

Ascent Solar Technologies, Inc.
Form 424B3
May 27, 2014
Table of Contents

Filed Pursuant to Rule 424(b)(3)
Registration No. 333-195136

PROSPECTUS

ASCENT SOLAR TECHNOLOGIES, INC.

21,000,000 shares of common stock

The selling stockholder named in this prospectus is offering to sell up to 21,000,000 shares of common stock of Ascent Solar Technologies, Inc. We will not receive any proceeds from the resale of shares of our common stock by the selling stockholder.

This prospectus includes (i) 5,478,261 shares of common stock issuable upon conversion of the 630 maximum number of shares of our Series C Preferred Stock we may issue to the selling stockholder and (ii) up to 15,521,739 shares of common stock which we may issue to the selling stockholder if we choose to pay dividends and make whole amounts on the Series C Preferred Stock in the form of common stock rather than cash.

Our common stock is traded on the Nasdaq Capital Market under the symbol ASTI. On May 23, 2014, the last reported sale price of our common stock on the Nasdaq Capital Market was \$0.36 per share.

Our principal executive offices are located at 12300 North Grant Street, Thornton, Colorado 80241.

These are speculative securities. Investing in these securities involves significant risks. You should purchase these securities only if you can afford a complete loss of your investment. See Risk Factors beginning on page 5.

The selling stockholder is offering these shares of common stock. The selling stockholder may sell all or a portion of these shares from time to time in market transactions through any market on which our common stock is then traded, in negotiated transactions or otherwise, and at prices and on terms that will be determined by the then prevailing market price or at negotiated prices directly or through a broker or brokers, who may act as agent or as principal or by a combination of such methods of sale. The selling stockholder will receive all proceeds from the sale of the common stock. For additional information on the methods of sale, you should refer to the section entitled Plan of Distribution.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is May 27, 2014

Table of Contents

TABLE OF CONTENTS

<u>ABOUT THIS PROSPECTUS</u>	1
<u>PROSPECTUS SUMMARY</u>	1
<u>THE OFFERING</u>	3
<u>FORWARD-LOOKING STATEMENTS</u>	4
<u>RISK FACTORS</u>	5
<u>USE OF PROCEEDS</u>	16
<u>SELLING STOCKHOLDER</u>	16
<u>DESCRIPTION OF CAPITAL STOCK</u>	17
<u>PLAN OF DISTRIBUTION</u>	24
<u>EXPERTS</u>	25
<u>LEGAL MATTERS</u>	25
<u>INFORMATION INCORPORATED BY REFERENCE</u>	25
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	26
<u>INDEMNIFICATION</u>	26
<u>DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION OF SECURITIES ACT</u>	
<u>LIABILITIES</u>	27
<u>DEALER PROSPECTUS DELIVERY OBLIGATION</u>	27

In this prospectus, references to we, us, our, Ascent, Ascent Solar or the Company mean Ascent Solar Technologies, Inc.

Table of Contents

About This Prospectus

You should rely only on the information contained or incorporated by reference in this prospectus or a prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should not assume that the information appearing in this prospectus, any prospectus supplement or any document incorporated by reference is accurate as of any date other than its date, regardless of the time of delivery of the prospectus or prospectus supplement or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since those dates.

PROSPECTUS SUMMARY

This summary highlights information contained in this prospectus. While we believe that this summary highlights some of the most important information about Ascent Solar Technologies, Inc. and this offering, you should read this entire prospectus and the documents incorporated by reference carefully, including Risk Factors, before deciding to invest in our securities. In this prospectus, references to we, us, our, Ascent, Ascent Solar or the Company mean Ascent Solar Technologies, Inc.

Overview

We are a development stage company formed in October 2005 to commercialize flexible photovoltaic (PV) modules using proprietary technology. Our technology was initially developed at ITN Energy Systems, Inc. (ITN) beginning in 1994 and subsequently assigned and licensed to us. Our proprietary manufacturing process deposits multiple layers of materials, including a thin film of highly efficient copper-indium-gallium-diselenide (CIGS) semiconductor material, on a flexible, lightweight, high tech plastic substrate using a roll-to-roll manufacturing process and then laser patterns the layers to create interconnected PV cells, or PV modules, in a process known as monolithic integration.

We believe that our technology and manufacturing process, which results in a lighter, flexible module package, provides us with unique market opportunities relative to both the crystalline silicon (c-Si) based PV manufacturers that currently lead the PV market, as well as other thin film PV manufacturers that use substrate materials such as glass, stainless steel or other metals that can be heavier and more rigid than plastics.

We believe that the use of CIGS on a flexible, durable, lightweight, high tech plastic substrate will allow for unique and seamless integration of our PV modules into a variety of electronic products, building materials, defense, transportation and space applications, as well as other products and applications that may emerge.

Recent Strategic Developments

Introduction of EnerPlex Consumer Products

In February 2012, we began to reposition our business model with an immediate focus on developing downstream consumer products. In June 2012, we launched our EnerPlex line of consumer products, and introduced our first product, the Surfr, under the EnerPlex brand. The Surfr is a battery and solar case for the Apple iPhone® 4/4S smart phone, featuring our ultra-light CIGS thin film technology integrated directly into the case.

The case incorporates our ultra-light and thin PV module into a sleek, protective iPhone® 4/4S case, along with a thin, life extending, battery. The charger adds minimal weight and size to an iPhone® smartphone, yet provides supplemental charging when needed. In August of 2012, we announced the launch of the second version of the Surfr

for the Samsung® Galaxy S® III, which provides 85% additional battery life.

In December 2012, we launched the EnerPlex Kickr and EnerPlex Jumpr product series. The Kickr IV is an extremely portable, compact and durable solar charging device, approximately seven inches by seven inches when folded, and weighs less than half a pound. The Kickr IV provides 6.5 watts of regulated power that can help charge phones, digital cameras, and other small USB enabled devices. The Kickr IV is ideal for outdoor activities such as camping, hiking and mountain climbing as well as daily city use. To complement the Kickr IV, we also released the Jumpr series of portable power banks in December of 2012. The Jumpr series provides a compact power storage solution for those who need to take the power of the sun with them while on the go.

Table of Contents

During 2013, our EnerPlex brand rapidly expanded with the addition of two new product series as well as over fifteen new products. In the beginning of 2013, we introduced further additions to the Jumpr line of portable power banks; releasing the Jumpr Mini and Jumpr Stack in August and the Jumpr Max in September. The latest additions to the Kickr line of portable solar chargers, the Kickr I and Kickr II, were introduced in August 2013. Furthermore, in October 2013, we released our first series of solar integrated backpacks, the Packr, for consumer use. The Packr is a fashion forward and functional pack perfect for charging mobile electronic devices while on the go. Also in October 2013, we introduced the Surfr battery and solar case for the Samsung Galaxy S[®] 4, and in December 2013, we introduced the Surfr battery and solar case for Apple's iPhone[®] 5. In addition, we added an assortment of useful accessories to our product lines, all of which can be integrated into the EnerPlex ecosystem of products; such as the LED wand which can be easily plugged into a Jumpr power bank to provide hours of light, or the Travel Adaptor, which enables consumers to charge up their Jumpr power banks from a traditional outlet anywhere in the world.

Throughout 2013, we aggressively pursued new distribution channels for the EnerPlex brand; these activities have led to placement in a variety of high-traffic ecommerce venues such as www.walmart.com, www.brookstone.com, www.newegg.com as well as many others including our own e-commerce platform at www.goenerplex.com. The April 2013 placement of EnerPlex products at Fry's Electronics, a US West Coast consumer electronics retailer, represented the company's first domestic retail presence. EnerPlex products are carried in all of Fry's 34 stores across 9 states. Each store is provided with EnerPlex branded merchandising assets to highlight the uniqueness of our product lines.

In addition, we now have a total of 15 kiosks in operation. In 2014, we expect to expand to over 20 kiosks across the United States. We believe this multi-faceted strategy will give the EnerPlex brand the broadest exposure for the amount of investment and make our products immediately available to large numbers of consumers.

We continue to design and manufacture PV integrated consumer electronics as well as portable power applications for commercial and military users. Due to the high durability of our products due to the monolithic integration employed by our technology, the capability to customize modules into different form factors and the industry leading light weight and flexibility provided by our modules, we believe that the potential applications for our products are numerous.

Suqian Joint Venture

On July 2, 2013, we entered into a framework agreement for the establishment of a joint venture with the Government of the Municipal City of Suqian in Jiangsu Province, China (Suqian). On December 28, 2013 we signed the definitive agreement with Suqian which further specified the terms and time frame of the joint venture.

Under this definitive agreement, Suqian will provide cash of approximately \$32.5 million, as well as the five year rent-free use of approximately 331,000 square feet of factory & office space in the Suqian Economic and Industrial Development Science Park. The JV will build a 100MW factory over six years to manufacture Ascent's proprietary thin-film Copper-Indium-Gallium-Selenium (CIGS) photovoltaic modules on flexible polyimide in addition to related consumer products.

Ascent shall purchase the factory within the first 5 years at the initial construction cost, and will also purchase Suqian's ownership interest in the JV within 5 years at 1.5 times of Suqian's cash cost.

In the initial phase of the project during the first half of 2014, Ascent and Suqian will form a JV in which Suqian will inject approximately \$4.8 million in cash and have majority interest of 75%. Ascent shall inject approximately \$1.6 million in cash and hold a minority interest of 25%. Subsequently, during 2014, Suqian will further inject the balance

of the committed \$32.5 million while Ascent will contribute its proprietary technology and intellectual property, as well as certain equipment from its Colorado facility, thereby increasing Ascent's shareholdings progressively up to 80% ownership. By the first quarter of 2016, the JV is expected to operate an end-to-end manufacturing plant of 25 megawatts capacity and related consumer products.

Suqian will also provide a package of additional incentives including:

A 5-year corporate tax holiday and a further 50% tax rebate over the following 5 years,

Full rebate of value-added tax for the first 2 years and 50% rebate for the subsequent 3 years,

Free accommodations for up to 3 years for key scientists, engineers and management personnel of the JV.

As phase two of this program is implemented, Ascent will have the option to purchase approximately 215,000 square feet of land zoned for commercial usage at a favorable price at 10% above the government's prevailing cost.

Table of Contents

The implementation of the Suqian Agreement, including the formation of the Joint Venture, will be subject to a number of contractual conditions and governmental approvals. Such conditions and approvals must be obtained in the future in order for the Suqian factory to be built and become operational.

Need for Additional Capital

Since inception, we have incurred significant losses. We expect to continue to incur net losses in the near term. For the year ended December 31, 2013, our cash used in operations was \$20.3 million. At December 31, 2013, we had cash and equivalents of approximately \$3.3 million. At March 31, 2014, we had cash and equivalents of \$1.6 million.

Although we have commenced production at our manufacturing facility, we do not expect that sales revenue and cash flows will be sufficient to support operations and cash requirements until we have fully implemented our new consumer products strategy. In 2014, we expect to incur a base level of maintenance capital expenditures and relatively minor improvements to the existing asset base. Additional projected product revenues are not anticipated to result in a positive cash flow position for the year 2014 overall. We believe we will need to raise additional capital during 2014 in order to continue our current level of operations through the end of 2014 and into 2015. We continue to accelerate sales and marketing efforts related to our consumer products strategy through increased hiring and expansion of our sales channel. We are exploring opportunities to secure additional financing through strategic or financial investors, but there is no assurance that we will be able to raise additional capital on acceptable terms or at all. If our revenues do not increase rapidly, and/or additional financing is not obtained, we will be required to significantly curtail operations to reduce costs and/or sell assets. Such actions would likely have an adverse impact on our future operations.

Going Concern Qualification

On March 28, 2014, we filed our Annual Report on Form 10-K with the Securities and Exchange Commission, which Annual Report included our audited financial statements for the year ended December 31, 2013. The report of our independent registered public accounting firm on such financial statements contained an explanatory paragraph expressing substantial doubt regarding our ability to continue as a going concern.

The full text of the report of our independent registered public accounting firm is contained in our Annual Report on Form 10-K for the year ended December 31, 2013, which is incorporated by reference into this prospectus.

Corporate Information

We are incorporated under the laws of Delaware. Our principal business office is located at 12300 Grant Street, Thornton, Colorado 80241, and our telephone number is (720) 872-5000. Our website address is www.ascentsolar.com. Information contained on our website or any other website does not constitute part of this prospectus.

THE OFFERING

On April 1, 2014, we entered into a Stock Purchase Agreement (the "Stock Purchase Agreement") with Ironridge Technology Co., a division of Ironridge Global IV, Ltd. (the "Selling Stockholder"). The Stock Purchase Agreement provides for sales of our newly designated Series C preferred stock (the "Series C Preferred Stock") by us to the Selling Stockholder in up to two tranches.

In the first tranche, the Selling Stockholder agreed to purchase from us, and we agreed to sell to the Selling Stockholder (subject to the terms and conditions set forth therein), an aggregate of 300 shares of Series C Preferred Stock at a price of \$10,000.00 per share of Series C Preferred Stock. The closing of the first tranche took place on April 1, 2014, which resulted in gross proceeds to us of \$3,000,000. The Series C Preferred Stock is convertible into common stock at a fixed conversion price of \$1.15 per share of common stock, as further described in the Description of Capital Stock - Series C Preferred Stock section of this prospectus.

In the second tranche, we have the option of selling up to 300 additional shares of Series C Preferred Stock at \$10,000.00 per share of Series C Preferred Stock to the Selling Stockholder by delivering a written notice to the Selling Stockholder of our election to sell at any time within three trading days after this registration statement has been declared effective (the Sale Election). If we make the Sale Election and the second tranche closes, we would receive an additional \$3,000,000 in gross proceeds. If we make the Sale Election, the second tranche would not close until after our stockholders approve certain issuances of our shares related to the Series C Preferred Stock in accordance with Nasdaq Listing Rule 5635(d). That rule requires stockholders to approve certain stock issuances that may aggregate to 20% or more of our outstanding common stock. Our stockholders approved such issuances at our 2014 annual stockholders meeting on May 22, 2014.

Table of Contents

In connection with the Stock Purchase Agreement, the Company filed a Certificate of Designations of Preferences, Rights and Limitations of Series C Preferred Stock (Certificate of Designations) with the Secretary of State of the State of Delaware. The terms of the Series C Preferred Stock are summarized in the Description of Capital Stock - Series C Preferred Stock section of this prospectus.

In connection with the Stock Purchase Agreement, the Company entered into a Registration Rights Agreement, pursuant to which the Company agreed to register the shares of common stock issuable in connection with the Stock Purchase Agreement, including common stock issuable (i) upon conversion of the shares of Series C Preferred Stock and (ii) in connection with the payment of dividends and make-whole amounts (if any) in the event that the Company elects to pay such amounts in the form of common stock rather than cash. The Company agreed to file such registration statement with the SEC on the earliest practical date by which the Company may file it following the execution of the Stock Purchase Agreement by the Company and the Selling Stockholder. If the registration statement is not declared effective within 30 days after April 1, 2014 (the Effectiveness Date), the Company shall issue the Selling Stockholder 30 shares of Series C Preferred Stock as partial liquidated damages. If the registration statement is not effective within 30 days after the Effectiveness Date, the Company shall issue the Selling Stockholder an additional 30 shares of Series C Preferred Stock and if the registration statement is not effective within 60 days after the Effectiveness Date, the Company shall issue the Selling Stockholder an additional 30 shares of Series C Preferred Stock. The maximum number of shares of Series C Preferred Stock that may be issued as liquidated damages as a result of the registration statement not becoming effective is 90 shares of Series C Preferred Stock. We issued 30 additional shares of Series C Preferred Stock to the Selling Stockholder on May 1, 2014. We expect that this registration statement will be declared effective before we would be required to issue any further additional Series C Preferred Stock based on the Effectiveness Date.

This prospectus includes (i) 5,478,261 shares of common stock issuable upon conversion of the 630 shares of Series C Preferred Stock we expect to issue under the Stock Purchase Agreement and (ii) up to 11,521,739 shares of common stock which we may issue to the selling stockholder if we choose to pay dividends and make whole amounts on the Series C Preferred Stock in the form of common stock rather than cash.

Common stock outstanding prior to the offering	79,041,954*
Common stock offered by the selling stockholders	21,000,000**
Common stock to be outstanding after the offering	100,041,954**
Use of proceeds	We will not receive any proceeds from the sale of the securities hereunder. See Use of Proceeds for a complete description.

* As of April 30, 2014

** Assumes (i) issuance and conversion of all 630 shares of Series C Preferred Stock we expect to issue under the Stock Purchase Agreement, and (ii) the issuer elects to pay dividends and make-whole amounts (if any) on the Series C Preferred Stock issuable under the Stock Purchase Agreement in the form of common stock, rather than cash.

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference into it contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements are those that predict or describe future events or trends and that do not relate solely to historical matters. You can generally identify forward-looking statements as statements containing the words believe, expect, may, will, could, would, anticipate, intend, estimate, project, plan, continue, assume or other similar expressions, although forward-looking statements contain these identifying words. All statements contained in this prospectus regarding our plans, objectives, goals, strategies, future events, future net sales or performance, capital expenditures, projected financial position, potential future revenues, projected costs, financing needs, plans or intentions relating to acquisitions, plans for the commercialization of our products, business trends and results that might be obtained by pursuing management's current plans and objectives are forward-looking statements. Forward-looking statements include, but are not necessarily limited to, those relating to:

Our limited operating history and lack of profitability;

Table of Contents

Our ability to successfully design, manufacture and sell our EnerPlex line of consumer products;

Our ability to develop demand for, and sales of, our products;

Our ability to attract and retain qualified personnel to implement our business plan and corporate growth strategies;

Our ability to develop sales, marketing and distribution capabilities;

Our ability to achieve profitability through our strategic alliance with TFG Radiant Investment Group Ltd. (TFG Radiant) in designing, manufacturing and selling products;

Our ability to successfully develop and maintain strategic relationships with key partners, including original equipment manufacturers (OEMs), system integrators, distributors, retailers and e-commerce companies, who deal directly with end users in our target markets;

The accuracy of our estimates and projections;

Our ability to secure additional financing to fund our short-term and long-term financial needs;

Our ability to maintain the listing of our common stock on the NASDAQ Capital Market;

The commencement, or outcome, of legal proceedings against us, or by us, including ongoing litigation proceedings;

Changes in our business plan or corporate strategies;

The extent to which we are able to manage the growth of our operations effectively, both domestically and abroad, whether directly owned or indirectly through licenses;

The supply, availability and price of equipment, components and raw materials, including the elements needed to produce our photovoltaic modules;

Our ability to expand and protect the intellectual property portfolio that relates to our consumer electronics, photovoltaic modules and processes;

General economic and business conditions, and in particular, conditions specific to consumer electronics and the solar power industry; and

Other risks and uncertainties discussed in greater detail in the section captioned Risk Factors.

You should not place undue reliance on our forward-looking statements because the matters they describe are subject to known and unknown risks, uncertainties and other unpredictable factors, many of which are beyond our control. Our forward-looking statements are based on the information currently available to us and speak only as of the date on the cover of this prospectus. New risks and uncertainties arise from time to time, and it is impossible for us to predict these matters or how they may affect us. Over time, our actual results, performance or achievements will likely differ from the anticipated results, performance or achievements that are expressed or implied by our forward-looking statements, and such differences might be significant and materially adverse to our investors. We have no duty to, and do not intend to, update or revise the forward-looking statements in this prospectus after the date of this prospectus except to the extent required by the federal securities laws. You should consider all risks and uncertainties disclosed in our filings with the Securities and Exchange Commission, or the SEC, described in the sections of this prospectus entitled Information Incorporated by Reference and Where You Can Find More Information, all of which are accessible on the SEC's website at www.sec.gov.

RISK FACTORS

An investment in our securities involves a high degree of risk and many uncertainties discussed in the section entitled Risk Factors in our annual report on Form 10-K for the year ended December 31, 2013, which is incorporated by reference into this

Table of Contents

prospectus. You should carefully consider the risk factors before purchasing our securities. If one or more of the possibilities described as risks actually occurs, our operating results and financial condition would likely suffer and the trading price of our securities could fall, causing you to lose some or all of your investment in the securities we are offering.

Risks Relating to Our Business

We have a limited history of operations, have not generated significant revenue from operations and have had limited production of our products.

We have a limited operating history and have generated limited revenue from operations. Currently we are producing consumer oriented products in quantities necessary to meet current demand. Under our current business plan, we expect losses to continue until annual revenues and gross margins reach a high enough level to cover operating expenses. We plan to continue manufacturing at our current facilities and to expand our production capacity as part of our Joint Venture with Suqian. We are utilizing contract manufacturers in Asia for components and for final assembly of finished goods. Our ability to achieve our business, commercialization and expansion objectives will depend on a number of factors, including whether:

we can generate customer acceptance of and demand for our products;

we successfully ramp up commercial production on the equipment installed;

our products are successfully and timely certified for use in our target markets;

we successfully operate production tools to achieve the efficiencies, throughput and yield necessary to reach our cost targets;

the products we design are saleable at a price sufficient to generate profits;

our strategic alliance with TFG Radiant results in the design, manufacture and sale of sufficient products to achieve profitability;

our ability to complete the formation of our Joint Venture with Suqian and subsequent installation of manufacturing equipment and ramp to production;

we raise sufficient capital to enable us to reach a level of sales sufficient to achieve profitability on terms favorable to us;

we are able to design, manufacture, market, distribute and sell our newly introduced line of consumer oriented products;

we effectively manage the planned ramp up of our operations;

we successfully develop and maintain strategic relationships with key partners, including OEMs, system integrators and distributors, retailers and e-commerce companies, who deal directly with end users in our target markets;

our ability to maintain the listing of our common stock on the NASDAQ Capital Market;

our ability to achieve projected operational performance and cost metrics;

our ability to enter into commercially viable licensing, joint venture, or other commercial arrangements; and

the availability of raw materials.

Each of these factors is critical to our success, and accomplishing each of these tasks may take longer or cost more than expected, or may never be accomplished. It also is likely that problems we cannot now anticipate will arise. If we cannot overcome these problems, our business, results of operations and financial condition could be materially and adversely affected.

We have to date incurred net losses and may be unable to generate sufficient sales in the future to become profitable.

We incurred a net loss applicable to common stockholders of \$36.1 million for the year ended December 31, 2013 and reported an accumulated deficit of \$247.8 million as of December 31, 2013. We expect to incur net losses in the near term. Our ability to

Table of Contents

achieve profitability depends on a number of factors, including market acceptance of our consumer oriented products at competitive prices. If we are unable to raise additional capital and generate sufficient revenue to achieve profitability and positive cash flows, we may be unable to satisfy our commitments and may have to discontinue operations.

Our EnerPlex line of consumer oriented products exposes us to many new risks and uncertainties.

Following the appointment of our new President and CEO in February 2012, we repositioned our business model with an immediate focus into developing downstream consumer products. In 2012, we launched our EnerPlex brand line of consumer products, and introduced the first product under the EnerPlex brand with a solar assisted mobile phone charger incorporating our CIGS PV thin film technology. This new line of consumer oriented products exposes us to many risks and uncertainties that are new to our business.

We have limited experience in the design, manufacture, marketing, distribution and sale of consumer oriented products. Our ability to be successful with our line of consumer oriented products will depend on a number of factors, including whether:

we can achieve and maintain customer acceptance of our new consumer oriented products;

we can rapidly develop and successfully introduce large numbers of new consumer oriented products in response to changing consumer preferences, the introduction of new consumer electronics products (such as new mobile phone models) that our EnerPlex products are designed to extend their battery life, and the introduction of new products by competing manufacturers;

we can maintain an adequate level of product quality over multiple consumer oriented products which must be designed, manufactured and introduced rapidly to keep pace with changing consumer preferences and competitive factors;

we can successfully manage our third party contract manufacturers located outside the U.S. on whom we are heavily dependent for the production of our consumer oriented products;

we can successfully distribute our consumer oriented products through distributors, wholesalers, internet retailers and traditional retailers (many of whom distribute products from competing manufacturers) on whom we are heavily dependent; and

we can successfully manage the substantial inventory and other asset risks associated with the manufacture and sale of consumer electronic products, given the rapid and unpredictable pace of product obsolescence in such consumer markets.

Our business is based on a new technology, and if our PV modules or processes fail to achieve the performance and cost metrics that we expect, then we may be unable to develop demand for our PV modules and generate sufficient revenue to support our operations.

Our CIGS on flexible plastic substrate technology is a relatively new technology. Our business plan and strategies assume that we will be able to achieve certain milestones and metrics in terms of throughput, uniformity of cell efficiencies, yield, encapsulation, packaging, cost and other production parameters. We cannot assure you that our technology will prove to be commercially viable in accordance with our plan and strategies. Further, we or our strategic partners and licensees may experience operational problems with such technology after its commercial introduction that could delay or defeat the ability of such technology to generate revenue or operating profits. If we are unable to achieve our targets on time and within our planned budget, then we may not be able to develop adequate demand for our PV modules, and our business, results of operations and financial condition could be materially and adversely affected.

Our failure to further refine our technology and develop and introduce improved PV products could render our PV modules uncompetitive or obsolete and reduce our net sales and market share.

Our success requires us to invest significant financial resources in research and development to keep pace with technological advances in the solar energy industry. However, research and development activities are inherently uncertain, and we could encounter practical difficulties in commercializing our research results. Our expenditures on research and development may not be sufficient to produce the desired technological advances, or they may not produce corresponding benefits. Our PV modules may be rendered obsolete by the technological advances of our competitors, which could harm our results of operations and adversely impact our net sales and market share.

Table of Contents

Failure to expand our manufacturing capability successfully at our facilities, through our strategic alliances, or our Joint Venture with Suqian, would adversely impact our ability to sell our products into our target markets and would materially and adversely affect our business, results of operations and financial condition.

Our growth plan calls for production and operation at our facility, our Joint Venture with Suqian and at contract manufacturers in Asia. Successful operations will require substantial engineering and manufacturing resources and are subject to significant risks, including risks of cost overruns, delays and other risks, such as geopolitical unrest that may cause us not be able to successfully operate in other countries. Furthermore, we may never be able to operate our production processes in high volume or at the volumes projected, make planned process and equipment improvements, attain projected manufacturing yields or desired annual capacity, obtain timely delivery of components, or hire and train the additional employees and management needed to scale our operations. Failure to meet these objectives on time and within our planned budget could materially and adversely affect our business, results of operations and financial condition.

We may be unable to manage the expansion of our operations and strategic alliances effectively.

We will need to significantly expand our operations and form beneficial strategic alliances in order to reduce manufacturing costs through economies of scale and partnerships, secure contracts of commercially material amounts with reputable customers and capture a meaningful share of our target markets. To manage the expansion of our operations and alliances, we will be required to improve our operational and financial systems, oversight, procedures and controls and expand, train and manage our growing employee base. Our management team will also be required to maintain and cultivate our relationships with partners, customers, suppliers and other third parties and attract new partners, customers and suppliers. In addition, our current and planned operations, personnel, facility size and configuration, systems and internal procedures and controls, even when augmented through strategic alliances, might be inadequate or insufficient to support our future growth. If we cannot manage our growth effectively, we may be unable to take advantage of market opportunities, execute our business strategies or respond to competitive pressures, resulting in a material and adverse effect to our business, results of operations and financial condition.

We depend on a limited number of third party suppliers for key raw materials, and their failure to perform could cause manufacturing delays and impair our ability to deliver PV modules to customers in the required quality and quantity and at a price that is profitable to us.

Our failure to obtain raw materials and components that meet our quality, quantity and cost requirements in a timely manner could interrupt or impair our ability to manufacture our products or increase our manufacturing cost. Most of our key raw materials are either sole sourced or sourced by a limited number of third party suppliers. As a result, the failure of any of our suppliers to perform could disrupt our supply chain and impair our operations. Many of our suppliers are small companies that may be unable to supply our increasing demand for raw materials as we implement our planned expansion. We may be unable to identify new suppliers in a timely manner or on commercially reasonable terms. Raw materials from new suppliers may also be less suited for our technology and yield PV modules with lower conversion efficiencies, higher failure rates and higher rates of degradation than PV modules manufactured with the raw materials from our current suppliers.

Our continuing operations will require additional capital which we may not be able to obtain on favorable terms, if at all or without dilution to our stockholders.

The Company will need to raise additional capital to continue the current level of operations through 2014 and into 2015. The Company has begun to explore opportunities to secure additional financing through strategic or financial investors, but there is no assurance the Company will be able to raise additional capital on acceptable terms or at all. If

we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our existing stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we raise additional funds through debt financing, which may involve restrictive covenants, our ability to operate our business may be restricted. We cannot assure you that additional financing will be available on terms favorable to us, or at all. If adequate funds are not available or are not available on acceptable terms, if and when needed, our ability to fund our operations, take advantage of unanticipated opportunities, develop or enhance our products, expand capacity or otherwise respond to competitive pressures could be significantly limited, and our business, results of operations and financial condition could be materially and adversely affected. If our revenues do not increase rapidly, and/or additional financing is not obtained, we will be required to significantly curtail operations to reduce costs and/or sell assets. Such actions would likely have an adverse impact on our future operations.

In addition, the terms of a loan we obtained from the Colorado Housing and Finance Authority (CHFA) in connection with our purchase and improvement of our Thornton, Colorado facility contain covenants that limit our ability, without the consent of CHFA, to create or incur additional indebtedness (other than obligations created or incurred in the ordinary course of business

Table of Contents

such as working capital financing); merge or consolidate with any other entity; or make loans or advances to our officers, shareholders, directors or employees. The presence of these covenants gives CHFA the ability to bar us from engaging in certain transactions in the future that we may determine are necessary or advisable to meet our business objectives, including debt offerings and acquisitions of or by other companies. If CHFA were to withhold its written consent under these or other circumstances, we could be forced to prepay such loans at a premium, which could adversely affect our business, results of operations and financial condition.

Our products may never gain sufficient market acceptance, in which case we would be unable to sell our products or achieve profitability.

Demand for our products may never develop sufficiently, and our products may never gain market acceptance, if we fail to produce products that compare favorably against competing products on the basis of cost, quality, weight, efficiency and performance. Demand for our products also will depend on our ability to develop and maintain successful relationships with key partners, including distributors, retailers, OEMs, system integrators and value added resellers. If our products fail to gain market acceptance as quickly as we envision or at all, our business, results of operations and financial condition could be materially and adversely affected.

We are targeting emerging markets for a significant portion of our planned product sales. These markets are new and may not develop as rapidly as we expect, or may not develop at all.

Our target markets include consumer electronics, portable power, defense, transportation, space and near space, and building applied photovoltaic (BAPV) and building integrated photovoltaic (BIPV) markets. Although certain areas of these markets have started to develop, some of them are in their infancy. We believe these markets have significant long term potential; however, some or all of these markets may not develop and emerge as we expect. If the markets do develop as expected, there may be other products that could provide a superior product or a comparable product at lower prices than our products. If these markets do not develop as we expect, or if competitors are better able to capitalize on these markets our revenues and product margins may be negatively affected.

Failure to consummate strategic relationships with key partners in our various target market segments, such as consumer electronics, defense and portable power, transportation, space and near space, and the respective implementations of the right strategic partnerships to enter these various specified markets, could adversely affect our projected sales, growth and revenues.

We intend to sell thin-film PV modules for use in consumer electronics, portable power systems, defense and portable power systems, transportation, space and near space solar panel applications. Our marketing and distribution strategy is to form strategic relationships with distributors, retailers and value added resellers as well as direct to consumer kiosks and e-commerce to provide a foothold in these target markets. If we are unable to successfully establish working relationships with such market participants or if, due to cost, technical or other factors, our products prove unsuitable for use in such applications; our projected revenues and operating results could be adversely affected.

If sufficient demand for our products does not develop or takes longer to develop than we anticipate, we may be unable to grow our business, generate sufficient revenue to attain profitability or continue operations.

The solar energy industry is at a relatively early stage of development, and the extent to which PV modules, including our own, will be widely adopted is uncertain. While pure PV solutions is not our short term primary market, if PV technology proves unsuitable for widespread adoption or if demand for PV modules fails to develop sufficiently, long term we may be unable to grow our business, generate sufficient sales to attain profitability or continue operations. Many factors, of which several are outside of our control, may affect the viability of widespread adoption of PV

technology and demand for PV modules.

We face intense competition from other manufacturers of thin-film PV modules and other companies in the solar energy industry.

The solar energy and renewable energy industries are both highly competitive and continually evolving as participants strive to distinguish themselves within their markets and compete with the larger electric power industry. We believe our main sources of competition are other thin film PV manufacturers and companies developing other solar solutions, such as solar thermal and concentrated PV technologies.

Many of our existing and potential competitors have substantially greater financial, technical, manufacturing and other resources than we do. A competitor's greater size provides them with a competitive advantage because they often can realize

Table of Contents

economies of scale and purchase certain raw materials at lower prices. Many of our competitors also have greater brand name recognition, established distribution networks and large customer bases. In addition, many of our competitors have well-established relationships with our current and potential partners and distributors and have extensive knowledge of our target markets. As a result of their greater size, these competitors may be able to devote more resources to the research, development, promotion and sale of their products or respond more quickly to evolving industry standards and changes in market conditions than we can. Our failure to adapt to changing market conditions and to compete successfully with existing or future competitors could materially and adversely affect our business, results of operations and financial condition.

Problems with product quality or performance may cause us to incur warranty expenses, damage our market reputation and prevent us from maintaining or increasing our market share.

If our products fail to perform as expected while under warranty, or if we are unable to support the warranties, sales of our products may be adversely affected or our costs may increase, and our business, results of operations and financial condition could be materially and adversely affected.

We may also be subject to warranty or product liability claims against us that are not covered by insurance or are in excess of our available insurance limits. In addition, quality issues can have various other ramifications, including delays in the recognition of revenue, loss of revenue, loss of future sales opportunities, increased costs associated with repairing or replacing products, and a negative impact on our goodwill and reputation. The possibility of future product failures could cause us to incur substantial expenses to repair or replace defective products. Furthermore, widespread product failures may damage our market reputation and reduce our market share causing sales to decline.

The interests of our largest stockholder, TFG Radiant, may conflict with our interests or your interests now or in the future.

As of April 30, 2014, TFG Radiant owned approximately 20% of our common stock. As a result of its large holding of our shares, TFG Radiant may have the ability to prevent any transaction that requires the approval of stockholders regardless of whether other stockholders believe any such transaction is in their own best interests, with the exception of certain agreements TFG Radiant has made pursuant to the Amended and Restated Stockholders Agreement between us and TFG Radiant. TFG Radiant also has certain registration rights that could impact shareholders. Additionally, TFG Radiant currently holds two seats on our Board, which affords TFG Radiant greater control and influence over matters affecting our business.

On February 1, 2012, Mr. Victor Lee was appointed by our Board as our President and Chief Executive Officer. Mr. Lee is the managing director of Tertius Financial Group Pte Ltd, the joint venture partner with Radiant Group in TFG Radiant.

TFG Radiant may from time to time acquire and hold interests in businesses that compete directly or indirectly with us. TFG Radiant also may pursue opportunities (including by acquisition) that may be adverse to, or be in direct or indirect competition with us. Additionally, our potential customers may be competitors of TFG Radiant and our interests in selling to those customers could be divergent from TFG Radiant's competitive interests. So long as TFG Radiant continues to own a significant amount of the outstanding shares of our common stock and Mr. Lee is President and Chief Executive Officer, TFG Radiant may be able to strongly influence or effectively control our decisions.

Currency translation risk may negatively affect our net sales, cost of equipment, cost of sales, gross margin or profitability and could result in exchange losses.

Although our reporting currency is the U.S. dollar, we may conduct business and incur costs in the local currencies of other countries in which we operate, make sales or buy equipment or materials. As a result, we are subject to currency translation risk. Our future contracts and obligations may be exposed to fluctuations in currency exchange rates, and, as a result, our capital expenditures or other costs may exceed what we have budgeted. Further, changes in exchange rates between foreign currencies and the U.S. dollar could affect our net sales and cost of sales and could result in exchange losses. We cannot accurately predict future exchange rates or the overall impact of future exchange rate fluctuations on our business, results of operations and financial condition.

A significant increase in the price of our raw materials could lead to higher overall costs of production, which would negatively affect our planned product margins, or make our products uncompetitive in the PV market.

Our raw materials include high temperature plastics and various metals. Significant increases in the costs of these raw materials may impact our ability to compete in our target markets at a price sufficient to produce a profit.

Table of Contents

Our intellectual property rights or our means of enforcing those rights may be inadequate to protect our business, which may result in the unauthorized use of our products or reduced sales or otherwise reduce our ability to compete.

Our business and competitive position depends upon our ability to protect our intellectual property rights and proprietary technology, including any PV modules that we develop. We attempt to protect our intellectual property rights, primarily in the United States, through a combination of patent, trade secret and other intellectual property laws, as well as licensing agreements and third party nondisclosure and assignment agreements. Because of the differences in foreign patent and other laws concerning intellectual property rights, our intellectual property rights may not receive the same degree of protection in foreign countries as they would in the United States. Our failure to obtain or maintain adequate protection of our intellectual property rights, for any reason, could have a materially adverse effect on our business, results of operations and financial condition. Further, any patents issued in connection with our efforts to develop new technology for PV modules may not be broad enough to protect all of the potential uses of our technology.

We also rely on unpatented proprietary technology. It is possible others will independently develop the same or similar technology or otherwise obtain access to our unpatented technology. To protect our trade secrets and other proprietary information, we require our employees, consultants and advisors to execute proprietary information and invention assignment agreements when they begin working for us. We cannot assure these agreements will provide meaningful protection of our trade secrets, unauthorized use, misappropriation or disclosure of trade secrets, know how or other proprietary information. Despite our efforts to protect this information, unauthorized parties may attempt to obtain and use information that we regard as proprietary. If we are unable to maintain the proprietary nature of our technologies, we could be materially adversely affected.

In addition, when others control the prosecution, maintenance and enforcement of certain important intellectual property, such as technology licensed to us, the protection and enforcement of the intellectual property rights may be outside of our control. If the entity that controls intellectual property rights that are licensed to us does not adequately protect those rights, our rights may be impaired, which may impact our ability to develop, market and commercialize our products. Further, if we breach the terms of any license agreement pursuant to which a third party licenses us intellectual property rights, our rights under that license may be affected and we may not be able to continue to use the licensed intellectual property rights, which could adversely affect our ability to develop, market and commercialize our products.

If third parties claim we are infringing or misappropriating their intellectual property rights, we could be prohibited from selling our PV products, be required to obtain licenses from third parties or be forced to develop non-infringing alternatives, and we could be subject to substantial monetary damages and injunctive relief.

The PV industry is characterized by the existence of a large number of patents and frequent litigation based on allegations of patent infringement. We are aware of numerous issued patents and pending patent applications owned by third parties that may relate to current and future generations of solar energy. The owners of these patents may assert the manufacture, use or sale of any of our products infringes one or more claims of their patents. Moreover, because patent applications can take many years to issue, there may be currently pending applications, unknown to us, which may later result in issued patents that materially and adversely affect our business. Third parties could also assert claims against us that we have infringed or misappropriated their intellectual property rights. Whether or not such claims are valid, we cannot be certain we have not infringed the intellectual property rights of such third parties. Any infringement or misappropriation claim could result in significant costs or substantial damages to our business or an inability to manufacture, market or sell any of our PV modules found to infringe or misappropriate. Even if we

were to prevail in any such action, the litigation could result in substantial cost and diversion of resources that could materially and adversely affect our business. The large number of patents, the rapid rate of new patent issuances, the complexities of the technology involved and uncertainty of litigation increase the risk of business assets and management's attention being diverted to patent litigation. Even if obtaining a license were feasible, it could be costly and time consuming. We might be forced to obtain additional licenses from our existing licensors in the event the scope of the intellectual property we have licensed is too narrow to cover our activities, or in the event the licensor did not have sufficient rights to grant us the license(s) purportedly granted. Also, some of our licenses may restrict or limit our ability to grant sub-licenses and/or assign rights under the licenses to third parties, which may limit our ability to pursue business opportunities.

Our future success depends on retaining our Chief Executive Officer and existing management team and hiring and assimilating new key employees and our inability to attract or retain key personnel would materially harm our business and results of operations.

Our success depends on the continuing efforts and abilities of our executive officers, including Mr. Victor Lee, our President and Chief Executive Officer, our other executive officers, and key technical personnel. Our future success also will depend on our ability to attract and retain highly skilled employees, including management, technical and sales personnel. The loss of any of our key personnel, the inability to attract, retain or assimilate key personnel in the future, or delays in hiring required personnel could materially harm our business, results of operations and financial condition.

Table of Contents

Our PV modules contain limited amounts of cadmium sulfide, and claims of human exposure or future regulations could have a material adverse effect on our business, results of operations and financial condition.

Our PV modules contain limited amounts of cadmium sulfide, which is regulated as a hazardous material due to the adverse health effects that may arise from human exposure, and is banned in certain countries. We cannot assure you human or environmental exposure to cadmium sulfide used in our PV modules will not occur. Any such exposure could result in third party claims against us, damage to our reputation and heightened regulatory scrutiny of our PV modules. Future regulation relating to the use of cadmium in various products could force us to seek regulatory exemptions or impact the manufacture and sale of our PV modules and could require us to incur unforeseen environmental related costs. The occurrence of future events such as these could limit our ability to sell and distribute our PV modules, and could have a material adverse effect on our business, results of operations and financial condition.

Environmental obligations and liabilities could have a substantial negative impact on our financial condition, cash flows and profitability.

We are subject to a variety of federal, state, local and foreign laws and regulations relating to the protection of the environment, including those governing the use, handling, generation, processing, storage, transportation and disposal of, or human exposure to, hazardous and toxic materials (such as the cadmium used in our products), the discharge of pollutants into the air and water, and occupational health and safety. We are also subject to environmental laws which allow regulatory authorities to compel, or seek reimbursement for, cleanup of environmental contamination at sites now or formerly owned or operated by us and at facilities where our waste is or has been disposed. We may incur significant costs and capital expenditures in complying with these laws and regulations. In addition, violations of, or liabilities under, environmental laws or permits may result in restrictions being imposed on our operating activities or in our being subjected to substantial fines, penalties, criminal proceedings, third party property damage or personal injury claims, cleanup costs or other costs. Also, future developments such as more aggressive enforcement policies, the implementation of new, more stringent laws and regulations, or the discovery of presently unknown environmental conditions or noncompliance may require expenditures that could have a material adverse effect on our business, results of operations and financial condition. Further, greenhouse gas emissions have increasingly become the subject of international, national, state and local attention. Although future regulations could potentially lead to an increased use of alternative energy, there can be no guarantee that such future regulations will encourage solar technology. Given our limited history of operations, it is difficult to predict future environmental expenses.

We currently anticipate having substantial international operations that will subject us to a number of risks, including potential unfavorable political, regulatory, labor and tax conditions in foreign countries.

We expect to expand our operations abroad in the future and, as a result, we may be subject to the legal, political, social and regulatory requirements and economic conditions of foreign jurisdictions. Risks inherent to international operations, include, but are not limited to, the following:

difficulty in procuring supplies and supply contracts abroad;

difficulty in enforcing agreements in foreign legal systems;

foreign countries imposing additional withholding taxes or otherwise taxing our foreign income, imposing tariffs or adopting other restrictions on foreign trade and investment, including currency exchange controls;

inability to obtain, maintain or enforce intellectual property rights;

risk of nationalization;

changes in general economic and political conditions in the countries in which we may operate, including changes in the government incentives we might rely on;

unexpected adverse changes in foreign laws or regulatory requirements, including those with respect to environmental protection, export duties and quotas;

difficulty with staffing and managing widespread operations;

Table of Contents

trade barriers such as export requirements, tariffs, taxes and other restrictions and expenses, which could increase the prices of our products and make us less competitive in some countries; and

difficulty of, and costs relating to, compliance with the different commercial and legal requirements of the international markets in which we plan to offer and sell our PV products.

Our business in foreign markets will require us to respond to rapid changes in market conditions in these countries. Our overall success as an international business depends, in part, on our ability to succeed in differing legal, regulatory, economic, social and political conditions. If we are not able to develop and implement policies and strategies that are effective in each location where we will do business, then our business, results of operations and financial condition could be materially and adversely affected.

Existing regulations and policies and changes to these regulations and policies may present technical, regulatory and economic barriers to the purchase and use of PV products, which may significantly reduce demand for our PV products.

The market for electricity generation products is heavily influenced by foreign, U.S., state and local government regulations and policies concerning the electric utility industry, as well as policies promulgated by electric utilities. These regulations and policies often relate to electricity pricing and technical interconnection of customer owned electricity generation. In the United States and in a number of other countries, these regulations and policies have been modified in the past and may be modified again in the future. These regulations and policies could deter end user purchases of PV products and investment in the research and development of PV technology. For example, without a mandated regulatory exception for PV systems, utility customers are often charged interconnection or standby fees for putting distributed power generation on the electric utility grid. These fees could increase the cost to our end users of using PV systems and make them less desirable, thereby harming our business, prospects, results of operations and financial condition. In addition, electricity generated by PV systems mostly competes with expensive peak hour electricity, rather than the less expensive average price of electricity. Modifications to the peak hour pricing policies of utilities, such as to a flat rate, would require PV systems to achieve lower prices in order to compete with the price of electricity from other sources.

We anticipate that our PV modules and their use in installations will be subject to oversight and regulation in accordance with national and local ordinances relating to building codes, safety, environmental protection, utility interconnection and metering and related matters. It is difficult to track the requirements of individual states and design equipment to comply with the varying standards. Any new government regulations or utility policies pertaining to PV modules may result in significant additional expenses to us, our business partners and their customers and, as a result, could cause a significant reduction in demand for our PV modules.

Risks Relating to our Securities and an Investment in our Common Stock

As a public company we are subject to complex legal and accounting requirements that require us to incur substantial expenses, and our financial controls and procedures may not be sufficient to ensure timely and reliable reporting of financial information, which, as a public company, could materially harm our stock price and listing on the NASDAQ Capital Market.

As a public company, we are subject to numerous legal and accounting requirements that do not apply to private companies. The cost of compliance with many of these requirements is substantial, not only in absolute terms but, more importantly, in relation to the overall scope of the operations of a small company. Failure to comply with these requirements can have numerous adverse consequences including, but not limited to, our inability to file required

periodic reports on a timely basis, loss of market confidence, delisting of our securities and/or governmental or private actions against us. We cannot assure you we will be able to comply with all of these requirements or the cost of such compliance will not prove to be a substantial competitive disadvantage vis-à-vis our privately held and larger public competitors.

The Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley) requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of Sarbanes-Oxley. Our compliance with Section 404 of Sarbanes-Oxley will require we incur substantial accounting expense and expend significant management efforts. The effectiveness of our controls and procedures may, in the future, be limited by a variety of factors, including:

faulty human judgment and simple errors, omissions or mistakes;

fraudulent action of an individual or collusion of two or more people;

Table of Contents

inappropriate management override of procedures; and

the possibility that any enhancements to controls and procedures may still not be adequate to assure timely and accurate financial information.

If we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm, identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, we may be subject to NASDAQ delisting, investigations by the SEC and civil or criminal sanctions.

Our ability to successfully implement our business plan and comply with Section 404 requires us to be able to prepare timely and accurate financial statements. We expect we will need to continue to improve existing, and implement new operational, financial and accounting systems, procedures and controls to manage our business effectively.

Any delay in the implementation of, or disruption in the transition to, new or enhanced systems, procedures or controls may cause our operations to suffer, and we may be unable to conclude that our internal control over financial reporting is effective as required under Section 404 of Sarbanes-Oxley. If we are unable to complete the required Section 404 assessment as to the adequacy of our internal control over financial reporting, if we fail to maintain or implement adequate controls, our ability to obtain additional financing could be impaired. In addition, investors could lose confidence in the reliability of our internal control over financial reporting and in the accuracy of our periodic reports filed under the Securities Exchange Act of 1934, as amended (the Exchange Act). A lack of investor confidence in the reliability and accuracy of our public reporting could cause our stock price to decline.

Due to our lack of compliance with the minimum bid price rule of the NASDAQ Global Market, our stock listing was recently transferred to the NASDAQ Capital Market and, if we are unable to regain compliance with the minimum bid price rule, our stock could be delisted, which could limit the liquidity of our stock, increase its volatility and hinder our ability to raise capital.

Under the rules of the NASDAQ Stock Market, listed companies are required to maintain a share bid price of at least \$1.00 per share and if the closing share bid price stays below \$1.00 for a period of 30 consecutive business days, then the listed company has a cure period of at least 180 days for the purpose of regaining compliance with the \$1.00 per share bid price minimum. As reported in our Current Report on Form 8-K filed on September 23, 2013, we received notice from the NASDAQ Stock Market that we were not in compliance with the minimum bid price rule.

As reported in our Current Report on Form 8-K filed on March 21, 2014, our share price did not sustain an increase sufficient for us to re-gain compliance during the relevant cure period ending on March 18, 2014. We received notice from the Listing Qualifications Staff of the NASDAQ Stock Market on March 19, 2014 that our securities were subject to delisting from the NASDAQ Global Market tier unless the Company requested a hearing before the NASDAQ Listing Qualifications Panel or successfully transferred its listing to the NASDAQ Capital Market tier. As reported in our Current Report on Form 8-K filed on March 27, 2014, we received approval from NASDAQ on March 26, 2014 to transfer our stock listing to the NASDAQ Capital Market, effective with the opening of the market on March 28, 2014.

In connection with the transfer of our stock listing, we have been granted an additional 180 days, or until September 15, 2014, to regain compliance with the minimum bid price requirement by having a closing bid price of our common stock of at least \$1.00 per share for at least ten consecutive business days. If our common stock does not trade at a level that is likely to regain compliance with the NASDAQ requirements, we may be subject to de-listing procedures. We are considering various options that will enable us to avoid de-listing should the cure period expire.

If our common stock is delisted by NASDAQ, our common stock may be eligible for quotation on an over-the-counter quotation system or on the pink sheets. Upon any such delisting, our common stock would become subject to the regulations of the SEC relating to the market for penny stocks. A penny stock is any equity security not traded on a national securities exchange that has a market price of less than \$5.00 per share. The regulations applicable to penny stocks may severely affect the market liquidity for our common stock and could limit the ability of shareholders to sell securities in the secondary market. In such a case, an investor may find it more difficult to dispose of or obtain accurate quotations as to the market value of our common stock, and there can be no assurance that our common stock will be eligible for trading or quotation on any alternative exchanges or markets.

Delisting from NASDAQ could adversely affect our ability to raise additional financing through public or private sales of equity securities, would significantly affect the ability of investors to trade our securities and would negatively affect the value and liquidity of our common stock. Delisting could also have other negative results, including the potential loss of confidence by employees, the loss of institutional investor interest and fewer business development opportunities.

Table of Contents

The price of our common stock may continue to be volatile.

Our common stock is currently traded on the NASDAQ Capital Market. The trading price of our common stock from time to time has fluctuated widely and may be subject to similar volatility in the future. For example, in the calendar year ended December 31, 2013, our common stock traded as low as \$0.51 and as high as \$1.16, and in 2012, traded as low as \$0.42 and as high as \$1.94. 2014 year to date, our common stock traded as high as \$0.75 and as low as \$0.35. The trading price of our common stock in the future may be affected by a number of factors, including events described in these Risk Factors. In recent years, broad stock market indices, in general, and smaller capitalization and PV companies, in particular, have experienced substantial price fluctuations. In a volatile market, we may experience wide fluctuations in the market price of our common stock. These fluctuations may have a negative effect on the market price of our common stock regardless of our operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted. A securities class action suit against us could result in substantial costs, potential liabilities and the diversion of management's attention and resources, and could have a material adverse effect on our financial condition.

Future sales, or the potential for future sales, of our securities may cause the trading price of our common stock to decline and could impair our ability to raise capital.

Sales of a substantial number of shares of our common stock or other securities in the public markets, or the perception these sales may occur, could cause the market price of our common stock or other securities to decline and could materially impair our ability to raise capital through the sale of additional securities. A large number of our outstanding shares are not registered under the Securities Act of 1933, as amended (the Securities Act). If and when these shares are registered or become eligible for sale to the public market, the market price of our common stock could decline.

If you purchase the securities, you may experience dilution if we issue additional equity securities in future fundraising transactions.

If we issue additional common stock, or securities convertible into or exchangeable or exercisable for common stock, our stockholders, including investors who purchase shares in this offering, will experience dilution, and any such issuances may result in downward pressure on the price of our common stock.

Current stockholders will be diluted by the issuance of shares related to our outstanding Series A, Series B and Series C preferred stock, including shares that would be issued if we elect to pay dividends and make-whole amounts in the form of common stock.

The conversion of our outstanding Series A, Series B and Series C preferred stock would result in the future issuance of significant additional shares of common stock by the Company. In addition, an indeterminate number of additional common shares may be issued in the event the Company elects to pay dividends and make-whole amounts (if any) due on the Series A, Series B and Series C preferred stock in the form of shares rather than cash. The dividend rates on the Series A, B and C preferred stock are indexed to our stock price so that the dividend rate increases if our stock price declines. To the extent we issue common stock in payment of the make-whole amounts (if any) for conversion or redemption of the Series A, Series B and Series C preferred stock, or elect to pay dividends on the Series A, Series B and Series C preferred stock in the form of our common stock, rather than cash, such issuances will dilute the ownership interests of existing stockholders.

As of April 30, 2014, we have issued a total of (i) 6,387,170 common shares (including 1,511,069 common shares for make-whole amounts paid in common shares in lieu of cash) in connection with the conversion of 487,610 shares of

Series A preferred stock. As of April 30, 2014, 262,390 shares of Series A preferred stock remained outstanding. If all remaining shares of Series A preferred stock were immediately converted as of the date of this prospectus, we estimate that we would issue 2,623,900 common shares upon conversion and 2,385,364 additional common shares for make-whole amounts paid in common shares in lieu of cash.

As of April 30, 2014, we have issued a total of (i) 18,152,163 common shares (including 10,326,076 common shares for make-whole amounts paid in common shares in lieu of cash) in connection with the conversion of 900 shares of Series B preferred stock.