

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM S-3

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

REAL GOODS SOLAR, INC.

(Exact name of registrant as specified in its charter)

Colorado

*(State or other jurisdiction of
incorporation or organization)*

26-1851813

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

**110 16th Street, 3rd Floor
Denver, Colorado 80202
(303) 222-8300**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Alan Fine
Real Goods Solar, Inc.
110 16th Street, 3rd Floor
Denver, Colorado 80202
(303) 222-8300**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

**Rikard Lundberg, Esq.
Brownstein Hyatt Farber Schreck, LLP
410 Seventeenth Street, Suite 2200
Denver, Colorado 80202
(303) 223-1100**

Approximate date of commencement of proposed sale to the public: From time to time or at one time after the effective date of this Registration Statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this form are being offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Amount to be registered (1) | Proposed maximum offering price per share | Proposed maximum aggregate offering price | Amount of registration fee (3) |
|--|-----------------------------|---|---|--------------------------------|
| Class A common stock, par value \$0.0001 per share | 51,038,634 (2) | \$0.96 (3) | \$48,997,088.64 | \$ 6,100.14 |

- (1) This Registration Statement also relates to an indeterminate number of shares of the registrant's Class A common stock that may be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions in accordance with Rule 416 under the Securities Act of 1933, as amended (the "Securities Act").
- (2) Represents 200% of the shares of (a) Class A common stock issuable upon conversion of the Registrant's Series A senior convertible notes due April 9, 2019, which were acquired by the selling shareholders in a private placement, and issuable from time-to-time under the terms of the Series A senior convertible notes, (b) Class A common stock issuable upon conversion of the Registrant's Series B senior secured convertible notes due April 9, 2019, which were acquired by the selling shareholders in a private placement, and issuable from time-to-time under the terms of the Series B senior secured convertible notes, and (c) Class A common stock issuable upon the exercise of Series Q warrants to purchase Class A common stock, which were acquired by the selling shareholders in a private placement.
- (3) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) under the Securities Act, based upon the average of the high and low prices of the registrant's Class A common stock as reported on The Nasdaq Capital Market on April 24, 2018.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with section 8(a) of the Securities Act, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said section 8(a), may determine.

The information in this prospectus is not complete and may be changed without notice. The selling shareholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and the selling shareholders named in this prospectus is not soliciting offers to buy these securities in any state where the offer or sale of these securities is not permitted.

Subject to completion, dated April 27, 2018

PRELIMINARY PROSPECTUS

REAL GOODS SOLAR, INC.

51,038,634 shares of Class A common stock

This prospectus relates to the offer and sale by the selling shareholders identified in the prospectus, and any of their respective pledgees, donees, transferees, or other successors in interest of up to 51,038,634 shares of Class A common stock of Real Goods Solar, Inc. The number of shares the selling shareholders may sell consist of 200% of the aggregate of (a) an estimated 8,196,167 shares of Class A common stock issuable under the terms of our Series A senior convertible notes due April 9, 2019 (assuming conversion of such notes at the Alternate Conversion Price (as defined in such notes) of \$0.7015 as of April 26, 2018), (b) an estimated 8,196,166 shares of Class A common stock issuable under the terms of our Series B senior secured convertible notes due April 9, 2019 (assuming conversion of such notes at the Alternate Conversion Price (as defined in such notes) of \$0.7015 as of April 24, 2018), and (c) 9,126,984 shares of Class A common stock issuable upon the exercise of our Series Q warrants to purchase Class A common stock, as further described in this prospectus.

We are filing the registration statement of which this prospectus is a part at this time to fulfill contractual obligations to do so, as described in this prospectus. We will not receive any of the proceeds from the sale of the Class A common stock by the selling shareholders.

The selling shareholders and their respective pledgees, donees, transferees, or other successors in interest may offer the shares of Class A common stock in one or more transactions at fixed prices, at prevailing market prices at the time of sale, at varying prices determined at the time of sale, at negotiated prices, or in trading markets for our Class A common stock. Additional information on the selling shareholders, and the times and manner in which they may offer and sell shares of our Class A common stock under this prospectus, is provided under "Selling Shareholders" and "Plan of Distribution" in this prospectus.

Our Class A common stock is quoted on The Nasdaq Capital Market under the symbol "RGSE." On April 26, 2018, the last reported sale price of our Class A common stock was \$0.92 per share.

Investing in our Class A common stock involves certain risks. See "Risk Factors" beginning on page 5 of this prospectus for the risks that you should consider. You should read this entire prospectus carefully before you make your investment decision.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____, 2018

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ABOUT THIS PROSPECTUS

Except where the context requires otherwise, in this prospectus the terms “Company,” “our company,” “Real Goods Solar,” “we,” “us,” “its,” and “our” refer to Real Goods Solar, Inc., a Colorado corporation, and where appropriate, its direct and indirect subsidiaries.

You should rely only on the information contained or incorporated by reference in this prospectus. 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. For further information, please see the section of this prospectus entitled “Where You Can Find More Information.” The selling shareholders are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted.

You should not assume that the information appearing in this prospectus is accurate as of any date other than the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or any sale of a security. Our business, financial condition, results of operations, and prospects may have changed since those dates.

This prospectus contains trademarks, tradenames, service marks, and service names of the Company.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein may contain forward-looking statements that involve risks and uncertainties. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they provide our current beliefs, expectations, assumptions and forecasts about future events, and include statements regarding our future results of operations and financial position, business strategy, budgets, projected costs, plans and objectives of management for future operations. The words “anticipate,” “believe,” “plan,” “estimate,” “expect,” “future,” “intend,” “may,” “will” and similar expressions as they relate to us are intended to identify such forward-looking statements. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. Therefore, you should not rely on any of these forward-looking statements.

Important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements include, without limitation, the following: our history of operating losses; our ability to implement our revenue growth strategy; our ability to achieve profitability; our ability to generate breakeven cash flow to fund our operations; our success in implementing our plans to increase future sales, and installations and revenue; rules, regulations and policies pertaining to electricity pricing and technical interconnection of customer-owned electricity generation such as net energy metering; the continuation and level of government subsidies and incentives for solar energy; existing and new regulations impacting solar installations including electric codes; an increase in our cost of materials that could arise as a result of the Section 201 tariff on imported crystalline silicon photovoltaic cells and modules; future shortages in supplies for solar energy systems; our failure to timely or accurately complete financing paperwork on behalf of customers; the adoption and general demand for solar energy; the impact of a drop in the price of conventional energy on demand for solar energy systems; delays or cancellations for system installations where revenue is recognized on a percentage-of-completion basis; seasonality of customer demand and adverse weather conditions inhibiting our ability to install solar energy systems; changing and updating technologies and the issues presented by these new technologies related to customer demand and our product offering; geographic concentration of revenue from the sale of solar energy systems in Hawaii, California and east coast states; non-compliance with or loss or suspension of licenses required for installation of solar energy systems; loss of key personnel and ability to attract necessary personnel; our failure to accurately predict future warranty claims; adverse outcomes arising from litigation and legal disputes to which we may be subject from time to time; the outcome of a dispute with a customer of our former Commercial segment related to remedial work; the possibility that our insurance carrier seeks reimbursement of legal expenses up to \$1.5 million in connection with a now closed Securities and Exchange Commission (the "SEC") investigation related to our July 2014 private placement; our ability to continue to obtain services and components from suppliers, installers and other vendors; disruption of our supply chain from equipment manufacturers and potential shortages of components for solar energy systems; factors impacting the timely installation of solar energy systems; competition; costs associated with safety and construction risks; continued access to competitive third party financiers to finance customer solar installations; increases in interest rates and tightening credit markets; our ability to obtain UL certification of POWERHOUSE™ and commercialize it; our ability to meet customer expectations; risks and liabilities associated with placing employees and technicians in our customers' homes and businesses; product liability claims; future data security breaches, or our inability to protect personally identifiable information or other information about our customers; failure to comply with the director independence standards of the SEC and the Nasdaq Capital Market; our inability to maintain effective disclosure controls and procedures and internal control over financial reporting; the volatile market price of our Class A common stock; the dilutive effect of the conversion of our outstanding convertible notes and exercise of outstanding warrants or other issuances and our ability to obtain additional financing in the future; our ability to obtain shareholder approval to reduce the conversion price of our convertible notes due April 9, 2019 and the exercise price of the Series Q warrants below the market price of our Class A common stock; our ability to receive cash payments under the Investor Notes; our ability to pay the balance due at maturity of our convertible notes due April 9, 2019 if the holders thereof do not convert them or are not forced to convert; the dilutive effect of future issuances of stock, options, warrants or other securities and the effect on the market price of our Class A common stock; the low likelihood that we will pay any cash dividends on our Class A common stock for the foreseeable future; compliance with public reporting requirements; anti-takeover provisions in our organizational documents; the terms of some of our outstanding securities and transaction documents entered into in connection with past offerings restrict our ability to enter into certain transactions or obtain financing, and could result in our paying premiums or penalties to the holders of some of our outstanding securities; the disruptive effect and costs associated with threatened or commenced proxy contests; our ability to meet The Nasdaq Capital Market continued listing requirements; and such other factors as discussed throughout Part I, Item 1A, Risk Factors and Part II, Item 7, Management's Discussion and Analysis of Financial Conditions and Results of Operations of our Annual Report on Form 10-K for the year ended December 31, 2017.

Any forward-looking statement made by us in this prospectus and the documents incorporated by reference herein is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise, except as required by applicable law.

PROSPECTUS SUMMARY

This prospectus summary highlights important features of this offering and the information included or incorporated by reference in this prospectus. Because it is a summary, it may not contain all of the information that may be important to you. You should carefully read this entire prospectus, including the section entitled "Risk Factors."

Overview of our Company

As of September 29, 2017, we are the exclusive domestic and international licensee of the POWERHOUSE™ in-roof solar shingle, an innovative and visually stunning solar shingle system using technology developed by The Dow Chemical Company. The POWERHOUSE™ 1.0 and 2.0 versions used CIGS (copper indium gallium selenide solar cells) technology which had a high manufacturing cost, resulting in the product not being consumer price friendly. Conversely, the POWERHOUSE™ 3.0 is being developed with traditional silicon solar cells to increase solar production and to provide a competitive consumer price point. Under terms of a Technology License Agreement with Dow, we are pursuing final stages of development of POWERHOUSE™ 3.0 to receive UL Certification, after which we will begin to commercialize the product in North America. Upon achieving UL Certification, we will engage third-party manufacturers for production and perform distribution logistics and services to the home building and roofing industries. Further, we plan on engaging in technological advances in panel output and expansion of potential customer base from asphalt shingle roofing to alternative roofing systems. Under the Trademark License Agreement, we will market the POWERHOUSE™ 3.0 product using the Dow name.

We are a residential and business commercial solar energy engineering, procurement and construction firm. We offer turnkey services, including design, procurement, permitting, build-out, grid connection, financing referrals and warranty and customer satisfaction activities. Our solar energy systems use high-quality solar photovoltaic modules. We use proven technologies and techniques to help customers achieve meaningful savings by reducing their utility costs. In addition, we help customers lower their reliance upon fossil fuel energy sources.

We, including our predecessors, have more than 39 years of experience in residential solar energy and trace our roots to 1978, when Real Goods Trading Corporation sold the first solar photovoltaic panels in the United States. We have designed and installed over 25,000 residential and commercial solar energy systems since our founding.

During 2014, we discontinued our entire former Commercial segment and sold the assets associated with our catalog business (a portion of the Other segment). As of September 30, 2017, we created a new segment for our POWERHOUSE™ business. As a result, we now operate as four reportable segments: (1) Residential – the installation of solar energy systems for homeowners, including lease financing thereof, and small business commercial in the continental United States; (2) Sunetric – the installation of solar energy systems for both homeowners and business owners (commercial) in Hawaii; (3) POWERHOUSE™ - the manufacturing and sales of solar shingles; and (4) Other – corporate operations. We believe this structure enables us to more effectively manage our operations and resources.

Our executive offices are located at 110 16th Street, 3rd Floor, Denver, CO 80202. Our telephone number is (303) 222-8300. Our website is www.rgsenergy.com. The information on our website is not intended to be a part of this prospectus, and you should not rely on any of the information provided there in making your decision to invest in our securities. Our website address referenced above is intended to be an inactive textual reference only and not an active hyperlink to our website.

Recent Developments

In conjunction with our plans to position our company for future profitable operations, we have:

- Issued and sold up to \$10.75 million of convertible notes and warrants in April 2018 to raise up to approximately \$9.1 million after costs. We have received gross proceeds of \$5.0 million at closing and may receive up to \$5.0 million more in the future upon prepayment of the Investor Notes (as defined below), if any. It is our intent to use the proceeds from the April 2018 offering to (i) finance UL certification for POWERHOUSE™ and the \$2 million license payment to Dow upon achieving UL certification, and (ii) initiate commercialization of POWERHOUSE™.

- Completed a realignment of our Residential and Sunetric, which is expected to reduce our fixed cost structure below the gross profit line by 30% as compared to 2017 costs, to lower the required amount of future revenue to achieve break-even, or better, operating results in the future.
- Raised gross proceeds of \$1.8 million from offerings of Class A common stock and warrants in January 2018.

The Offering

| | |
|---|--|
| Class A common stock offered | Up to 51,038,634 shares (representing 200% of the shares issuable pursuant to the terms of the Series A senior convertible notes, Series B senior secured convertible notes (collectively, the “Notes”) and Series Q warrants, calculated pursuant to the terms of the Registration Rights Agreement described below) |
| Class A common stock outstanding before this offering | 10,351,845 shares as of April 26, 2018 |
| Class A common stock outstanding after this offering | 61,390,479 shares (assuming that the full 200% of the registered securities are issued pursuant to the terms of the Notes and the Series Q warrants) |
| Use of proceeds | We will not receive any proceeds from the sale of shares of Class A common stock in this offering, but we will receive the exercise price of the Series Q warrants if the Series Q warrants are exercised (unless the Series Q warrants are exercised by means of a “cashless exercise,” in which case we will not receive any exercise price). See the section entitled “Use of Proceeds.” |
| Nasdaq Capital Market symbol | RGSE |
| Risk factors | You should consider carefully the information set forth in the section entitled “Risk Factors,” beginning on page 5 of this prospectus, in deciding whether or not to invest in our Class A common stock. |
| Plan of distribution | The selling shareholders and their pledgees, donees, transferees, or other successors in interest may offer the shares of Class A common stock in one or more transactions at fixed prices, at prevailing market prices at the time of sale, at varying prices determined at the time of sale, at negotiated prices, or in trading markets for our Class A common stock. See the section entitled “Plan of Distribution,” beginning on page 16 of this prospectus for a complete description of the manner in which the shares registered hereby may be distributed. |

RISK FACTORS

An investment in our securities involves a high degree of risk. Before making an investment decision you should carefully read and consider the risks described below, together with all of the other information included or incorporated by reference in this prospectus, including, without limitation, the risk factors in the section entitled “Risk Factors” in our most recent Annual Report on Form 10-K, which is on file with the SEC. If any of the risks listed in our most recent Annual Report on Form 10-K or any of the following risks actually occur, our business, financial condition, and/or results of operations could suffer. In that case, the market price of our common stock offered by this prospectus could decline, and you may lose all or part of your investment. You should read the section entitled “Special Note Regarding Forward-Looking Statements” above for a discussion of what types of statements are forward-looking statements, as well as the significance of such statements in the context of this prospectus. Additional risks and uncertainties that we do not presently know or that we currently deem immaterial may also have a material adverse effect on our business.

The issuance of shares of Class A common stock upon conversion of our outstanding convertible notes, including the Notes, and exercise of our outstanding warrants could substantially dilute your investment and could impede our ability to obtain additional financing.

Our outstanding convertible notes, including the Notes are convertible into, and our outstanding warrants are exercisable for, shares of our Class A common stock and give the holders an opportunity to profit from a rise in the market price of our Class A common stock. Conversion or exercise thereof will result in dilution of the equity interests of our shareholders. In particular, we have agreed with the parties to the Securities Purchase Agreement for the offering of the Notes and Series Q warrants (the “2018 Note Offering”) to have our shareholders vote for approval of a decrease in the conversion price and exercise price of the Notes and Series Q warrants, respectively, which could result in downward pressure on the price of our Class A common stock. We have no control over whether the holders will exercise their right to convert their convertible notes or exercise their warrants. We cannot predict the market price of our Class A common stock at any future date, and therefore, we are unable to accurately forecast or predict with any certainty the total amount of shares that may be issued under the Notes and outstanding warrants. However, we have estimated the number of Class A common stock that may ultimately be issued under the Notes to be approximately 18.0 million shares and under outstanding warrants (assuming that only warrants with an exercise price at or below \$3.10 will be exercised) to be approximately 18.7 million shares. The actual number of shares to be issued cannot be precisely determined.

If our shareholders do not vote in favor to allow us to issue shares of Class A common stock below market price under the Notes and Series Q warrants, we may not receive cash payment under the Investor Notes.

The terms of our Notes and Series Q warrants provide for reduction of the conversion price and exercise price, as applicable, upon the occurrence of certain events. Under applicable Nasdaq rules, we are not permitted to issue shares upon the conversion of the Notes or exercise of the Series Q warrants at a price below the market price of our Class A common stock at the time we entered into the transaction documents for the 2018 Offering unless we first obtain shareholder approval. The transaction documents for the 2018 Offering require us to seek shareholder approval to allow such reduction. If our shareholders do not vote to approve such reduction, we will not be able to require the investors in the 2018 Offering to prepay their Investor Notes and will not receive any of the \$5 million principal amount of the Investor Notes unless the investors voluntarily agree to prepay.

If we determine to proceed with commercialization of POWERHOUSE™ 3.0, it will require additional capital which could be met from the Investor Notes. In the event capital from the Investor Notes is not received, we would seek to obtain the capital from other transactions, such as an offering of securities, and common stock warrant exercises, including by potentially reducing the exercise price of outstanding common stock warrants to induce conversion. No assurances can be given that, should we determine to proceed with commercialization of POWERHOUSE™ 3.0, we will have available to us the necessary capital to do so, whether from the Investor Notes or an alternative transaction. Should we determine to seek capital from a public offering of securities it will be dilutive to shareholders.

If the holders of the Notes do not convert their Notes into shares of Class A common stock and we are unable to force them to convert, we will have a balance outstanding at maturity of the Notes.

The Notes are convertible into shares of our Class A common shares. Note holders are allowed to convert them into shares of Class A common stock at any time. We also will have the ability to force Note holders to convert upon the occurrence of a certain event. However, we do not expect that Note holders will convert them voluntarily unless the shares they receive upon conversion are either registered for resale under the Securities Act of 1933, as amended, or eligible to be resold under Rule 144 promulgated under the Securities Act. Further, our ability to force Note holders to convert them is subject to the satisfaction of certain conditions and we may be unable to satisfy these conditions.

In the event there is a balance outstanding at maturity, we would seek to refinance the remaining balance outstanding at that time from either: (i) refinancing of the obligation with the Note holders, (ii) an offering of securities, or (iii) common stock warrant exercises, including by reducing the exercise price of common stock warrants to induce conversion. No assurances can be given that should a balance remain on the Notes at maturity we will be successful in meeting the obligation under the Notes. Should we determine to seek capital from a public offering of securities, it will be dilutive to shareholders.

The terms of some of our outstanding securities and certain transaction documents we have entered into with investors participating in our past offerings could impede our ability to enter into certain transactions or obtain additional financing and could result in our paying premiums or penalties to the holders of the Notes and outstanding warrants.

The terms of some of our outstanding securities, including the Notes and some of our outstanding series of warrants to purchase Class A common stock, prohibit us from entering into a “fundamental transaction” (as defined in the Notes and such warrants) (including generally, a merger, sale of all or substantially all of our assets, or permitting a purchase tender or exchange offering resulting in a person or group of persons owning at least 50% of the outstanding shares of our Class A common stock) unless, among other things, the successor resulting from the fundamental transaction assumes all of our obligations under the Notes, the applicable warrants and the associated transaction documents. The terms of the transaction documents we have entered into with investors participating in our past offerings also contain restrictions on our ability to conduct future securities offerings and incur additional debt.

Further, the Notes and our outstanding warrants require us to deliver the number of shares of our Class A common stock issuable upon conversion or exercise within a specified time period. If we are unable to deliver the shares of Class A common stock within the timeframe required, we may be obligated to reimburse the holder for the cost of purchasing the shares of our Class A common stock in the open market or pay them the profit they would have realized upon the conversion or exercise and sale of such shares.

We may also be obligated to redeem the Notes at a premium upon the occurrence of an event of default (as defined in the Notes) or a change of control (as defined in the Notes). Some of our outstanding warrants also contain features that may require us to repurchase such warrants upon the occurring of a change of control.

In addition to the foregoing, we may be obligated to pay cash penalties under the registration rights agreement we have entered into with the investors in the 2018 Note Offering (the “Registration Rights Agreement”) if, among other things, the SEC has not declared effective required registration statements within a specified registration deadline. The Registration Rights Agreement provides that in the event that (i) an initial registration statement fails to register the minimum number of shares of Class A common stock required under the Registration Rights Agreement, (ii) we do not file a registration statement required to be filed under the Registration Rights Agreement within the prescribed time period, (iii) the SEC has not declared effective a registration statement required to be filed under the Registration Rights Agreement within the prescribed time period, or (iv) a registration statement required to be filed under the Registration Rights Agreement ceases to be effective and available to the selling shareholders under certain circumstances, we must pay to the selling shareholders, on the occurrence of each such event and on every 30th day thereafter until the applicable event is cured, an amount in cash equal to 1.0% of the aggregate principal amount outstanding under the Notes (subject to a 3% of the aggregate principal amount outstanding under the Notes for any 30-day period).

The payments described above we may be obligated to make may adversely affect our results of operations.

DESCRIPTION OF THE TRANSACTION

Private Placement of Notes and Series Q Warrants

On April 9, 2018, we closed a private placement of Notes and Series Q warrants with two unaffiliated institutional and accredited investors (the “Investors”) in which we issued and sold to the Investors (i) \$10.75 million in principal amount and \$10 million funding amount (reflecting an original issue discount of \$750,000) of convertible notes due April 9, 2019, consisting of (A) two Series A senior convertible notes in the aggregate principal amount of \$5,750,000 (the “Series A Notes”) in consideration for aggregate cash payments of \$5,000,000, (B) two Series B senior secured convertible notes in the aggregate principal amount of \$5,000,000 for consideration consisting of two secured promissory notes, each issued and payable by an Investor, in the aggregate principal amount of \$5,000,000 (each, an “Investor Note”), and (ii) Series Q warrants to purchase up to 9,126,984 shares of our Class A common stock, under the terms of the Securities Purchase Agreement, dated March 30, 2018, among us and the Investors (a amended, the “Purchase Agreement”). The Notes are convertible into, and the Series Q warrants are exercisable for, shares of our Class A common stock.

The Notes and the Series Q warrants were issued in physical form separately from each other and may be transferred separately at any time. The Notes and the Series Q warrants are not listed on any national securities exchange or other trading market, and no trading market for the Notes and the Series Q warrants is expected to develop.

Description of the Notes

Principal Amount; Maturity Date; Interest

The aggregate principal amount of the Series A Notes is \$5,750,000 and the Series B Notes is \$5,000,000. All of the aggregate principal amount of the Series B Notes constitutes Restricted Principal (as defined in the Series B Notes). If an Investor prepays any amount under such Investor’s Investor Note, an equal amount of the Restricted Principal becomes unrestricted principal under such Investor’s Series B Note. In lieu of initially receiving any original issue discount on the Series B Notes, the Series B Notes accrue an “Additional OID Amount” (as defined in the Series B Notes) based upon the portion of the principal of the Series B Notes that becomes unrestricted from time to time, pro rata, which, in the aggregate would result in up to \$750,000 of Additional OID Amount payable under the Series B Notes if all of the principal under the Series B Notes becomes unrestricted.

All amounts outstanding under the Notes mature and will be due and payable on April 9, 2019, the one-year anniversary of the issuance of the Notes. We are not required to amortize the Notes. The Notes do not incur interest other than upon the occurrence of an event of default, in which case the Notes bear default interest at 18% per year.

Conversion of the Notes

The Notes are convertible at any time, at the option of the holders, into shares of Class A common stock at a conversion price. The initial fixed conversion price is \$1.26 per share, subject to reduction, as described below, and adjustment for stock splits, stock dividends, and similar events.

If we obtain the shareholder approval described below, following an event of default under the Notes, during a specified time period, a Note holder may convert a Note at an Alternate Conversion Price and at a 125% premium. “Alternate Conversion Price” means the greater of (i) a floor price of \$0.194, and (ii) the lower of (A) the conversion price, and (B) 85% of the price computed as the quotient of (1) the sum of the VWAP (a volume-weighted average price of our Class A common stock, as defined in the Notes) of the Class A common stock for each of the two trading days with the lowest VWAP of the Class A common stock during the 20 consecutive trading day period ending and including the date of the delivery by the Note holder of a conversion notice, divided by (2) two.

We have the right to require Note holders to convert all, or any part of, their Notes if at any time (i) the VWAP of the Class A common stock exceeds 200% of the conversion price 10 consecutive trading days, and (ii) no Equity Conditions Failure (as defined in the Notes) then exists. However, our ability to force a holder to convert its Notes is limited to each Note holder’s pro rata amount of an amount equal to 20% of the aggregate dollar trading volume of the Class A common stock during the 20 consecutive trading day period before the date we provides notice of mandatory conversion to Note holders.

Equity Conditions

The Notes require that certain Equity Conditions (as defined in the Notes) are met to allow us to take certain actions. Generally, the Equity Conditions include, but are not limited to, requirements that (i) holders of Notes and Series Q warrants may resell shares of Class A common stock issuable upon conversion and exercise of the Notes and the Series Q warrants under an effective registration statement or under Rule 144 promulgated under the Securities Act (“Rule 144”); (ii) the Class A common stock is listed on an Eligible Market (as defined in the Notes); (iii) certain stock price and volume requirements are met; (iv) there is no event of default under the Notes; and (v) we have obtained shareholder approval of the issuance of shares of Class A common stock upon conversion of the Notes and exercise of the Series Q warrants at conversion and exercise prices below the initial conversion price of the Notes and the initial exercise price of the Series Q warrants, as required under Nasdaq Rule 5635(d).

Reduction of the Conversion Price

The initial conversion price of the Notes is subject to reduction as described below. However, until we obtain the shareholder approval described above, the conversion price may not be reduced below the initial conversion price of \$1.26 per share.

- If on or after March 30, 2018, we issue or sell, or are deemed to have issued or sold, any shares of Class A common stock or other securities convertible, exercisable or exchangeable for shares of Class A common stock (other than Excluded Securities (as defined in the Notes)) for consideration per share less than the conversion price of the Notes (the “New Issuance Price”), then the conversion price of the Notes will be reduced to the New Issuance Price in accordance with formulas provided in the Notes.
- If we sell Variable Price Securities (as defined in the Notes) after March 30, 2018, a Note holder will have a right to substitute the Variable Price (as defined in the Notes) for the conversion price under the Notes.
- If there occurs any stock split, stock dividend, stock combination recapitalization or other similar transaction involving the Class A common stock and the Event Market Price (as defined in the Notes) is less than the conversion price, then on the 16th trading day after event, the conversion price shall be reduced (but in no event increased) to the Event Market Price.
- We may at any time, subject to Nasdaq’s approval and with the prior written consent of the Required Holders (as defined in the Purchase Agreement), reduce the conversion price to any amount and for any period of time deemed appropriate by our board of directors.
- We will be required to provide notice to Note holders after the occurrence of each of (i) the later of (A) the date on which we obtain the shareholder approval described above or (B) the effective date of a registration statement registering for resale by a Note holder less than all of the shares of Class A common stock issued upon conversion of the Notes and exercise of the Series Q warrant held by such holder; (ii) the later of (A) the date on which we obtain the shareholder approval described above or (B) the Applicable Date (as defined below), and (iii) the date on which we obtain the shareholder approval described above (each, an “Adjustment Event”). With respect to each Adjustment Event, on the 10th trading day after the later of (x) the date we delivered notice of such Adjustment Event, and (y) the date of occurrence of such Adjustment Event, if the conversion price then in effect is greater than the Adjusted Conversion Price (as defined below), the exercise price shall automatically adjust to the Adjusted Exercise Price. “Adjusted Conversion Price” means the greater of (i) \$0.194 and (ii) 75% of the quotient determined by dividing (x) the sum of the VWAP of the Class A common stock for each of the two lowest trading days during the 10 consecutive trading day period ending and including the trading day immediately before the applicable adjustment date, divided by (y) two. “Applicable Date” means the earlier of (i) the first date on which the resale by the Investors of all the Registrable Securities (as defined in the Registration Rights Agreement) required to be included on the initial registration statement under the Registration Rights Agreement is declared effective by the SEC (and each prospectus contained therein is available for use on such date), and (ii) the first date on which all of the Registrable Securities are eligible to be resold by the Investors under Rule 144, subject to certain conditions.

The conversion price may also be reduced in connection with our failure to pay the redemption price in a timely manner, as described below.

Redemption of the Notes

At any time after the later of (i) 15 days after the Applicable Date and (ii) the date no Equity Conditions Failure (as defined in the Notes) exists, we will have the right to redeem all, but not less than all, of the Notes in cash at a price equal to (A) if on or before October 9, 2018, 120% or (B) if after such date, 125%, in each case, of the greater of (1) the amount being redeemed, and (2) the product of (x) the amount being redeemed divided by the conversion price, multiplied by (y) the greatest closing price of the Class A common stock on any trading day during the period commencing on the date immediately preceding the date on which we provided notice of such redemption and ending on the trading day immediately before the date we make the entire redemption payment.

If we consummate a Subsequent Placement (as defined below), subject to some exceptions, a Note holder will have the right to require that we redeem, in whole or in part, a portion of the amounts owed by us to such holder under a Note equal to such holder's pro rata share of 37.5% of the gross proceeds from such Subsequent Placement in cash at a price calculated as described in the paragraph above.

A Note holder may also require us to redeem all or a portion of its Note in connection with a transaction that results in a Change of Control (as defined in the Notes) and upon the occurrence of an event of default, as described below.

If we do not pay the redemption price in a timely manner, Note holders have the option to cancel such redemption and the principal amount of each Note will then be increased by an amount equal to the difference between (i) the applicable redemption price minus (ii) the principal portion of the amount subject to redemption. In addition, if we have obtained the shareholder approval described above, the conversion price will be automatically adjusted with respect to each conversion effected thereafter by a Note holder to the lowest of (i) the conversion price, (ii) the greater of (A) \$0.194 and (B) 75% of the lowest closing bid price of the Class A common stock during the period beginning on and including the date on which the applicable redemption notice is delivered to us and ending on and including the date on which the applicable redemption notice is voided, and (iii) the greater of (A) \$0.194 and (B) 75% of the quotient of (I) the sum of the five lowest VWAPs of the Class A common stock during the 20 consecutive trading day period ending and including the applicable conversion date divided by (II) five.

Additional Amount

Each of the Notes provide that, upon any conversion of the Notes (or at maturity if the additional amount "true-up" has not occurred in connection with a previous conversion), the Note holder will receive an additional amount in order to "true-up" conversions of Notes and exercises of Series Q warrants that occurred before an Adjustment Event (an Adjustment Event can only occur after we have obtained the shareholder approval described above) as if the prior conversions or exercises had occurred on or after the applicable date of conversion. In addition to this "true-up" additional amount, in lieu of initially receiving any original issue discount on the Series B Notes, the Series B Notes are also entitled to an additional amount based upon the portion of the principal of the Series B Notes that becomes unrestricted from time to time, pro rata, which, in the aggregate would result in up to \$750,000 of additional amounts payable under the Series B Notes if all of the principal under the Series B Notes becomes unrestricted.

Events of Default

The Notes contain customary events of default, including but not limited to: (i) failure to file or have declared effective by the SEC the applicable registration statement required by the Registration Rights Agreement within certain time periods or failure to keep the registration statement effective as required by the Registration Rights Agreement, (ii) failure to maintain the listing of the Class A common stock, (iii) failure to make payments when due under the Notes, (iv) breaches of covenants, and (iv) bankruptcy or insolvency.

The occurrence of an event of default under the Notes will trigger default interest and will cause an Equity Condition Failure, which may mean that we will be unable to force mandatory conversion of the Notes and that Investors may not be required to prepay their Investor Notes under a mandatory prepayment event.

Following an event of default, Note holders may require us to redeem all or any portion of their Notes in cash at a conversion price equal to the greater of (i) 125% of the amount to be redeemed, and (ii) the product of (A) the amount to be redeemed divided by the conversion price, multiplied by (B) the product of (x) 125% multiplied by (y) the greatest closing sale price of the Class A common stock on any trading day during the period commencing on the date immediately preceding such event of default and ending on the date we make the entire redemption payment.

We must immediately redeem the Notes in cash in an amount equal to 125% multiplied by the amount to be redeemed upon the occurrence of a Bankruptcy Event of Default (as defined in the Notes).

Fundamental Transactions and Change of Control

The terms of the Notes prohibit us from entering into transactions constituting a Fundamental Transaction (as defined in the Notes) unless the successor entity, which must be a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market (as defined in the Notes), assumes all of our obligations under the Notes and the other transaction documents in a written agreement approved by each Note holder. The definition of Fundamental Transactions includes, but is not limited to, mergers, a sale of all or substantially all of our assets, certain tender offers and other transactions that result in a change of control.

Further, in connection with a Change of Control (as defined in the Notes), upon request of a Note holder, we must redeem all or any portion of such holder's Note(s) in cash at a 125% premium in an amount calculated pursuant to a formula set forth in the Notes. The definition of Change of Control is generally the same as the definition of Fundamental Transaction but excludes certain types of Fundamental Transactions.

Beneficial Ownership Limitation

A holder may not convert a Note and we may not issue shares of Class A common stock upon conversion of a Note, if, after giving effect to the conversion, a holder together with its "attribution parties," would beneficially own in excess of 4.99% or 9.99%, as elected by each Investor at closing, of the outstanding shares of our Class A common stock. At each holder's option, the cap may be increased or decreased to any other percentage not in excess of 9.99%, except that any increase will not be effective until the 61st day after notice to us.

Purchase Rights; Distributions of Assets

The Note holders are entitled to acquire options, convertible securities or rights to purchase our securities or property granted, issued or sold pro rata to the holders of our Class A common stock on an "as if converted into Class A common stock" basis. The Note holders are entitled to receive any dividend or other distribution of our assets (or rights to acquire our assets), at any time after the issuance of the Notes, on an "as if converted into Class A common stock" basis.

Covenants

We agreed to certain negative covenants in the Notes, under which we have agreed not to, and to cause our subsidiaries not to, among other things: (i) incur or guarantee, assume or suffer to exist any indebtedness, other than certain permitted indebtedness, (ii) allow or suffer to exist any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets of ours or any of our subsidiaries other than certain permitted liens, (iii) redeem, defease, repurchase, repay or make any payments in respect of, by the payment of cash or cash equivalents all or any portion of any indebtedness other than the Notes if at the time such payment is due or is otherwise made or, after giving effect to such payment, an event of default under the Notes has occurred and is continuing, (iv) redeem, repurchase or declare or pay any cash dividend or distribution on any of our capital stock, (v) sell, lease, license, assign, transfer, spin-off, split-off, close, convey or otherwise dispose of any material assets or rights, subject to certain exceptions, (vi) permit any of our indebtedness to mature or accelerate before the maturity date of the Notes, (vii) make any changes in the nature of our business nor modify our corporate structure or purpose, (viii) enter into transactions with affiliates, subject to certain exceptions, or (ix) issue any Notes or any other securities that would cause a breach or default under the Notes or the Series Q warrants.

We also agreed to certain affirmative covenants in the Notes, pursuant to which we agreed to and will cause each of our subsidiaries to, among other things: (i) maintain and preserve ours and its existence, rights and privileges, and become or remain duly qualified and in good standing in each jurisdiction in which the character of the properties owned or leased or in which the transaction of our business makes such qualification necessary, (ii) maintain and preserve all properties which are necessary or useful in the proper conduct of our business in good working order and condition, ordinary wear and tear excepted, and comply at all times with the provisions of all leases to which we are a party as lessee or under which we occupy property, so as to prevent any loss or forfeiture thereof or thereunder, (iii) maintain all intellectual property rights that are necessary or material to the conduct of our business, (iv) maintain certain insurance coverage, (v) at any time at least \$1,000,000 in aggregate principal amount of Notes remains outstanding, maintain Available Cash (as defined in the Notes) as of each fiscal quarter equal to or exceeding \$750,000, and (vi) make quarterly announcements of operating results.

Other Terms Specific to the Series B Notes

If an Investor Note is pledged, assigned or transferred to any person other than us without the prior written consent of the applicable Investor, including by contract, operation of law, court order or otherwise (each, a "Prohibited Transfer") or if any provision of an Investor Note is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction or other similar authority, in each case, (i) such Investor Note will be deemed paid in full and will be null and void, and (ii) 75% of the remaining Restricted Principal of the applicable Series B Note will be automatically cancelled (with the remaining 25% of the Restricted Principal becoming unrestricted principal).

The Restricted Principal of the Series B Notes are subject to offset under certain circumstances, as further described below. Upon any offset, the Restricted Principal under a Series B Note will automatically and simultaneously be reduced, on a dollar-for-dollar basis, in an amount equal to the principal amount of an Investor's Investor Note that is cancelled and offset.

Under the terms of the Series B Notes, we granted a security interest to each Investor in such Investor's Investor Note to secure our obligations under the applicable Series B Note. Each Investor perfected its security interest by taking possession of such Investor's Investor Note at the closing.

Number of Shares Issuable Upon Conversion of the Notes

Based on the initial conversion price of the Notes at issuance on April 9, 2018, and assuming that the Investors converted \$11,500,000 of principal and original issue discount amounts into shares of Class A common stock immediately upon issuance, we would be required to issue 9,126,984 shares of Class A common stock to the Investors. If we obtain the shareholder approval described above, it is possible that the conversion price of the Notes could be reduced in the future. If the conversion price is reduced in the future, more shares of our Class A common stock will become issuable upon conversion of the Notes compared to the number of shares of our Class A common stock issuable upon the initial conversion price of the Notes. The issuance of additional shares of Class A common stock may cause significant dilution to our shareholders' ownership, voting power and right to participate in dividends or other payments from future earnings, if any, and may cause a decline in the market price of our Class A common stock. A decline in our market price could impair our ability to raise funds in future equity or debt financings.

The following table sets forth the total number of shares of Class A common stock that would be issued to the Note holders if an aggregate amount of \$11,500,000 (which includes all principal and all possible original issue discount amounts that may accrue under the Notes) is converted into shares of Class A common stock. The following table assumes that: (i) the indicated conversion price remains the same from the date of issuance until the Notes are fully converted, (ii) no interest, Additional Amount (as defined in the Notes), Late Charges (as defined in the Notes) or any other additional amounts or charges are incurred or accrued under the Notes, (iii) no event of default under the Notes occurs, and (iv) the Investors prepay their Investor Notes in full before maturity of the Notes. This table is provided for illustrative purposes only, as it is unlikely that these assumptions will be fully accurate at all relevant times.

| Assumed Conversion Price | Number of Shares of Common Stock Potentially Issuable |
|---------------------------------------|---|
| \$1.26 (the initial conversion price) | 9,126,984 |
| \$1.00 | 11,500,000 |
| \$0.75 | 15,333,334 |
| \$0.50 | 23,000,000 |
| \$0.25 | 46,000,000 |
| \$0.1904 | 60,399,160 |

Description of the Series Q Warrants

Each Series Q warrant was immediately exercisable and will expire five years from the date of issuance. Initially, only 75% of the shares of Class A common stock issuable upon exercise of a Series Q warrant may be exercised, which amount increases upon an Investor's prepayment under such Investor's Investor Note. Holders of Series Q warrants will be entitled to use cashless exercise if after the date that is six months after the closing, at any time, there is no registration statement covering the resale of the shares of Class A common stock issuable upon exercise of the Series Q warrants.

The initial exercise price of the Series Q warrants is \$1.12, subject to adjustments for stock splits, stock dividends, and similar events. In addition, the exercise price will be subject to reduction in substantially the same manner as the conversion price of the Notes as described above under the heading "**Description of the Notes – Reduction of the Conversion Price.**" However, until we obtain the shareholder approval described above, the exercise price may not be reduced below \$0.97. Unlike with respect to the Notes, a reduction in the exercise price will not result in any additional shares being issued upon exercise of the Series Q warrants.

A holder may not exercise any of the Series Q warrants, and we may not issue shares of Class A common stock upon exercise of any of the Series Q warrants if, after giving effect to the exercise, a holder together with its "attribution parties," would beneficially own in excess of 4.99% or 9.99%, as elected by each Investor at closing, of the outstanding shares of our Class A common stock. At each holder's option, the cap may be increased or decrease to any other percentage not in excess of 9.99%, except that any increase will not be effective until the 61st day after notice to us.

The holders of the Series Q warrants are entitled to receive any dividend or other distribution of our assets (or rights to acquire its assets) at any time after the issuance of the Series Q warrants, on an "as if exercised for Class A common stock" basis. The holders of the Series Q warrants are entitled to acquire options, convertible securities or rights to purchase our securities or property granted, issued or sold pro rata to the holders of our Class A common stock on an "as if exercised for Class A common stock" basis.

The Series Q warrants prohibit us from entering into transactions constituting a Fundamental Transaction (as defined in the Series Q warrants) unless the successor entity assumes all of our obligations under the Series Q warrants and the other transaction documents in a written agreement approved by the Required Holders (as defined in the Series Q warrants). The definition of Fundamental Transactions includes, but is not limited to, mergers, a sale of all or substantially all of our assets, certain tender offers and other transactions that result in a change of control. Further, in connection with a Change of Control (as defined in the Series Q warrants), upon request of a holder of a Series Q warrant, we or the Successor Entity (as defined in the Series Q warrants), as the case may be, shall exchange a Series Q warrant for consideration equal to the Black Scholes Value (as defined in the Series Q warrants) of such portion of such Series Q warrant subject to exchange in the form of, at our election, either (i) rights convertible into the Corporate Event Consideration (as defined in the Series Q warrants) applicable to the change of control event, or (ii) cash. The definition of Change of Control is generally the same as the definition of Fundamental Transaction but excludes certain types of Fundamental Transactions.

Further, after the occurrence of an Event of Default (as defined in the Notes), at the request of a holder of a Series Q warrant, we or the Successor Entity (as defined in the Series Q warrants), as the case may be, shall purchase such holders Series Q warrant for cash in an amount equal to the Event of Default Black Scholes Value (as defined in the Series Q warrants).

Additional Terms of the Purchase Agreement

Under the terms of the Purchase Agreement, we were obligated to reimburse the lead Investor for costs and expenses incurred in connection with the transaction.

The Purchase Agreement prohibits us from issuing, offering, selling, granting any option or right to purchase, or otherwise dispose of (or announce any issuance, offer, sale, grant of any option or right to purchase or other disposition of) any equity security or any equity-linked or related security (a "Subsequent Placement"), other than certain Excluded Securities (as defined in the Purchase Agreement), until the 16th day after the Applicable Date.

Further, so long as any Notes remain outstanding, we are prohibited from effecting or entering into an agreement to effect any Subsequent Placement involving a Variable Rate Transaction. A "Variable Rate Transaction" generally means a transaction in which we or any subsidiary issues or sells (i)(A) any securities with a conversion, exercise or exchange rate or price that is based upon and/or varies with the trading prices of the Class A common stock at any time after the initial issuance, or (B) a conversion, exercise or exchange price that is subject to reset in the future, other than pursuant to certain anti-dilution provisions, or (ii) enters into any agreement whereby we or any subsidiary may sell securities at a future determined price (other than standard and customary "preemptive" or "participation" rights).

The Purchase Agreement also provides that, until the first anniversary of the closing, the Investors have the right to participate in any future Subsequent Placement (other than with respect to Excluded Securities) in an amount equal to up to 35% of such Subsequent Placement. We may not affect a Subsequent Placement during this time without complying with the terms of the participation right set forth in the Purchase Agreement.

Until the Applicable Date and at any time thereafter while any registration statement filed under the Registration Rights Agreement is not effective or the prospectus contained therein is not available for use, or any Current Public Information Failure (as defined in the Registration Rights Agreement) exists, we may not file any registration statement relating to securities that are not Registrable Securities (as defined in the Registration Rights Agreement), subject to some exclusions.

We are required to hold a shareholders' meeting not later than June 30, 2018 to seek approval of the issuance of shares of Class A common stock upon conversion of the Notes and exercise of the Series Q warrants at conversion and exercise prices below the initial conversion price of the Notes and the initial exercise price of the Series Q warrants, as required under Nasdaq Rule 5635(d). If, despite our reasonable best efforts such shareholder approval is not obtained at such shareholders' meeting, we must hold another shareholders' meeting on or before August 30, 2018. If, despite our reasonable best efforts such shareholder approval is not obtained after such subsequent shareholder meetings, we must hold additional shareholders' meetings quarterly thereafter until such shareholder approval is obtained. We are obligated to reimburse the lead investor's legal counsel for its reasonable fees in connection with reviewing the proxy statements relating to such shareholders' meetings in an amount not to exceed \$10,000.

Registration Rights Agreement

At the closing, we entered into the Registration Rights Agreement with the Investors under which we agreed to register for resale the shares of Class A common stock issuable upon conversion of the Notes and upon exercise of the Series Q warrants plus an additional number of shares so that the total number of shares of Class A common stock registered equals 200% of the sum of (i) the maximum number of shares issuable upon conversion of the Notes (using the Alternate Conversion Price (as defined in the Notes)) and (ii) the maximum number of shares issuable upon exercise of the Series Q warrants. The Registration Rights Agreement requires us to file the registration statement within 30 days after the closing and to have the registration statement declared effective 60 days after the closing, or 90 days if the registration statement is subject to review by the SEC (if the registration statement is on Form S-1, the time periods are 90 and 120 days, respectively).

Under the Registration Rights Agreement, we are required to pay each Investor cash liquidated damages of 1% of the sum of the aggregate original principal amount stated in such Investor's Notes at the closing upon our failure to (i) file the registration statement in the time required, (ii) have the registration statement declared effective in the time required, (iii) maintain the effectiveness of the registration statement, or (iv) keep current public information in the marketplace. We are obligated to make such liquidated damages payments upon the occurrence of one of the described events and every 30 days thereafter until cured (or, in the case of the current public information failure, until such time that such public information is no longer required pursuant to Rule 144).

We are required to keep the registration statement effective (and the prospectus contained therein available for use) pursuant to Rule 415 for resales on a delayed or continuous basis at then-prevailing market prices at all times until the earlier of (i) the date as of which the Investors may sell all of the Class A common stock issuable pursuant thereto without restriction pursuant to Rule 144, or (ii) the date on which all of the Class A common stock covered by the registration statement have been sold.

The Registration Rights Agreement also provides for piggyback registration rights under certain circumstances.

We are obligated to reimburse the lead investor's legal counsel for its fees and disbursements in connection with registration, filing or qualification under the Registration Rights Agreement in an amount not to exceed \$10,000 for each such registration, filing or qualification.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of Class A common stock by the selling shareholders. The exercise price of the outstanding Series Q warrants issued in the private placement described above, which are exercisable immediately into 9,720,457 shares of Class A common stock, is \$1.12 per share. If all the Series Q warrants are exercised for cash, we will receive proceeds of approximately \$10.3 million, which we will use for working capital. If the selling shareholders elect to exercise the Series Q warrants by means of a "cashless exercise," we will not receive any proceeds.

The selling shareholders will pay all underwriting discounts, selling commissions and expenses incurred by them for brokerage, accounting, tax or legal services or any other expenses incurred by the selling shareholders in connection with the sale of the shares, if any. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, without limitation, all registration and filing fees, Nasdaq listing fees and fees and expenses of our counsel and our accountants.

SELLING SHAREHOLDERS

The shares of Class A common stock being offered by the selling shareholders are those issuable to the selling shareholders upon conversion of the Notes and exercise of the Series Q warrants. For additional information regarding the issuance of the Notes and the Series Q warrants, see "DESCRIPTION OF THE TRANSACTION" above. We are registering the shares of Class A common stock in order to permit the selling shareholders to offer the shares for resale from time to time. Except for the ownership of the Notes and the warrants issued pursuant to the Purchase Agreement or as described in the table below, the selling shareholders have not had any material relationship with us within the past three years.

The table below lists the selling shareholders and other information regarding the beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder) of the shares of Class A common stock held by each of the selling shareholders. The second column lists the number of shares of Class A common stock beneficially owned by the selling shareholders, based on their respective ownership of shares of Class A common stock, convertible notes and warrants, as of April 26, 2018, assuming conversion of the convertible notes and exercise of the warrants held by each such selling shareholder on that date but taking account of any limitations on conversion and exercise set forth therein.

The third column lists the shares of Class A common stock being offered by this prospectus by the selling shareholders and does not take in account any limitations on (i) conversion of the Notes set forth therein or (ii) exercise of the Series Q warrants set forth therein.

In accordance with the terms of the Registration Rights Agreement this prospectus generally covers the resale of 200% of the sum of (i) the maximum number of shares of Class A common stock issued or issuable pursuant to the Notes determined as if the outstanding Notes were converted in full (without regard to any limitations on conversion or exercise contained therein solely for the purpose of such calculation) at the Alternate Conversion Price (as defined in the Notes), and (ii) the maximum number of shares of common stock issued or issuable upon exercise of the Series Q warrants, calculated as of the trading day immediately preceding the date this registration statement was initially filed with the SEC. Because the conversion price of the Notes may be adjusted, the number of shares that will actually be issued may be more or less than the number of shares being offered by this prospectus.

The fourth column assumes the sale of all of the shares offered by the selling shareholders pursuant to this prospectus.

Under the terms of the Notes and the Series Q warrants, a selling shareholder may not convert the Notes or exercise the Series Q warrants to the extent (but only to the extent) such selling shareholder or any of its affiliates would beneficially own a number of shares of our common stock which would exceed 4.99% or 9.99%, as elected by each selling shareholder at closing, of our outstanding shares.

The number of shares in the second column reflects these limitations. The selling shareholders may sell all, some or none of their shares in this offering. See “Plan of Distribution.”

| Name of Selling Shareholder | Number of Shares of Class A Common Stock Owned Prior to Offering | Maximum Number of Shares of Class A Common Stock to be Sold Pursuant to this Prospectus | Number of Shares of Class A Common Stock Owned After Offering | Percentage of Shares of Class A Common Stock Owned After Offering (to the extent greater than 1%) |
|---|--|---|---|---|
| Alto Opportunity Fund, SPC – Segregated Master Portfolio B ⁽¹⁾ | 543,687 ⁽²⁾ | 35,727,044 | 225,000 | * |
| Hudson Bay Master Fund Ltd. ⁽³⁾ | 1,148,927 ⁽⁴⁾ | 15,311,590 | 3,265,470 ⁽⁵⁾ | 5.32% |

* Denotes less than 1%.

(1) Ayrton Capital LLC, the investment manager to Alto Opportunity Master Fund, SPC – Segregated Master Portfolio B, has discretionary authority to vote and dispose of the shares held by Alto Opportunity Master Fund, SPC – Segregated Master Portfolio B. Waqas Khatri is the managing member of Ayrton Capital LLC and in his capacity as director of Alto Opportunity Master Fund, SPC – Segregated Master Portfolio B, may also be deemed to have investment discretion and voting power over the shares held by Alto Opportunity Master Fund, SPC – Segregated Master Portfolio B. Mr. Khatri disclaims any beneficial ownership of these shares. The address of Ayrton Capital, LLC is 222 Broadway, 19th Floor, New York, NY 10038. One or more entities affiliated with Alto Opportunity Master Fund, SPC – Segregated Master Portfolio B have participated in prior offerings of our securities.

(2) Consists of shares of our Class A common stock issuable (i) under the Notes (subject to a 4.99% beneficial ownership limitation; calculated using the initial conversion price of \$1.26), and (ii) upon exercise of warrants that are currently exercisable (subject to a 4.99% beneficial ownership limitation), which together represent 4.99% of our outstanding shares of Class A common stock as of April 26, 2018. Does not include an estimated 17,544,835 additional shares of Class A common stock issuable under the Notes and upon exercise of warrants (calculated in the manner described in the preceding sentence) because the selling shareholder does not have the right to receive such shares if the selling shareholder, together with certain attribution parties, would beneficially own in excess of 4.99% of the outstanding shares of our Class A common stock.

(3) Hudson Bay Capital Management, LP, the investment manager of Hudson Bay Master Fund Ltd., has voting and investment power over these securities. Sander Gerber is the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management, LP. Each of Hudson Bay Master Fund Ltd. and Sander Gerber disclaims beneficial ownership over these securities. The address of Hudson Bay Master Fund Ltd. is c/o Hudson Bay Capital Management LP, 777 Third Avenue, 30th Floor, New York, NY 10017. Hudson Bay Master Fund Ltd. has participated in prior offerings of our securities and is currently a beneficial owner of more than 5% of our Class A common stock.

(4) Consists of shares of our Class A common stock issuable (i) under our senior secured convertible notes due on April 1, 2019 (the “2016 Notes”) (subject to a 9.99% beneficial ownership limitation; calculated using a “Conversion Price” (as defined in the 2016 Notes) of \$0.7250, the lowest conversion price resulting from the defined term “Conversion Price” as of April 26, 2018), (ii) under the Notes (subject to a 9.99% beneficial ownership limitation; calculated using the initial conversion price of \$1.26), and (iii) upon exercise of warrants that are currently exercisable (subject to either a 4.99% or 9.99% beneficial ownership limitation), which together represent 9.99% of our outstanding shares of Class A common stock as of April 26, 2018. Does not include an estimated 9,772,864 additional shares of Class A common stock issuable under the 2016 Notes, the Notes and upon exercise of warrants (calculated in the manner described in the preceding sentence) because the selling shareholder does not have the right to receive such shares if the selling shareholder, together with certain attribution parties, would beneficially own in excess of 9.99% (or, with respect to some warrants, 4.99%) of the outstanding shares of our Class A common stock.

(5) Consists of shares of our Class A common stock issuable (i) under the 2016 Notes (subject to a 9.99% beneficial ownership limitation; calculated using a “Conversion Price” (as defined in the 2016 Notes) of \$0.7250, the lowest conversion price resulting from the defined term “Conversion Price” as of April 26, 2018), and (ii) upon exercise of warrants that are currently exercisable (9.99% beneficial ownership limitation). Does not include an estimated 526 additional shares of Class A common stock issuable upon exercise of warrants because the selling shareholder does not have the right to receive such shares if the selling shareholder, together with certain attribution parties, would beneficially own in excess of 4.99% of the outstanding shares of our Class A common stock.

PLAN OF DISTRIBUTION

We are registering the shares of Class A common stock issuable upon conversion of the Notes and exercise of the Series Q warrants to permit the resale of these shares of Class A common stock by the holders of the Notes and Series Q warrants from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling shareholders of the shares of Class A common stock, although we will receive the exercise price of any Series Q warrants not exercised by the selling shareholders on a cashless exercise basis. We will bear all fees and expenses incident to our obligation to register the shares of Class A common stock.

The selling shareholders may sell all or a portion of the shares of Class A common stock held by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of Class A common stock are sold through underwriters or broker-dealers, the selling shareholders will be responsible for underwriting discounts or commissions or agent’s commissions. The shares of Class A common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;

- through the writing or settlement of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales made after the date the registration statement is declared effective by the SEC;
- broker-dealers may agree with a selling shareholder to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling shareholders may also sell shares of Class A common stock under Rule 144 promulgated under the Securities Act, if available, rather than under this prospectus. In addition, the selling shareholders may transfer the shares of Class A common stock by other means not described in this prospectus. If the selling shareholders effect such transactions by selling shares of Class A common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling shareholders or commissions from purchasers of the shares of Class A common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of Class A common stock or otherwise, the selling shareholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of Class A common stock in the course of hedging in positions they assume. The selling shareholders may also sell shares of Class A common stock short and deliver shares of Class A common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling shareholders may also loan or pledge shares of Class A common stock to broker-dealers that in turn may sell such shares.

The selling shareholders may pledge or grant a security interest in some or all of the Notes, Series Q warrants or shares of Class A common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of Class A common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending, if necessary, the list of selling shareholders to include the pledgee, transferee or other successors in interest as selling shareholders under this prospectus. The selling shareholders also may transfer and donate the shares of Class A common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

To the extent required by the Securities Act and the rules and regulations thereunder, the selling shareholders and any broker-dealer participating in the distribution of the shares of Class A common stock may be deemed to be “underwriters” within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of Class A common stock is made, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of shares of Class A common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling shareholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers.

Under the securities laws of some states, the shares of Class A common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of Class A common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling shareholder will sell any or all of the shares of Class A common stock registered pursuant to the registration statement, of which this prospectus forms a part.

The selling shareholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of Class A common stock by the selling shareholders and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the shares of Class A common stock to engage in market-making activities with respect to the shares of Class A common stock. All of the foregoing may affect the marketability of the shares of Class A common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of Class A common stock.

We will pay all expenses of the registration of the shares of Class A common stock pursuant to the Registration Rights Agreement, estimated to be \$50,000 in total, including, without limitation, SEC filing fees and expenses of compliance with state securities or “blue sky” laws; provided, however, that a selling shareholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling shareholders against liabilities, including some liabilities under the Securities Act in accordance with the Registration Rights Agreement or the selling shareholders will be entitled to contribution. We may be indemnified by the selling shareholders against civil liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the selling shareholder specifically for use in this prospectus, in accordance with the related Registration Rights Agreements or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of Class A common stock will be freely tradable in the hands of persons other than our affiliates.

LEGAL MATTERS

The validity of the Class A common stock issued and issuable upon conversion of the Notes and exercise of the Series Q warrants will be passed upon for us by Brownstein Hyatt Farber Schreck, LLP, Denver, Colorado.

EXPERTS

The consolidated financial statements of Real Goods Solar, Inc. and its subsidiaries, as of and for the year ended December 31, 2016, incorporated in this Prospectus by reference from the Real Goods Solar, Inc. Annual Report on Form 10-K for the year ended December 31, 2017 have been audited by Hein & Associates LLP, an independent registered public accounting firm, as stated in their report incorporated herein by reference, and have been incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Real Goods Solar, Inc. and its subsidiaries, as of and for the year ended December 31, 2017, incorporated in this Prospectus by reference from the Real Goods Solar, Inc. Annual Report on Form 10-K for the year ended December 31, 2017 have been audited by Moss Adams LLP, an independent registered public accounting firm, as stated in their report (which report expresses an unqualified opinion and includes an explanatory paragraph related to going concern uncertainty) incorporated herein by reference, and have been incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus, which constitutes a part of a registration statement on Form S-3 that we have filed with the SEC, omits certain of the information set forth in the registration statement. Accordingly, you should refer to the registration statement and its exhibits for further information with respect to us and our Class A common stock. Copies of the registration statement and its exhibits are on file at the offices of the SEC. This prospectus contains statements concerning documents filed as exhibits. For the complete text of any of these documents, we refer you to the copy of the document filed as an exhibit to the registration statement.

We file annual, quarterly and current reports, proxy and information statements and other information with the SEC. You may read and copy any materials we file with the SEC at the SEC's Public Reference Room in Washington, D.C. at 100 F Street, N.E., Washington, D.C. 20549.

You may obtain information about the operation of the Public Reference Room by calling the SEC at 1(800) SEC-0330. The SEC also maintains a website that contains information we file electronically with the SEC, which you can access over the Internet at <http://www.sec.gov>. We maintain a website at <http://www.rgsenergy.com> with information about our company. Information contained on our website or any other website is not incorporated into this prospectus and does not constitute a part of this prospectus. Our website address referenced above is intended to be an inactive textual reference only and not an active hyperlink to our website.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information we file with the SEC, which means that we can disclose important information to you by referring you to other documents filed separately with the SEC. The information incorporated by reference is considered part of this prospectus, and any information that we file with the SEC subsequent to this prospectus and prior to the termination of the offering referred to in this prospectus will automatically be deemed to update and supersede this information. We incorporate by reference into this prospectus the documents listed below (excluding any portions of such documents that have been "furnished" but not "filed" for purposes of the Exchange Act unless specifically incorporated by reference herein or therein):

- Our Annual Report on Form 10-K (including amendments thereto) for the year ended December 31, 2017, filed April 2, 2018;
- Our Current Reports on Form 8-K (including amendments thereto) filed on January 2, 2018 (other than information furnished pursuant to Item 2.02 and Item 7.01 of Form 8-K), January 3, 2018 (other than information furnished pursuant to Item 7.01 of Form 8-K), January 4, 2018 (other than information furnished pursuant to Item 7.01 of Form 8-K), January 25, 2018, February 12, 2018, March 12, 2018, April 2, 2018 (other than information furnished pursuant to Item 2.02 and Item 7.01 of Form 8-K), April 10, 2018 and April 24, 2018; and
- The description of our common stock contained in our registration statement on Form 8-A filed May 5, 2008 including any other amendments or reports filed for the purpose of updating such description (other than any portion of such filings that are furnished under applicable SEC rules rather than filed).

We also incorporate by reference all documents we subsequently file with the SEC (other than information furnished pursuant to Item 2.02 or Item 7.01 of Form 8-K or as otherwise permitted by SEC rules) pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the initial filing of the registration statement of which this prospectus is a part (including prior to the effectiveness of the registration statement) and prior to the termination of the offering.

This prospectus is part of a registration statement on Form S-3 that we have filed with the SEC relating to the securities. As permitted by SEC rules, this prospectus does not contain all of the information included in the registration statement and the accompanying exhibits and schedules we file with the SEC. We have filed certain legal documents that control the terms of the Class A common stock offered by this prospectus as exhibits to the registration statement. We may file certain other legal documents that control the terms of the Class A common stock offered by this prospectus as exhibits to reports we file with the SEC. You may refer to the registration statement and the exhibits and schedules for more information about us and our securities. The registration statement and exhibits and schedules are also available at the SEC's Public Reference Room or through its website.

We will provide, without charge and upon oral or written request, to each person, including any beneficial owner, to whom a copy of this prospectus has been delivered, a copy of any of the documents referred to above as being incorporated by reference into this prospectus but not delivered with it. You may obtain a copy of these filings, at no cost, by writing or calling us at Real Goods Solar, Inc., 110 16th Street, 3rd Floor, Denver, Colorado 80202, (303) 222-8300. Exhibits to the filings will not be provided, however, unless those exhibits have been specifically incorporated by reference in this prospectus.

PART II. INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following expenses incurred in connection with the sale of the securities being registered will be borne by the registrant. Other than the SEC registration fee, the amounts stated are estimates.

| | | |
|------------------------------|----|--------|
| SEC Registration Fee | \$ | 6,100 |
| Legal Fees and Expenses | \$ | 20,000 |
| Accounting Fees and Expenses | \$ | 4,000 |
| Miscellaneous | \$ | 3,000 |
| Total | \$ | 33,100 |

Item 15. Indemnification of Directors and Officers

The Colorado Business Corporation Act (the “CBCA”) generally provides that a corporation may indemnify a person made party to a proceeding because the person is or was a director against liability incurred in the proceeding if: the person’s conduct was in good faith; the person reasonably believed, in the case of conduct in an official capacity with the corporation, that such conduct was in the corporation’s best interests, and, in all other cases, that such conduct was at least not opposed to the corporation’s best interests; and, in the case of any criminal proceeding, the person had no reasonable cause to believe that the person’s conduct was unlawful. The CBCA prohibits such indemnification in a proceeding by or in the right of the corporation in which the person was adjudged liable to the corporation or in connection with any other proceeding in which the person was adjudged liable for having derived an improper personal benefit. The CBCA further provides that, unless limited by its articles of incorporation, a corporation shall indemnify a person who was wholly successful, on the merits or otherwise, in the defense of any proceeding to which the person was a party because the person is or was a director or officer of the corporation, against reasonable expenses incurred by the person in connection with the proceeding. In addition, a director or officer, who is or was a party to a proceeding, may apply for indemnification to the court conducting the proceeding or to another court of competent jurisdiction. The CBCA allows a corporation to indemnify and advance expenses to an officer, employee, fiduciary or agent of the corporation to the same extent as a director.

As permitted by the CBCA, the Company’s articles of incorporation and bylaws generally provide that the Company shall indemnify its directors and officers to the fullest extent permitted by the CBCA. In addition, the Company may also indemnify and advance expenses to an officer who is not a director to a greater extent, not inconsistent with public policy, and if provided for by its bylaws, general or specific action of the Company’s board of director or shareholders.

The Company has entered into substantively identical Indemnification Agreements with certain current and former directors and officers (the “Indemnitees”), which generally provide that, to the fullest extent permitted by Colorado law, the Company shall indemnify such Indemnitee if the Indemnitee was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that the Indemnitee is or was or has agreed to serve at the Company’s request as a director, officer, employee or agent of the Company, or while serving as a director or officer of the Company, is or was serving or has agreed to serve at the Company’s request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity or by reason of the imposition upon such officer or director of any federal and/or state income tax obligation (inclusive of any interest and penalties, if applicable), that is imposed on such officer or director with respect to income, “phantom income,” rescinded or un consummated transactions, or any other allegedly taxable event for which no benefit was received by such officer or director. The indemnification obligation includes, without limitation, claims for monetary damages against an Indemnitee in respect of an alleged breach of fiduciary duties and generally covers expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by an Indemnitee or on an Indemnitee’s behalf in connection with such action, suit or proceeding and any appeal therefrom, but shall only be provided if the Indemnitee acted in good faith; and, in the case of conduct in an official capacity with the corporation, if such conduct was in the Company’s best interests, and, in all other cases, if such conduct was at least not opposed to the Company’s best interests; and, with respect to any criminal action, suit or proceeding, if the Indemnitee had no reasonable cause to believe the Indemnitee’s conduct was unlawful.

Section 7-108-402(1) of the CBCA permits a corporation to include in its articles of incorporation a provision eliminating or limiting the personal liability of directors to the corporation or its shareholders for monetary damages for any breach of fiduciary duty as a director (except for breach of a director's duty of loyalty, acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, unlawful distributions, or any transaction from which the director derived improper personal benefit). Further, Section 7-108-402(2) of the CBCA provides that no director or officer shall be personally liable for any injury to persons or property arising from a tort committed by an employee, unless the director or officer was either personally involved in the situation giving rise to the litigation or committed a criminal offense in connection with such situation.

As permitted by the CBCA, the Company's articles of incorporation provide that the personal liability of the Company's directors to the Company or its shareholders is limited to the fullest extent permitted by the CBCA. The Indemnification Agreements described above also provide that the Company's indemnification obligation includes, without limitation, claims for monetary damages against the Indemnitee in respect of an alleged breach of fiduciary duties to the fullest extent permitted by the CBCA.

Section 7-109-108 of the CBCA provides that a corporation may purchase and maintain insurance on behalf of a person who is or was a director, officer, employee, fiduciary or agent of the corporation, or who, while a director, officer, employee, fiduciary or agent of the corporation, is or was serving at the request of the corporation as a director, officer, partner, trustee, employee, fiduciary or agent of another entity or an employee benefit plan, against liability asserted against or incurred by the person in that capacity or arising from the person's status as a director, officer, employee, fiduciary or agent, whether or not the corporation would have power to indemnify the person against the same liability under the CBCA.

As permitted by the CBCA, the Company's bylaws authorize the Company to purchase and maintain such insurance. The Company currently maintains a directors and officers insurance policy insuring its past, present and future directors and officers, within the limits and subject to the limitations of the policy, against expenses in connection with the defense of actions, suits or proceedings, and certain liabilities that might be imposed as a result of such actions, suits or proceedings.

Item 16. Exhibits

The exhibits listed in the exhibit index immediately following the signature pages are filed as part of this registration statement.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act, that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Exchange Act that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(6) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the indemnification provisions described herein, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Denver, State of Colorado, on April 27, 2018.

REAL GOODS SOLAR, INC.

By: /s/ Dennis Lacey
Dennis Lacey
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PEOPLE BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Dennis Lacey and Alan Fine, and each of them severally, as his or her true and lawful attorneys-in-fact and agents, each acting alone with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any or all amendments (including pre-effective and post-effective amendments) and exhibits to this Registration Statement on Form S-3, and to any registration statement relating to the same offering of securities that are filed pursuant to Rule 462 of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or theirs or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|----------------------------|---|----------------|
| <u>/s/ Ian Bowles</u> | Ian Bowles, Chairman of the Company's Board of Directors | April 27, 2018 |
| <u>/s/ Dennis Lacey</u> | Dennis Lacey, Chief Executive Officer, Secretary and Director (Principal Executive Officer) | April 27, 2018 |
| <u>/s/ Alan Fine</u> | Alan Fine, Chief Financial Officer and Treasurer (Principal Financial Officer) | April 27, 2018 |
| <u>/s/ Nicolle Dorsey</u> | Nicolle Dorsey, Principal Accounting Officer and Controller | April 27, 2018 |
| <u>/s/ Pavel Bouska</u> | Pavel Bouska, Director | April 27, 2018 |
| <u>/s/ Robert L. Scott</u> | Robert L. Scott, Director | April 27, 2018 |

EXHIBITS INDEX

| <u>Exhibit No.</u> | <u>Description</u> |
|--------------------|--|
| <u>4.1</u> | <u>Form of Real Goods Solar Class A common stock Certificate (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Amendment No. 5 to Registration Statement on Form S-1 filed May 2, 2008 (Commission File No. 333-149092))</u> |
| <u>4.2</u> | <u>Form of Series A Senior Convertible Note issued to the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044))</u> |
| <u>4.3</u> | <u>Form of Series B Senior Secured Convertible Note issued to the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 4.2 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044))</u> |
| <u>4.4</u> | <u>Form of Series O Warrant to Purchase Common Stock issued to the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 4.3 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044))</u> |
| <u>5.1†</u> | <u>Opinion of Brownstein Hyatt Farber Schreck, LLP</u> |
| <u>10.1</u> | <u>Securities Purchase Agreement, dated March 30, 2018, among Real Goods Solar, Inc. and the investor parties thereto (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed April 2, 2018 (Commission File No. 001-34044))</u> |
| <u>10.2</u> | <u>Form of Amendment No. 1 to Securities Purchase Agreement, dated April 9, 2018, between Real Goods Solar, Inc. and each of the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044))</u> |
| <u>10.3</u> | <u>Registration Rights Agreement, dated April 9, 2018, among Real Goods Solar, Inc. and the investor parties thereto (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044))</u> |
| <u>23.1†</u> | <u>Consent of Brownstein Hyatt Farber Schreck, LLP (included in Exhibit 5.1)</u> |
| <u>23.2†</u> | <u>Consent of Moss Adams LLP</u> |
| <u>23.3†</u> | <u>Consent of Hein & Associates LLP</u> |
| <u>24.1†</u> | <u>Power of Attorney (included on the signature page to this Registration Statement)</u> |

† Filed herewith

April 27, 2018

Board of Directors
Real Goods Solar, Inc.
110 16th Street, 3rd Floor
Denver, Colorado 80202

Ladies and Gentlemen:

We are acting as special counsel to Real Goods Solar, Inc., a Colorado corporation (the "Company"), in connection with its filing with the Securities and Exchange Commission (the "Commission"), under the Securities Act of 1933, as amended (the "Act"), of a Registration Statement on Form S-3, including any amendments thereto (the "Registration Statement"). The Registration Statement relates to the resale by the selling shareholders identified in the Registration Statement of up to 51,038,634 shares of the Company's Class A common stock, \$0.0001 par value per share (the "Shares"). The Shares are issuable pursuant to the terms of convertible notes and warrants described in the Registration Statement. This opinion letter is furnished to you for filing with the Commission pursuant to Item 601 of Regulation S-K promulgated under the Act.

In reaching the opinion stated in this letter, we have reviewed originals or copies of the Registration Statement, the Company's Articles of Incorporation and Bylaws, the resolutions of the Board of Directors authorizing the issuance of the Shares, and such other documents as we have considered relevant. We have assumed that: (i) all information contained in all documents that we have reviewed is correct; (ii) all signatures on all documents that we have reviewed are genuine; (iii) all documents submitted to us as originals are true and complete; (iv) all documents submitted to us as copies are true and complete copies of the originals thereof; (v) each natural person signing any document that we have reviewed had the legal capacity to do so; and (vi) each natural person signing in a representative capacity any document that we reviewed had authority to sign in such capacity.

Based upon the foregoing, it is our opinion that the Shares that are covered by the Registration Statement that are to be offered and sold from time to time by the selling shareholders have been duly authorized and, when issued in accordance with the terms of the applicable convertible note, warrant or other agreement and upon receipt of the consideration contemplated thereby, will be validly issued, fully paid and non-assessable.

We hereby consent to the use of this opinion letter as Exhibit 5.1 to the Registration Statement and to the use of our name under the heading "Legal Matters" therein. In giving such consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission promulgated thereunder.

As to the foregoing matters with respect to which we express our opinion, we advise that we are admitted to practice in the States of Colorado and New York, and do not render any opinion as to legal matters subject to or governed by laws other than the State of Colorado and New York or United States federal jurisprudence.

Very truly yours,

/s/ Brownstein Hyatt Farber Schreck, LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement (Form S-3) of Real Goods Solar, Inc. of our report dated April 2, 2018, relating to the consolidated financial statements of Real Goods Solar, Inc. which report appears in the Form 10-K of Real Goods Solar, Inc. for the year ended December 31, 2017 (and expresses an unqualified opinion and includes an explanatory paragraph relating to going concern uncertainty), and to the reference to our firm under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Moss Adams LLP

Denver, Colorado
April 26, 2018

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-3 and related Prospectus of Real Goods Solar, Inc. of our report dated March 9, 2017 relating to the consolidated financial statements of Real Goods Solar, Inc., appearing in the Annual Report on Form 10-K of Real Goods Solar, Inc. for the year ended December 31, 2017.

We also consent to the reference to our firm under the heading "Experts" in such Prospectus.

/s/ Hein & Associates LLP

Denver, Colorado
April 26, 2018
