations under the terms of the contract with our customer are satisfied. Generally, this occurs with the transfer of control of the asset, which is in line with shipping terms.

Determine the transaction price: The transaction price is determined based on the consideration to which we will be entitled in exchange for transferring services to the customer. Such amounts are typically stated in the customer contract, and to the extent that we identify variable consideration, we will estimate the variable consideration at the onset of the arrangement as long as it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. The majority of our contracts do not contain variable consideration provisions as a continuation of the original contract. None of our contracts contain a significant financing component. Taxes collected from customers and remitted to governmental authorities are not included in revenue.

Allocate the transaction price to performance obligations in the contract: Once we have determined the transaction price, we allocate the total transaction price to each performance obligation in a manner depicting the amount of consideration to which we expect to be entitled in exchange for transferring the good(s) or service(s) to the customer. We allocate the transaction price to each performance obligation identified in the contract on a relative standalone selling price basis.

We use the expected cost-plus margin approach based on hardware, labor, and related overhead cost to estimate the standalone selling price of our solar tracker systems, customized components of those systems, and individual parts for certain specific transactions. We use the adjusted market assessment approach for all other performance obligations except shipping, handling, and logistics. For shipping, handling, and logistics performance obligations, we use a residual approach to calculate the standalone selling price, because of the nature of the highly variable and broad range of prices we charge to various customers for this performance obligation in the contracts.

Recognize revenue when or as the Company satisfies a performance obligation: For each performance obligation identified, we determine at contract inception whether we satisfy the performance obligation over time or at a point in time. The performance obligations in the contracts for our solar tracker systems and customized components of those systems are satisfied over-time as work progresses, utilizing an input measure of progress determined by cost-to-cost measures on these projects as this faithfully depicts our performance in transferring control. Additionally, our performance does not create an asset with an alternative use, due to the highly customized nature of the product, and we have an enforceable right to payment for performance completed to date. Our performance obligations for individual part sales for certain specific transactions are recognized point-in-time as and when control transfers based on the Incoterms for the contract. Our performance obligations for term-based software licenses are recognized point-in-time as and when control transfers, either upon delivery to the customer or the software license start date, whichever is later. Our performance obligations for shipping and handling services are satisfied over-time as the services are delivered over the term of the contract. We recognize revenue for subscription and other services on a straight-line basis over the contract period. With regard to support revenue, a time-elapsed method is used to measure progress because we transfer control evenly over the contractual period. Accordingly, the fixed consideration related to support revenue is generally recognized on a straight-line basis over the contract term.

Contract assets and liabilities: The timing of revenue recognition, billing, and cash collection results in the recognition of accounts receivable, unbilled receivables for revenue recognized in excess of billings, and deferred revenue in the Consolidated Balance Sheets. We may receive advances or deposits from our customers before revenue is recognized, resulting in contract liabilities, which are reflected as "deferred revenue" in our Consolidated Balance Sheets.

Cost of revenue consists primarily of costs related to raw materials, freight and delivery, product warranty, and personnel costs (salaries, bonuses, benefits, and stock-based compensation). Personnel costs in cost of revenue include both direct labor costs as well as costs attributable to any individuals whose activities relate to the procurement, installment, and delivery of the finished product and services. Personnel costs during 2021 are reported net of federal employee retention credits received. Deferred cost of revenue results from the timing differences between the costs incurred in advance of the satisfaction of all revenue recognition criteria consistent with our revenue recognition policy.

Research and development

Research and development costs are expensed as incurred and consist primarily of personnel costs, including salaries, bonuses, benefits, and stock-based compensation, along with other costs related to development of new

products and services, as well as enhancing system performance, improving product reliability, reducing product cost, and simplifying installation. Research and development costs also include depreciation and allocated overhead.

Advertising costs

Advertising costs are expensed as incurred and are included in selling and marketing expenses in the accompanying consolidated statements of operations and comprehensive loss.

Concentrations of credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk are primarily cash and accounts receivable.

We regularly maintain cash balances with various financial institutions that exceed federally insured amounts, but we have experienced no losses associated with these amounts to date.

The Company extends credit to customers in the normal course of business, often without requiring collateral. The Company performs credit analyses and monitors the financial health of its customers to reduce credit risk.

The Company's accounts receivables are derived from revenue earned from customers primarily located in the United States, Australia and in the Asia Pacific region. No countries other than the United States and Australia account for 10% or more of our revenue. Most of our customers are project developers, solar asset owners and engineering, procurement and construction ("EPC") contractors that design and build solar energy projects. Often times, as discussed further in "Note 5. Accounts receivable, net" below, a small number of customers account for a significant portion of our year end outstanding receivables and our total revenue for the year.

Fair value of financial instruments

Our financial instruments consist of cash, cash equivalents, accounts receivable, accounts payable, and debt obligations, if any. Cash, cash equivalents, accounts receivable and accounts payable are stated at their carrying value, which approximates fair value due to the short time to the expected receipt or payment date. The carrying values of debt obligations bearing variable rates of interest, if any, are also considered to approximate fair value due to applicable interest rates resetting to market rates periodically. The fair value of our fixed-rate debt obligations, if any, will be impacted by changes in market rates for similar debt subsequent to our initial borrowings.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date. A hierarchy for inputs used in measuring fair value has been defined to minimize the use of unobservable inputs by requiring the use of observable market data when available. Observable inputs are inputs that market participants would use in pricing the asset or liability based on active market data. Unobservable inputs we select reflect our assumptions about what market participants would use in pricing the asset or liability based on the best information currently available.

The fair value hierarchy prioritizes the inputs into three broad levels:

- Level 1: Quoted (unadjusted) prices in active markets for identical assets or liabilities.
- Level 2: Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability.
- Level 3: Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

We account for long-term debt, if any, on an amortized cost basis.

Recent accounting pronouncements adopted and not yet adopted

Adopted

We adopted ASU 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): Accounting for Convertible Instruments and Contract in an Entity's Own Equity, effective January 1, 2022. This standard had no impact on our financial position or results operations at the time of adoption.

Not yet adopted

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments (“ASU 2016-13”). ASU 2016-13, as amended, changes the impairment model for most financial assets and requires the use of an expected loss model in place of the currently used incurred loss method. Under this model, entities will be required to estimate the lifetime expected credit loss on such instruments and record an allowance to offset the amortized cost basis of the financial asset, resulting in a net presentation of the amount expected to be collected on the financial asset. We will adopt ASU 2016-13 effective January 1, 2023, and expect no material impact on our consolidated financial statements upon adoption.

Note 3. Acquisitions

On June 14, 2022, we closed on the acquisition of all of the outstanding stock of Shanghai Han Xiang New Energy Technology Co., Ltd. ("HX Tracker"), a China-based supplier of 1P tracker systems, in order to extend our international market presence. The purchase price included approximately \$3.5 million of cash, paid in July 2022, and the issuance in June 2022 of 1,000,000 shares of the Company's common stock valued at approximately \$4.4 million. In addition, as part of the purchase price, we paid the existing debt of HX Tracker owed to the previous owners, totaling approximately \$0.8 million as of the acquisition date during the third quarter of 2022. The goodwill recognized as part of the acquisition is attributable to expected synergies in the acquired company's tracker offering and cross selling opportunities in various international markets and is not deductible for tax purposes. The results of operations of HX Tracker, which are not material to our consolidated results, have been included in our consolidated financial statements since the date of acquisition.

Certain former key employees of HX Tracker became employees of the Company following the closing and were eligible to receive up to 2.2 million RSUs, with vesting based on either performance or service conditions over a 2 to 4-year period. These awards require continuous employment during their term, subject to certain conditions as defined in the award, and are being accounted for as post combination expense recognized over the required service period based on the current expectation that all performance conditions will be met.

On July 1, 2022, we closed on an acquisition of certain assets from Standard Sun, Inc. relating to their pile testing and equipment installation business. Total purchase price was approximately \$0.8 million. Two employees of this business became employees of the Company following the acquisition. The results of operations of this business, which are not material, have been included in our consolidated financial statements since the date of acquisition. Goodwill associated with this acquisition is deductible for tax purposes.

The final allocation of the purchase price from these acquisitions was as follows:

(in thousands)	HX Tracker	Pile testing and equipment installation business	Total
Cash	\$ 18	\$ —	\$ 18
Prepays and other current assets	17	—	17
Property and equipment, net	—	502	502
Intangible assets, net	1,425	—	1,425
Goodwill	7,447	271	7,718
Deferred tax asset	221	—	221
Accrued expenses	(55)	—	(55)
Deferred tax liability	(356)	—	(356)
Total purchase price	<u>\$ 8,717</u>	<u>\$ 773</u>	<u>\$ 9,490</u>

Activity in our goodwill balance was as follows:

(in thousands)	Year ended December 31, 2022
Balance at December 31, 2021	\$ —
Acquisition of HX Tracker	7,447
Acquisition of pile testing and equipment installation business	271
Translation	(180)
Balance at December 31, 2022	<u>\$ 7,538</u>

Note 4. Reduction in force

In December 2022, in order to align our cost structure with our strategic and financial objectives and expected market conditions, we implemented a reduction in force impacting 20 employees, or approximately 8% of our then existing workforce. In connection with this event, we recognized severance and termination-related costs as follows:

(in thousands)	Year ended December 31, 2022
Cost of revenue	\$ 145
Research and development	116
Selling and marketing	62
General and administrative	118
Total	<u>\$ 441</u>

The majority of the costs incurred will be paid in 2023.

Note 5. Accounts receivable, net

Accounts receivable consisted of the following:

(in thousands)	December 31, 2022	December 31, 2021
Trade receivables	\$ 35,367	\$ 38,597
Revenue recognized in excess of billings	14,844	72,676
Other receivables	25	147
Total	50,236	111,420
Allowance for doubtful accounts	(1,184)	(3,872)
Accounts receivable, net	<u>\$ 49,052</u>	<u>\$ 107,548</u>

Included in total receivables above are amounts billed under retainage provisions totaling \$3.7 million and \$11.6 million as of December 31, 2022, and 2021, respectively, which are due within the upcoming year.

At December 31, 2022, three customers accounted for approximately 55%, 15%, and 12%, respectively, of our total accounts receivable. At December 31, 2021, four customers accounted for approximately 29%, 23%, 19% and 18%, respectively, of total accounts receivable.

Activity in the allowance for doubtful accounts for each period was as follows:

(in thousands)	Year ended December 31,		
	2022	2021	2020
Balance at beginning of period	\$ 3,872	\$ 1,228	\$ 441
Additions charged to earnings	5,578	4,045	787
Write-offs of uncollectible accounts	(8,266)	(1,401)	—
Balance at end of period	<u>\$ 1,184</u>	<u>\$ 3,872</u>	<u>\$ 1,228</u>

Note 6. Inventories, net

Inventories consisted of the following:

(in thousands)	December 31, 2022	December 31, 2021
Finished goods	\$ 16,269	\$ 8,950
Allowance for slow-moving and obsolete inventory	(1,320)	(90)
Total	<u>\$ 14,949</u>	<u>\$ 8,860</u>

Activity in the allowance for slow-moving and obsolete inventory for each period was as follows:

(in thousands)	Year ended December 31,		
	2022	2021	2020
Balance at beginning of period	\$ 90	\$ —	\$ —
Additions charged to earnings	1,813	90	—
Write-offs of obsolete inventory	(583)	—	—
Balance at end of period	<u>\$ 1,320</u>	<u>\$ 90</u>	<u>\$ —</u>

Note 7. Prepaid and other current assets

Prepaid and other current assets consisted of the following:

(in thousands)	December 31, 2022	December 31, 2021
Vendor deposits	\$ 5,085	\$ 13,098
Prepaid expenses	3,544	2,301
Prepaid taxes	163	269
Surety collateral	107	460
Other current assets	1,405	1,058
Total	<u>\$ 10,304</u>	<u>\$ 17,186</u>

Note 8. Leases

We lease office and warehouse space in various locations, including our corporate headquarters in Austin, Texas. Additionally, we lease space for an applications laboratory and have a membership in a collaborative research facility in Colorado. All of our manufacturing is outsourced to contract manufacturing partners, and we currently do not own or lease any manufacturing facilities.

We utilized a weighted average discount rate of 5.0% in establishing our operating lease ROU assets and liabilities at lease inception. At December 31, 2022, our weighted average remaining lease term for our operating leases was 3.2 years.

Our lease expense consisted of the following:

(in thousands)	Year ended December 31,		
	2022	2021	2020
Operating lease cost	\$ 705	\$ 458	\$ 288
Short-term lease cost	456	100	31
Total lease cost	<u>\$ 1,161</u>	<u>\$ 558</u>	<u>\$ 319</u>

Reported in:

Cost of revenue	\$ 677	\$ 239	\$ 38
Research and development	46	39	—
Selling and marketing	45	1	3
General and administrative	393	279	278
Total lease cost	<u>\$ 1,161</u>	<u>\$ 558</u>	<u>\$ 319</u>

Future remaining operating lease payment obligations were as follows:

(in thousands)	December 31, 2022
2023	\$ 471
2024	434
2025	367
2026	27
Thereafter	—
Total lease payments	1,299
Less: imputed interest	(96)
Present value of operating lease liabilities	<u>\$ 1,203</u>
Current portion of operating lease liability	\$ 417
Operating lease liability, net of current portion	786
Present value of operating lease liabilities	<u>\$ 1,203</u>

Note 9. Property and equipment, net

Property and equipment consisted of the following:

(in thousands)	December 31, 2022	December 31, 2021
Leasehold improvements	\$ 22	\$ 22
Field equipment	1,078	833
Information technology equipment	355	182
Tooling	824	543
Capitalized software	250	250
Total	2,529	1,830
Accumulated depreciation	(827)	(248)
Property and equipment, net	<u>\$ 1,702</u>	<u>\$ 1,582</u>

We recognized depreciation expense associated with our property and equipment each period as follows:

(in thousands)	Year ended December 31,		
	2022	2021	2020
Tangible asset depreciation	\$ 547	\$ 170	\$ 14
Capitalized software depreciation	84	62	—
Total depreciation expense	<u>\$ 631</u>	<u>\$ 232</u>	<u>\$ 14</u>

Note 10. Intangible assets, net

Intangible assets consisted of the following:

(in thousands)	Estimated Useful Lives (Years)	December 31, 2022	December 31, 2021
Developed technology	2.5 - 3.0	\$ 2,591	\$ 1,200
Total		2,591	1,200
Accumulated amortization		(1,478)	(1,200)
Intangible assets, net		<u>\$ 1,113</u>	<u>\$ —</u>

On January 13, 2017, we entered into an asset purchase agreement with SunEdison Utility Holdings, Inc. ("Seller") to purchase all assets and liabilities of the Seller. The assets purchased as part of this acquisition included \$1.2 million of developed technology in the form of software tools for the AP90 tracker, a first-generation tracker based on a 1P linked-row design. The developed technology for the AP90 tracker was amortized over a 3-year period on a straight-line basis and was fully amortized as of December 31, 2021.

As described further in Note 3 "Acquisitions" above, we acquired the outstanding stock of HX Tracker on June 14, 2022. In connection with that acquisition, we identified \$1.4 million of developed technology in connection with

the Helios 1P tracker system. We are amortizing this developed technology over a 2.5-year period on a straight-line basis.

Amortization expense recognized for the year ended December 31, 2022, totaled \$0.3 million. Amortization expense for the years ended December 31, 2023 and 2024, will be approximately \$0.6 million and \$0.5 million, respectively. No amortization expense was recognized for the year ended December 31, 2021, and the amount recognized in 2020 was not significant.

Note 11. Debt

On April 30, 2021, we entered into a Senior Secured Revolving Credit Facility with various lenders, including Barclays Bank PLC, as issuing lender, the swingline lender and as administrative agent (the "Credit Facility Agreement"). The facility has an initial three-year term and is secured by a first priority lien on substantially all of our assets, subject to certain exclusions, and customary guarantees.

The Credit Facility Agreement includes the following terms: (i) aggregate commitments of up to \$100 million, with letter of credit and swingline sub-limits; (ii) a base rate of LIBOR, plus 3.25% per annum, (iii) initial commitment fees of 0.50% per annum; (iv) initial letter of credit fees of 3.25% per annum; and (v) other customary terms for a corporate revolving credit facility. We have not made any draws on the revolving credit facility, however, we have \$1.8 million of outstanding letters of credit as of December 31, 2022. Should LIBOR rates become unavailable during the term of the Credit Agreement, the rate per annum on loans will be based on the secured overnight financing rate (SOFR) published by the Federal Reserve Bank of New York, or a successor SOFR administrator.

On June 2, 2022, we entered into Amendment No. 2 to the Credit Facility Agreement (the "Amendment") which, among other things, amended certain terms of the Credit Facility Agreement, including without limitation, to (i) reduce the minimum liquidity level in the minimum liquidity financial covenant from \$125.0 million to \$50.0 million until March 31, 2023, and (ii) set forth additional financial condition covenants and reporting requirements that apply if the Company does not maintain specified minimum liquidity from the effectiveness of the Amendment until the earlier of (x) March 31, 2023, and (y) the occurrence of certain specified conditions. The new financial condition covenants include the following: (i) if loans are outstanding, (x) the Company shall not have more than \$25.0 million in unrestricted cash and cash equivalents for longer than three business days, and (y) the ratio of the amount of (A) 75% of specified third party accounts receivables to (B) outstanding loans shall not be less than 1.10:1.00 at the end of each month and (ii) the Company shall limit the amount of cash it pays to third parties (net of all cash received by the Company (subject to certain exclusions)) to not more than \$50.0 million, with the financial covenants described in the foregoing clauses (i)(y) and (ii) only being applicable if the Company fails to maintain specified minimum liquidity, with the Company currently maintaining such specified minimum liquidity as of December 31, 2022. Additionally, prior to March 31, 2023, the Company and its restricted subsidiaries under the Credit Facility Agreement are not permitted to (i) incur additional indebtedness for borrowed money, other than through the Credit Facility Agreement or specified permitted unsecured debt, or (ii) pay dividends, subject to specified exceptions. The Amendment also sets forth certain informational rights of the lenders.

We incurred \$2.1 million of costs relating to establishment of the Credit Agreement, which are included in "Other assets" in our Consolidated Balance Sheet. At December 31, 2022, the remaining unamortized balance was \$0.9 million.

On April 30, 2020, we received a Paycheck Protection Program ("PPP") loan pursuant to the Coronavirus Aid, Relief, and Economic Security Act (the "CARES" Act) in the amount of \$0.8 million. The PPP loan had a two-year term and a fixed interest rate of 1%. Under the terms of the CARES act, the PPP loan was eligible for forgiveness, in part or whole, if the proceeds were used to retain and pay employees and for other qualifying expenditures. On January 20, 2021, the Company received notification from the Small Business Administration that they approved the forgiveness of the full \$0.8 million PPP loan. The Company recorded the forgiveness of the PPP loan as a gain on extinguishment of debt in the Consolidated Statements of Operations and Comprehensive Loss during the year ended December 31, 2021.

On June 17, 2019, the Company entered into a revolving line of credit agreement with Western Alliance Bank for a total principal amount of \$1.0 million, which was to mature two years from the date of borrowing. The line of credit had a variable rate of interest, based on the prime rate as published in the Wall Street Journal, and required monthly interest payments. The prime rate at the time of borrowing was at 5.50% per annum. The outstanding balance of \$1.0 million was paid in full, and the revolving credit line was closed in 2021.

Note 12. Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consisted of the following:

(in thousands)	December 31,	
	2022	2021
Accrued cost of revenue	\$ 13,198	\$ 43,185
Accrued compensation	4,688	981
Other accrued expenses	6,010	3,694
Total accrued expenses	<u>\$ 23,896</u>	<u>\$ 47,860</u>
Warranty reserves	\$ 8,004	\$ 4,032
Current portion of operating lease liability	417	452
Non-federal tax obligations	463	172
Total other current liabilities	<u>\$ 8,884</u>	<u>\$ 4,656</u>

We anticipate paying employee bonuses earned during the fourth quarter of 2022 in stock that will be issued during the first quarter of 2023, and have accrued \$2.0 million, which is included in accrued compensation in the table above.

We provide standard warranties on our hardware products to customers. The liability amount is based on actual historical warranty spending activity by type of product, customer and geographic region, modified by any known differences such as the impact of reliability improvements.

Activity by period in the Company's warranty accruals was as follows:

(in thousands)	Year ended December 31,		
	2022	2021	2020
Balance at beginning of period	\$ 9,346	\$ 6,811	\$ 2,057
Warranties issued during the period	8,228	8,588	7,866
Settlements made during the period	(4,041)	(5,270)	(3,111)
Changes in liability for pre-existing warranties	(1,107)	(783)	(1)
Balance at end of period	<u>\$ 12,426</u>	<u>\$ 9,346</u>	<u>\$ 6,811</u>
Warranty accruals are reported in:			
Other current liabilities	\$ 8,004	\$ 4,032	\$ 3,985
Other non-current liabilities	4,422	5,314	2,826
Balance at end of period	<u>\$ 12,426</u>	<u>\$ 9,346</u>	<u>\$ 6,811</u>

Note 13. Income taxes

The components of income before income taxes were as follows:

(in thousands)	Year ended December 31,		
	2022	2021	2020
United States	\$ (98,462)	\$ (106,467)	\$ (16,269)
Foreign	(716)	47	262
Total loss before income taxes	<u>\$ (99,178)</u>	<u>\$ (106,420)</u>	<u>\$ (16,007)</u>

The provisions (benefits) for income taxes and the reasons for the differences between the provisions (benefits) for income taxes and income tax provisions (benefits) using the U.S. federal income tax rate were as follows:

(in thousands)	Year ended December 31,		
	2022	2021	2020
Current -			
Federal	\$ —	\$ —	\$ (159)
State	204	196	1
Foreign	231	(27)	78
	<u>435</u>	<u>169</u>	<u>(80)</u>
Deferred -			
Federal	—	—	(3)
State	—	—	—
	<u>—</u>	<u>—</u>	<u>(3)</u>
Provision (benefit) for income taxes	<u>\$ 435</u>	<u>\$ 169</u>	<u>\$ (83)</u>
Federal income tax provision (benefit) at statutory rate	\$ (20,827)	\$ (22,348)	\$ (3,362)
State taxes, net of federal	(1,035)	(1,744)	(215)
Research and experimentation tax credit	(2,811)	(342)	(179)
Change in valuation allowance	24,911	28,361	3,523
Stock compensation	(1,781)	(6,863)	406
Dividends received deduction	—	—	(308)
Section 162m limitation on executive compensation	1,922	2,467	—
Permanent differences and other	56	638	52
Provision (benefit) for income taxes	<u>\$ 435</u>	<u>\$ 169</u>	<u>\$ (83)</u>

The components of deferred tax assets and liabilities were as follows:

(in thousands)	December 31, 2022	December 31, 2021
Deferred tax assets:		
Fixed assets and intangibles	\$ 5	\$ 17
Leases	255	378
Accrued expenses	4,887	2,741
Net operating loss carryforward	52,179	31,868
Stock options	3,528	5,508
R&D credit carryforward	3,431	616
Other	1,998	402
Subtotal	<u>66,283</u>	<u>41,530</u>
Less: valuation allowance	<u>(65,659)</u>	<u>(40,760)</u>
Total deferred tax assets	<u>624</u>	<u>770</u>
Deferred tax liabilities:		
Leases	(243)	(370)
Prepaid expenses	(381)	(400)
Total deferred tax liability	<u>(624)</u>	<u>(770)</u>
Net deferred tax asset (liability)	<u>\$ —</u>	<u>\$ —</u>

The net change in the total valuation allowance for the year ended December 31, 2022, was an increase of \$24.9 million recorded through continuing operations. The net change in the total valuation allowance for the year ended December 31, 2021, was an increase of \$31.5 million, comprised of \$28.4 million recorded through continuing operations and \$3.1 million recorded to paid in capital due to IPO costs. In assessing the realizability of deferred tax assets, we considered whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. We considered the scheduled reversal of deferred tax liabilities, carryback potential, projected future taxable income and tax planning strategies in making this assessment. After consideration of these factors and based upon the level of historical taxable losses, we believe it is more likely than not that the Company will not realize the benefits of these deductible differences at December 31, 2022.

We have federal net operating loss carryforwards of approximately \$232.1 million at December 31, 2022. These loss carryforwards have an indefinite carryforward period. We also have state net operating loss carryforwards of approximately \$84.6 million which begin to expire in 2037.

We have federal R&D credit carryforwards of approximately \$4.3 million at December 31, 2022, which begin to expire in 2038.

We are subject to U.S. federal income tax, as well as income tax in multiple state and foreign jurisdictions. The tax returns for years 2018 and beyond remain open for examination. As of December 31, 2022, the Company is not currently under audit by any taxing authority.

We account for uncertainty in taxes in accordance with authoritative guidance. Changes in our accruals for unrecognized tax benefits were as follows:

(in thousands)	Year ended December 31,	
	2022	2021
Balance at beginning of period	\$ 717	\$ 81
Increase for tax positions related to the current year	386	636
Increase for tax positions related to prior years	318	—
Balance at end of period	<u>\$ 1,421</u>	<u>\$ 717</u>

The unrecognized tax benefits in the table above includes \$0.9 million, and \$0.2 million as of December 31, 2022, and December 31, 2021, respectively, that, if recognized, would affect our effective tax rate. We do not anticipate a significant increase or decrease over the next twelve months in the unrecognized tax benefits reported above. As of December 31, 2022, and 2021, we have not accrued any interest or penalties related to unrecognized tax benefits.

Note 14. Commitments and contingencies

The Company may be involved in various claims, lawsuits, investigations, and other proceedings, arising in the normal course of business. The Company accrues a liability when management believes information available prior to the issuance of financial statements indicates it is probable a loss has been incurred as of the date of the financial statements and the amount of loss can be reasonably estimated. The Company adjusts its accruals to reflect the impact of negotiation, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular case. Legal costs are expensed as incurred.

We were a party to certain litigation styled FCX Solar, LLC v. FTC Solar, Inc., Case Nos. 1:21-cv-03556-RA and 1:21-cv-08766-RA, in the United States District Court for the Southern District of New York, pursuant to which FCX Solar, LLC (“FCX”) filed a lawsuit alleging breach of contract, fraud and unjust enrichment claims related to a patent license agreement and consulting relationship between us and FCX, and seeking damages of approximately \$134 million. On December 29, 2022, we entered into a settlement agreement with FCX (the “Settlement Agreement”), pursuant to which, in full settlement of this litigation, (i) we agreed to (a) pay FCX an aggregate of \$1.5 million in certain installments, and (b) issue to FCX 797,396 shares of our common stock, par value \$0.0001 per share, valued at \$2.0 million, based on a daily volume weighted average share price of our common stock on The Nasdaq Global Market in the ten consecutive trading days prior to entry into the Settlement Agreement, which was \$2.508163 per share, and (ii) we and FCX agreed to an arrangement whereby FCX has granted us a worldwide license under certain of FCX's patents to make, have made, use, sell, offer for sale, lease, import, export, or otherwise dispose of any and all our products for an initial term of three years, subject to annual renewals at our option. An initial cash payment and the shares of stock were issued to FCX in January 2023, pursuant to the terms of the Settlement Agreement.

The Company has fully accrued our entire obligation under the Settlement Agreement, including amounts payable under the license agreement, as a legal settlement in the Consolidated Balance Sheet at December 31, 2022.

Note 15. Stockholders' equity

Preferred stock

The Certificate of Incorporation, as amended on April 28, 2021, and on June 7, 2021, (the "Certificate of Incorporation"), authorizes the Company to issue up to 10 million shares of Preferred Stock with a par value of \$0.0001 with such designation, rights and preferences as may be determined from time to time by the Company's board of directors. As of December 31, 2022, there were no shares of preferred stock issued or outstanding.

Common stock

The Certificate of Incorporation authorizes the Company to issue 850 million shares of \$0.0001 par value of Common Stock. Holders of Common Stock are entitled to dividends, as and when declared by the board of directors, subject to the rights of the holders of all classes of stock outstanding having priority rights as to dividends. There have been no dividends declared to date. The holders of the Common Stock are entitled to one vote for each share of Common Stock; provided that, except as otherwise required by law, holders of Common Stock (in such capacity) shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation.

In March 2020, the Company sold 9,162,976 (post-split basis) shares of common stock at \$3.27 per share (post-split basis) for an aggregate purchase price of \$30.0 million. The proceeds were available for working capital and other corporate purposes.

On April 30, 2021, the Company closed on its IPO in which we issued and sold 19,840,000 shares of our common stock at a public offering price of \$13.00 per share. We received aggregate proceeds of \$241.2 million from the IPO, net of approximately \$16.8 million in underwriting discount and commissions and before offering costs.

The Company used \$54.2 million of net proceeds from the IPO to purchase and retire an aggregate of 4,455,384 shares of our common stock, of which 2,191,557 was a repurchase of common shares and 2,263,827 shares were from the settlement of certain vested RSUs and common shares exercised from options in connection with the IPO.

The Company is using the remaining proceeds from the IPO for general corporate purposes, including working capital and operating expenses. We may also use a portion of such proceeds to acquire or invest in businesses, products, services or technologies and may use a portion of such proceeds to provide funding to third parties for future development capital in connection with projects using our tracker systems.

ATM program

On September 14, 2022, we filed a prospectus supplement under which we may from time to time, in one or more transactions, offer and sell newly issued shares of our common stock having an aggregate offering price of up to \$100 million, to or through Credit Suisse Securities (USA) LLC ("Credit Suisse"), as our sales agent, in "at the market" offerings. We intend to use the net proceeds, if any, from this offering for general corporate purposes, including working capital and operating expenses. We may also use a portion of such proceeds to acquire or invest in businesses, products, services or technologies; however, we do not have binding agreements or commitments for any material acquisitions or investments at this time.

In connection with the ATM Program, on September 14, 2022, we entered into an equity distribution agreement (the "EDA") with Credit Suisse. The offering of our common stock pursuant to the EDA will terminate upon the earlier of (1) the sale of all common stock subject to the EDA or (2) the termination of the EDA by us or by Credit Suisse as permitted therein. The EDA contains customary representations, covenants and indemnification provisions.

As of December 31, 2022, no shares of our common stock had been sold pursuant to the EDA.

Treasury stock

On July 21, 2020, the Company's board of directors approved a share repurchase of 9,896,666 shares of common stock for an aggregate price of \$0 from founders of the Company. The repurchase of these shares was recorded as treasury stock on the Company's Consolidated Balance Sheet as of December 31, 2020, and the shares have been added to the overall pool of stock available to be utilized for future option/stock award issuances to other employees of the organization.

On January 8, 2021, the Company's board of directors approved a share repurchase of 148,440 shares of common stock for an aggregate price of \$0 from founders of the Company. The repurchase of these shares was recorded as treasury stock on the Company's Consolidated Balance Sheet as of December 31, 2021, and the shares have been added to the overall pool of stock available to be utilized for future option/stock award issuances to other employees of the organization.

On April 5, 2021, the Company's board of directors approved a share repurchase of 717,460 shares of common stock for an aggregate price of \$0 from founders of the Company. The repurchase of these shares was recorded as treasury stock on the Company's Consolidated Balance Sheet as of December 31, 2021, and the shares have been added to the overall pool of stock available to be utilized for future option/stock award issuances to other employees of the organization.

Note 16. Stock compensation and other employee benefit plans

Stock compensation plans

On January 9, 2017, the Company's board of directors adopted the 2017 Stock Incentive Plan (the "2017 Plan"). The Plan offered employees, directors and selected service providers the opportunity to acquire equity in the Company through grants of options, restricted stock awards ("RSA"), stock appreciation rights, restricted stock units ("RSU"), and other stock awards, at exercise prices not less than the fair market value of the Company's common stock on the date of grant.

Following our IPO in April 2021, we adopted the 2021 Stock Incentive Plan (the "2021 Plan") which provides for the grant of awards similar to the 2017 Plan, as well as stock bonuses and cash awards. The number of shares initially reserved for issuance under the 2021 Plan was 12,645,239, which will automatically increase on January 1 of each calendar year prior to the tenth anniversary of the Plan's effective date in an amount equal to the lesser of (i) 4% of the total number of shares of common stock outstanding on the day prior (December 31st), and (ii) a number of shares of common stock determined by the compensation committee of the Company's board of directors. Effective January 1, 2022, an additional 3,704,785 shares became available for issuance pursuant to the automatic increase provisions of the 2021 Plan.

On July 1, 2022, we filed a registration statement on Form S-8 to register 5,000,000 shares of common stock for issuance upon the settlement of RSUs and the exercise of stock options previously granted under the 2017 Plan that remain outstanding. No new awards have been or will be granted under the 2017 Plan following the effectiveness of our 2021 Plan on April 27, 2021. Also, included as part of this registration statement on Form S-8, we registered the additional 3,704,785 shares of common stock described above available under our 2021 Plan.

Concurrent with the adoption of the 2021 Plan, we also adopted the 2021 Employee Stock Purchase Plan (the "2021 ESPP Plan") in order to provide employees of the Company and its designated subsidiaries with an opportunity to purchase the Company's common stock through accumulated payroll deductions at 85% of the stock's fair market value. As of December 31, 2022, this plan has not yet been implemented internally within the Company, and no purchases of common stock have been made pursuant to the 2021 ESPP Plan.

Stock options generally vest over four years from the date of grant, and, except as noted below, are based only on service vesting conditions.

During 2021, stock options were issued to our newly appointed Chief Executive Officer which contained market conditions relating to the price of our common stock that must be met in order to start the vesting period. As described further in "Note 17. Related parties" below, similar options were granted to a related party company engaged to support us with improvements to our processes and performance in February 2022.

RSU grants may contain either service vesting conditions or a combination of performance and service vesting conditions, both of which must be met in order to vest. Awards with service conditions generally vest over a period of four years from the date of grant.

Our IPO in April 2021 was deemed to meet the liquidity event provisions in our 2017 Plan, which resulted in the vesting of all awards that had previously satisfied the time-based vesting conditions of such awards as of that date.

Generally, new shares of authorized common stock are issued to satisfy vesting or exercise of awards under both the 2017 and 2021 Stock Incentive Plans although treasury shares are also available for issuance at the discretion of the Company.

Stock compensation expense for each period was as follows:

(in thousands)	Year ended December 31,		
	2022	2021	2020
Cost of revenue	\$ 3,292	\$ 8,094	\$ 322
Research and development	1,460	3,657	57
Selling and marketing	1,889	2,056	38
General and administrative	13,662	47,958	1,401
Total stock compensation expense	<u>\$ 20,303</u>	<u>\$ 61,765</u>	<u>\$ 1,818</u>

Information relating to our outstanding option awards was as follows:

Options	Shares	Weighted-average exercise price	Weighted-average remaining contractual term (in years)	Average intrinsic value (in thousands)
Outstanding as of December 31, 2021	7,538,265	\$ 2.48		
Granted	3,000,000	3.86		
Exercised	(3,316,079)	0.27		
Forfeited and expired	(412,336)	0.48		
Outstanding as of December 31, 2022	<u>6,809,850</u>	<u>\$ 4.29</u>	<u>7.69</u>	<u>\$ 4,099</u>
Vested at December 31, 2022 or expected to vest in the future	<u>4,704,127</u>	<u>\$ 5.59</u>	<u>8.30</u>	<u>\$ 580</u>
Exercisable at December 31, 2022	<u>2,105,723</u>	<u>\$ 1.38</u>	<u>6.33</u>	<u>\$ 3,519</u>
At December 31, 2022:				
Stock-based compensation cost not yet recognized (in thousands)				<u>\$ 10,551</u>
Weighted-average remaining expense recognition period (in years)				<u>3.09</u>

Assumptions used to value option awards were as follows:

	Year ended December 31,		
	2022	2021	2020
Black-Scholes-Merton pricing formula weighted-average assumptions:			
Expected life (in years)	5.27	7.72	6.07
Risk-free interest rate	1.82%	1.32%	1.60%
Volatility	80.00%	56.47%	51.57%
Dividend yield	0.00%	0.00%	0.00%
Valuations:			
Grant-date fair value per option (post-split) ⁽¹⁾	\$ 1.85	\$ 4.79	\$ 2.86
Intrinsic value of options exercised (in thousands)	\$ 14,646	\$ 22,852	\$ —
Average intrinsic value per share of options exercised	\$ 4.42	\$ 8.05	\$ —

⁽¹⁾ - Includes options with market conditions.

Information relating to our outstanding restricted stock unit and restricted stock awards was as follows:

	Shares	Weighted-average grant date fair value
Restricted stock units:		
Nonvested as of December 31, 2021	5,141,469	\$ 6.08
Granted	6,927,858	3.71
Vested	(3,435,814)	4.93
Forfeited	(1,560,850)	5.55
Nonvested as of December 31, 2022	<u>7,072,663</u>	<u>\$ 4.73</u>
At December 31, 2022:		
Stock-based compensation cost not yet recognized (in thousands)		<u>\$ 18,500</u>
Weighted-average remaining expense recognition period (in years)		<u>1.29</u>

Other employee benefit plans

We sponsor a 401(k) savings plan for our U.S. employees, whereby the employees can elect to make pre- or post-tax contributions, subject to certain limitations. We make matching contributions equal to 100% of the first 3% and 50% of the next 2% of an employee's contribution. Employee and company contributions are both immediately

vested. Company matching contributions were approximately \$0.7 million, \$0.6 million, and \$0.3 million for the years ending December 31, 2022, 2021, and 2020, respectively.

Employees are also eligible to participate in various employee welfare benefit plans, including medical, dental, prescription and life insurance, in which the Company pays a portion of the cost. All such plans are unfunded.

Note 17. Related parties

Information relating to repurchases of shares from founders of the Company at no cost for inclusion in treasury stock may be found in Note 15 "Stockholders' equity" above.

During the year ended December 31, 2022, we entered into a contract with a customer in China in which our Vice President & General Manager, FTC China/Southeast Asia, and Director of FTC Solar (China) Co. Ltd., our Chinese subsidiary, is also a member of the customer's board of directors. We recognized a \$0.3 million gross margin loss on this project in our 2022 operating results.

In February 2022, we engaged Fernweh Engaged Operator Company LLC ("FEOC") to support us with improvements to our processes and performance in various areas including design, sourcing, logistics, pricing, software and standard configuration. The consideration for such engagement is a combination of (i) quarterly cash payments through mid-2023, (ii) stock options that are time-based vested through the second quarter of 2023, and (iii) options with vesting tied to achievement of certain performance metrics based on our stock price. The foregoing transaction constitutes a related person transaction under our policies and procedures as South Lake One LLC, an entity affiliated with Isidoro Quiroga Cortés, a member of our board of directors, and a holder of more than 5% of our outstanding capital stock, is an investor in Fernweh Group LLC ("Fernweh Group"), the parent entity of FEOC. Also, Aequanimitas Limited Partnership and Discrimen LLC are investors in Fernweh Group, and Isidoro Quiroga Cortés is affiliated with those entities. Isidoro Quiroga Cortés is also on the board of Fernweh Group. For the year ended December 31, 2022, we incurred \$3.9 million of general and administrative expense associated with our engagement of FEOC. Cash payments during the year ended December 31, 2022, totaled \$2.5 million.

On January 30, 2017, the Company issued promissory notes worth \$7 million, out of which \$6.0 million was issued to two board members. The notes carried an interest rate of 5% and were to expire five years from date of issuance. The Company repaid the principal during the year ended December 31, 2020. For the year ended December 31, 2020, we incurred interest expense of \$0.2 million related to the notes issued to the related parties.

Note 18. Net loss per share

	Year ended December 31,		
	2022	2021	2020
Net loss (in thousands)	\$ (99,613)	\$ (106,589)	\$ (15,924)
Weighted average shares outstanding for calculating basic and diluted loss per share	101,408,263	86,043,051	68,810,533
Basic and diluted loss per share	\$ (0.98)	\$ (1.24)	\$ (0.23)

For purposes of computing diluted loss per share, weighted average common shares outstanding do not include potentially dilutive securities that are anti-dilutive, as shown below.

	As of December 31,		
	2022	2021	2020
Anti-dilutive securities excluded from calculating dilutive loss per share:			
Shares of common stock issuable under stock option plans outstanding	6,809,850	7,538,265	8,524,997
Shares of common stock issuable upon vesting of RSUs	7,072,663	5,141,469	14,121,666
Potential common shares excluded from diluted net loss per share calculation	13,882,513	12,679,734	22,646,663

All share and per share amounts in the table above have been adjusted for an approximately 8.25-for-1 forward stock split which took effect on April 28, 2021.

Note 19. Fair value measurements

Our financial instruments consist of cash, cash equivalents, accounts receivable, accounts payable, and debt obligations, if any. Cash, cash equivalents, accounts receivable and accounts payable are stated at their carrying value, which approximates fair value due to the short time to the expected receipt or payment date. The carrying values of debt obligations bearing variable rates of interest, if any, are also considered to approximate fair value due to applicable interest rates resetting to market rates periodically. The fair value of our fixed-rate debt obligations, if any, will be impacted by changes in market rates for similar debt subsequent to our initial borrowings.

Recurring measurements

We did not hold any financial instruments measured at fair value on a recurring basis as categorized within the fair value hierarchy at December 31, 2022, and 2021.

Non-recurring measurements

We had no debt outstanding at December 31, 2022 and 2021.

Other than writing off certain deferred costs relating to uncompleted transactions, there were no indications of impairment of any of our long-lived or other intangible assets, including goodwill, during 2022 that required us to evaluate recoverability or estimate fair value of those assets.

Note 20. Sale of investment in unconsolidated subsidiary

On June 24, 2021, we disposed of our 4,791,566 Class A common unit interest in Dimension Energy LLC, ("Dimension"), representing approximately 23% of the total outstanding common shares, for approximately \$22.3 million, net of a success-based fee described below, resulting in a gain of \$20.8 million. Prior to the third-party sale, we had recognized a net loss from our investment in this unconsolidated subsidiary of \$0.4 million compared to a gain of \$1.4 million recognized in 2020.

On June 29, 2021, we made a success-based fee payment in the amount of \$1.9 million to two executive members of Dimension for entering into voting and support letter agreements and for recommending to all Executive Members of Dimension that they support the purchase agreement and the consummation of the transaction on June 24, 2021.

The sales agreement with Dimension includes an earnout provision which provides the potential to receive an additional contingent consideration of up to approximately \$14.0 million through December 2024, based on Dimension achieving certain performance milestones. This potential earnout is calculated each quarter starting January 1, 2022, as \$200 times the number of kilowatts constituting each Notice To Proceed (NTP) megawatt (MW) achieved during such quarterly earnout period, provided that no earnout amount is payable in respect to the first 100 NTP MW achieved in any earnout year.

The sales agreement also includes a projects escrow release which is an additional contingent consideration to receive \$7 million based on Dimension's completion of certain construction projects currently in progress.

During 2022 and 2021, we received \$1.7 million and \$0.2 million, respectively, from escrow for subsequent completion of certain construction projects that were in progress at the time of the sale. In accordance with our accounting policy, these amounts were recognized in the "Gain from disposal of investment in unconsolidated subsidiary" in our Consolidated Statements of Operations and Comprehensive Loss upon realization.

Note 21. Geographic and customer concentrations

Geographic concentrations

Third-party revenues were recognized in the following locations:

(in thousands)	Year ended December 31,		
	2022	2021	2020
United States	\$ 97,992	\$ 270,107	\$ 187,168
Australia	24,847	418	184
All other	227	—	—
Total third-party revenue	<u>\$ 123,066</u>	<u>\$ 270,525</u>	<u>\$ 187,352</u>

Our long-lived assets, consisting of ROU assets and property and equipment, were in the following locations:

(in thousands)	As of December 31,	
	2022	2021
United States	\$ 2,728	\$ 3,183
Australia	3	44
All other	125	88
Total long-lived assets	<u>\$ 2,856</u>	<u>\$ 3,315</u>

Customer concentrations

During the year ended December 31, 2022, three customers accounted for approximately 23%, 20% and 11%, respectively, of total revenue. During the year ended December 31, 2021, three customers accounted for approximately 37%, 20% and 15%, respectively, of total revenue. During the year ended December 31, 2020, four customers accounted for approximately 21%, 19%, 10% and 10%, respectively, of total revenue.

Note 22. Subsequent events

Thurman J. “T.J.” Rodgers resigned from his position as a director of the Company on January 19, 2023, effective immediately. Mr. Rodgers’ resignation was not a result of any disagreement with the Company on any matter relating to the Company’s operations, policies or practices.

On January 19, 2023, the board of directors of the Company (the “Board”) appointed Shaker Sadasivam as Chairman of the Board, effective immediately. Mr. Sadasivam has served as a member of the Board since January 2017 and is currently Chairman of the Board’s Compensation Committee and a member of each of the Board’s Nominating and Corporate Governance Committee and Audit Committee.

In addition, on January 19, 2023, the Board appointed Tamara Mullings as an independent director of the Company, effective immediately, in order to fill the vacancy resulting from the resignation of Mr. Rodgers. Mrs. Mullings will serve as a Class I director with a term expiring at the 2025 annual meeting of the stockholders of the Company. The Board also appointed Mrs. Mullings as a member of the Board’s Compensation Committee.

On February 9, 2023, we issued a press release to announce an agreement with Taihua New Energy (Thailand) Co., LTD, a leading steel fabricator, for the creation of Alpha Steel LLC (“Alpha Steel”), a manufacturing partnership dedicated to producing steel components, including torque tubes, for utility-scale solar projects. The Alpha Steel facility, which will be located outside of Houston in Sealy, Texas, is expected to begin commercial production in mid-2023. We currently expect to make capital contributions totaling approximately \$3.5 million, representing our 45% interest in this new venture, which we plan to account for as an equity method investment.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Evaluation of disclosure controls and procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2022. Based on that evaluation, our principal executive officer and our principal financial officer have concluded that our disclosure controls and procedures were effective at a level of reasonable assurance as of December 31, 2022.

In designing and evaluating our disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Disclosure controls and procedures include, without limitation, controls and procedures designed to provide reasonable assurance that the information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

Description of remediation efforts related to previously identified material weaknesses

Described below are the steps taken to remediate the previously identified material weaknesses in our internal control over financial reporting:

- a. We previously did not have a sufficient complement of experienced personnel with the requisite technical knowledge of public company accounting and reporting for non-routine, unusual or complex transactions.

Remediation efforts -

From November 2020 to April 2022, we added key personnel with knowledge and experience in public company internal controls, accounting, reporting, tax and other areas, including a CAO, CIO, VP Finance, Internal Audit Director, Corporate Controller, Director of SEC Reporting and Technical Accounting, Tax Director, Director of Information Technology, and a Senior Director and Director of Financial Planning and Analysis. We believe the qualifications and experience of these individuals has significantly improved our internal control environment by (i) helping ensure we implement and maintain effective internal controls suitable to a public company, (ii) having the knowledge, experience and judgment to deal with accounting and tax complexities unique to the Company, and (iii) ensuring we provide timely reporting of financial results and other material events as required by the U.S. Securities and Exchange Commission.

- b. Previously, we had not designed and maintained adequate controls over the period-end close and financial reporting process including (i) establishment of accounting policies and procedures, (ii) preparation of account reconciliations for certain accounts, (iii) ensuring proper cut-off, (iv) providing for adequate segregation of duties, (v) approving journal entries, and (vi) ensuring adequate financial statement preparation. This material weakness contributed to material adjustments in prior consolidated financial statements principally, but not limited to, the following areas: earnings per share calculations, recording of definite-lived intangibles, warranty obligation calculations, and cut-off of revenue transactions and related cost of sales. This material weakness also contributed to misstatements in our stock-based compensation expense and weighted-average common shares outstanding, which led to the revision of our interim consolidated financial statements as of June 30, 2021 and for the three- and six-months period then ended.

Remediation efforts -

The Company developed, documented and implemented key accounting policies and procedures. Internal controls were designed, documented and implemented using an internally developed risk control matrix. Such controls included entity level controls and information technology general controls ("ITGCs"). We designed, implemented and tested each quarter controls for our key business processes, such as (i) financial close and reporting, (ii) purchase to pay, (iii) revenue, (iv) treasury, and (v) payroll. In 2020, we implemented the NetSuite Financial Reporting Application System for our enterprise general ledger and transaction reporting needs. This system also provides journal entry workflow and role-based access to employees. In 2021, we implemented the Blackline business application system to provide standardization

and organization for our account reconciliation process and to improve visibility into the status of the financial close process. In January 2022, in conjunction with implementing new controls involving our stock compensation accounting process, we began using the Bank of America-Merrill Lynch equity reporting platform to provide more robust reporting of our stock-compensation programs.

- c. Previously, we had not designed and maintained effective ITGCs over the information technology ("IT") systems used for the preparation of the financial statements. Specifically, we had not designed and maintained (i) program change management controls to ensure that IT program and data changes affecting financial applications and underlying accounting records were identified, tested, authorized and implemented appropriately; (ii) user access controls to ensure appropriate segregation of duties and that adequately restricted user and privileged access to financial applications, programs and data to appropriate Company personnel; and (iii) testing and approval controls for program development to ensure that new software development was aligned with business and IT requirements.

Remediation efforts -

Utilizing our internal risk control matrix, we designed, documented and implemented new internal controls over our IT systems used to prepare our financial statements. Controls were defined for (i) IT security, (ii) IT change management, and (iii) program development. Specifically, we implemented new user provisioning and access controls to ensure segregation of duties are designed to restrict access to financial applications, programs and data to appropriate Company personnel. We also implemented new program change management controls to ensure that IT programs and data changes affecting financial applications and the underlying accounting records were identified, tested, authorized and implemented appropriately. Finally, we implemented program development controls for testing and approving new software development to ensure it is aligned with business and IT requirements.

We tested the key controls described above, added as part of our remediation efforts throughout 2022, and concluded that such controls had been operating consistently and effectively throughout 2022.

Management's report on internal control over financial reporting

It is the responsibility of the Company's management to establish and maintain adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Our internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of FTC Solar; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of FTC Solar are being made only in accordance with authorizations of management and directors of FTC Solar; and (iii) provide reasonable assurance regarding the prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements of FTC Solar.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has performed an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2022 based upon criteria set forth in *Internal Control-Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management determined that our internal control over financial reporting was effective as of December 31, 2022.

This Annual Report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the company to provide only management's report in this Annual Report.

/s/ Sean Hunkler

Sean Hunkler

President and Chief Executive Officer

/s/ Phelps Morris

Phelps Morris

Chief Financial Officer

Austin, Texas

February 28, 2023

Item 9B. Other Information.

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Information required by Item 10 will be set forth in the 2023 Proxy Statement for the Annual Meeting of Stockholders and is incorporated herein by reference. Except as otherwise specifically incorporated by reference, our 2023 Proxy Statement is not deemed filed as part of this Annual Report.

Item 11. Executive Compensation.

Information required by Item 11 will be set forth in the 2023 Proxy Statement for the Annual Meeting of Stockholders and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Information required by Item 12 will be set forth in the 2023 Proxy Statement for the Annual Meeting of Stockholders and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Information required by Item 13 will be set forth in the 2023 Proxy Statement for the Annual Meeting of Stockholders and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services.

Information required by Item 14 will be set forth in the 2023 Proxy Statement for the Annual Meeting of Stockholders and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

- (a) The following documents are filed as part of this Annual Report or incorporated by reference
 - (1) The Consolidated Financial Statements of FTC Solar, Inc. as listed on the Index to Financial Statements in Item 8.
 - (2) All financial statement schedules are omitted as they are not applicable, or not required, or the required information is included in the consolidated financial statements or notes thereto.
 - (3) Those exhibits required by Item 601 of Regulation S-K are included in the Exhibit Index below.

Exhibit Index

Exhibit Number	Description
3.1	<u>Amended and Restated Certificate of Incorporation of FTC Solar, Inc. (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 3, 2021 and incorporated herein by reference)</u>
3.2	<u>Amended and Restated Bylaws of FTC Solar, Inc. (filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 3, 2021 and incorporated herein by reference)</u>
3.3	<u>Certificate of Correction of Amended and Restated Certificate of Incorporation (filed as Exhibit 3.3 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on June 8, 2021 and incorporated herein by reference)</u>
4.1	<u>Specimen Common Stock Certificate (filed as Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 filed with the Securities Exchange Commission on April 19, 2021 and incorporated herein by reference)</u>
4.2	<u>Description of Registrant's Securities (filed as Exhibit 4.2 to the Registrant's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 21, 2022 and incorporated herein by reference)</u>
10.1**	<u>Employment Agreement by and between FTC Solar, Inc. and Robert Phelps Morris (filed as Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 16, 2022 and incorporated herein by reference)</u>
10.2**	<u>Amendment to Employment Agreement, dated as of March 31, 2022, between FTC Solar, Inc. and Phelps Morris (filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 9, 2022 and incorporated herein by reference)</u>
10.3	<u>Registration Rights Agreement, dated April 29, 2021, by and among FTC Solar, Inc. and certain holders of its capital stock (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 3, 2021 and incorporated herein by reference)</u>
10.4	<u>Amendment No. 1 to Registration Rights Agreement, dated February 17, 2022, by and among FTC Solar, Inc. and certain holders of its capital stock (filed as Exhibit 10.2 to the Registrant's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 21, 2022 and incorporated herein by reference)</u>
10.5	<u>Senior Secured Revolving Credit Facility, by and among FTC Solar, Inc., as borrower, the several financial institutions from time to time parties thereto, and Barclays Bank PLC, as an issuing lender, the swingline lender and as administrative agent (filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 3, 2021 and incorporated herein by reference)</u>
10.6	<u>Amendment No. 1 to Senior Secured Revolving Credit Facility, by and among FTC Solar, Inc., as borrower, HSBC Bank USA, N.A. and Barclays Bank PLC, as an issuing lender and as administrative agent (filed as Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 16, 2022 and incorporated herein by reference)</u>
10.7	<u>Amendment No. 2 to Senior Secured Revolving Credit Facility, by and among FTC Solar, Inc., as borrower, Barclays Bank PLC, as administrative agent, and the lenders party thereto (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 2, 2022 and incorporated herein by reference)</u>
10.8**	<u>Employment Agreement by and between FTC Solar, Inc. and Sean Hunkler (filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 12, 2021 and incorporated herein by reference)</u>
10.9**	<u>Employment Agreement by and between FTC Solar, Inc. and Ali Mortazavi (filed as Exhibit 10.7 to the Registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on February 4, 2022 and incorporated herein by reference)</u>
10.10**	<u>Employment Agreement by and between FTC Solar, Inc. and Deepak Navnith (filed as Exhibit 10.8 to the Registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on February 4, 2022 and incorporated herein by reference)</u>
10.11**	<u>Employment Agreement by and between FTC Solar, Inc. and Anthony P. Etnyre (filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 3, 2021 and incorporated herein by reference)</u>
10.12**	<u>FTC Solar, Inc. 2021 Stock Incentive Plan and form of agreement (filed as Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q with the Securities and Exchange Commission on August 11, 2021 and incorporated herein by reference)</u>
10.13**	<u>FTC Solar, Inc. 2021 Employee Stock Purchase Plan (filed as Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q with the Securities and Exchange Commission on August 11, 2021 and incorporated herein by reference)</u>
10.14	<u>Form of Indemnification Agreement (filed as Exhibit 10.4 to the Registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on April 19, 2021)</u>
21.1*	<u>List of Subsidiaries of FTC Solar, Inc.</u>
23.1*	<u>Consent of PricewaterhouseCoopers LLP</u>
24.1*	<u>Power of Attorney (included in signature page)</u>

Exhibit Number	Description
31.1*	<u>Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
31.2*	<u>Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
32.1*	<u>Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
32.2*	<u>Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.
** Management contract or compensatory plan or arrangement

Item 16. Form 10-K Summary

None.

Board of Directors

Shaker Sadasivam

Chairman of the Board of FTC Solar, Inc.
Chief Executive Officer,
Auragent Bioscience, LLC

Sean Hunkler

President and Chief Executive Officer,
FTC Solar, Inc.

Ahmad Chatila

Managing Partner
Fenice Investment Group

Isidoro Quiroga Cortés

Manager
South Lake One LLC

Lisan Hung

Vice President, General Counsel and
Corporate Secretary,
Enphase Energy, Inc.

Tamara Mullings

Business Consultant and Leadership Coach
Former Assistant Vice President of Global
Technology Services, Met Life, Inc. (2017 – 2021)

William Aldeen “Dean” Priddy, Jr.

Retired
Former Executive Vice President of Administration
Qorvo, Inc.

David Springer

Managing Director, EPC
Recurrent Energy (December 2022 – Present)

Executive Officers

Sean Hunkler

President and Chief Executive Officer

Sasan Aminpour

Chief Operating Officer (since March 2023)

Phelps Morris

Chief Financial Officer

Patrick M. Cook

Chief Commercial Officer

Nagendra Cherukupalli

Chief Technology Officer

Kristian Nolde

Vice President, Marketing and Strategy

Stockholder Return Performance Graph

The chart below illustrates FTC Solar’s cumulative total return for the period from the completion of our initial public offering in April 2021 until December 31, 2022, as compared to the Russell 2000 Index (“RUT”) and the Nasdaq Clean Edge Green Energy Index (“CELS”). The performance chart assumes (1) \$100 was invested at the opening price on April 28, 2021 in shares of FTC Solar, Inc. common stock (“FTCI”), along with the Russell 2000 Index and the Nasdaq Clean Edge Green Energy Index and (2) all dividends are reinvested.

