

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

**FORM 10-K**

(Mark One)

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

For the fiscal year ended December 31, 2017

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 001-34044

**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 16<sup>th</sup> Street, Suite 300**  
**DENVER, COLORADO 80202**  
(Address of principal executive offices)

**(303) 222-8300**  
(Registrant's telephone number, including area code)

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

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Class A Common Stock, \$.0001 par value	NASDAQ Stock Market LLC

Securities registered pursuant to section 12(g) of the Act:

None

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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

Emerging growth company

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

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

The aggregate market value of the voting common equity held by non-affiliates of the registrant was approximately \$7,313,815 as of June 30, 2017, based upon the closing price on the NASDAQ Capital Market on that date. The registrant does not have non-voting common equity.

As of March 30, 2018, 10,351,845 shares of the registrant's Class A common stock and no shares of the registrant's Class B common stock were outstanding.

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REAL GOODS SOLAR, INC.

Annual Report on Form 10-K

For the Fiscal Year Ended December 31, 2017

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## Part I

### Item 1. Business.

#### Overview

RGS Energy and its subsidiaries (“RGS”, “we,” “us,” or the “Company”) provide solar energy systems to homeowners, and commercial building owners in the United States. We believe that solar energy adoption is still in the early stages and will continue to increase as utility rates rise and customers become more knowledgeable about the savings clean and sustainable solar energy can deliver. RGS and our predecessors have installed over 26,000 solar energy systems across the continental United States and Hawaii since 1978.

We endeavor to make the move to solar energy simple for our customers by managing and executing the process with our sales and installation teams. We design and offer a suitable solar energy solution, then procure, permit, install, and interconnect the system to the utility grid. We provide a comprehensive workmanship warranty on each fully operational system.

On September 29, 2017 we executed an exclusive domestic and international world-wide Technology License Agreement (the “License”) with Dow Global Technologies LLC (“Dow”) for its POWERHOUSE™ in-roof solar shingle, an innovative and aesthetically pleasing solar shingle system developed by Dow. 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 the License, we are pursuing final stages of development of the 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 a Trademark License Agreement with Dow, we will market the POWERHOUSE™ 3.0 product using the Dow name.

We were incorporated in Colorado in 2008 as a successor to Gaiam Energy Tech, Inc. founded in 1999.

A description about our operating segments and the financial information about our segments may be found in Note 10. Segment Information, to our audited financial statements, included in Item 8 of this Annual Report on Form 10-K, which disclosure is incorporated herein by reference.

#### Business Strategy

Our goals are to (i) provide solar solutions that save residential and commercial customers’ money and (ii) operate our Company at a profit. Our strategies to achieve these goals are:

- *Commercialize the POWERHOUSE™ 3.0 in-roof solar shingle.* We have executed an exclusive domestic and international world-wide License with Dow for its POWERHOUSE™ 3.0 in-roof solar shingle to provide customers with a more aesthetically pleasing solar shingle system. Upon receiving UL Certification, we plan to sell the product directly to homebuilders and develop a network of authorized roofers.
- *Utilize our call center.* In past years we have built a call center in our headquarters in Colorado to conduct sales via the phone and internet. This provides a cost-effective mechanism to reach potential customers and readily enter new markets. Call center personnel have access to engineering, operations, customer support and other services personnel at our headquarters location allowing them to quickly address any questions that might arise during the sales process.
- *Continue to drive growth through referrals networks.* We pay customers for referring additional customers. We will continue to expand these programs through the call center, post-install in-home parties, user-friendly software, and digital marketing.
- *Identify attractive financing options for customers.* We refer our customers to a variety of options for financing their solar energy systems including home improvement loans, equipment leases and power purchase agreements.
- *Utilize technology to enhance and streamline our operations.* We launched RGS 365™, a mobile software and online dashboard suite, creating a better and more engaging customer experience.

## Our Competitive Strengths

We believe our customers select us because:

- *We have been in the solar industry for 40 years.*
- *Flexible menu of product offerings.* Our customers can utilize cash, loan, and third-party ownership agreements such as leasing and power purchase agreements.
- *Location.* We are located in states where utility costs are high and/or incentives for solar energy systems are available, therefore offering an attractive alternative to conventional power sources.

We believe being awarded the exclusive worldwide POWERHOUSE™ License will give us a competitive edge because we will become a technology company insulated by patents creating a barrier to competition, as well as a company utilizing a product with brand recognition.

## Description of our Services

We have two divisions as of the end of 2017: (i) POWERHOUSE™ and (ii) Solar Division.

*POWERHOUSE™:* Effective September 29, 2017, the Company executed the License with Dow, to commercialize POWERHOUSE™ 3.0. Under the terms of the License, the Company has exclusive world-wide rights through 2034, the expiration of Dow's applicable patents. The License requires that we obtain UL Certification to commercialize and sell a minimum of 50 megawatts of solar within 5-years of the Effective Date to retain exclusive world-wide rights, a requirement we believe is achievable. To obtain UL Certification we have retained Dow's former UL consultant. Additionally, we have met with various potential supply chain vendors prior to entering negotiations. Currently we are producing samples of the product that will be sent to UL for testing. We believe our future services will be POWERHOUSE™ 3.0 solar shingles. We have entered into third-party manufacture agreements with suppliers and we plan to distribute POWERHOUSE™ solar shingles to a network of new homebuilders and roofers. Additionally, we plan to offer various services, including but not limited to system design, permit application, utility application for permission to operate ("PTO") and assistance in procurement and/or sales of adjunct installation materials.

*Solar Division:* The Solar Division consists of the residential and commercial solar segments of our Company. We will continue to offer our turnkey solar energy systems providing design, engineering, financing, procurement, permitting, installing, grid interconnection, monitoring, and maintenance services. We install residential systems generally between 3 kilowatts ("kW") and 10 kW, and commercial systems up to 500 kW in size, depending on the amount of electricity used by the customer and the size of their building. The size of the average solar energy system we installed during 2017 was approximately 8 kW. We maintain a service department to manage and assist with service and repairs, and to provide operations and maintenance service contracts for larger projects. We design and build solar energy systems to meet each customer's individual needs and circumstances. We assess a customer's annual power requirements and average electricity rates to size the solar system and engineer its interconnection to the grid. We assess the customer's roof size, configuration, and composition to determine the optimum location for the solar photovoltaic modules. We factor in information about the customer's electrical service territory, rate structures, budget, preferred financing method and aesthetic preferences. We also identify the relevant federal, state and local regulations, including building codes, which are important to the cost, operation and return on investment of the customer's solar energy system, as well as relevant tax rates, benefits of net metering, and various other factors. We assess this data using solar production tools and analytical models to size and configure a cost-effective solar system for the customer and one that offers a return on investment to the customer that meets their requirements.

We prepare construction plans to obtain a building permit, which is necessary for grid interconnection and state incentive rebate processing. We also provide customers with a return-on-investment analysis which reflects the rebates and performance-based incentives that are available to each customer. Once all necessary approvals from financing partners and utilities, and incentive, rebate and jurisdictional authorities have been received, our in-house construction teams or authorized integrators begin the installation of the customer's solar energy system. Once the solar energy system has been installed, we arrange for a final inspection by the local building department or other relevant regulatory agency and complete final as-built drawings of the system to submit applicable applications for the jurisdictional rebate(s). At the same time, we apply to the local utility company to finalize interconnection of the customer's solar energy system to the utility grid.

## *Solar Energy Systems*

The most visible component of solar energy systems are the solar shingles or photovoltaic modules with metal racking which transforms the sunlight into direct electrical current (“DC”), which then travels to the inverter. The inverter converts the DC electricity into useable alternating current (“AC”) that matches the current of the household electrical service and the utility grid. Other major components include the monitoring which tracks the solar production of the system, and balance of system which includes mechanical and electrical parts. The electricity created can go onto the grid or be used by the customer to power household items such as lights and appliances. For customers who would like to have electrical black out protection or who want to strategically manage their electrical usage, we provide battery solutions that integrate with our solar energy systems.

*POWERHOUSE™*: This product is a built-in photovoltaic array (“BIPV”), also known as a solar shingle. The solar shingle is a building material that once installed becomes the roof structure. The BIPV takes the place of the module and racking in a traditional solar installation. We will not be installing these systems. Instead, we will be manufacturing the solar shingle for distribution.

*Solar Division*: The Solar Division will install traditional modules and racking systems. We do not manufacture any of these components. We purchase all components from the manufacturer or their distributors.

## *Warranty Terms*

*POWERHOUSE™*: We expect to issue a manufacturer’s warranty on *POWERHOUSE™* solar shingles, equal to the third-party manufacturer terms we secure. Workmanship warranty will be provided by the installer. Our new homebuilder and roofer network, when applicable, will submit to us a return merchandise authorization (“RMA”) for defective components. We will authorize the RMA and transfer substitute *POWERHOUSE™* component(s) to the customer who will return a like number of defective components. We will similarly execute a RMA with the appropriate manufacturer. As the manufacturer will provide a product warranty on the *POWERHOUSE™* components to us, we will not record a warranty liability.

*Solar Division*: We and our suppliers offer warranties of up to 10 years for parts and labor, including property damage arising from workmanship, excluding roof penetrations which are generally warranted for a period of 5 years. All major components installed in a photovoltaic system array are covered under transferable manufacturers’ warranties, which generally range from 10 to 25 years. Customer claims are processed through our customer service department. We will provide reasonable assistance to our customers in contacting the manufacturer concerning warranty service and undertake reasonable effort to recoup our labor costs from the manufacturer.

## *Financing*

We offer our Solar Division customers a choice to finance their solar systems with their cash, third-party loans, or third-party leases or power purchase agreements. We are constantly vetting new financing products and only refer the ones that fit the customer’s needs and desires. Our menu of finance offerings allows us to provide solar energy systems to our customers with financing terms that we believe are economically attractive for their individual situation.

## **Sales and Marketing**

We have trained our sales organization to effectively engage prospective customers from initial interest to customized proposals to signed contracts. We intend to continue to educate consumers about the benefits of our solar products in order to lower our customer acquisition costs and further expand the market opportunity.

- ***Inside sales*** – Our inside sales groups initially engage with potential customers prior to our outside sales or e-sales teams’ customer engagement. Inside sales groups identify each potential customer’s initial interest in solar energy and compile data necessary to assess potential cost savings for subsequent discussion with the potential customer by the sales teams.

- **Direct outside sales** –Throughout 2017, we employed an outside sales force in the east coast markets and Hawaii to generate new business and complete sales orders initiated by inside sales groups from their own networking, at local events and by establishing local business alliances. The outside sales team would visit potential customers in their homes or businesses, explaining the advantages of solar energy, answering customer questions and facilitating new sales orders. Effective March 1, 2018, we have completed a realignment of our sales teams resulting in the elimination of the outside residential sales force.
- **Sales** – The e-sales teams provide an online, real time, complete customer experience. We use software and satellite imagery to review the customer’s rooftop for suitability and system capacity, and based on the customer’s current utility costs, assess the project’s potential cost savings from installation of the solar energy system. We utilize electronic contracts and digital signatures.
- **Customer referrals** – Our customer referral program is designed to be an effective and efficient method of reaching new customers. Our program provides cash incentives to current customers to refer friends, relatives and co-workers.
- **Online Digital Marketing** – Consumers seek online education, purchase options, and business reviews before determining the best provider to meet their needs. In an effort to align our business with marketplace, and our sales teams with the consumer, we will continue to expand our online market presence.

## Customers

*POWERHOUSE™*: Our customers will include new home builders and roofers in the re-roof market, of which there is approximately 7 million re-roofs annually in the United States.

*Solar Division*: Our residential customers are homeowners interested in reducing electrical utility costs and switching to clean, renewable energy. Our residential solar energy systems are generally rooftop installations up to 24kW in size.

Our commercial customers come from a variety of industries including retail, manufacturing, service, not-for-profit and municipal services. Often times, our small commercial clients arise from the relationship developed when we install a residential solar system to the owner of the small business. Our commercial solar energy systems may be roof mounted or ground mounted and are generally up to 500kW in size. Occasionally, through the course of our normal operations, we are presented with opportunities for larger (greater than 500kW) commercial solar energy systems. We evaluate each of these large opportunities on a case by case basis while minimizing onerous contract terms.

## Suppliers

*POWERHOUSE™*: We will engage third-party manufacturers to manufacture components of the in-roof *POWERHOUSE™* solar shingle. The major components of the *POWERHOUSE™* solar shingle consist of the solar laminate, connectors, wire harnesses, base assembly and integrated flashing system. The solar laminate, connectors and wire harnesses will be produced by a manufacturer located in China and shipped to our U.S. based manufacturer of the base assembly and integrated flashing system to be assembled and warehoused. The product will then be kitted and shipped to our customers.

*Solar Division*: Our solar energy systems utilize photovoltaic modules and inverters purchased from several manufacturers and distributors. The majority of these materials are “Buy American” under the American Recovery and Reinvestment Act of 2009. We negotiate pricing based on quantity purchased and payment terms. Generally, we purchase major components as needed and do not have long-term or volume commitments with suppliers. However, in response to the 201 Tariff, as discussed in Item 7 of Part II, in January 2018 we entered into a purchase commitment with one of our major vendors for solar panels on a semi-annual basis to maintain a consistent price for imported solar panels.

## Competition

*POWERHOUSE™*: The Dow Chemical Company developed the *POWERHOUSE™* solar shingle and has various worldwide patents. As we have obtained exclusive licenses to commercialize the product worldwide from Dow, the patents and licenses provide a barrier to entry, thereby limiting the number of competitors. Existing sources of competition include Suntegra and CertainTeed as well as a few others who are approaching the market but have not commercialized, such as Tesla.

*Solar Division*: We believe our primary competitors are the traditional local utilities that supply energy to our potential customers. We compete with these traditional utilities primarily based on price, predictability of price and the ease by which customers can switch to electricity generated by our solar energy systems rather than fossil based alternatives. We believe that our pricing and focus on customer relationships allow us to compete favorably with traditional utilities in the regions we service.

The other source of competition comes from other solar providers such as, the SolarCity division of Tesla, Inc., Vivint Solar Inc., Sunrun Inc., Sungevity, Inc., and many others.

## Regulations

*POWERHOUSE™*: We will have to obtain UL Certification and maintain compliance with UL standards on *POWERHOUSE™* 3.0 solar shingles and on any future development.

*Solar Division*: An interconnection agreement is generally required from the applicable local electricity utility to interconnect a solar energy system with the utility grid. In almost all cases, interconnection agreements are standard form agreements that have been pre-approved by the local public utility commission or other regulatory body with jurisdiction over interconnection. As such, no additional regulatory approvals are required once interconnection agreements are signed. We prepare and submit these agreements on behalf of our customers to ensure compliance with interconnection rules.

Our operations are subject to stringent and complex federal, state and local laws and regulations governing the occupational health and safety of our employees and wage regulations. For example, we are subject to the requirements of the federal Occupational Safety and Health Act, as amended, or “OSHA”, and comparable state laws that protect and regulate employee health and safety. We expend resources to comply with OSHA requirements and industry best practices. Federal and/or state prevailing wage requirements, which generally apply to any “public works” construction project that receives public funds, may apply to installations of our solar energy systems on government facilities. The prevailing wage is the basic hourly rate paid on public works projects to a majority of workers engaged in a particular craft, classification or type of work within a particular area. Prevailing wage requirements are established and enforced by regulatory agencies. Our in-house personnel monitor and coordinate our continuing compliance with these regulations when required.

Some jurisdictions place limits on the size or number of solar energy systems that can be interconnected to the utility grid. This can limit our ability to sell and install solar energy systems in some markets. The regulatory environment is constantly changing.

## Government Incentives and Policies

U.S. federal, state and local governments have established various policies, incentives and financial mechanisms to reduce the cost of solar energy and to accelerate the adoption of solar energy. These incentives include tax credits, cash grants, production-based incentives, tax abatements and rebates. These incentives help catalyze private sector investments in solar energy, energy efficiency and energy storage measures, including the installation and operation of residential and commercial solar energy systems.



Following the extension of the Solar Investment Tax Credit in December 2015, the Internal Revenue Code allows a United States taxpayer to claim a tax credit of 30% of qualified expenditures for a solar energy system that is placed in service on or before December 31, 2019. This credit is scheduled to decline to 26% effective January 1, 2020, 22% in 2021, and then to 10% for commercial projects and 0% for residential projects in 2022.

Many U.S. states and local jurisdictions have established property tax incentives for renewable energy systems, which include exemptions, exclusions, abatements and credits. Many state governments, investor-owned utilities, municipal utilities and co-operative utilities offer rebates or other cash incentives for the installation and operation of a solar energy system or energy-related products.

Many states have a regulatory policy known as net energy metering, or net metering. Net metering typically allows our customers to interconnect their on-site solar energy systems to the utility grid and offset their utility electricity purchases by receiving a bill credit at the utility's retail rate for energy generated by their solar energy system that is exported to the grid in excess of electric load used by customers.

Some states have established limits on net metering, imposed monthly or other fees on solar energy systems, or reduced the credit available for electricity generated by solar energy systems that are connected to the utility grid. For example, Hawaii, Nevada and Mississippi have announced net metering policies that establish wholesale rates, not retail rates, for crediting electricity produced by solar energy systems. This has adversely impacted the attractiveness of solar to residential customers in these markets. The California Public Utilities Commission issued a ruling that maintains the net energy metering credit at full retail value, but adds new charges and requirements for customers installing a solar energy system. On the other hand, other states continue to expand their net metering programs. New York, for example, has suspended its cap on solar photovoltaic systems covered by the state's net metering program.

Some states like Massachusetts offer Solar Renewable Energy Credits ("SRECs") that provide cash payments based on the electricity produced by solar energy systems as an incentive for customers to invest in these systems. These programs are generally capped and must be reauthorized or extended when the cap is reached in order for the incentives to be continued. The Massachusetts Department of Energy Resources announced that the total capacity available under its current SREC program (SREC-II) for projects over 25 kW had been exceeded in early 2016, however it was announced on January 31, 2017 by the Massachusetts Department of Energy Resources that their new program, called Solar Massachusetts Renewable Target ("SMART"), is targeted to start in April 2018 and that the SREC II program would be extended in order to bridge between the two programs.

On January 22, 2018, the Office of the President of the United States approved in substantial form, recommendations by the U.S. International Trade Commission ("ITC") to impose a tariff of 30% on imports of solar cells and modules under Section 201 of the Trade Act of 1974, unless specifically excluded. Further, the provisions of the 201 Tariff are applicable to imported solar cells and modules from Canada, despite its being a member of the North American Free Trade Act.

### **Seasonality**

Our quarterly net revenue and operating results for solar energy system installations are difficult to predict and have, in the past, and may, in the future, fluctuate from quarter to quarter as a result of changes in state, federal, or private utility company subsidies, as well as weather, economic trends and other factors. We have historically experienced seasonality in our solar installation business, with the first quarter representing our lowest installation quarter of the year, primarily due to adverse weather. We have historically experienced seasonality in our sales of solar systems, with the fourth and first quarters of the year seeing less sales orders than the second and third quarters.

### **Employees**

As of March 30, 2018, we had approximately 140 full-time employees. None of our employees are represented by a labor union or subject to a collective bargaining agreement.

## Reverse Stock Splits

On January 25, 2017, we consummated a reverse stock split of all outstanding shares of our Class A common stock at a ratio of one-for-30, whereby 30 shares of Class A common stock were combined into one share of Class A common stock (the "2017 Reverse Stock Split"). The 2017 Reverse Stock Split was previously authorized by a vote of our shareholders on January 23, 2017. We did not decrease our authorized shares of capital stock in connection with the reverse stock split. Share amounts and share prices set forth in this Annual Report are presented to reflect the reverse split, as applicable.

## Offerings

On February 6, 2017, we closed a \$11.5 million offering and sale of (a) units, "February 6 Primary Units," each consisting of one share of our Class A common stock, and a Series K warrant to purchase one share of Class A common stock, and (b) units, "February 6 Alternative Units," each consisting of a prepaid Series L warrant to purchase one share of Class A common stock, and a Series K warrant pursuant to the Securities Purchase Agreement, dated as of February 1, 2017, by and among us and several institutional investors, and to public retail investors. As a result, we issued 2,096,920 February 6 Primary Units, 1,613,080 February 6 Alternative Units, 2,096,920 shares of Class A common stock as part of the February 6 Primary Units, Series K warrants to purchase 3,710,000 shares of Class A common stock, and Series L warrants to purchase 1,613,080 shares of Class A common stock. The purchase price for a February 6 Primary Unit was \$3.10 and the purchase price for a February 6 Alternative Unit was \$3.09. We received net proceeds of approximately \$10.5 million at the closing, after deducting commissions to the placement agents and estimated offering expenses payable by us associated with the offering. As of December 31, 2017, there were 3,710,000 Series K warrants outstanding.

On February 9, 2017, we closed a \$6 million offering and sale of (a) units, "February 9 Primary Units," each consisting of one share of our Class A common stock, and a Series M warrant to purchase 75% of one share of Class A common stock, and (b) units, "February 9 Alternative Units," each consisting of a prepaid Series N warrant to purchase one share of Class A common stock, and a Series M warrant, pursuant to the Securities Purchase Agreement, dated as of February 7, 2017, by and among us and several institutional and accredited investors. As a result, we issued 1,650,000 February 9 Primary Units, 750,000 February 9 Alternative Units, 1,650,000 shares of Class A common stock as part of the February 9 Primary Units, Series M warrants to purchase 1,800,000 shares of Class A common stock, and Series N warrants to purchase 750,000 shares of Class A common stock. The purchase price for a February 9 Primary Unit was \$2.50 and the purchase price for a February 9 Alternative Unit was \$2.49. We received net proceeds of approximately \$5.5 million at the closing, after deducting commissions to the placement agents and estimated offering expenses payable by us associated with the offering. As of December 31, 2017, there were 1,609,974 Series M warrants outstanding.

On January 4, 2018, we closed a \$1.8 million offering and sale of (a) 800,000 shares of Class A common stock, (b) a prepaid Series P Warrant to purchase 800,000 shares of Class A common stock, and (c) a Series O Warrant to purchase 1,600,000 shares of Class A common stock, pursuant to the Securities Purchase Agreement, dated as of January 2, 2018, by and between us and one institutional and accredited investor. The purchase price was \$1.15 per share of Class A common. We received net proceeds of approximately \$1.5 million at the closing, after deducting commissions to the placement agents and estimated offering expenses payable by us associated with the offering.

On March 30, 2018, we entered into a Securities Purchases Agreement with two unaffiliated institutional and accredited investors for a private placement (the "2018 Offering") of up to \$10.75 million in principal amount and \$10 million funding amount (reflecting \$750,000 of original issue discount) of Senior Convertible Notes (the "2018 Notes"), and Series Q Warrants to purchase 9,270,457 shares of Class A Common Stock. The closing of the 2018 Offering is subject to customary closing conditions. The 2018 Offering may result in gross proceeds of \$10.0 million, before placement agent fees and other expenses associated with the transaction. We will receive \$5 million of the proceeds from the sale of the 2018 Notes at closing. We also will receive a secured promissory note from each investor, in a combined aggregate amount of \$5 million (each, an "Investor Note"), secured by cash and/or securities held in investor accounts.

We will issue Series A Notes and Series B Notes in the transaction. The aggregate principal amount of the Series A Notes will be \$5,750,000 and the Series B Notes will be \$5,000,000. All of the aggregate principal amount of the Series B Notes will constitute 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 will 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.

We will not be required to amortize the 2018 Notes. All amounts owed under the 2018 Notes will mature and come due upon maturity.

The 2018 Notes will not incur interest other than upon the occurrence of an event of default, in which case the 2018 Notes bear interest at 18% per year.

The 2018 Notes will be convertible at any time, at the option of the holder, into shares of Class A common stock at a conversion price. The initial fixed conversion price will be \$1.2045 per share (which was above the closing bid price of our Class A common stock immediately before executing the Securities Purchase Agreement), subject to adjustment for stock splits, stock dividends and similar events.

A holder may not convert a 2018 Note and we may not issue shares of Class A common stock upon conversion of a 2018 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 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 Securities Purchase Agreement requires us to hold a shareholders' meeting before June 30, 2018 to seek approval of the issuance of shares of Class A Common Stock upon conversion of the 2018 Notes and exercise of the Series Q Warrants at conversion and exercise prices below the market price of our Class A common stock at the time of entering into the Securities Purchase Agreement, in compliance with Nasdaq Marketplace Rules. If, despite our reasonable best efforts such shareholder approval is not obtained at such shareholders' meeting, we are obligated to hold recurring shareholders' meeting until such shareholder approval is obtained. There can be no assurance that we will be successful in obtaining such shareholder approval.

If we receive such shareholder approval, the conversion price of the 2018 Notes and exercise price of the Series Q Warrants would be subject to potential reduction and resets in the future, for example, upon the future issuance of securities (e.g. full-ratchet anti-dilution protection) and the occurrence of certain events. In addition, if we receive such shareholder approval, following an event of default, holders of 2018 Note holders would be permitted to convert their 2018 Notes at an "Alternate Conversion Price" and at a 125% premium in an "Alternate Conversions" (each term, as defined in the 2018 Notes). We may at any time, subject to Nasdaq's approval and with the prior written consent of the Required Holders (as defined in the Securities Purchase Agreement), reduce the conversion price of the 2018 Notes and exercise price of the Series Q Warrants to any amount and for any period of time deemed appropriate by our board of directors after obtaining such shareholder approval. Some of the provisions providing for reduction and reset of the conversion price of the 2018 Notes and exercise price of the Series Q Warrants are subject to a floor price, such that the adjusted conversion price or exercise price, as applicable, can never be below \$0.97.

We will have the right to require mandatory conversion of the 2018 Notes if the volume-weighted average price of our Class A common stock for 10 consecutive trading days exceeds 200% of the conversion price, subject to certain "Equity Conditions" (as defined in the 2018 Notes). One of the equity conditions is that we have obtained the shareholder approval discussed above. We also have the right to redeem all, but not less than all, 2018 Notes for cash at 120% or 125% (depending on when it occurs) of the amount outstanding, subject to certain Equity Conditions. A holder of a 2018 Note may require use to redeem such note for cash at a 125% premium in connection with a transaction that results in a "Change of Control" (as defined in the 2018 Notes) and upon the occurrence of an event of default.

The terms of the 2018 Notes prohibit us from entering into a "fundamental transaction" (as defined in the 2018 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 2018 Notes), assumes all of the Company's obligations under the 2018 Notes and the other transaction documents in a written agreement approved by each 2018 Note holder. The definition of "fundamental transactions" includes, but is not limited to, mergers, a sale of all or substantially all our assets, certain tender offers and other transactions that result in a change of control.

The 2018 Notes will contain customary events of default, the occurrence of which triggers default interest and causes a failure of Equity Conditions, which may mean that we will be unable to force mandatory conversion of the 2018 Notes and that investors may not be required to prepay the Investor Notes under a mandatory prepayment event.

The 2018 Notes will contain negative and affirmative covenants, including a requirement that we on a quarterly basis have available cash of at least \$750,000.

Each investor may voluntarily prepay such investor's Investor Note, in whole or in part, without premium or penalty at any time. The Investor Notes will also be subject to mandatory prepayment, in whole or in part, upon the occurrence of (i) conversion of Restricted Principal under an investor's Series B Note, and (ii) on the 45th day after the earlier to occur of (A) the first date on which the U.S. Securities and Exchange Commission declares effective one or more registration statements registering the resale of the shares of Class A common stock underlying the 2018 Notes and the Series Q Warrants, and (B) the first date on which all of such shares of Class A common stock are eligible to be resold by the holders pursuant to Rule 144 promulgated under the Securities Act, subject to (1) certain Equity Conditions, (2) a requirement that the average volume weighted average price of the Class A common stock exceed a specified amount, and (3) that no event of default is then existing and continuing.

At the closing of the 2018 Offering, we will enter into a Registration Rights Agreement (the "Registration Rights Agreement") with the purchaser of the 2018 Notes under which we will be required, on or before the 30th day after the closing of the 2018 Offering, to file an initial registration statement with the U.S. Securities and Exchange Commission covering the resale of the shares of Class A common stock issuable pursuant to the 2018 Notes and the Series Q Warrants and to use our reasonable best efforts to have that initial registration statement declared effective within specified deadlines. We will be subject to certain monetary penalties, as set forth in the Registration Rights Agreement, if we fail to meet specified filing deadlines, effectiveness deadlines, maintenance requirements, and/or current public information requirements under the Registration Rights Agreement.

If the 2018 Notes have not been fully converted into shares of our Class A common stock at maturity, we would seek to refinance a remaining balance at that time from either: (i) by negotiating with the holders of the 2018 Notes, (ii) funds obtained in a public or private offering of securities, or (iii) common stock warrant exercises including our reducing the exercise price of common stock warrants to induce conversion. No assurances can be given that should a balance remain on the 2018 Notes at maturity that we will be successful in meeting the obligation under the 2018 Notes.

We believe that without determining to proceed with the commercialization of POWERHOUSE™ 3.0 we have sufficient capital resources for the ensuing 12 months. 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 are not received, we would seek obtaining the capital from other transactions such as a public offering of securities, and common stock warrant exercises including reducing the exercise price of 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 receive the additional capital necessary, either from the Investor Notes or an alternative transaction.

#### **Item 1A. Risk Factors.**

We wish to caution you that there are risks and uncertainties that could cause our actual results to be materially different from those indicated by forward looking statements that we make from time to time in filings with the U.S. Securities and Exchange Commission, news releases, reports, proxy statements, registration statements and other written communications, as well as oral forward-looking statements made from time to time by our representatives. These risks and uncertainties include those risks described below of which we are presently aware. Historical results are not necessarily an indication of the future results. Cautionary statements below discuss important factors that could cause our business, financial condition, operating results and cash flows to be materially adversely affected.

#### **Risk Factors Related to our Business and Industry**

*We have a history of operating losses, and we can provide no assurance as to our future operating results. If we do not become profitable on an ongoing basis, we may be unable to continue our operations.*

We have experienced net losses and negative cash flows from operating activities as of December 31, 2017. If we cannot improve our operating results and ultimately generate net income, we may be unable to continue our operations in the future. Whether we achieve profitability or not will depend on our success in increasing sales and installation revenue. As of December 31, 2017, we had working capital of \$3.7 million and an accumulated deficit of approximately \$200 million. The net loss for the twelve months ended December 31, 2017 was \$17.7 million.

Our financial statements as of December 31, 2017 were prepared under the assumption that we will continue as a going concern. The independent registered public accounting firm that audited our 2017 financial statements, in their report, included an explanatory paragraph referring to our recurring losses and expressed substantial doubt in our ability to continue as a going concern. Our financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our ability to continue as a going concern depends on our ability to obtain additional equity or debt financing, increase sales and installations, attain further operating efficiencies, reduce expenditures, and, ultimately, to generate revenue.

*We need to increase our sales, installations and revenue in order to achieve our goal of initially operating at break-even, and profitability thereafter.*

Our current levels of sales, installations and revenue are insufficient for profitable operations. The additional financial resources obtained in February 2017 allowed us to develop and initiate implementation of a revenue growth strategy to increase sales and installation revenue. If we are unsuccessful in executing these plans, we will be unable to increase sales, installations and resulting revenue and will not achieve our goal of operating at break-even, and profitability thereafter.

*We need to continue to grow our backlog or we will be unable to increase revenue.*

To grow our backlog, we hired and trained new salespersons, and bid upon new customer sales which were ultimately awarded. While we continue to implement our revenue growth strategy, until we build a larger backlog, our installation revenue will fluctuate by quarter. If we are unsuccessful in building a larger backlog, we will be unable to increase sales, installations and resulting revenue and we will not achieve our goal of operating at break-even and achieving profitability thereafter.

*We have a history of negative cash flows from operations, and it is uncertain when, or if, in the future we will be able to achieve or sustain positive cash flow from operations.*

There can be no assurance in the future that we will generate sufficient cash flow from operations or obtain funds from future financings or other sources to fund operations or other liquidity needs which could have important adverse consequences to us, such as:

- limiting our ability to obtain additional financing;
- making it more difficult for us to satisfy our obligations with respect to future indebtedness;
- limiting our ability to respond to changing business, industry and economic conditions and to withstand competitive pressures, which may affect our financial condition;
- limiting our ability to make investments, dispose of assets, pay cash dividends or repurchase stock;
- increasing our vulnerability to downturns in our business, our industry or the general economy and restricting us from making improvements or acquisitions or exploring business opportunities; and
- placing us at a competitive disadvantage to competitors with greater resources

Our future operating performance and our ability to service indebtedness will be subject to future economic conditions and to financial, business and other factors, many of which are beyond our control.

*Our indebtedness imposes restrictive covenants on us.*

Our indebtedness imposes customary covenants on us and our subsidiaries. The restrictions imposed under these debt instruments include, among other obligations, limitations on our and our subsidiaries' ability to:

- sell assets;
- change our business, management or ownership;
- engage in any merger, acquisition or consolidation transactions;
- incur additional debt or sell additional securities;
- make dividends or distributions and repurchase stock;
- make investments;
- enter into certain transactions with affiliates; and
- make payments on or amend any subordinated obligations

Our ability to comply with the covenants imposed by the terms of our indebtedness may be affected by general economic conditions, industry conditions, and other events beyond our control. As a result, we cannot assure you that we will be able to comply with these covenants. Our failure to comply with such covenants, including failure to comply as a result of events beyond our control, could result in an event of default, which could materially and adversely affect our operating results and our financial condition.

If there were an event of default under our indebtedness, the holders of the defaulted debt would likely be able to cause all amounts outstanding with respect to that debt to be due and payable, subject to applicable grace periods. We cannot assure you that our assets or cash flow would be sufficient to repay borrowings under applicable indebtedness if accelerated upon an event of default, or that we would be able to repay, refinance or restructure the payments on such indebtedness.

*Existing rules, regulations and policies pertaining to electricity pricing and technical interconnection of customer-owned electricity generation and changes to these regulations and policies may deter the purchase and use of solar energy systems and negatively impact development of the solar energy industry.*

The market for solar energy systems is heavily influenced by foreign, federal, state and local government regulations and policies concerning the electric utility industry, as well as policies adopted by electric utilities. These regulations and policies often relate to electricity pricing and technical interconnection of customer-owned electricity generation. For example, the vast majority of states have a regulatory policy known as net energy metering, or "net metering", which allows our customers to interconnect their on-site solar energy systems to the utility grid and offset their utility electricity purchases by receiving a bill credit at the utility's retail rate for energy generated by their solar energy system that is exported to the grid and not consumed on-site. In this way, the customer pays for the net energy used or receives a credit at the retail rate if more electricity is produced than consumed. In some states, net metering is being replaced with lower credits for the excess electricity sent onto the grid from solar energy systems, and utilities are imposing minimum or fixed monthly charges on owners of solar energy systems. These regulations and policies have been modified in the past and may be modified in the future in ways that can restrict the interconnection of solar energy systems and deter purchases of solar energy systems by customers. In addition, electricity generated by solar energy systems competes most favorably in markets with tiered rate structures or peak hour pricing that increase the price of electricity when more is consumed. Modifications to these rate structures by utilities, such as reducing peak hour or tiered pricing or adopting flat rate pricing, could require the price of solar energy systems to be reduced in order to compete with the price of utility generated electricity.

*The reduction, elimination or expiration of government subsidies and economic incentives for solar energy systems could reduce the demand for our products and services.*

U.S. federal, state and local government bodies and utilities provide incentives to end-users, distributors, system integrators and manufacturers of solar energy systems to promote solar electricity in the form of rebates, tax credits and other financial incentives such as system performance payments and payments for renewable energy credits associated with renewable energy generation. These incentives enable us to lower the price we charge our customers for solar energy systems. However, these incentives may expire on a particular date, end when the allocated funding is exhausted, or be reduced or terminated as solar energy adoption rates increase. These reductions or terminations often occur without warning. In addition, applicable authorities may adjust or decrease incentives from time to time or include provisions for minimum domestic content requirements or other requirements to qualify for these incentives. The reduction, elimination or expiration of such incentives or delays or interruptions in the implementation of favorable federal or state laws could substantially increase the cost of our systems to our customers, resulting in a significant reduction in demand for our solar energy systems, which would negatively impact our business. For example, The Massachusetts Department of Energy Resources (DOER) announced that the total capacity available under its current SREC program (SREC-II) for projects over 25 kW had been exceeded in early 2016. DOER's new program, SMART is expected to launch in the summer of 2018, and has announced that the SREC II program would be extended until the SMART program begins in order to bridge between the two programs.

*Existing regulations, and changes to such regulations, may present technical, regulatory and economic barriers to the installation of solar energy systems, which may significantly reduce demand for our solar energy systems.*

The installation of solar energy systems is subject to oversight and regulation under local ordinances; building, zoning and fire codes; environmental protection regulation; utility interconnection requirements for metering; and other rules and regulations. We attempt to keep up-to-date on these requirements on a national, state and local level and must design and install our solar energy systems to comply with varying standards. Certain jurisdictions may have ordinances that prevent or increase the cost of installation of our solar energy systems. In addition, new government regulations or utility policies pertaining to the installation of solar energy systems are unpredictable and may result in significant additional expenses or delays, which could cause a significant reduction in demand for solar energy systems.

*An increase in our cost of materials could arise as a result of the United States imposing trade remedies on imported crystalline silicon photovoltaic cells and modules.*

In April 2017, Suniva, a US-based manufacturer of solar panels in bankruptcy, filed a safeguard petition under Section 201 of the Trade Act of 1974 requesting that the ITC recommend the President impose trade remedies on imported crystalline silicon photovoltaic cells and modules in the form of an initial duty rate on imported solar cells of \$0.40/watt and an initial minimum price on imported solar modules of \$0.78/watt.

On January 22, 2018, the Office of the President of the United States approved in substantial form, recommendations by the ITC to impose a tariff of 30% on imports of solar cells and modules under Section 201 of the Trade Act of 1974, unless specifically excluded. Further, the provisions of the 201 Tariff are applicable to imported solar cells and modules from Canada, despite its being a member of the North American Free Trade Act. In response to the 201 Tariff, we entered into a purchase commitment for solar panels on a semi-annual basis to maintain a consistent price for imported solar panels.

If the tariff increases the cost of materials and pricing to a level that causes a reduction in the number of customer installations, it may negatively impact our revenue and profit margin.

On March 22, 2018, the Office of the President of the United States signed a memorandum in regard to imposing new tariffs based on the findings of an investigation by the United States Trade Representative in Section 301 of the Trade Act of 1974. The investigation was focused on trade practices with China and the President has instructed the United States Trade Representative to publish a list of proposed Chinese goods that could be subject to tariffs within 15 days of signing the memorandum. The tariffs are expected to affect about 1,300 lines of the harmonized tariff code, but they will not be imposed until after a 60-day notice and comment period after which the final list of goods will be identified.

Currently the majority of products for our solar division are procured from regions other than China. Our current manufacturing plan for POWERHOUSE™ does include goods that will be made in China and may be affected by newly imposed tariffs, however we have incorporated an additional 30% tariff into our models should additional tariffs be placed on POWERHOUSE™ products.

*Although currently there is no shortage of supplies for solar energy systems, from time to time in the past, shortages have occurred and have impacted solar companies such as us. Shortages in the supply of silicon and inverters or supply chain issues could adversely affect the availability and cost of the solar photovoltaic modules used in our solar energy systems.*

Shortages of silicon and inverters or supply chain issues could adversely affect the availability and cost of our solar energy systems. Manufacturers of photovoltaic modules depend upon the availability and pricing of silicon, one of the primary materials used in photovoltaic modules. The worldwide market for silicon from time to time experiences a shortage of supply, which can cause the prices for photovoltaic modules to increase and supplies to become difficult to obtain. While we have been able to obtain sufficient supplies of solar photovoltaic modules to satisfy our needs to date, this may not be the case in the future. Future increases in the price of silicon or other materials and components could result in an increase in costs to us, price increases to our customers or reduced margins.

A significant percentage of photovoltaic modules used in the United States are imported from China or utilize solar cells made in Taiwan. In 2014 the U.S. Department of Commerce imposed tariffs on these products. Although most of the solar photovoltaic modules we used in 2017 were sourced from North American manufacturers, we have experienced price increases and occasional problems with availability as a result of these tariffs. Other international trade conditions such as work slowdowns and labor strikes at port facilities or major weather events can also adversely impact the availability and price of solar photovoltaic modules.

*We prepare and submit paperwork on behalf of our customers and financing partners to obtain payment for solar energy systems that we sell and applicable incentives. The failure to complete this paperwork accurately or submit it on a timely basis may reduce our revenue and profit on projects and expose us to liquidated damages and other penalties.*

We typically prepare and submit the necessary paperwork on behalf of our customers and financing companies to obtain payment for solar energy systems that we sell and applicable incentive payments. The processing of such paperwork is generally subject to rigid and formal compliance procedures. In addition, such processing may be time consuming and add significant cost and administrative burden. We may price our products assuming that we will obtain payments that depend on the timely and accurate processing of such paperwork. There can be no assurance that we will be able to process necessary paperwork in a timely and accurate manner and successfully obtain all payments available to us or to our customers. If we are unsuccessful in doing so, our revenue and profit margin will be negatively impacted and we may have to pay financial penalties or liquidated damages.

*Our business prospects could be harmed if solar energy is not widely adopted or sufficient demand for solar energy systems does not develop or takes longer to develop than we anticipate.*

The solar energy market is at a relatively early stage of development. The extent to which solar energy will be widely adopted and the extent to which demand for solar energy systems will increase are uncertain. If solar energy does not achieve widespread adoption or demand for solar energy systems fails to develop sufficiently, we may be unable to achieve our revenue and profit targets. In addition, demand for solar energy systems in our targeted markets may not develop or may develop to a lesser extent or more slowly than we anticipate. Many factors may affect the demand for solar energy systems, including the following:

- availability of government and utility company subsidies and incentives to support the development of the solar energy industry;
- government and utility policies regarding the interconnection of solar energy systems to the utility grid;



- fluctuations in economic and market conditions that affect the viability of conventional and non-solar renewable energy sources, such as changes in the price of natural gas and other fossil fuels;
- cost-effectiveness (including the cost of solar panels), performance and reliability of solar energy systems compared with conventional and other non-solar renewable energy sources and products;
- success of other renewable energy generation technologies, such as hydroelectric, wind, geothermal, solar thermal, concentrated solar and biomass;
- availability of financing with economically attractive terms;
- fluctuations in expenditures by purchasers of solar energy systems, which tend to decrease in slower economic environments and periods of rising interest rates and tighter credit; and
- deregulation of the electric power industry and the broader energy industry.

*A drop in the retail price of conventional electricity or non-solar renewable energy sources may negatively impact our business.*

The demand for our solar energy systems depends in part on the price of conventional electricity, which affects return on investment resulting from the purchase of solar energy systems. Fluctuations in economic and market conditions that impact the prices of conventional and non-solar renewable energy sources could cause the demand for solar energy systems to decline, which would have a negative impact on our business.

*For installation projects where we recognize revenue using the percentage-of-completion method, any delay or cancellation of a project could adversely affect our business.*

For projects where we recognize revenue on a percentage-of-completion basis, our revenue from these installations is determined by the performance of our contractual obligations. The time it takes to execute our contractual obligations may impact the amount of revenue recognized in a particular period. Timelines can be adversely impacted by weather, governmental agencies, utilities and customer requirements. In addition, certain customer contracts may include payment milestones due at specified points during a project. Although we generally have payment terms that provide for positive cash flow, delays in project execution or customer payments can adversely affect our business and cash flows.

*Our sales and installations are subject to seasonality of customer demand and weather conditions which are outside of our control.*

Our sales are subject to the seasonality of when customers buy solar energy systems. We experience spikes in orders during the spring and summer months which, due to lead time, result in installations and revenue increasing during the summer and fall. Tax incentives can generate additional backlog prior to the end of the year, depending upon the incentives available and whether customers are looking to take advantage of such incentives before the end of the year.

Our ability to construct systems outdoors may be impacted by inclement weather, which can be most prominent in our geographic installation regions during the first and fourth quarters of the year. As a result of these factors, our first quarter is generally our slowest quarter of the year. If unexpected natural events occur and we are unable to manage our cash flow through these seasonal factors, there could be a negative impact on our financial position, liquidity, results of operations and cash flow.

*Our inability to respond to changing technologies and issues presented by new technologies could harm our business.*

The solar energy industry is subject to technological change. If we rely on products and technologies that cease to be attractive to customers, or if we are unable to respond appropriately to changing technologies and changes in product function or quality, we may not be successful in capturing or retaining significant market share. In addition, any new technologies utilized in our solar energy systems may not perform as expected or as desired, in which event our adoption of such products or technologies may harm our business.

*We derive the majority of the revenue from the sale of solar energy systems in east coast states, Hawaii and California.*

We currently derive the vast majority of our revenue from the sale of solar energy systems in east coast states, Hawaii and California. This geographic concentration exposes us to increased risks associated with the growth rates, government regulations, economic conditions, weather and other factors that may be specific to those states to which we would be less subject if we were more geographically diversified. The growth of our business will require us to expand our operations in existing markets and to commence operations in other states. Any geographic expansion efforts that we may make may not be successful, which would limit our growth opportunities.

*We may incur fines and other penalties if we do not conduct our business in accordance with licenses required for our operations and if any such license is suspended or lost, we may be unable to sell or install solar energy systems in the jurisdiction in question and our sales and revenue from that jurisdiction would be adversely affected.*

As a construction company, we are required to hold general or specialty contractors' licenses in some of the jurisdictions in which we operate, although in other jurisdictions we are permitted to utilize the licenses of subcontractors. Some jurisdictions also require licenses to sell home improvement products or services, or to issue consumer credit. If we violate the rules of these licensing authorities, we may incur fines or other penalties or have our licenses suspended or cancelled. Some licenses require us to employ personnel with specific qualifications. If we lose those personnel, we may lose our ability to conduct business in that jurisdiction until we can hire a qualified replacement.

*Our operations are largely dependent on the skill and experience of our management and key personnel. The loss of management and other key personnel or our inability to hire additional personnel could significantly harm our business and our ability to expand, and we may not be able to effectively replace members of management who have left the company.*

Our continued success and our ability to maintain our competitive position is largely dependent upon, among other things, the efforts and skills of our senior executives and management team. We cannot guarantee that these individuals will remain with us. We have not paid bonuses in over two years and have not had a significant amount of employee stock options or other equity incentive awards available to issue as incentive compensation to our senior executives, management team and employees. If we are unable to pay bonuses or issue stock options or other equity incentive awards in the future, we may lose the services of members of our management team or other key personnel. Further, we do not carry key man life insurance on our executives. If we lose the services of any members of our management team or other key personnel, our business may be significantly impaired. In addition, we cannot assure you that we will be able to attract additional qualified senior executive, management and key personnel.

*The loss of personnel or failure to hire additional personnel could materially and adversely affect our business, operating results and our ability to expand.*

The expansion of our business could significantly strain our managerial, financial and personnel resources. To reach our goals, we must successfully recruit, train, motivate and retain additional employees, including management and technical personnel, integrate new employees into our overall operations and enhance our financial and accounting systems, controls and reporting systems. While we believe we have personnel sufficient for the current requirements of our business, expansion of our business could require us to employ additional personnel. The loss of personnel or our failure to hire additional personnel could materially and adversely affect our business, operating results and our ability to expand.

*We may be subject to unexpected warranty expenses or service claims that could reduce our profits.*

As a result of the length of the warranty periods we provide both in workmanship and, in certain cases, in energy production, we bear the risk of warranty claims long after we have completed the installation of a solar energy system. Our current standard warranty for our installation services includes a warranty period of up to 10 years for defective workmanship. In addition, most manufacturers of solar photovoltaic modules offer a 25-year warranty period for declines in power performance. Although we maintain an estimated liability for potential warranty or service claims, claims in excess of our recorded liability could adversely affect our operating results. Our failure to predict accurately future warranty claims could result in unexpected volatility in our financial results.

*From time to time, we are subject to litigation which, if adversely determined, could cause us to incur substantial losses.*

From time to time during the normal course of operating our businesses, we are subject to various litigation claims and legal disputes. As a result, we might also be required to incur significant legal fees, which may have a material adverse effect on our financial position. In addition, because we cannot accurately predict the outcome of any action, it is possible that, as a result of current and/or future litigation, we will be subject to adverse judgments or settlements that could significantly reduce our earnings or result in losses.

*We have a dispute with a customer of our former Commercial segment, the ultimate resolution of which could have a material impact upon our results of operations and financial position.*

As previously disclosed, and as discussed in Item 3 of Part I, we have a dispute with a customer of our former Commercial segment wherein the customer alleges that we have not completed agreed-upon remedial work to remedy alleged deficiencies, and has notified us that the customer intends to perform such work at our expense using a third-party contractor. In addition, the customer demanded an aggregate of approximately \$0.4 million as liquidated damages under the terms of the project contract. We estimate that the range of loss related to this warranty claim is from approximately \$0.2 million to a maximum of approximately \$0.6 million, resulting in our having previously recorded a \$0.2 million, the low end of the range. Additionally, we have approximately \$0.6 million held in escrow related to this matter. If we have to compensate the customer for its remedial work or pay the customer liquidated damages, it would negatively impact our results of operations to the extent such costs exceed the previously recorded liability, and result in a significant use of cash.

*The ultimate resolution of our dispute with our insurance carrier could result in the significant outlay of cash.*

As previously disclosed, and as discussed in Item 3 of Part I, we have incurred legal expenses of \$1.5 million in connection with a U.S. Securities and Exchange Commission investigation into our July 2014 private placement. The investigation was ultimately closed without action by the U.S. Securities and Exchange Commission, and we and our legal advisors believe the legal expenses incurred in connection with the investigation should be fully paid by our insurance carrier. Our insurance carrier has paid these legal expenses but informed us that if it concludes that such expenses do not constitute a "claim" covered by the policy, they would seek to recoup all amounts advanced. As such, we have recorded the advanced funds as a deferred liability. If our insurance carrier were to pursue reimbursement and prevailed in recouping the amounts advanced, it would not affect results of operations but would result in a significant use of cash.

*We rely heavily on a limited number of suppliers, installers and other vendors, and if these companies were unable to deliver critical components and services, it would adversely affect our ability to operate and our financial results.*

We rely on a limited number of third-party suppliers to provide the components used in our solar energy systems. We also rely on key vendors to provide internal and external services which are critical to our operations, including installation of solar energy systems, accounting and customer relationship management software, facilities and communications. The failure of our suppliers and vendors to supply us with products and services in a timely manner or on commercially reasonable terms could result in lost orders, delay our project schedules, limit our ability to operate and harm our financial results. If any of our suppliers or vendors were to fail to supply our needs on a timely basis or to cease providing us key components or services we use, we would be required to secure alternative sources of supply. We may have difficulty securing alternative sources of supply. If this were to occur, our business would be harmed.

*We install solar energy systems, and many factors can prevent us from completing installations on time or on budget.*

Factors that may prevent us from completing installations on time or on budget include:

- shortages of materials;
- shortages of skilled labor;
- unforeseen installation scheduling, engineering, excavation, environmental or geological problems;

- job site issues that were not apparent during site inspection;
- natural disasters, hurricanes, weather interference, fires, earthquakes or other casualty losses or delays;
- delays in obtaining or inability to obtain or maintain necessary licenses or permits;
- changes to plans or specifications;
- performance by subcontractors;
- disputes with subcontractors; and
- unanticipated cost increases in materials, labor or other elements of our projects beyond budgets and allowances for contingencies.

Our installation projects expose us to risks of cost overruns due to typical uncertainties associated with any project or changes in the designs, plans or concepts of such projects. For these and other reasons, installation costs may exceed the estimated cost of completions.

*Because the legacy solar energy system installation market is highly competitive and has low barriers to entry, we may face the loss of business or reduced margins.*

The solar energy system installation market is highly competitive with low barriers to entry. We currently compete with significantly larger companies as well as a large number of relatively small installers and developers. Larger companies may have greater financial, technical and marketing resources and greater name recognition than we do. Smaller companies may lack adequate systems and capital, but can benefit from operating efficiencies or from having lower overhead, which enables them to offer lower prices.

We believe that our ability to compete depends in part on a number of factors outside of our control, including the following:

- the availability of solar financing solutions;
- the price at which competitors offer comparable products;
- marketing efforts undertaken by our competitors;
- the extent of our competitors' responsiveness to customer needs; and
- access to materials, labor and installation services.

Competition in the solar energy system installation market may increase in the future as a result of low barriers to entry. Increased industry competition could result in reductions in price, margins, and market share and in greater competition for qualified personnel. Our business and operating results would be adversely affected if we are unable to compete effectively.

*The installation and ongoing operation of solar energy systems involves significant safety risks.*

Solar energy systems generate electricity, which is inherently dangerous. Installation of these systems also involves the risk of falling from rooftops, personal injuries occurring at the job site and other risks typical of construction projects. Although we take many steps to assure the safe installation and operation of our solar energy systems, and maintain insurance against such liabilities, we may nevertheless be exposed to significant losses arising from personal injuries or property damage arising from our projects.

*Availability and cost of financing for solar energy systems could reduce demand for our services and products.*

Many of our customers depend on loan or lease financing to fund the purchase price of our solar energy systems. The interest rate for this financing varies with market conditions. Third-party financing sources may also charge significant fees for their financing products. If our financing sources increase their fees or interest rates, our customers' cost of purchasing our solar energy systems will increase and we may experience decreased demand for our products and services, resulting in reduced revenue. In the alternative, if we elect to absorb any financing price increase by lowering the price of our products and services to keep the total cost to our customers constant, our revenue will decrease and we will experience lower profit margins. However, we continue to rely on third parties to finance most of our sales of solar energy systems.

*An increase in interest rates or tight credit markets could make it difficult for customers to finance the cost of solar energy systems and could reduce demand for our services and products.*

Some of our prospective customers may depend on debt financing, such as home equity loans or leasing, to fund the purchase of a solar energy system. Third-party financing sources, specifically for solar energy systems, are currently limited. The lack of financing sources, limitations on available credit, or an increase in interest rates could make it difficult or too costly for our potential customers to secure the financing necessary to purchase a solar energy system on favorable terms, or at all, thus lowering demand for our services and products and negatively impacting our business.

*Our license with Dow Global Technologies LLC for the exclusive use of the POWERHOUSE™ trademark name is subject to obtaining UL certification and thereafter, successful commercialization of the POWERHOUSE™ 3.0 in-roof shingle.*

As of December 31, 2017, we have recorded an intangible asset of \$1 million for the initial up-front license payment to Dow Global Technologies LLC. Upon obtaining UL Certification, assuming we determine to proceed with commercialization of POWERHOUSE™ 3.0, we will incur a liability of \$2 million for further up-front license payments that will be recorded as an addition to the intangible asset. If we do not obtain UL Certification by September 2019, the licensor has the right to amend the license to be non-exclusive. Recoverability of the intangible asset is dependent upon successful commercialization of POWERHOUSE™ 3.0 and will require us to obtain additional capital, manage a supply chain to manufacture the product and expand our operations. If we are unable to successfully commercialize the POWERHOUSE™ 3.0 shingle, the related intangible asset will become impaired.

*We may be unable to successfully commercialize POWERHOUSE™ 3.0, which may negatively impact our business and results of operation.*

There are risks we must address to successfully commercialize POWERHOUSE™ 3.0:

- Obtaining requisite UL certification of POWERHOUSE™ 3.0;
- The adequacy of, and access to, capital necessary to commercialize POWERHOUSE™ 3.0;
- Our ability to satisfy the conditions and our obligations under the POWERHOUSE™ 3.0 license agreement;
- Our ability to manage a supply chain, including the cost and availability of raw materials, in order to achieve production levels and competitive pricing of the POWERHOUSE™ 3.0 shingles;
- Our ability to successfully expand operations, employees and realize profitable revenue growth from the sale and installation of POWERHOUSE™ 3.0;
- Our ability to successfully and timely expand our POWERHOUSE™ 3.0 business outside of the United States and manage foreign exchange risks associated with the POWERHOUSE™ 3.0 business;
- Intellectual property infringement claims, and warranty claims related to the POWERHOUSE™ 3.0 business; and
- Competition in the built-in photovoltaic solar system business.

No assurances can be given: (i) that we will receive UL certification, (ii) for the timing of receiving UL certification, (iii) for the timing of commencement of POWERHOUSE™ 3.0 sales, and (iv) whether we can successfully commercialize POWERHOUSE™ 3.0.

*Our failure to meet customer expectations in the performance of our services, and the risks and liabilities associated with placing our employees and technicians in our customers' homes and businesses, could give rise to claims against us.*

Our failure or inability to meet customer expectations in the performance of our services could damage our reputation or result in claims against us. In addition, we are subject to various risks and liabilities associated with our employees and technicians providing installation services in the homes and businesses of our customers, including possible claims of errors and omissions, harassment, theft of customer property, criminal activity and other claims.

*Product liability claims against us could result in adverse publicity and potentially significant monetary damages.*

As a seller of consumer products, we may face product liability claims in the event that use of our solar energy systems results in injuries. Because solar energy systems produce electricity, it is possible that our products could result in injury, whether by product malfunctions, defects, improper installation or other causes. If such injuries or claims of injuries were to occur, we could incur monetary damages and our business could be adversely affected by any resulting negative publicity. The successful assertion of product liability claims against us also could result in potentially significant monetary damages and, if our insurance protection is inadequate to cover these claims, could require us to make significant payments from our own resources.

*Increased information technology security threats and more sophisticated computer crime pose a risk to our systems, networks, products and services.*

We rely on technology, computer systems, third-party service providers, and our website for obtaining and storing certain information. Our business requires us to receive, retain and transmit personally identifiable information and other information about our customers, suppliers and employees, some of which is entrusted to third-party service providers and other businesses we interact with. Information technology security threats are increasing in frequency and sophistication. Our security measures have been breached in an immaterial manner in the past and may be breached in the future due to a cyber-attack, computer malware or viruses, employee error, malfeasance, fraudulent inducement (including so-called "social engineering" attacks and "phishing" scams) or other acts. Costs associated with our past security breach have not been significant. Unauthorized parties have previously obtained and may in the future obtain access to our data or the data of our customers, suppliers or employees or may otherwise cause damage or interfere with our technology, computer systems or website. We develop and update processes and maintain systems in an effort to try to prevent this from occurring and seek assurances from businesses we interact with that they will do the same, but the development and maintenance of these processes and systems are costly and require ongoing monitoring and updating as technologies change, privacy and information security regulations change, and efforts to overcome security measures become more sophisticated. We have taken, and continue to undertake significant steps to protect such information and seek assurances from businesses we interact with that they will do the same, but there can be no assurance that our data security systems or those of businesses we interact with will not be compromised, and such compromise could result in such information being obtained by unauthorized persons, adverse operational effects or interruptions, substantial additional costs or being subject to legal or regulatory proceedings, any of which could damage our reputation in the marketplace or materially and adversely affect our business, financial condition, operating results and cash flows.

*In the event the make-up of our board of directors or audit committee were not, or are not in the future, in compliance with the U.S. Securities and Exchange Commission and the Nasdaq Capital Market independence requirements, we face a number of risks that could materially and adversely affect our shareholders and our business.*

The U.S. Securities and Exchange Commission rules and the Nasdaq Capital Market's continued listing requirements require, among other things, that a majority of the members of our board of directors are independent and that our audit committee consists entirely of independent directors. In the event that we do not remain in compliance with these requirements, our executive officers could establish policies and enter into transactions without the requisite independent review and approval. This could present the potential for a conflict of interest between us and our shareholders generally and our executive officers, shareholders, or directors.

Further, our failure to comply with these requirements may limit the quality of the decisions that are made by our board of directors and audit committee, increasing the risk of material misstatements or omissions caused by errors or fraud with respect to our financial statements or other disclosures that may occur and not be detected in a timely manner or at all, or the payment of inappropriate levels of compensation to our executive officers. In the event that there are deficiencies or weaknesses in our internal control over financial reporting, we may misreport our financial results or lose significant amounts due to misstatements caused by errors or fraud. Finally, if the composition of our board of directors or audit committee fails to meet Nasdaq's independence requirements in the future, our Class A common stock will be delisted from the Nasdaq Capital Market.

## **Risk Factors Related to Our Securities**

*The market price of our Class A common stock has been volatile, and future volatility could result in substantial losses for investors.*

The market price of our Class A common stock has been volatile in the past and could fluctuate widely in response to various factors, many of which are beyond our control, including the following:

- actual or anticipated changes in our operating results;
- regulatory, legislative or other developments affecting us or the solar energy industry generally;
- changes in expectations relating to our services and products, plans and strategic position or those of our competitors or customers;
- market conditions and trends within the solar energy industry;
- acquisitions or strategic alliances by us or by our competitors;
- litigation involving us, our industry or both;
- introductions of new technological innovations, services, products or pricing policies by us or by our competitors;
- recruitment or departure of key personnel;
- our ability to execute our business plan;
- volume and timing of customer orders;
- price and volume fluctuations in the overall stock market from time to time;
- changes in investor perception;
- the level and quality of any research analyst coverage of our Class A common stock;
- changes in earnings estimates or investment recommendations by analysts;
- the financial guidance we may provide to the public, any changes in such guidance or its failure to meet such guidance;
- the trading volume of our Class A common stock;
- our issuance of additional Class A common stock or securities convertible into or exercisable for Class A common stock; and
- economic and other external factors that impact purchasing decisions of our potential customers.

Future volatility of the market price of our Class A common stock could result in substantial losses for investors.

*The issuance of shares of Class A common stock upon conversion of the 2018 Notes and exercise of outstanding warrants could substantially dilute your investment and could impede our ability to obtain additional financing in the future.*

The 2018 Notes will be 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 2018 Offering to have our shareholders vote for approval of a decrease in the conversion price and exercise price of the 2018 Notes and Series Q warrants to be issued in the 2018 Offering, which could result in downward pressure on the price of our Class A common stock. Further, the issuance of shares of our Class A common stock, at our election, in payment of principal and/or interest on the 2018 Notes, will result in dilution of the equity interests of our other shareholders. We have no control over whether the holders will exercise their right to convert their Notes or exercise their warrants. We cannot predict the market price of our Class A common stock at any future date, and therefore, cannot predict the applicable prices at which the 2018 Notes may be converted or outstanding warrants may be exercised. For these reasons, we are unable to accurately forecast or predict with any certainty the total amount of shares that may be issued under the 2018 Notes and outstanding warrants. However, we have estimated the number of Class A common stock that may ultimately be issued under the 2018 Notes to be approximately 18 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 7.0 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 our 2018 Notes and Series Q warrants, we may not receive cash payment under the Investor Notes.*

The terms of our 2018 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 2018 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 are not received, we would seek obtaining the capital from other transactions such as a public offering of securities, and common stock warrant exercises including 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 2018 Notes do not convert their 2018 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 2018 Notes.*

The 2018 Notes will be convertible into shares of our Class A common shares. Holders of our 2018 Notes will be allowed to convert them into shares of Class A common stock at any time. We also will have the ability to force holders to convert upon the occurrence of a certain event. However, we do not expect that holders of the 2018 Notes will convert them voluntarily unless the shares they receive upon conversion are either registered for resale under the Securities Act or eligible to be resold under Rule 144 promulgated under the Securities Act. Further, our ability to force holders of our 2018 Notes to convert them will be subject to the satisfaction of certain 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) a public offering of securities, or (iii) common stock warrant exercises including reducing the exercise price of common stock warrants to induce conversion. No assurances can be given that should a balance remain on the 2018 Notes at maturity we will be successful in meeting the obligation under the 2018 Notes. Should we determine to seek capital from a public offering of securities, it will be dilutive to shareholders.



*Future issuances of stock, options, warrants or other securities will cause substantial dilution and may negatively affect the market price of our Class A common stock.*

Ownership of our securities may be diluted by future issuances of securities or the conversion or exercise of outstanding or to be issued options, warrants, convertible notes, convertible stock or other securities.

As of March 30, 2018, there were an aggregate of approximately 10.4 million shares of our Class A common stock issuable upon exercise of outstanding warrants. The exercise price under certain of our outstanding warrants is subject to reset in the future. Further, the exercise price of our Series H warrants is subject to reset at the earlier to occur of (a) the repayment in full of our Senior Secured Convertible Notes due April 1, 2019 (the "2016 Notes"), and (b) the maturity date of the 2016 Notes. If on such date the exercise price of our Series H warrants exceeds 85% of the lowest volume weighted average price of our Class A common stock for the five trading days ending on, but including, the adjustment date, the exercise price will be reset to such lower price.

Derivative securities, such as convertible debt, options and warrants, currently outstanding or issued in the future may contain anti-dilution protection provisions, which, if triggered, could require us to issue a larger number of the security underlying such derivative security than the face amount. For example, the warrants we issued in the June 3, 2013 private placement provide that among other things, if we issue or sell, or are deemed to have issued and sold, shares of Class A common stock for a consideration per share less than a price equal to the exercise price of the warrants, the exercise price of the warrants will be reduced and the number of shares of Class A common stock issuable upon exercise of the warrants will be increased, based on the formula and on the terms set forth in the warrants.

We cannot predict the effect, if any, that future sales or issuance of shares of our Class A common stock into the market, or the availability of shares of our Class A common stock for future sale, will have on the market price of our Class A common stock. Sales of substantial amounts of our Class A common stock (including shares issued upon exercise of options and warrants or conversion of convertible related party debt), or the perception that such sales could occur, may materially affect prevailing market prices for our Class A common stock.

*We do not expect to pay any cash dividends on our Class A common stock for the foreseeable future.*

We do not anticipate paying any cash dividends on our Class A common stock for the foreseeable future. Accordingly, investors in our securities would have to sell some or all of their stock in order to generate cash flow from their investment. Any determination to pay dividends in the future on our Class A common stock will be made at the discretion of our board of directors and will depend on our results of operations, financial conditions, contractual restrictions, restrictions imposed by applicable law, capital requirements and other factors that our board of directors deems relevant.

*Our business is subject to reporting requirements that continue to evolve and change, which could continue to require significant compliance effort and resources.*

Because our Class A common stock is publicly traded, we are subject to certain rules and regulations of federal, state and financial market exchange entities charged with the protection of investors and the oversight of companies whose securities are publicly traded. These entities, including the Public Company Accounting Oversight Board, the Securities and Exchange Commission and the Nasdaq Stock Market, periodically issue new requirements and regulations and legislative bodies also review and revise applicable laws such as the Sarbanes-Oxley Act of 2002 and the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. As interpretation and implementation of these laws and rules and promulgation of new regulations continues, we will continue to be required to commit significant financial and managerial resources and incur additional expenses.

*Provisions in our articles of incorporation and bylaws might discourage, delay or prevent a change of control of our company or change in our management and, therefore, depress the trading price of our Class A common stock.*

Our articles of incorporation and bylaws contain provisions that could depress the trading price of our Class A common stock by discouraging, delaying or preventing a change of control of our company or changes in our management that our shareholders may believe advantageous. These provisions include:

- Our board of directors may consist of any number of directors, which may be fixed from time to time by our board of directors. Newly created directorships resulting from any increase in our authorized number of directors may be filled by the affirmative vote of a majority of the directors then in office or by an election at an annual meeting or special meeting of shareholders called for that purpose, and any vacancies on its board of directors resulting from death, resignation, retirement, disqualification, removal from office or other cause may be filled by the affirmative vote of a majority of the remaining board of directors, even if less than a quorum is remaining in office.

- A shareholder must provide advance notice of any proposal to be brought before an annual meeting of shareholders by a shareholder, including any nomination for election of directors by any shareholder entitled to vote for the election of directors at the meeting.
- No shareholder proposal may be considered at a meeting of our shareholders unless the proposal relates to a matter on which a shareholder vote is required by our articles of incorporation, bylaws or by applicable law.
- Our board of directors has the power to issue preferred stock with designations, preferences, limitations and relative rights determined by our board of directors without any vote or action by shareholders. The issuance of preferred stock or of rights to purchase preferred stock could have the effect of making it more difficult for a third party to acquire our company, or of discouraging a third party from attempting to acquire our company.
- Our board of directors may amend, supplement or repeal our bylaws or adopt new bylaws, subject to repeal or change by action of our shareholders.

*The terms of the 2018 Notes, our outstanding warrants 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 2018 Notes and outstanding warrants.*

The terms of the 2018 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 2018 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 2018 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 2018 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 2018 Notes at a premium upon the occurrence of an event of default (as defined in the 2018 Notes) or a change of control (as defined in the 2018 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 Offering if, among other things, the U.S. Securities and Exchange Commission has not declared effective required registration statements within a specified registration deadline.

As a result, our ability to enter into certain transactions or obtain additional financing in the future, could be impeded and the payments we may be obligated to make described above may adversely affect our results of operations.

*Proxy contests threatened or commenced against us could be disruptive and costly and the possibility that activist shareholders may wage proxy contests or gain representation on our Board of Directors could cause uncertainty about the strategic direction of our business.*

Contested elections and responses to activist shareholders can be distracting to management, time consuming and expensive, and can cause the Company’s resources and the attention of our management to be diverted. For example, we incurred approximately \$1 million of additional expense in connection with the proxy contest related to our 2017 annual shareholders meeting when compared to an annual meeting with an uncontested director election. Additionally, activist shareholders may jeopardize our ability to attract qualified board members in the future which may make it difficult to comply with independence standards of the U.S. Securities and Exchange Commission and the Nasdaq Capital Market, attract new employees, retain current employees, create new vendor alliances, establish favorable credit terms with vendors, and close customer sales in the future.

In addition, with respect to contested shareholders' meetings, the rules governing the ability of banks, brokers and other nominees to vote shares for which they have not received voting instructions from beneficial owners make it more difficult to obtain a quorum for the meeting. For example, we were unable to establish a quorum for its 2017 annual meeting of shareholders until we reached an agreement with the activist shareholders who had filed a competing proxy statement for the meeting. Failure to obtain a quorum at our shareholders' meeting could cause us to be in non-compliance with Nasdaq rules which require us to hold an annual meeting once each fiscal year, and would result in our not being able to obtain shareholder approval of matters we are required to submit to our shareholders for approval, such as amendments to our equity incentive plan, which could have a negative impact on our operations as discussed further in a separate risk factor below. Further, uncertainty about our future board composition and our ability to obtain shareholder approval when required could negatively impact the market price and volatility of our Class A common stock.

*We must meet The Nasdaq Capital Market continued listing requirements or we risk delisting, which may decrease the per share price of our Class A common stock and make it harder for our shareholders to trade our stock.*

Our Class A common stock is currently listed for trading on The Nasdaq Capital Market. We must continue to satisfy Nasdaq's continued listing requirements or risk delisting of our securities.

We have failed to comply with the Nasdaq Capital Market continued listing requirements in the past and there can be no assurance that we will continue to satisfy Nasdaq's minimum shareholders' equity requirement or any other applicable listing requirement during the monitoring period or thereafter.

If our Class A common stock is delisted from the Nasdaq Capital Market, it may trade on the over-the-counter market, which may be a less liquid market. In such case, our shareholders' ability to trade, or obtain quotations of the market value of, shares of our Class A common stock would be severely limited because of lower trading volumes and transaction delays. These factors could contribute to lower prices and larger spreads in the bid and ask prices for our securities.

In addition to the foregoing, if our Class A common stock is delisted from Nasdaq and it trades on the over-the-counter market, the application of the "penny stock" rules could adversely affect the market price of our Class A common stock and increase the transaction costs to sell those shares. The Securities and Exchange Commission has adopted regulations which generally define a "penny stock" as an equity security that has a market price of less than \$5.00 per share, subject to specific exemptions. The last reported trade of our Company Stock on The Nasdaq Capital Market was at a price below \$5.00 per share. If our Class A common stock is delisted from Nasdaq and it trades on the over-the-counter market at a price of less than \$5.00 per share, our Class A common stock would be considered a penny stock. The Securities and Exchange Commission's penny stock rules require a broker-dealer, before a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document that provides information about penny stocks and the risks in the penny stock market. The broker-dealer must also provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and the salesperson in the transaction, and monthly account statements showing the market value of each penny stock held in the customer's account. In addition, the penny stock rules generally require that before a transaction in a penny stock occurs, the broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's agreement to the transaction. If applicable in the future, these rules may restrict the ability of brokers-dealers to sell our Class A common stock and may affect the ability of investors to sell their shares, until our Class A common stock no longer is considered a penny stock.

**Item 1B. Unresolved Staff Comments.**

None.

**Item 2. Properties.**

Our principal executive offices are located in Denver, Colorado. The following table sets forth certain information relating to our primary facilities:

<b>Primary Locations</b>	<b>Size (sq. ft.)</b>	<b>Use</b>	<b>Lease Expiration</b>	<b>Business Segment</b>
Denver, CO	12,477	Corporate Headquarters	May-22	Other/Residential
Bloomfield, CT	10,000	Office and warehouse	Nov-19	Residential
Lowell, MA	1,469	Office	Month-Month	Residential
Kailua, HI	10,000	Office and warehouse	Dec-19	Sunetric
Kailu-Kona, HI	3,360	Warehouse	Month-Month	Sunetric

Existing facilities have lease renewal options ranging from 1 month to 5 years.

**Item 3. Legal Proceedings.**

From time to time, we are involved in legal proceedings that we consider to be in the normal course of business.

**Item 4. Mine Safety Disclosures.**

Not applicable.

**Part II****Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.****Stock Price History**

Our Class A common stock is listed on the NASDAQ Capital Market under the symbol "RGSE." On March 30, 2018, we had 97 shareholders of record and 10,351,845 shares of \$.0001 par value Class A common stock and no shares of \$.0001 par value Class B common stock outstanding.

The following table sets forth the high and low close prices for our Class A common stock for the periods indicated:

	<b>High</b>	<b>Low</b>
<b>Fiscal 2017:</b>		
Fourth Quarter	\$ 2.37	\$ 0.82
Third Quarter	\$ 1.03	\$ 0.64
Second Quarter	\$ 1.39	\$ 0.81
First Quarter	\$ 8.70	\$ 1.27
<b>Fiscal 2016:</b>		
Fourth Quarter	\$ 83.70	\$ 5.70
Third Quarter	\$ 267.00	\$ 54.90
Second Quarter	\$ 426.00	\$ 120.60
First Quarter	\$ 462.00	\$ 246.00

## **Dividend Policy**

We have not declared or paid any cash dividends on our Class A common stock, and we do not anticipate doing so in the foreseeable future. We currently intend to retain future earnings, if any, to operate our business and support our future growth strategies. Any future determination to pay dividends on our Class A common stock will be at the discretion of our Board of Directors and will depend on our financial condition, results of operations, contractual restrictions, restrictions imposed by applicable law, capital requirements and other factors that our Board of Directors deems relevant. In addition, the terms of our 2016 Notes and 2018 Notes prohibit us from making any dividend payment until all of the 2016 Notes and 2018 Notes have been converted, redeemed, or otherwise satisfied.

## **Sale of Unregistered Securities**

Between January 1, 2017 and March 31, 2017, we issued an aggregate of 160,185 shares of Class A common stock to the holders of the 2016 Notes as payment of an aggregate of \$0.5 million of principal and interest owed under the 2016 Notes at a per share price of \$2.82.

As previously reported, the issuance of the shares of Class A common stock issuable upon repayment of principal and interest and upon conversion of the 2016 Notes was exempt from registration under the Securities Act of 1933 (as amended, the "Securities Act") Section 4(a)(2) and Securities Act Rule 506(b). The holders of the 2016 Notes are sophisticated, accredited investors and acquired the 2016 Notes for their own accounts for investment purposes. Further, the transaction documents pursuant to which the holders purchased the 2016 Notes state that the securities in question have not been registered under the Securities Act and cannot be sold or otherwise transferred without registration or an exemption therefrom and provide for the placement of a restrictive legend on any stock certificates issued upon conversion of the 2016 Notes, subject to the terms of the transaction documents.

All other sales of equity securities during 2017 were registered and have been previously reported in Current Reports on Form 8-K.

## **Equity Compensation Plan Information**

See section entitled "Equity Compensation Plan Information" in Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters, which disclosure is incorporated herein by reference.

## **Item 6. Selected Financial Data.**

Not applicable.

## **Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.**

*The following discussion and analysis provides information that we believe is relevant to an assessment and understanding of our results of operation and financial condition. You should read this analysis in conjunction with our audited consolidated financial statements and related footnotes. This discussion and analysis contains statements of a forward-looking nature relating to future events or our future financial performance. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results, level of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements, including those set forth in this Form 10-K.*

## Overview

We are a residential and small 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. As of September 29, 2017, we are the exclusive domestic and international licensee of POWERHOUSE™ in-roof solar shingle, an innovative and aesthetically pleasing solar shingle system developed by Dow.

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 26,000 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.

We generally recognize revenue from solar energy systems sold to our customers when we install the solar energy system. Our business requires that we incur costs of acquiring solar panels and labor to install solar energy systems on our customer rooftops up-front and receive cash from customers thereafter. As a result, during periods when we are increasing sales, we expect to have negative cash flow from operations.

### *POWERHOUSE™ License Agreement*

A material significant event occurred on September 29, 2017 (the “Effective Date”), when we executed the License with Dow, providing an exclusive domestic and international right to commercialize its POWERHOUSE™ in-roof solar shingle, an innovative and aesthetically pleasing solar shingle system developed by Dow. 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. The License requires us to commercialize and sell a minimum of 50 megawatts of solar within 5-years of the Effective Date to retain exclusive world-wide rights, a requirement we believe is achievable.

In addition to the License, we executed a Trademark License Agreement (the “TLA”), a Technology Service Agreement (the “TSA”) and a Sales Agreement-Surplus Property (the “Sales Agreement”) with Dow. The execution of the TLA will allow us to market the POWERHOUSE™ 3.0 product using the Dow name. The Sales Agreement identified used manufacturing molds that Dow transferred title to us for a cost of \$1.00.

Under the terms of the License, we will produce, market and sell POWERHOUSE™ 3.0, for which we have agreed to a license fee of \$3 million and a running royalty fee equal to 2.5% against net sales of the POWERHOUSE™ product and services, payable quarterly in arrears. Further, we will be responsible for all post-Effective Date costs to obtain UL Certification and for the prosecution of all related patents world-wide, which may be offset against the payment of the running royalty fee. The license fee is comprised of two payments; the first \$1 million was paid within 10 days of the Effective Date of the License in 2017 in accordance with the TLA. The remaining \$2 million is due within 30 days of the Company receiving UL Certification of the POWERHOUSE™ 3.0 product. Upon obtaining UL Certification, we intend to begin commercialization of POWERHOUSE™ 3.0 entailing the manufacturing, marketing and sale of POWERHOUSE™ 3.0 to roofing companies.

As of December 31, 2017, we have invested approximately \$1.1 million that has been capitalized to the POWERHOUSE™ License, an intangible asset on the Consolidated Balance Sheet.

## Other Key Metrics

### Backlog

Backlog is discussed below and an important metric as we implement our revenue growth strategy.

### Key Operational Metric, Gross Margin on Residential Segment, Our Largest Segment

We utilize a job costing system whereby employees record their time to projects. We accumulate the cost of idle time reflecting the cost we incur to maintain a construction organization until our revenue grows, allowing for greater utilization of our construction organization. Cost of goods sold (“COGS”) include direct project installation costs (materials, labor, travel, financing fees, and estimated warranty costs) and indirect costs for project installation support (including un-utilized labor of idle time of construction crews, supplies, and insurance). We employ an internal time reporting system to determine COGS and resulting gross margin percentage used by the company to measure its performance in achieving gross margin percentage targets. Further, we measure COGS per watt based upon COGS, excluding idle time, divided by the aggregate watts of systems installed during the period. For financial reporting purposes, COGS include the idle time of construction crews currently maintained by the company in anticipation of future growth of backlog. Gross margin percentage on actual installation time is not a measure defined by generally accepted accounting principles.

For the year ended December 31, 2017, as a result of the competitive landscape, the average selling price per watt (“ASP”) declined at a greater rate than the cost of installation per watt. Accordingly, our ASP declined 10% resulting in a roughly 6% and 8% decline in gross margin based on actual installation time and including idle time, respectively. We anticipate an improvement in our gross margin percentage in future periods from increased revenue from our implementation of our revenue growth strategy.

	Twelve Months Ended December 31, 2017	Twelve Months Ended December 31, 2016
Gross margin % on actual installation time	24%	30%
Gross margin % including idle time	13%	21%

### Backlog

Backlog represents the dollar amount of revenue that may be recognized in the future from signed contracts to install solar energy systems that have not yet been installed without taking into account possible future cancellations. Backlog is not a measure defined by generally accepted accounting principles, and is not a measure of contract profitability. Our methodology for determining backlog may not be comparable to methodologies used by other companies in determining their backlog amounts. The backlog amounts we disclose are net of cancellations received and include anticipated revenues associated with (i) the original contract amounts, and (ii) change orders for which we have received written confirmations from customers. Backlog may not be indicative of future operating results, and projects in our backlog may be cancelled, modified or otherwise altered by customers.

The following table summarizes changes to our backlog by segment for the years ended December 31, 2016 and December 31, 2017:

(in thousands)	Residential	Sunetric	Totals
Backlog at January 1, 2016	\$ 9,502	\$ 7,195	\$ 16,697
Bookings from new awards (“Sales”)	15,186	693	15,879
Cancellations and reductions on existing contracts	(5,152)	(1,484)	(6,636)
Amounts recognized in revenue upon installation	(12,609)	(3,956)	(16,565)
Backlog at December 31, 2016	6,927	2,448	9,375
Bookings from new awards (“Sales”)	23,400	3,196	26,596
Cancellations and reductions on existing contracts	(8,005)	(1,201)	(9,206)
Amounts recognized in revenue upon installation	(11,801)	(2,199)	(14,000)
Backlog at December 31, 2017	\$ 10,521	\$ 2,244	\$ 12,765

We have experienced a high level of contract cancellations, which we attribute to (i) the competitive nature of the solar industry wherein customers shop price after signing a contract and exercise their right to cancel during a three day rescission period after we countersign their contract, (ii) customer home's physical condition requires upgrades that they may not be able to afford or reduces their return on investment, (iii) delays to installing their system within their desired timeframe, and (iv) our history of operating losses and resulting declining stock price affecting customer decisions. We determined that for optimum internal operations, and customer satisfaction, that a backlog equivalent to a few months of sales is optimal.

We intend to continue the optimization of our e-sales call -center- based sales organization with the goal of increasing our future sales awards, both for our current states of operation and new states where we may operate in future periods. Our customers currently finance their acquisition of solar energy systems using their own cash, or a loan they receive from a financial provider. We believe that to be successful in increasing our sales and resultant revenue, we intend to do the following as part of our revenue growth strategy:

- Invest in the POWERHOUSE™ license by obtaining UL Certification for POWERHOUSE™ 3.0, a prerequisite for commercialization of the product and, upon achieving UL Certification, manufacture, market and sell the POWERHOUSE™ 3.0 to roofing companies and new home builders;
- Leverage the POWERHOUSE™ brand to generate leads and revenue for the Solar Division;
- Leverage our investment in RGS 365™ customer-centric software for the POWERHOUSE™ and Solar Divisions;
- Expand our digital marketing program to generate customer leads while achieving our desired cost of acquisition;
- Make available to our customers, additional third-party providers to finance customer acquisitions of our solar energy systems; and
- Expand our network of authorized third-party installers.

We compete with larger, better-financed firms for customers, employees, and the services of third party financiers and installers and, accordingly, there can be no assurance that we will be successful in meeting our goals for increasing sales and revenue.

#### **Recent Developments**

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

- Entered into an agreement for an up to \$10.75 million convertible note and warrant offering in March 2018 to raise approximately up to \$9.1 million after costs. We will receive 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, if any. It is our intent to use the proceeds from the 2018 Offering to obtain UL Certification for POWERHOUSE™ which will then require a \$2 million payment to Dow, and (ii) initiate commercialization of POWERHOUSE™.
- Launched a realignment of the Solar Division to reduce 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 net proceeds of \$1.8 million from offerings of Class A common stock and warrants in January 2018.



## Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles, or “GAAP.” The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We have identified the following to be critical accounting policies whose application have a material impact on our reported results of operations, and which involve a higher degree of complexity, as they require us to make judgments and estimates about matters that are inherently uncertain.

### *Revenue Recognition*

For sales of solar energy systems and components of less than 100 kW, “residential and small commercial customers”, we recognize revenue in accordance with ASC 605-25, *Revenue Recognition—Multiple-Element Arrangements*, and ASC 605-10-S99, *Revenue Recognition—Overall—SEC Materials*. Revenue is recognized when (1) persuasive evidence of an arrangement exists, (2) delivery has occurred or services have been rendered, (3) the sales price is fixed or determinable, and (4) collection of the related receivable is reasonably assured. Components are principally comprised of photovoltaic panels, inverters, and solar energy system mounting hardware. We recognize revenue when we install a solar energy system, provided all other revenue recognition criteria have been met. Costs incurred on residential installations before the solar energy systems are completed are deferred and included in other current assets as work in progress in the consolidated balance sheet.

For those systems of 100 kW or greater, “commercial customers,” we recognize revenue according to ASC 605-35, *Revenue Recognition—Construction-Type and Production Type Contracts*. Revenue is recognized on a percentage-of-completion basis, based on the ratio of total costs incurred to date to total projected costs. Provisions are made for the full amount of any anticipated losses on a contract-by-contract basis.

The assets “Costs in excess of billings” and “Deferred costs on uncompleted contracts” represent costs incurred plus estimated earnings in excess of amounts billed on percentage-of-completion method contracts and costs incurred but deferred until recognition of the related contract revenue on completed-method contracts, respectively. The liability “Billings in excess of costs on uncompleted contracts” represents billings in excess of related costs and earned profit on percentage-of-completion method contracts. We invoice commercial customers according to milestones defined in their respective contracts. The prerequisite for billing is the completion of an application and certificate of payment form as per the contract, which is done after each month end.

Deferred revenue consists of solar energy system installation fees billed to customers for projects which are not completed as of the balance sheet date.

### *Allowance for Doubtful Accounts*

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. We estimate anticipated losses based on the expected collectability of all of our accounts receivable, which takes into account collection history, the number of days past due, identification of specific customer exposure and current economic trends. When we determine a balance is uncollectible and no longer actively pursue collection of the account, it is written off.

### *Inventory*

Inventory consists primarily of solar energy system components (such as photovoltaic modules and inverters) located at our warehouses and is stated at the lower of cost (first-in, first-out method) or market. We identify the inventory items to be written down for obsolescence based on the item’s current sales status and condition. We write down discontinued or slow-moving inventories based on an estimate of the markdown to retail price needed to sell through our current stock level of the inventories on a quarterly basis.

### *Warranties*

We warrant solar energy systems sold to customers for up to ten years against defects in installation workmanship. The manufacturers' warranties on the solar energy system components, which are typically passed through to the customers, typically have product warranty periods of 10 years and a limited performance warranty period of 25 years. We generally provide for the estimated cost of warranties at the time the related revenue is recognized. We also maintain specific warranty liabilities for large commercial customers included in discontinued operations. We assess the accrued warranty reserve regularly and adjust the amounts as necessary based on actual experience and changes in future estimates.

Certain prior year amounts have been reclassified for consistency with the current period presentation. These reclassifications had no effect on the reported results of operations. During the second quarter of 2017, we concluded that it was appropriate to classify items in the statement of operations to conform with operating metrics reported to investors and the manner in which management evaluates financial performance and to classify warranty liability separately as current and non-current liabilities. Accordingly, we revised the classification of certain items to report items in the statement of operations and balance sheet. These changes in classification did not change the previously reported operating income (loss) in the statement of operations, or cash generated (used) from operations in the statement of cash flows, or operating income (loss) for any business segment.

### *Goodwill and Purchased Intangibles*

We review goodwill and indefinite-lived intangible assets for impairment during the second quarter, or more frequently if a triggering event occurs between impairment testing dates.

Intangible assets arising from business combinations, such as acquired customer contracts and relationships (collectively "customer relationships"), are initially recorded at fair value. Goodwill represents the excess of the purchase price over the fair value of the net identifiable assets acquired in a business combination. Goodwill and purchased intangibles are reviewed for impairment annually or more frequently if impairment indicators arise.

Up-front POWERHOUSE™ 3.0 license payments when incurred, costs to obtain UL Certification and legal costs to acquire the license and protect the underlying patents are initially capitalized and thereafter amortized to operations, upon achieving UL Certification, on a straight-line basis over the expected life of the license through 2034.

### *Derivative Liabilities*

We account for complex financial instruments including convertible notes, convertible preferred stock, and warrants under ASC 815 and ASC 480. We utilize third party appraisers to determine the fair value of derivative liabilities embedded in complex financial instruments. For financial instruments accounted for as liabilities, we defer and amortize to operations costs incurred including the initial fair value of warrants issued and derivative liabilities. The issuance costs of financial instruments accounted for as equity are charged to additional paid in capital.

The extinguishment of financial instruments accounted for as debt that are extinguished by issuance of common stock are recorded at the fair value of common stock issued at the date of issuance, with any difference from the carrying value of the liability recorded as a loss on debt extinguishment.

### *Share-Based Compensation*

We recognize compensation expense for share-based awards based on the estimated fair value of the award on the date of grant. We measure compensation cost at the grant date fair value of the award and recognize compensation expense based on the probable attainment of a specified performance condition for performance based awards or over a service period for time based awards. We use the Black-Scholes option valuation model to estimate the fair value for purposes of accounting and disclosures. In estimating this fair value, certain assumptions are used (see Note 8. Share-Based Compensation in Item 8 of this Annual Report), including the expected life of the option, risk-free interest rate, dividend yield, volatility and forfeiture rate. The use of different estimates for any one of these assumptions could have a material impact on the amount of reported compensation expense.

## *Income Taxes*

We recognize income taxes under the asset and liability method. Deferred income taxes are recognized based on temporary differences between financial reporting and income tax bases of assets and liabilities, using current enacted income tax rates and regulations. These differences will result in taxable income or deductions in future years when the reported amount of the asset or liability is recovered or settled, respectively. Considerable judgment is required in determining when these events may occur and whether recovery of an asset, including the utilization of a net operating loss carry-forward prior to its expiration, is more likely than not.

## **Results of Operations**

### ***Year Ended December 31, 2017 Compared to Year Ended December 31, 2016***

#### *Contract revenue:*

*Sale and installation of solar energy systems.* Sale and installation of solar energy system revenue decreased \$2.7 million, or 16.1%, to \$14 million during the twelve months ended December 31, 2017, from \$16.7 million during the twelve months ended December 31, 2016. During the twelve months ended December 31, 2017, installations decreased 0.4 megawatts to 3.7 as compared to the 4.1 megawatts installed during the twelve months ended December 31, 2016. This decrease was primarily due to slower sales in the beginning of the year and a weighted average 10% decline in our ASP. Additionally, the Rhode Island Renewal Energy Growth program reached its funding cap earlier than expected through April 1, 2018 which caused a delay in installations originally planned for the fourth quarter of 2017. These projects are projected to be installed in the second quarter of 2018.

*Service.* Service revenue increased \$0.4 million, or 53.5%, to \$1.1 million during the twelve months ended December 31, 2017 from \$0.7 million during the twelve months ended December 31, 2016. The increase is primarily due to a contract entered into with a third-party in the 4<sup>th</sup> quarter of 2016 to provide service work on their existing customers.

#### *Contract expenses:*

*Installation of solar energy systems.* Installation of solar energy system expenses decreased \$1.2 million, or 8.2%, to \$13.2 million during the twelve months ended December 31, 2017, from \$14.4 million during the twelve months ended December 31, 2016, which corresponds to the reduction of installation revenue during this same time comparison. We utilize gross margin percentage to measure performance utilizing an internal time reporting system allowing us to measure both total incurred contract expense and contract expense excluding construction crew idle time. For the twelve months ended December 31, 2017, our residential segments gross margin without idle time declined due to a 10% decline in the average selling price per watt exceeding the 2% decline in the costs of installation per watt.

*Service.* Service expense increased \$0.5 million to \$1.6 million, or 34.8% during the twelve months ended December 31, 2017, from \$1.2 million during the twelve months ended December 31, 2016. The increase is primarily due to the additional costs attributed to a contract entered into with a third-party in the fourth quarter of 2016 to provide service work on their existing customers.

*Customer acquisition.* Customer acquisition expense increased \$0.1 million during the twelve months ended December 31, 2017, or 2.2%, to \$5.9 million from \$5.8 million during the twelve months ended December 31, 2016. This increase is primarily attributable to our revenue growth strategy beginning during the first quarter of 2017 resulting in increased hiring in our sales department, an increase in digital lead development and an overall commitment to increased marketing efforts to reduce our cost of acquisition.

*Operating expense.* Operating expenses increased \$3 million, or 39.9%, to \$10.7 million during the twelve months ended December 31, 2017 compared to \$7.7 million during the twelve months ended December 31, 2016, primarily due to an increase in labor.

*Litigation and proxy contest expense.* Litigation and proxy contest expenses during the twelve months ended December 31, 2017 was \$1.5 million compared to \$0.02 million during the twelve months ended December 31, 2016, primarily attributable to proxy contest expenses of \$1.2 million in 2017. Our legal expenses may increase in subsequent periods. See Note 5. Commitments and Contingencies.

*Interest expense.* On September 14, 2016, we raised \$2.8 million of convertible preferred stock that was accounted for as debt. By September 29, 2016, all of the convertible preferred stock was converted to Class A common stock of the Company, extinguishing the debt, leaving a balance of \$1,000 related to the 2016 Notes. As a result, there was effectively no interest expense incurred during the twelve months ended December 31, 2017, resulting in a \$2.8 million decrease from the twelve months ended December 31, 2016.

*Derivative and other.* Derivative and other expenses was a \$0.2 million gain for the twelve months ended December 31, 2017 resulting from a fair market value change in the outstanding warrant liability. In comparison, there was a \$2.6 million gain in the twelve months ended December 31, 2016 primarily resulting from a change in the fair market value of stock issued from the convertible note, offset by a decrease in the derivative liability of the convertible note.

*Debt accretion expense and loss on extinguishment.* During the twelve months ended December 31, 2017, \$0.5 million of loss on extinguishment was recorded related to the first quarter conversion of convertible notes, compared to \$14 million during the twelve months ended December 31, 2016. During the three months ended March 31, 2017, \$0.4 million of principal and \$0.1 million of accrued interest under the 2016 Notes were converted into 160,185 shares of Class A common stock. As the trading price of our Class A common stock was higher at conversion than the effective conversion price per share to the debt holder, we recorded a loss on extinguishment. During the third quarter of 2016 we raised \$2.8 million of convertible preferred stock that was accounted for as debt. This debt was subsequently converted to Class A common stock and as the trading price of our stock was higher at conversion than the effective conversion price per share to the debt holder, a loss on extinguishment was recorded.

## **Liquidity and Capital Resources**

We have experienced recurring operating losses and negative cash flow from operations which have necessitated: (i) developing plans to grow revenue to generate positive cash flow and (ii) raising additional capital. No assurances can be given that we will be successful with our plans to grow revenue for profitable operations. See Note 6. Shareholders Equity and Note 12. Subsequent Events for transactions raising capital during 2017 and the first quarter of 2018.

Our plans to grow revenue are:

- Invest in the POWERHOUSE™ license by obtaining UL Certification for POWERHOUSE™ 3.0, a prerequisite for commercialization of the product and, upon achieving UL Certification, manufacture, market and sell the POWERHOUSE™ 3.0 to roofing companies and new home builders;
- Leverage the POWERHOUSE™ brand to generate leads and revenue for the Residential and Sunetric segments;
- Leverage our investment in RGS 365™ customer-centric software for the POWERHOUSE™ and Solar Divisions;
- Expand our digital marketing program to generate customer leads while achieving our desired cost of acquisition;
- Make available to our customers additional third-party providers to finance customer acquisitions of our solar energy systems; and
- Expand our network of authorized third-party installers.

During February 2018, we completed a strategic realignment to scale back our residential solar homeowner business. While we have made progress during 2017 in growing solar sales and backlog, growth has not met initial expectations. The realignment reduced the number of outside sales personnel. We plan to maintain the areas of core competencies meeting expectations, such as its e-sales call center and commercial sales organization.

Until we are successful in implementing our plans to increase revenue for profitable operations, we expect to have a cash outflow from operating activities. We expect to obtain UL certification for POWERHOUSE™ 3.0 in 2018 and, if we determine to proceed at that time with the commercialization of POWERHOUSE™, we expect to have cash outflow from operating activities for commercialization of POWERHOUSE™, including the remaining “Initial License” payment of the \$2 million, prepayments with supply chain manufacturers and working capital as sales of the product commence.

The accompanying consolidated financial statements have been prepared on a basis that assumes we will continue as a going concern and contemplates the continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the normal course of business. We have experienced a history of operating losses and have an accumulated deficit of approximately \$200 million at December 31, 2017. During the year ended December 31, 2017, we generated a net loss of approximately \$17.7 million and we expect that we will continue to generate operating losses until sales are increased and we subsequently recognize an increase in installation revenue. At December 31, 2017, our consolidated cash balance was approximately \$1.2 million.

To provide funds to grow our revenue, on March 30, 2018, we entered into the Securities Purchase Agreement for the 2018 Offering of up to \$10.75 million in principal amount and \$0.75 million of original issue discount of 2018 Notes with unaffiliated institutional investors. The 2018 Offering may result in gross proceeds of \$10.0 million, before placement agent fees and other expenses associated with the transaction. We will receive \$5 million of the proceeds from the sale of the 2018 Notes at closing of the 2018 Offering. We also will receive Investor Notes from the investors of \$5.0 million secured by cash and securities held in escrow. Investors are required to prepay the Investor Notes as they convert their Series B Notes issued in the 2018 Offering and, upon satisfaction of Equity Conditions and certain other conditions, upon the occurrence of a specified mandatory prepayment event. The 2018 Notes will be convertible into Class A common stock and, if not fully converted at maturity, we would seek to refinance a remaining balance at that time from either: (i) refinancing of the obligation with the issuers, (ii) a public offering of securities, or (iii) common stock warrant exercises including reducing the exercise price of common stock warrants to induce conversion. No assurances can be given that should a balance remain on the 2018 Notes at maturity that we will be successful in meeting the obligation under the 2018 Notes. See Note 6. Shareholders' Equity for information regarding our 2018 Offering.

We believe that without determining to proceed with the commercialization of POWERHOUSE™ 3.0 we have sufficient capital resources for the ensuing 12 months. If we determine to proceed with commercialization of POWERHOUSE™ 3.0, we will require additional capital which could be met from the Investor Notes. In the event capital from the Investor Notes are not received, we would seek obtaining the capital from other transactions such as a public offering of securities, and common stock warrant exercises including reducing the exercise price of 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 receive the additional capital necessary, either from the Investor Notes or an alternative transaction. Other than the uncertainties regarding our ability to obtain additional funding, there are currently no known trends, demands, commitments, events or uncertainties that are likely to materially affect our liquidity.

### ***201 Tariff***

Beginning in the second quarter of 2017, certain U.S. based solar module manufacturers filed a petition under Section 201 of the Trade Act of 1974 (the "201 Tariff") claiming damages as a result of foreign manufacturers exporting lower priced photovoltaic modules into the U.S. and recommended the cost of foreign manufactured modules have a floor cost of \$0.78 per watt, to be reduced over a four-year period. Currently, we pay a weighted average cost less than the potential floor cost. On September 22, 2017, the U.S. International Trade Commission ("ITC") decided that the domestic industry had suffered serious harm due to imports. After additional public hearings, on October 31, 2017 the ITC provided remedy recommendations to the President of the United States which stated (i) that a tariff of 30% to 35% of the solar module cost should be applied and (ii) that any such tariff not apply to certain North American treaty partners such as Canada. Approximately 90% of the equipment we purchase is from North American manufacturers.

As we sell systems months in advance of their installation and coupled with our cash management approach to adhere to just-in-time procurement of materials, we determined there was sufficient exposure to installation margins to warrant bridge buying inventory at our current pricing and procuring panels in excess of current needs into 2018. Accordingly, we have invested in our panel inventory, and as of December 31, 2017, have sufficient panel inventory for substantially all planned installations during the first quarter of 2018.

On January 22, 2018, the Office of the President of the United States approved in substantial form, recommendations by the ITC to impose a tariff of 30% on imports of solar cells and modules under Section 201 of the Trade Act of 1974, unless specifically excluded. Further, the provisions of the 201 Tariff are applicable to imported solar cells and modules from Canada, despite its being a member of the North American Free Trade Agreement. We have entered into a bi-annual purchase arrangement with our North American panel provider to stabilize the price per watt for panels. Accordingly, we do not believe the impact of the 201 Tariff will have a material effect on our operations.

## Cash Flows

The following table summarizes our primary sources (uses) of cash during the periods presented:

	2017	2016
Net cash (used in) provided by:		
Operating activities - continuing operations	\$ (16,533)	\$ (11,313)
Operating activities - discontinued operations	498	(981)
Operating activities	(16,035)	(12,294)
Investing activities	(1,959)	(50)
Financing activities	16,224	14,690
Net increase (decrease) in cash	\$ (1,770)	\$ 2,346

### Continuing Operations

*Operating activities.* Cash outflow from operations for the twelve-month period ended December 31, 2017 increased \$5.2 million as compared to the twelve-month period ended December 31, 2016. This increase was primarily due to (i) an increase in customer acquisition expense as contemplated our revenue growth strategy, (ii) an increase in inventory to secure solar panels at pre-201 Tariff pricing and (iii) an increase in litigation and proxy costs attributable to activist shareholder actions.

*Investing activities.* During the twelve months ended December 31, 2017, we internally developed RGS 365™ customer-centric software at a cost of \$0.5 million with \$0.4 million paid during the year. Additionally, expenditures related to our move of corporate headquarters resulted in cash outflows related to leasehold improvements, furnishings and computer equipment of approximately \$0.4 million. We also capitalized costs related to the POWERHOUSE™ license of \$1.1 million.

*Financing activities.* Our financing activities provided net cash of \$16.2 million and \$14.7 million during the twelve months ended December 31, 2017 and 2016, respectively. Our net cash provided by financing activities during the twelve months ended December 31, 2017 reflected the release of restricted cash of \$0.2 million related to the 2016 Note offering, net proceeds of \$16.0 million from the issuance of common stock during the February 2017 offerings, borrowings against our revolving line of credit of \$1.5 million offset by repayment of our line-of-credit facility of \$2.5 million.

### Discontinued Operations

*Operating activities.* Discontinued operations provided net cash of \$0.5 million and used \$1 million during the twelve months ended December 31, 2017 and 2016, respectively. In 2017, we realized \$0.4 million attributable to performance based output (watts produced) from certain previously installed commercial projects. The net cash outflow in 2016 primarily arose from the cash payment for a surety bond, coupled with payments of accounts payable.

### **Off-Balance Sheet Arrangements**

We have not participated in transactions that generate relationships with unconsolidated entities or financial partnerships, such as special purpose entities or variable interest entities, established for the purpose of facilitating off-balance sheet arrangements or other limited purposes.

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

Not applicable.

**Item 8. Financial Statements.**

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Shareholders  
Real Goods Solar, Inc.

We have audited the accompanying consolidated balance sheets of Real Goods Solar, Inc. and subsidiaries (collectively, the "Company") as of December 31, 2016, and the related consolidated statements of operations, shareholders' equity, and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Real Goods Solar, Inc. and subsidiaries as of December 31, 2016, and the results of their operations and their cash flows for the year then ended in conformity with U.S. generally accepted accounting principles.

/s/ Hein & Associates LLP

Denver, Colorado  
March 9, 2017



## Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of  
Real Goods Solar, Inc.

### *Opinion on the Financial Statements*

We have audited the accompanying consolidated balance sheet of Real Goods Solar, Inc. and subsidiaries (the “Company”) as of December 31, 2017, the related consolidated statements of operations, shareholders’ equity, and cash flows for the year then ended, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2017, and the consolidated results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

### *Going Concern Uncertainty*

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and has an accumulated deficit as of December 31, 2017 that raise substantial doubt about its ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

### *Basis for Opinion*

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

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

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

/s/ Moss Adams LLP

Denver, Colorado  
April 2, 2018

We have served as the Company’s auditor since 2017.

REAL GOODS SOLAR, INC.

Consolidated Balance Sheet

(in thousands, except share and per share data)	As of December 31,	
	2017	2016
<b>ASSETS</b>		
Current assets:		
Cash	\$ 1,170	\$ 2,940
Restricted cash	-	173
Accounts receivable, net	2,393	3,002
Costs in excess of billings	-	19
Inventory, net	1,950	1,502
Deferred costs on uncompleted contracts	615	398
Other current assets	1,264	912
Current assets of discontinued operations	1,242	909
Total current assets	8,634	9,855
Property and equipment, net	1,156	620
POWERHOUSE™ license	1,114	-
Goodwill	1,338	1,338
Net investment in sales-type leases and other assets	1,437	1,308
Noncurrent assets of discontinued operations	579	1,252
Total assets	\$ 14,258	\$ 14,373
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Line of credit	\$ -	\$ 663
Convertible debt, net of deferred cost and pre-installment of \$0 and \$298	1	124
Accounts payable	1,387	2,019
Accrued liabilities	1,441	1,362
Billings in excess of costs on uncompleted contracts	-	107
Derivative liabilities	-	46
Deferred revenue and other current liabilities	1,392	1,033
Current liabilities of discontinued operations	721	921
Total current liabilities	4,942	6,275
Other liabilities	2,329	2,222
Derivative liabilities	76	137
Non-current liabilities of discontinued operations	745	761
Total liabilities	8,092	9,395
Commitments and contingencies (Note 5)		
Shareholders' equity:		
Preferred stock, par value \$.0001 per share; 50,000,000 shares authorized; no shares issued and outstanding	-	-
Class A common stock, par value \$.0001 per share; 150,000,000 shares authorized; 8,151,845 and 1,183,151 shares issued and outstanding at December 31, 2017 and 2016, respectively	8	8
Class B common stock, par value \$.0001 per share; 50,000,000 shares authorized; no shares issued and outstanding	-	-
Additional paid-in capital	205,830	187,752
Proxy contest consideration	810	-
Accumulated deficit	(200,482)	(182,782)
Total shareholders' equity	6,166	4,978
Total liabilities and shareholders' equity	\$ 14,258	\$ 14,373

See accompanying notes to consolidated financial statements.

REAL GOODS SOLAR, INC.

Consolidated Statements of Operations

(in thousands, except per share data)	For the years ended December 31,	
	2017	2016
Contract revenue:		
Sale and installation of solar energy systems	\$ 14,019	\$ 16,705
Service	1,104	719
Leasing, net	53	59
Contract expenses:		
Installation of solar energy systems	13,176	14,347
Service	1,623	1,204
Customer acquisition	5,918	5,793
Contract loss	(5,541)	(3,861)
Operating expense	10,704	7,651
Proxy contest expense	1,186	-
Litigation	327	24
Operating loss	(17,758)	(11,536)
Interest expense	-	(2,872)
Derivative and other	170	2,645
Debt accretion expense and loss on extinguishment	(486)	(14,067)
Loss from continuing operations, net of tax	(18,074)	(25,830)
Income from discontinued operations, net of tax	374	502
Net loss	<u>\$ (17,700)</u>	<u>\$ (25,328)</u>
Net loss per share – basic and diluted:		
From continuing operations	(2.60)	(187.17)
From discontinued operations	0.05	3.64
Net loss per share – basic and diluted	<u>\$ (2.55)</u>	<u>\$ (183.53)</u>
Weighted-average shares outstanding:		
Basic and Diluted	<u>6,950</u>	<u>138</u>

See accompanying notes to consolidated financial statements.

REAL GOODS SOLAR, INC.

Consolidated Statement of Changes in Shareholders' Equity (Deficit)

(in thousands, except share data)	Class A Common Stock		Additional Paid - in Capital	Accumulated Deficit	Total Shareholders' Equity (Deficit)
	Shares	Amount			
Balance, January 1, 2016	20,502	\$ 8	\$ 156,433	\$ (157,454)	\$ (1,013)
Equity changes related to compensation			708		708
Proceeds from common stock offering and warrant exercises, net of costs	626,251		5,185		5,185
Fair value of shares issued for convertible note and interest and preferred stock liability converted to common stock	534,875		21,604		21,604
Issuance of common stock related to line of credit	970		167		167
Adjustment to common stock warrant liability for warrants exercised/extinguished	364		103		103
Fractional shares issued in connection with reverse split	189				-
Issuance of warrants in the 2016 note and preferred stock offerings			3,552		3,552
Net Loss				(25,328)	(25,328)
<b>Balance, December 31, 2016</b>	<b>1,183,151</b>	<b>\$ 8</b>	<b>\$ 187,752</b>	<b>\$ (182,782)</b>	<b>\$ 4,978</b>
Equity changes related to compensation			249		249
Proceeds from common stock offering and warrant exercises, net of costs	6,780,939		17,095		17,095
Fair value of shares issued for convertible note and interest and preferred stock liability converted to common stock	177,018		734		734
Fractional shares issued in connection with reverse split	10,737				-
Proxy contest consideration			810		810
Net Loss				(17,700)	(17,700)
<b>Balance, December 31, 2017</b>	<b>8,151,845</b>	<b>\$ 8</b>	<b>\$ 206,640</b>	<b>\$ (200,482)</b>	<b>\$ 6,166</b>

See accompanying notes to consolidated financial statements.

REAL GOODS SOLAR, INC.

Consolidated Statements of Cash Flows

(in thousands)	For the years ended December 31,	
	2017	2016
<b>Operating activities:</b>		
Net loss	\$ (17,700)	\$ (25,328)
Income from discontinued operations	374	502
Loss from continuing operations	(18,074)	(25,830)
Adjustments to reconcile net loss to net cash used in operating activities - continuing operations:		
Depreciation	415	424
Amortization of debt discount and issuance costs	-	2,516
Share-based compensation expense	249	708
Change in fair value of derivative liabilities and loss on debt extinguishment	379	11,395
(Gain) loss on sale of assets	(3)	21
Loss on settlement of proxy contest	810	-
Inventory obsolescence	320	(19)
Bad debt expense	263	26
Changes in operating assets and liabilities:		
Accounts receivable, net	346	1,346
Costs in excess of billings on uncompleted contracts	19	911
Inventory, net	(768)	568
Deferred costs on uncompleted contracts	(217)	537
Net investment in sales-type leases and other current assets	(352)	(153)
Other non-current assets	(129)	-
Accounts payable	(253)	(3,217)
Accrued liabilities	103	22
Billings in excess of costs on uncompleted contracts	(107)	(751)
Deferred revenue and other current liabilities	359	115
Other liabilities	107	68
Net cash used in operating activities - continuing operations	(16,533)	(11,313)
Net cash provided by (used in) operating activities - discontinued operations	498	(981)
Net cash used in operating activities	(16,035)	(12,294)
<b>Investing activities:</b>		
Payments related to POWERHOUSE™ license	(1,114)	-
Purchases of property and equipment	(432)	(67)
Payments related to RGS 365™ portal	(413)	-
Proceeds from sale of property and equipment	-	17
Net cash used in investing activities	(1,959)	(50)
<b>Financing activities:</b>		
Proceeds from warrant exercises, net of costs	1,064	1,587
Proceeds from convertible debt, net of costs and restricted cash	-	8,929
Restricted cash released upon conversion of debt	173	-
Proceeds from the issuance of common stock, net of costs	16,029	3,565
Proceeds from the issuance of convertible preferred stock, net of costs	-	2,228
Principal borrowings on revolving line of credit	1,498	18,094
Principal payments on revolving line of credit	(2,540)	(19,713)
Net cash provided by financing activities	16,224	14,690
Net (decrease) increase in cash	(1,770)	2,346
Cash at beginning of year	2,940	594
Cash at end of year	\$ 1,170	\$ 2,940
<b>Supplemental cash flow information:</b>		
Income taxes paid	-	19
Interest paid	8	212
<b>Non-cash items</b>		
Proxy contest settlement payment in shares of common stock	810	-
Change in common stock warrant liability in conjunction with exercise/extinguishment of warrants	-	133
Transfer from accounts payable to other liabilities for amounts paid by insurance carrier	-	1,510
Transfer of accounts payable to vendor line of credit	-	1,675
Payment on line of credit in Class A common stock	-	167
Debt discount arising from warrants issued in conjunction with 2016 Note Offering	-	20
Interest paid with common stock	125	337
Embedded derivative liability with 2016 Note Offering	-	45
Accrued closing costs on the 2016 Note Offering	-	25

See accompanying notes to consolidated financial statements.

## Notes to consolidated financial statements

### 1. Principles of Consolidation, Organization and Nature of Operations

Real Goods Solar, Inc. (“RGS” or the “Company”) is a residential and commercial solar energy engineering, procurement, and construction firm.

The consolidated financial statements include the accounts of RGS and its wholly-owned subsidiaries. RGS has prepared the accompanying consolidated financial statements in accordance with accounting principles generally accepted in the United States, or GAAP, which include the Company’s accounts and those of its subsidiaries. Intercompany transactions and balances have been eliminated. The Company has included the results of operations of acquired companies from the effective date of acquisition.

These consolidated financial statements have been prepared on the going concern basis, which presumes the realization of assets and the settlement of liabilities in the normal course of operations. The application of the going concern basis is dependent upon the Company achieving profitable operations to generate sufficient cash flows to fund continued operations, or, in the absence of adequate cash flows from operations, obtaining additional financing. The Company has reported losses from operations for the years ended December 31, 2017 and 2016, and has an accumulated deficit of approximately \$200 million at December 31, 2017. These factors raise substantial doubt about the Company’s ability to continue as a going concern. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

Management continues to review operations in order to identify additional strategies designed to generate cash flow, improve the Company’s financial position, and enable the timely discharge of the Company’s obligations. If management is unable to identify sources of additional cash flow in the short term, it may be required to further reduce or limit operations.

#### *Reverse Stock Splits*

The Company reports all share and per share amounts reflecting the most recent reverse stock split.

#### *Discontinued Operations*

During 2014, the Company committed to a plan to sell certain contracts and rights comprised of the Company’s large commercial installations business, otherwise known as the Company’s former Commercial segment. At the same time, the Company determined not to enter into further large commercial installation contracts in the mainland United States. Most contracts in process at December 31, 2014 were substantially completed during 2015 and remaining work was completed in 2016. The Company now reports this business as a discontinued operation, separate from the Company’s continuing operations.

#### *POWERHOUSE™ License Agreement*

A material significant event occurred on September 29, 2017 (the “Effective Date”), when the Company executed an exclusive domestic and international world-wide Technology License Agreement (the “License”) with Dow Global Technologies LLC (“Dow”) for its POWERHOUSE™ in-roof solar shingle. The License requires the Company to commercialize and sell a minimum of 50 megawatts of solar within 5-years of the Effective Date to retain exclusive world-wide rights, a requirement the Company believes is achievable.

In addition to the License, the Company and Dow executed a Trademark License Agreement (the “TLA”), a Technology Service Agreement (the “TSA”) and a Sales Agreement-Surplus Property (the “Sales Agreement”). The execution of the TLA will allow RGS to market the POWERHOUSE™ 3.0 product using the Dow name. The Sales Agreement identified used manufacturing molds that Dow transferred title to RGS for a cost of \$1.00.

Under the terms of the License, the Company will produce, market and sell the POWERHOUSE™ 3.0 product, for which it has agreed to a license fee of \$3 million and a running royalty fee equal to 2.5% against net sales of the POWERHOUSE™ product and services, payable quarterly in arrears. Further, the Company will be responsible for all post-Effective Date costs to obtain United Laboratories certification (“UL Certification”) and for the prosecution of all related patents world-wide, which may be offset against the payment of the running royalty fee. The license fee is comprised of two payments; the first \$1 million was paid in connection with the Effective Date of the License in 2017 in accordance with the TLA. The remaining \$2 million is due within 30 days after the Company receiving UL Certification of the POWERHOUSE™ 3.0 product. Upon obtaining UL Certification, the Company intends to begin commercialization of POWERHOUSE™ 3.0 entailing the manufacturing, marketing and sale of POWERHOUSE™ 3.0 to roofing companies.

### *Liquidity and Financial Resources Update*

The Company has experienced recurring operating losses and negative cash flow from operations which have necessitated: (i) developing plans to grow revenue to generate positive cash flow and (ii) raising additional capital. No assurances can be given that the Company will be successful with its plans to grow revenue for profitable operations. See Note 6. Shareholders Equity and Note 12. Subsequent Events for transactions raising capital during 2017 and the first quarter of 2018.

The Company plans to grow revenue are:

- Invest in the POWERHOUSE™ license by obtaining UL Certification for POWERHOUSE™ 3.0, a prerequisite for commercialization of the product and, upon achieving UL Certification, manufacture, market and sell POWERHOUSE™ 3.0 to roofing companies and new home builders;
- Leverage the POWERHOUSE™ brand to generate leads and revenue for the Residential and Sunetric segments;
- Leverage the Company's investment in RGS 365™ customer-centric software for the POWERHOUSE™ and Solar Divisions;
- Expand the Company's digital marketing program to generate customer leads while achieving its desired cost of acquisition;
- Make available to the Company's customers additional third-party providers to finance customer acquisitions of its solar energy systems; and
- Expand the Company's network of authorized third-party installers.

During February 2018, the Company completed a strategic realignment to scale back the Company's residential solar homeowner business. While the Company has made progress during 2017 in growing solar sales and backlog, growth has not met initial expectations. The realignment reduced the number of outside sales personnel. The Company plans to maintain the areas of core competencies meeting expectations, such as its e-sales call center and commercial sales organization.

Until the Company is successful in implementing its plans to increase revenue for profitable operations, the Company expects to have a cash outflow from operating activities. The Company expects to obtain UL certification for POWERHOUSE™ 3.0 in 2018 and, if it determines to proceed at that time with the commercialization of POWERHOUSE™, the Company expects to have cash outflow from operating activities for commercialization of POWERHOUSE™, prepayments with supply chain manufacturers and working capital as sales of the product commence. Additionally, the Company would be required to make the remaining "Initial License" payment of the \$2 million, which would be recorded as a cash outflow in investing activities.

To provide funds to grow the Company's revenue, on March 30, 2018, the Company entered into the Securities Purchase Agreement for the 2018 Offering, as defined and described in Note 6. Shareholders' Equity. The 2018 Offering may result in gross proceeds of \$10.0 million, before placement agent fees and other expenses associated with the transaction. The Company will receive \$5 million of the proceeds from the sale of the 2018 Notes (as defined in Note 6. Shareholders' Equity) at closing. The Company also will receive Investor Notes in an aggregate amount of \$5.0 million secured by cash and/or securities held in investor accounts. Investors are required to prepay the Investor Notes as they convert their Series B Notes issued in the 2018 Offering and, upon satisfaction of Equity Conditions and certain other conditions, upon the occurrence of a specified mandatory prepayment event. The 2018 Notes will be convertible into Class A common stock and if not fully converted into shares of Class A common stock at maturity, we would seek to refinance a remaining balance at that time from: (i) negotiations with the holders of the 2018 Notes, (ii) funds obtained in a public or private offering of securities, or (iii) common stock warrant exercises including our reducing the exercise price of common stock warrants to induce conversion. No assurances can be given that should a balance remain on the 2018 Notes at maturity that we will be successful in meeting the obligation under the 2018 Notes.

If the Company determines 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 are not received by the Company, the Company would seek to obtain the capital from other transactions such as a public offering of securities, and common stock warrant exercises including the Company reducing the exercise price of common stock warrants to induce conversion. No assurances can be given that, should the Company determine to proceed with commercialization of POWERHOUSE™ 3.0, it will receive the additional capital necessary, either from the Investor Notes or an alternative transaction.

## 2. Significant Accounting Policies

No changes were made to the Company's significant accounting policies during the year ended December 31, 2017.

### *Use of Estimates*

The preparation of the consolidated financial statements in accordance with GAAP requires the Company to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. The Company bases its estimates on historical experience and on various other assumptions believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Significant estimates are used to value warranty liabilities, the fair value of derivative liabilities embedded in complex financial instruments, common stock warrants, and allowance for doubtful accounts. Actual results could differ materially from those estimates.

### *Reclassifications*

Certain prior period amounts have been reclassified to conform to the current period presentation. The reclassifications did not impact prior period results of operations, cash flows, total assets, total liabilities or total equity. During the second quarter of 2017, the Company concluded that it was appropriate to classify items in the statement of operations to conform with operating metrics reported to investors and the manner in which management evaluates financial performance and to classify warranty liability separately as current and non-current liabilities. Accordingly, the Company revised the classification of certain items to report items in the statement of operations and balance sheet. These changes in classification did not change the previously reported operating income (loss) in the statement of operations, or cash generated (used) from operations in the statement of cash flows, or operating income (loss) for any business segment.

### *Cash*

Cash represents demand deposit accounts with financial institutions that are denominated in U.S. dollars.

### *Allowance for Doubtful Accounts*

The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. The Company estimates anticipated losses based on the expected collectability of all accounts receivable, taking into account collection history, number of days past due, identification of specific customer exposure and current economic trends. When the Company determines a balance is uncollectible and no longer actively pursues collection of the account, it is written off. The allowance for doubtful accounts was \$0.6 million at both December 31, 2017 and 2016.

### *Inventory*

Inventory consists primarily of solar energy system components (such as solar panels and inverters) located at Company warehouses and its cost is determined by the first-in, first-out ("FIFO") method. The inventory is stated at the lower of cost or net realizable value with an allowance for slow moving and obsolete inventory items based on an estimate of the markdown to the retail price required to sell or dispose of such items. The Company has an allowance for obsolete or slow-moving inventory of \$0.5 million at December 31, 2017 and 2016.

### *Property and Equipment*

Property and equipment is stated at cost less accumulated depreciation and amortization. Depreciation of property and equipment is computed on the straight-line method over estimated useful lives, generally three to twenty years. RGS amortizes leasehold and building improvements over the shorter of the estimated useful lives of the assets or the remaining term of the lease or remaining life of the building, respectively.



### *Goodwill and Purchased Intangibles*

The Company reviews goodwill and indefinite-lived intangible assets for impairment annually during the second quarter, or more frequently if a triggering event occurs between impairment testing dates.

Intangible assets arising from business combinations, such as acquired customer contracts and relationships (collectively, “customer relationships”), trademarks, and non-compete agreements are initially recorded at fair value. Goodwill represents the excess of the purchase price over the fair value of the net identifiable assets acquired in a business combination.

The Company’s impairment assessment begins with a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. The qualitative assessment includes comparing the overall financial performance of the reporting units against the planned results used in the last quantitative goodwill impairment test. If it is determined under the qualitative assessment that it is more likely than not that the fair value of a reporting unit is less than its carrying value, then a two-step quantitative impairment test is performed. Under the first step, the estimated fair value of the reporting unit is compared with its carrying value (including goodwill). If the fair value of the reporting unit exceeds its carrying value, step two does not need to be performed. If the estimated fair value of the reporting unit is less than its carrying value, an indication of goodwill impairment exists for the reporting unit and the enterprise must perform step two of the impairment test (measurement). Under step two, an impairment loss is recognized for any excess of the carrying amount of the reporting unit’s goodwill over the implied fair value of that goodwill.

Fair value of the reporting unit under the two-step assessment is determined using a discounted cash flow analysis. The use of present value techniques requires us to make estimates and judgments about the Company’s future cash flows. These cash flow forecasts will be based on assumptions that are consistent with the plans and estimates the Company uses to manage its business. The process of evaluating the potential impairment of goodwill is highly subjective and requires significant judgment at many points during the analysis. Application of alternative assumptions and definitions could yield significantly different results.

Intangible assets with finite useful lives are amortized over their respective estimated useful lives and reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable.

### *Revenue Recognition*

For sales of solar energy systems and components of less than 100 kilowatts (kW), “residential and small commercial customers,” the Company recognizes revenue, in accordance with ASC 605-25, *Revenue Recognition—Multiple-Element Arrangements*, and ASC 605-10-S99, *Revenue Recognition—Overall—SEC Materials*. Revenue is recognized when (1) persuasive evidence of an arrangement exists, (2) delivery has occurred or services have been rendered, (3) the sales price is fixed or determinable and (4) collection of the related receivable is reasonably assured. Components are principally comprised of photovoltaic panels, inverters, and solar energy system mounting hardware. The Company recognizes revenue when it installs a solar energy system, provided all other revenue recognition criteria have been met. Costs incurred on residential installations before the solar energy systems are completed are deferred and included in other current assets as work in progress in the consolidated balance sheet.

For those systems of 100kW or greater, “commercial customers,” the Company recognizes revenue according to ASC 605-35, *Revenue Recognition—Construction-Type and Production Type Contracts*. Revenue is recognized on a percentage-of-completion basis, based on the ratio of costs incurred to date to total projected costs. Provisions are made for the full amount of any anticipated losses on a contract-by-contract basis.

The assets “Costs in excess of billings on uncompleted contracts” and “Deferred costs on uncompleted contracts” represent costs incurred plus estimated earnings in excess of amounts billed on percentage-of-completion method contracts and costs incurred but deferred until recognition of the related contract revenue on completed-method contracts, respectively. The liability “Billings in excess of costs on uncompleted contracts” represents billings in excess of related costs and earned profit on percentage-of-completion method contracts. The Company invoices large installation customers according to milestones defined in their respective contracts. The prerequisite for billing is the completion of an application and certificate of payment form as per the contract, which is done after each month end. Unbilled receivables were included in discontinued operations at December 31, 2017 and 2016.

Deferred revenue consists of solar energy system installation fees billed to customers for projects which are not completed as of the balance sheet date.

### Share-Based Compensation

RGS recognizes compensation expense for share-based awards based on the estimated fair value of the award on the date of grant. The Company measures compensation cost at the grant date fair value of the award and recognizes compensation expense based on the probable attainment of a specified performance condition or over a service period. The Company uses the Black-Scholes option valuation model to estimate the fair value for purposes of accounting and disclosures. In estimating this fair value, certain assumptions are used (see Note 8. Share-Based Compensation), including the expected life of the option, risk-free interest rate, dividend yield, volatility and forfeiture rate. The use of different estimates for any one of these assumptions could have a material impact on the amount of reported compensation expense.

### Income Taxes

The Company recognizes income taxes under the asset and liability method. Deferred income taxes are recognized based on temporary differences between financial reporting and income tax basis of assets and liabilities, using current enacted income tax rates and regulations. These differences will result in taxable income or deductions in future years when the reported amount of the asset or liability is recovered or settled, respectively. Considerable judgment is required in determining when these events may occur and whether recovery of an asset is more likely than not. RGS has significant net operating loss carry-forwards and evaluates at the end of each reporting period whether it expects it is more likely than not that the deferred tax assets will be fully recoverable and provides a tax valuation allowance as necessary.

### Warranties

The Company warrants solar energy systems sold to customers for up to 10 years against defects in installation workmanship. The manufacturers' warranties on the solar energy system components, which are typically passed through to the customers, typically have product warranty periods of 10 years and a limited performance warranty period of 25 years. The Company generally provides for the estimated cost of warranties at the time the related revenue is recognized. The Company also maintains specific warranty liabilities for large commercial customers included in discontinued operations. The Company assesses the accrued warranty reserve regularly and adjusts the amounts as necessary based on actual experience and changes in future estimates.

### Net Loss per Share

RGS computes net loss per share by dividing net income (loss) by the weighted average number of shares of common stock outstanding for the period. Diluted net loss per share reflects the potential dilution that could occur if options or warrants to issue shares of the Company's Class A common stock were exercised. Common share equivalents of 5,857,861 and 843,163 shares have been omitted from net loss per share for 2017 and 2016, respectively, as they are anti-dilutive.

The following table sets forth the computation of basic and diluted net income (loss) per share:

(In thousands, except per share data)	For the Years Ended December 31,	
	2017	2016
Numerator for basic and diluted net loss per share	\$ (17,700)	\$ (25,328)
Denominator:		
Weighted average shares for basic net loss per share	6,950	138
Effect of dilutive securities:		
Weighted average of common stock, stock options and warrants	-	-
Denominators for diluted net loss per share	6,950	138
Net loss per share—basic and diluted	\$ (2.55)	\$ (183.53)

### *Concentration of Risk*

The Company did not have any customer who accounted for more than 10% of total accounts receivable as of December 31, 2017 and 2016, nor did it have any customer representing over 10% of sales during 2017 or 2016.

### *Segment Information*

Operating segments are defined as components of a company about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker is the executive team. Based on the financial information presented to and reviewed by the chief operating decision maker in deciding how to allocate the resources and in assessing the performance of the Company, the Company has determined that it has four reporting segments: residential solar installations, Sunetric installations, POWERHOUSE™ and corporate expenses ("other segment").

### *Derivative Liabilities*

The Company accounts for complex financial instruments including convertible notes, convertible preferred stock, and warrants under ASC 815 and ASC 480. The Company utilizes third party appraisers to determine the fair value of derivative liabilities embedded in complex financial instruments. Certain of the Company's warrants are accounted for as liabilities due to provisions either allowing the warrant holder to request redemption, at the intrinsic value of the warrant, upon a change of control and/or providing for an adjustment to the number of shares of the Company's Class A common stock underlying the warrants and the exercise price in connection with dilutive future funding transactions. The Company classifies these derivative liabilities on the Consolidated Balance Sheet as current and long-term liabilities, which are revalued at each balance sheet date subsequent to their initial issuance.

For financial instruments accounted for as liabilities, the Company defers and amortizes to operations costs incurred including the initial fair value of warrants issued and derivative liabilities. The issuance costs of financial instruments accounted for as equity are charged to additional paid in capital.

The extinguishment of financial instruments accounted for as debt that are extinguished by issuance of common stock are recorded at the fair value of common stock issued at the date of issuance, with any difference from the carrying value of the liability recorded as a loss on debt extinguishment.

### *Residential Leases*

To determine lease classification, the Company evaluates lease terms to determine whether there is a transfer of ownership or bargain purchase option at the end of the lease, whether the lease term is greater than 75% of the useful life, or whether the present value of minimum lease payments exceed 90% of the fair value at lease inception. All of the Company's leased systems are treated as sales-type leases under GAAP accounting policies.

Financing receivables are generated by solar energy systems leased to residential customers under sales-type leases. Financing receivables represents gross minimum lease payments to be received from customers over a period commensurate with the remaining lease term of up to 20 years and the systems estimated residual value, net of allowance for estimated losses. Initial direct costs for sales-type leases are recognized as cost of sales when the solar energy systems are placed in service.

For systems classified as sales-type leases, the net present value of the minimum lease payments, net of executory costs, is recognized as revenue when the lease is placed in service. This net present value as well as the net present value of the residual value of the lease at termination are recorded as other assets in the Consolidated Balance Sheet. The difference between the initial net amounts and the gross amounts are amortized to revenue over the lease term using the interest method. The residual values of the Company's solar energy systems are determined at the inception of the lease applying an estimated system fair value at the end of the lease term.

RGS considers the credit risk profile for its lease customers to be homogeneous due to the criteria the Company uses to approve customers for its residential leasing program, which among other things, requires a minimum "fair" FICO credit quality. Accordingly, the Company does not regularly categorize its financing receivables by credit risk.

## Recently Issued Accounting Standards

### ASU 2018-05

On March 13, 2018, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update No. 2018-05 (“ASU 2018-05”), *Income Taxes (Topic 740) – Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118*, which was issued to state the income tax accounting implications of the Tax Cuts and Jobs Act (“TCJA”). The guidance clarifies the measurement period timeframe, changes in subsequent reporting periods and reporting requirements as a result of the TCJA. The measurement period begins in the period that includes the TCJA’s enactment date which was December 22, 2017 and as a result the Company has reflected the impact of this ASU on the tax provision and deferred tax calculation as of December 31, 2017.

### ASU 2017-11

On July 13, 2017, the FASB issued Accounting Standards Update No. 2017-11 (“ASU 2017-11”), *Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*. The amendments in Part I of this Update change the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features. When determining whether certain financial instruments should be classified as liabilities or equity instruments, a down round feature no longer precludes equity classification when assessing whether the instrument is indexed to an entity’s own stock. The amendments also clarify existing disclosure requirements for equity-classified instruments. The amendments in Part II of this Update recharacterize the indefinite deferral of certain provisions of Topic 480 that now are presented as pending content in the Codification, to a scope exception. Those amendments do not have an accounting effect. For public business entities, the amendments in Part I of this Update are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The amendments in Part II of this Update do not require any transition guidance because those amendments do not have an accounting effect. The company will assess the impact of ASU 2017-11 on any derivative instruments entered into in the future.

### ASU 2017-04

On January 26, 2017, the FASB issued Accounting Standards Update No. 2017-04 (“ASU 2017-04”), *Intangibles – Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment*, which was issued to simplify the accounting for goodwill impairment. The guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. Impairment will now be the amount by which a reporting unit’s carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance remains largely unchanged. The standard is effective for financial statements issued for fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed after January 1, 2017, and the Company is assessing the impact of ASU 2017-04 on its consolidated financial statements.

### ASU 2016-20

On December 21, 2016, the FASB issued Accounting Standards Update No. 2016-20 (“ASU 2016-20”), *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*. This ASU provides technical corrections and improvements to Topic 606. This ASU is effective for the Company on January 1, 2018, which coincides with the effective date of ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The Company expects the adoption of ASU 2016-20 will have minimal impact on its consolidated financial statements.

### ASU 2016-18

On November 17, 2016, the FASB issued Accounting Standards Update No. 2016-18 (“ASU 2016-18”), *Statement of Cash Flows: Restricted Cash*, which was issued to address the diversity that currently exists in the classification and presentation of changes in restricted cash on the statement of cash flows. This ASU requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts general described as restricted cash and restricted cash equivalents. The standard is effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods therein. Early adoption is permitted and the Company has determined that it will have minimal impact on its consolidated statements of cash flows.

#### ASU 2016-15

On August 26, 2016, the FASB issued Accounting Standards Update No. 2016-15 (“ASU 2016-15”), *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments*, which was issued to provide clarification on how certain cash receipts and cash payments are reported in the statement of cash flows. This ASU addresses eight specific cash flow issues in an effort to reduce existing diversity between companies. The standard is effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods therein. Early adoption is permitted and the Company has determined that it will have minimal impact on its consolidated statements of cash flows.

#### ASU 2016-02

On February 25, 2016, the FASB issued Accounting Standards Update No. 2016-02 (“ASU 2016-02”), *Leases (Topic 842)*, which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e. lessees and lessors). The new standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases today. The new standard requires lessors to account for leases using an approach that is substantially equivalent to existing guidance for sales-type leases, direct financing leases and operating leases. The standard is effective for financial statements issued for fiscal years beginning after December 15, 2018, and interim periods therein. The Company currently expects that upon adoption of ASU 2016-02, right-of-use assets and lease liabilities will be recognized in the balance sheet in amounts that will be material.

#### ASU 2014-09

On May 28, 2014, the FASB issued Accounting Standards Update No. 2014-09 (“ASU 2014-09”), which created Topic 606, *Revenue from Contracts with Customers*. This standard outlines a single comprehensive model for companies to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The core principle of the revenue model is that revenue is recognized when a customer obtains control of a good or service. A customer obtains control when it has the ability to direct the use of and obtain the benefits from the good or service. Transfer of control is not the same as transfer of risks and rewards, as it is considered in current guidance.

In August 2015, the FASB issued Accounting Standards Update No. 2015-14, *Revenue from Contracts with Customers – Deferral of the Effective Date*, which defers the effective date of ASU 2014-09 one year. ASU 2014-09, as deferred by ASU 2015-14, will be effective for the first interim period within annual reporting periods beginning after December 15, 2017. The two permitted transition methods under the new standard are the full retrospective method, in which case the standard would be applied to each prior reporting period presented and the cumulative effect of applying the standard would be recognized at the earliest period shown, or the modified retrospective method, in which case the cumulative effect of applying the standard would be recognized at the date of initial application.

During the second, third and fourth quarters of 2017, we evaluated our contracts with customers and have determined that for the majority of our contracts there will not be any significant change to timing or method of recognizing revenue. As such, we do not believe this new standard will have a material impact on our results of operations, financial condition or cash flows. The Company adopted the new standard as of January 1, 2018, and utilized the modified retrospective method, which requires a disclosure of the nature of and reason for the change in accounting principle. In the year of adoption, the Company must also disclose the amount by which each financial statement line item is affected in the current year as a result of applying the revenue standard and a qualitative explanation of the significant changes between the reported results under the revenue standard and the previous revenue guidance.

### 3. Property and Equipment

Property and equipment, stated at lower of cost or estimated fair value, consists of the following as of December 31:

<b>(in thousands)</b>	<b>2017</b>	<b>2016</b>
Buildings and leasehold improvements	441	195
Furniture, fixtures and equipment	1,811	1,369
Software	2,135	1,491
Vehicles and machinery	1,044	707
Total property and equipment	5,431	3,762
Accumulated depreciation and amortization	(4,275)	(3,142)
Total property and equipment, net	<u>\$ 1,156</u>	<u>\$ 620</u>

### 4. Related Parties

On May 23, 2017, the Company entered into an agreement with Mobomo, LLC (“Mobomo”) pursuant to the design and development of intellectual property at a cost of \$0.5 million. The intellectual property consisted of an integrated mobile phone application and the new RGS 365™ customer portal. As of December 31, 2017, the Company has an accrued expense of \$0.1 million for the remaining payment.

Mobomo’s Chief Executive Officer Brian Lacey is the son of the Company’s CEO Dennis Lacey. The Company approved the agreement in accordance with its related-party transaction policy.

### 5. Commitments and Contingencies

The Company leases office and warehouse space through operating leases. Some of the leases have renewal clauses, which range from one month to five years.

The Company leases vehicles through operating leases for certain field personnel. Leases range up to five years with varying termination dates through August 2020.

The following schedule represents the annual future minimum payments of all leases as of December 31, 2017:

<b>(in thousands)</b>	<b>Future Minimum Lease Payments</b>
2018	\$ 929
2019	850
2020	506
2021	439
2022 and thereafter	112
Total minimum lease payments	<u>\$ 2,836</u>

The Company incurred office and warehouse rent expense of \$0.7 million and \$0.8 million for the years ended December 31, 2017 and 2016, respectively. The Company incurred automobile lease expense of \$0.4 million and \$0.3 million for the years ended December 31, 2017 and 2016, respectively.

The Company is subject to risks and uncertainties in the normal course of business, including legal proceedings; governmental regulation, such as the interpretation of tax and labor laws; and the seasonal nature of its business due to weather-related factors. The Company has accrued for probable and estimable costs incurred with respect to identified risks and uncertainties based upon the facts and circumstances currently available.

As previously disclosed in the Company's Quarterly Report on Form 10-Q for the first quarter of 2017, on February 16, 2017, Alpha Capital Anstalt ("Alpha"), an investor in the Company's February 7, 2017 public offering of common stock and warrants, filed a lawsuit against Roth Capital Partners, LLC, the Company's investment banking firm in the offering, and the Company in U.S. District Court for the Southern District of New York. Alpha's lawsuit initially alleged that the registration statement for the February 7, 2017 offering contained material misstatements or omissions and that the Company had breached contractual obligations owed to Alpha. Alpha seeks unspecified monetary damages, rescission and other unspecified relief in the lawsuit. The Company disputes Alpha's allegations and is vigorously defending the lawsuit. Under local court rules, the Company filed a letter motion seeking permission to file a motion to dismiss the claims related to the alleged misstatements and omissions in the complaint. On May 12, 2017, Alpha filed an amended complaint removing the securities and fraud-related claims and leaving only breach of contract claims against the Company. Because the Company has been unwilling to entertain settlement discussions, Alpha has recently deposed members of the Company and the Company's legal team that represented the Company in the offering. The discovery period of the suit has ended and the Company filed a motion for summary judgment on February 23, 2018, based in part on Alpha's lack of damages.

On September 29, 2017, Dow awarded the Company a world-wide exclusive license for the POWERHOUSE™ in-roof solar shingle. Under terms of the License, RGS has agreed to a license fee of \$3 million, of which \$1 million was paid in connection with the Effective Date and the remaining \$2 million will become a liability in the future upon obtaining UL Certification and payable within 30 days thereafter.

On January 2, 2018, the Company entered into a Cooperation Agreement (the "Cooperation Agreement") with Iroquois Capital Management LLC, Iroquois Master Fund LTD, Iroquois Capital Investment Group LLC, Richard Abbe and Kimberly Page (collectively, "Iroquois Capital"), wherein Iroquois Capital has agreed to (i) immediately terminate, and cease any and all solicitation and other efforts with respect to, the solicitation of proxies in opposition to the Company's proposals for the 2017 annual meeting of shareholders, (ii) withdraw (and not resubmit) Iroquois' proxy statement in opposition to the Company's proposals for the 2017 annual meeting of shareholders, and (iii) promptly notify the staff of the Securities and Exchange Commission in writing that it is terminating the solicitation of proxies in opposition to the Company's proposals for the 2017 annual meeting of shareholders.

Pursuant to the Cooperation Agreement, the Company issued to Iroquois Master Fund LTD and Iroquois Capital Investment Group LLC, 456,000 and 144,000 unregistered and restricted shares of Class A common stock respectively as reimbursement for expenses incurred in connection with the 2017 annual meeting of shareholders and the negotiation, execution and effectuation of the Cooperation Agreement. The Company has recognized \$0.8 million of consideration to be transferred in the Equity section of the Balance Sheet and recorded a like amount as a loss on settlement in the Statement of Operations, resulting in zero impact to shareholders' equity at December 31, 2017. See Note 12. Subsequent Events for further detail.

## 6. Shareholders' Equity

### *April 2016 Convertible Note Offering*

In connection with the issuance of the 2016 Notes, the Company issued Series G warrants exercisable into 9,710 shares of Class A common stock. The fair value of the Series G warrants issued was \$2.5 million and is recorded in Equity. The following table reflects original assumptions as of April 1, 2016 for Series G warrants issued in the 2016 Note offering:

	<b>Exercise Price</b>	<b>Closing Market Price</b>	<b>Risk-free Rate</b>	<b>Market Price Volatility</b>	<b>Remaining Term (years)</b>
Series G Warrant	\$ 496.80	\$ 426.00	1.240%	121.21%	5.0

### 2016 Convertible Preferred Stock offering

In connection with the issuance of the September 14, 2016 units, the Company issued Series H warrants exercisable into 16,970 shares of Class A common stock. The fair value of the Series H warrants issued was \$1.1 million, net of costs and is recorded in Equity. The following table reflects original assumptions as of September 14, 2016 for Series H warrants issued in the 2016 Convertible Preferred Stock offering:

	<b>Exercise Price</b>	<b>Closing Market Price</b>	<b>Risk-free Rate</b>	<b>Market Price Volatility</b>	<b>Remaining Term (years)</b>
Series H Warrant	\$ 165.00	\$ 146.40	1.210%	127.60%	5.0

### December 2016 Common Stock Offering

On December 13, 2016, the Company closed a \$4.07 million offering and sale of units consisting of shares of the Company's Class A common stock, Series I warrants to purchase shares of Common Stock, and prepaid Series J warrants to purchase shares of Common Stock, pursuant to the Securities Purchase Agreement, dated as of December 8, 2016, by and among the Company and several institutional investors, and to public retail investors. As a result, the Company issued 616,667 shares of Common Stock and Series I warrants to purchase 616,667 shares of Common Stock. The purchase price for a Unit was \$6.60. Notwithstanding the Company's December 8, 2016 press release, the Company did not issue any prepaid Series J warrants in connection with the closing of the offering. The Series I warrants are exercisable upon issuance and will remain exercisable until the fifth anniversary of the date of issuance. The exercise price for the Series I warrants is \$10.50, subject to certain adjustments and a reset. The Company received net proceeds of approximately \$3.6 million at the closing, after deducting commissions to the placement agents and estimated offering expenses payable by the Company associated with the offering.

### January 2017 Reverse Stock Split

On January 25, 2017, the Company executed a reverse stock split of all outstanding shares of the Company's Class A common stock at a ratio of one-for-thirty, whereby thirty shares of Class A common stock were combined into one share of Class A common stock. The reverse split was previously authorized by a vote of the Company's shareholders on January 23, 2017. The Company did not decrease its authorized shares of capital stock in connection with the reverse stock split. Share amounts are presented to reflect the reverse split for all periods.

### February 2017 Offerings

On February 6, 2017, the Company closed a \$11.5 million offering and sale of (a) units, "February 6 Primary Units," each consisting of one share of the Company's Class A common stock, and a Series K warrant to purchase one share of Class A common stock, and (b) units, "February 6 Alternative Units," each consisting of a prepaid Series L warrant to purchase one share of Common Stock, and a Series K warrant pursuant to the Securities Purchase Agreement, dated as of February 1, 2017, by and among the Company and several institutional investors, and to public retail investors. As a result, the Company issued 2,096,920 February 6 Primary Units, 1,613,080 February 6 Alternative Units, 2,096,920 shares of Class A common stock, Series K warrants to purchase 3,710,000 shares of Class A common stock, and Series L warrants to purchase 1,613,080 shares of Class A common stock. The purchase price for a February 6 Primary Unit was \$3.10 and the purchase price for a February 6 Alternative Unit was \$3.09. The Company received net proceeds of approximately \$10.5 million at the closing, after deducting commissions to the placement agents and estimated offering expenses payable by the Company associated with the offering.

On February 9, 2017, the Company closed a \$6 million offering and sale of (a) units, "February 9 Primary Units," each consisting of one share of the Company's Class A common stock, and a Series M warrant to purchase 75% of one share of Class A common stock, and (b) units, "February 9 Alternative Units," each consisting of a prepaid Series N warrant to purchase one share of Class A common stock, and a Series M warrant, pursuant to the Securities Purchase Agreement, dated as of February 7, 2017, by and among the Company and several institutional and accredited investors. As a result, the Company issued 1,650,000 February 9 Primary Units, 750,000 February 9 Alternative Units, 1,650,000 shares of Common Stock as part of the February 9 Primary Units, Series M warrants to purchase 1,800,000 shares of Class A common stock, and Series N warrants to purchase 750,000 shares of Class A common stock. The purchase price for a February 9 Primary Unit was \$2.50 and the purchase price for a February 9 Alternative Unit was \$2.49. The Company received net proceeds of approximately \$5.5 million at the closing, after deducting commissions to the placement agents and estimated offering expenses payable by the Company associated with the offering.



### *January 2018 Offering*

On January 4, 2018, the Company closed a registered offering and concurrent private placement with one institutional and accredited investor in which the Company issued and sold to the Investor (i) 800,000 shares of Class A common stock, (ii) a prepaid Series P Warrant to purchase 800,000 shares of Class A common stock, and (iii) a Series O Warrant to purchase 1,600,000 shares of Class A common stock pursuant to the terms of the Securities Purchase Agreement, dated as of January 2, 2018, between the Company and the investor. The investor paid \$1.15 per share of Class A common stock and \$1.14 per share of Class A common stock underlying the Series P Warrant for aggregate gross proceeds of approximately \$1.8 million. The Company received net proceeds of approximately \$1.5 million at the closing.

### *Amendment to 2008 Long-Term Incentive Plan*

On February 8, 2018, the Company held its 2017 annual meeting of shareholders, at which the Company's shareholders approved an amendment and restatement of the Real Goods Solar, Inc. 2008 Long-Term Incentive Plan (the "Plan") to (a) increase the maximum number of shares of the Company's Class A common stock that may be issued or subject to awards under the Plan, (b) increase the number of shares of Class A common stock that a plan participant may receive during any fiscal year, (c) eliminate the Company's ability to reprice outstanding awards without shareholder approval, (d) prohibit the payment of dividends or dividend equivalents on unvested equity awards, (e) eliminate the Company's discretion to accelerate the vesting of outstanding equity awards, except under certain limited circumstances, and (f) institute a one-year minimum vesting schedule applicable to at least 95% of equity awards issued under the Plan. Following the amendments to the Plan, up to an aggregate of 1,300,000 shares of Class A common stock are authorized for issuance under the Plan and no participant may receive awards for more than 500,000 shares of Class A common stock in any one fiscal year.

### *2018 Convertible Note Offering*

On March 30, 2018, the Company entered into a Securities Purchase Agreement with two unaffiliated institutional and accredited investors for a private placement (the "2018 Offering") of up to \$10.75 million in principal amount and \$10 million funding amount (reflecting \$750,000 of original issue discount) of Senior Convertible Notes (the "2018 Notes"), and Series Q Warrants to purchase 9,270,457 shares of Class A Common Stock. The closing of the 2018 Offering is subject to customary closing conditions. The 2018 Offering may result in gross proceeds of \$10.0 million, before placement agent fees and other expenses associated with the transaction. The Company will receive \$5 million of the proceeds from the sale of the 2018 Notes at closing. The Company also will receive a secured promissory note from each investor, in a combined aggregate amount of \$5 million (each, an "Investor Note"), secured by cash and/or securities held in investor accounts.

The Company will issue Series A Notes and Series B Notes in the transaction. The aggregate principal amount of the Series A Notes will be \$5,750,000 and the Series B Notes will be \$5,000,000. All of the aggregate principal amount of the Series B Notes will constitute 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 will 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.

The Company will not be required to amortize the 2018 Notes. All amounts owed under the 2018 Notes will mature and come due upon maturity.

The 2018 Notes will not incur interest other than upon the occurrence of an event of default, in which case the 2018 Notes bear interest at 18% per year.

The 2018 Notes will be convertible at any time, at the option of the holder, into shares of Class A common stock at a conversion price. The initial fixed conversion price will be \$1.2045 per share (which was above the closing bid price of our Class A common stock immediately before executing the Securities Purchase Agreement), subject to adjustment for stock splits, stock dividends and similar events.

A holder may not convert a 2018 Note and the Company may not issue shares of Class A common stock upon conversion of a 2018 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 the Company's 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 the Company.

The Securities Purchase Agreement requires the Company to hold a shareholders' meeting before June 30, 2018 to seek approval of the issuance of shares of Class A Common Stock upon conversion of the 2018 Notes and exercise of the Series Q Warrants at conversion and exercise prices below the market price of its Class A common stock at the time of entering into the Securities Purchase Agreement, in compliance with Nasdaq Marketplace Rules. If, despite the Company's reasonable best efforts such shareholder approval is not obtained at such shareholders' meeting, the Company is obligated to hold recurring shareholders' meeting until such shareholder approval is obtained. There can be no assurance that the Company will be successful in obtaining such shareholder approval.

If the Company receives such shareholder approval, the conversion price of the 2018 Notes and exercise price of the Series Q Warrants would be subject to potential reduction and resets in the future, for example, upon the future issuance of securities (e.g. full-ratchet anti-dilution protection) and the occurrence of certain events. In addition, if the Company receives such shareholder approval, following an event of default, holders of 2018 Note holders would be permitted to convert their 2018 Notes at an "Alternate Conversion Price" and at a 125% premium in an "Alternate Conversions" (each term, as defined in the 2018 Notes). The Company may at any time, subject to Nasdaq's approval and with the prior written consent of the Required Holders (as defined in the Securities Purchase Agreement), reduce the conversion price of the 2018 Notes and exercise price of the Series Q Warrants to any amount and for any period of time deemed appropriate by its board of directors after obtaining such shareholder approval. Some of the provisions providing for reduction and reset of the conversion price of the 2018 Notes and exercise price of the Series Q Warrants are subject to a floor price, such that the adjusted conversion price or exercise price, as applicable, can never be below \$0.97.

The Company will have the right to require mandatory conversion of the 2018 Notes if the volume-weighted average price of its Class A common stock for 10 consecutive trading days exceeds 200% of the conversion price, subject to certain "Equity Conditions" (as defined in the 2018 Notes). One of the equity conditions is that the Company has obtained the shareholder approval discussed above. The Company also has the right to redeem all, but not less than all, 2018 Notes for cash at 120% or 125% (depending on when it occurs) of the amount outstanding, subject to certain Equity Conditions. A holder of a 2018 Note may require use to redeem such note for cash at a 125% premium in connection with a transaction that results in a "Change of Control" (as defined in the 2018 Notes) and upon the occurrence of an event of default.

The terms of the 2018 Notes prohibits the Company from entering into a "fundamental transaction" (as defined in the 2018 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 2018 Notes), assumes all of the Company's obligations under the 2018 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 the Company's assets, certain tender offers and other transactions that result in a change of control.

The 2018 Notes will contain customary events of default, the occurrence of which triggers default interest and causes a failure of Equity Conditions, which may mean that the Company will be unable to force mandatory conversion of the 2018 Notes and that investors may not be required to prepay the Investor Notes under a mandatory prepayment event.

The 2018 Notes will contain negative and affirmative covenants, including a requirement that the Company on a quarterly basis has available cash of at least \$750,000.

Each investor may voluntarily prepay such investor's Investor Note, in whole or in part, without premium or penalty at any time. The Investor Notes will also be subject to mandatory prepayment, in whole or in part, upon the occurrence of (i) conversion of Restricted Principal under an investor's Series B Note, and (ii) on the 45th day after the earlier to occur of (A) the first date on which the U.S. Securities and Exchange Commission declares effective one or more registration statements registering the resale of the shares of Class A common stock underlying the 2018 Notes and the Series Q Warrants, and (B) the first date on which all of such shares of Class A common stock are eligible to be resold by the holders pursuant to Rule 144 promulgated under the Securities Act, subject to (1) certain Equity Conditions, (2) a requirement that the average volume weighted average price of the Class A common stock exceed a specified amount, and (3) that no event of default is then existing and continuing.

At the closing of the 2018 Offering, the Company will enter into a Registration Rights Agreement (the "Registration Rights Agreement") with the purchaser of the 2018 Notes under which it will be required, on or before the 30th day after the closing of the 2018 Offering, to file an initial registration statement with the U.S. Securities and Exchange Commission covering the resale of the shares of Class A common stock issuable pursuant to the 2018 Notes and the Series Q Warrants and to use the Company's reasonable best efforts to have that initial registration statement declared effective within specified deadlines. The Company will be subject to certain monetary penalties, as set forth in the Registration Rights Agreement, if it fails to meet specified filing deadlines, effectiveness deadlines, maintenance requirements, and/or current public information requirements under the Registration Rights Agreement.

*Employee Option Exercises, Warrant Exercises and Common Stock Reserved for Future Issuances*

At December 31, 2017, RGS had the following shares of Class A common stock reserved for future issuance:

Stock options and grants outstanding under incentive plans	149
Common stock warrants outstanding - derivative liability	43,015
Common stock warrants outstanding - equity security	5,810,846
Total shares reserved for future issuance	<u>5,854,010</u>

## 7. Fair Value Measurements

The Company complies with the provisions of FASB ASC No. 820, *Fair Value Measurements and Disclosures* ("ASC 820"), in measuring fair value and in disclosing fair value measurements at the measurement date. ASC 820 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements required under other accounting pronouncements. FASB ASC No. 820-10-35, *Fair Value Measurements and Disclosures- Subsequent Measurement* ("ASC 820-10-35"), clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC 820-10-35-3 also requires that a fair value measurement reflect the assumptions market participants would use in pricing an asset or liability based on the best information available. Assumptions include the risks inherent in a particular valuation technique (such as a pricing model) and/or the risks inherent in the inputs to the model.

ASC 820-10-35 discusses valuation techniques, such as the market approach (comparable market prices), the income approach (present value of future income or cash flow), and the cost approach (cost to replace the service capacity of an asset or replacement cost). The statement utilizes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The following is a brief description of those three levels:

**Level 1 Inputs** – Level 1 inputs are unadjusted quoted prices in active markets for assets or liabilities identical to those to be reported at fair value. An active market is a market in which transactions occur for the item to be fair valued with sufficient frequency and volume to provide pricing information on an ongoing basis.

**Level 2 Inputs** – Level 2 inputs are inputs other than quoted prices included within Level 1. Level 2 inputs are observable either directly or indirectly. These inputs include: (a) Quoted prices for similar assets or liabilities in active markets; (b) Quoted prices for identical or similar assets or liabilities in markets that are not active, such as when there are few transactions for the asset or liability, the prices are not current, price quotations vary substantially over time or in which little information is released publicly; (c) Inputs other than quoted prices that are observable for the asset or liability; and (d) Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

**Level 3 Inputs** – Level 3 inputs are unobservable inputs for an asset or liability. These inputs should be used to determine fair value only when observable inputs are not available. Unobservable inputs should be developed based on the best information available in the circumstances, which might include internally generated data and assumptions being used to price the asset or liability.

When determining the fair value measurements for assets or liabilities required or permitted to be recorded at and/or marked to fair value, the Company considers the principal or most advantageous market in which it would transact and considers assumptions that market participants would use when pricing the asset or liability. When possible, the Company looks to active and observable markets to price identical assets. When identical assets are not traded in active markets, the Company looks to market observable data for similar assets.

The following tables summarize the basis used to measure certain financial assets and liabilities at fair value on a recurring basis in the consolidated balance sheets:

<b>Balance at December 31, 2017 (in thousands)</b>	<b>Total</b>	<b>Quoted Prices in Active Markets for Identical Items (Level 1)</b>	<b>Significant Other Observable Inputs (Level 2)</b>	<b>Significant Unobservable Inputs (Level 3)</b>
Common stock warrant liability	\$ 76	-	-	\$ 76

The following summarizes the valuation technique for assets and liabilities measured and recorded at fair value:

For the Company's Level 3 measures, which represent common stock warrants, fair value is based on a Monte Carlo pricing model that is based, in part, upon unobservable inputs for which there is little or no market data, requiring the Company to develop its own assumptions. The Company used a market approach to value these derivative liabilities.

The following table shows the reconciliation from the beginning to the ending balance for the Company's common stock warrant liability measured at fair value on a recurring basis using significant unobservable inputs (i.e. Level 3) for the year ended December 31, 2017:

<b>(in thousands)</b>	<b>Common Stock warrant liability</b>	<b>Embedded derivative liability</b>	<b>Total</b>
Fair value of derivative liabilities at December 31, 2016	\$ 137	\$ 46	\$ 183
Change in the fair value of derivative liabilities, net	(61)		(61)
Adjustment for conversions of Notes		(46)	(46)
Fair value of derivative liabilities at December 31, 2017	\$ 76	\$ -	\$ 76

## 8. Share-Based Compensation

At December 31, 2017, the Company's 2008 Long-Term Incentive Plan provided that an aggregate of 52,536 shares of its Class A common stock may be awarded under the plan. Both nonqualified stock options and incentive stock options may be issued under the provisions of the 2008 Long Term Incentive Plan. Employees, members of the Board of Directors, consultants, service providers and advisors are eligible to participate in the 2008 Long-Term Incentive Plan, which terminates upon the earlier of a board resolution terminating the 2008 Long-Term Incentive Plan or ten years after the effective date of the 2008 Long-Term Incentive Plan. All outstanding options are nonqualified and are generally granted with an exercise price equal to the closing market price of the Company's stock on the date of the grant. Options vest based on service conditions, performance (attainment of a certain amount of pre-tax income for a given year), or some combination thereof. Grants typically expire seven years from the date of grant.

The determination of the estimated fair value of share-based payment awards on the date of grant using the Black-Scholes option-pricing model is affected by the Company's stock price as well as assumptions regarding a number of complex and subjective variables. Expected volatilities are based on a value calculated using the combination of historical volatility of comparable public companies in RGS' industry and its stock price volatility since the Company's initial public offering. Expected life is based on the specific vesting terms of the option and anticipated changes to market value and expected employee exercise behavior. The risk-free interest rate used in the option valuation model is based on U.S. Treasury zero-coupon securities with remaining terms similar to the expected term on the options. RGS does not anticipate paying any cash dividends on its Class A common stock in the foreseeable future and, therefore, an expected dividend yield of zero is used in the option valuation model. RGS is required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. In accordance with ASU 2016-09, an entity can make an accounting policy to either estimate the number of awards that are expected to vest or account for forfeitures as they occur. The Company will continue to utilize the plan life-to-date forfeiture experience rate to estimate option forfeitures and records share-based compensation expense only for those awards that are expected to vest.

The table below presents a summary of the Company's option activity as of December 31, 2017 and changes during the years then ended:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Yrs)	Aggregate Intrinsic Value
Outstanding at January 1, 2016	213	\$ 13,711.15	5.0	\$ -
Granted	-	-		
Exercised	-	-		
Forfeited or expired	(28)	1,428.00		
Outstanding at December 31, 2016	<u>185</u>	<u>\$ 15,736.67</u>	3.3	\$ -
Exercisable at December 31, 2016	155	\$ 17,454.19	3.6	\$ -
Granted	-	-		
Exercised	-	-		
Forfeited or expired	(36)	4,990.00		
Outstanding at December 31, 2017	<u>149</u>	<u>\$ 18,452.38</u>	2.6	\$ -
Exercisable at December 31, 2017	141	\$ 19,418.30	2.8	\$ -

The Company did not grant any stock options and cancelled 36 stock options during the year ended December 31, 2017 versus zero grants of stock options and cancellations of 28 stock options during the year ended December 31, 2016. The Company's share-based compensation cost charged against income for continuing operations was approximately \$0.2 million and \$0.7 million during the years 2017 and 2016, respectively.

#### 9. Income Taxes

On December 22, 2017, The President of the United States signed the TCJA. The enactment of TCJA requires companies, under Accounting Standards Codification (ASC) 740, Income Taxes, to recognize the effects of changes in tax laws and rates on deferred tax assets and liabilities and the retroactive effects of changes in tax laws in the period in which the new legislation is enacted. The TCJA would permanently reduce the maximum corporate income tax rate from 35% to 21% effective for tax years beginning after December 31, 2017, and the future benefits of existing deferred tax assets would need to be computed at the new tax rate. In addition to the change in the corporate income tax rate, the TCJA further introduced a number of other changes including a one-time transition tax via a mandatory deemed repatriation of post-1986 undistributed foreign earnings and profits; the introduction of a tax on global intangible low-taxed income ("GILTI") for tax years beginning after December 31, 2017; the limitation of deductible net interest to 30% of adjustable taxable income; the further limitation of the deductibility of share-based compensation of certain highly compensated employees; the ability to elect to accelerate bonus depreciation on certain qualified assets; and the Base Erosion and Anti-Abuse Tax ("BEAT"), amongst other changes

The tax effects recorded primarily include an estimate of the impact of the reduction in the U.S. tax rate on our deferred tax assets and liabilities. We consider the amounts recorded to be provisional amounts primarily because we continue to evaluate the tax effects of the 2017 TCJA on the realizability of deferred tax assets and remeasurement of certain temporary differences at the new tax rates and the impact of other retroactive provisions.

Additionally, we consider these amounts preliminary as we continue to evaluate the impacts of the 2017 TCJA as we further understand its implications, as well as the related, and yet to be issued, regulator rules, regulations and interpretations.

The Company had \$0 of income tax expense (benefit) for the years ended December 31, 2017 and December 31, 2016.

Variations from the federal statutory rate are as follows:

<b>(in thousands)</b>	<b>Years ended December 31,</b>	
	<b>2017</b>	<b>2016</b>
Expected federal income tax expense (benefit) at statutory rate of 35%	(6,191)	(8,845)
Effect of permanent other differences	142	4,755
Effect of valuation allowance	(12,572)	(1,665)
Other	(1,147)	6,173
Impact of change in federal tax rate on deferred tax asset	20,479	-
State income tax expense (benefit), net of federal benefit	(690)	(391)
	<u>21</u>	<u>27</u>

Deferred income taxes reflect net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The components of the net accumulated deferred income tax assets shown on a gross basis as of December 31, 2017 and 2016 are as follows:

<b>(in thousands)</b>	<b>2017</b>	<b>2016</b>
Deferred tax assets (liabilities)		
Current:		
Provision for doubtful accounts	\$ 195	\$ 220
Inventory-related expense	209	209
Accrued liabilities	444	739
Other	699	863
Total current deferred tax assets	<u>1,547</u>	<u>2,031</u>
Non-current		
Depreciation and amortization	2,128	3,535
Net operating loss carry-forwards	35,754	46,427
Other	20	28
Total non-current deferred tax assets	<u>37,902</u>	<u>49,990</u>
Valuation allowance	<u>(39,449)</u>	<u>(52,021)</u>
Total net deferred tax assets	<u>\$ -</u>	<u>\$ -</u>

At December 31, 2017, RGS had \$141 million of federal net operating loss carryforwards expiring, if not utilized, beginning in 2020. Additionally, the Company had \$128 million of state net operating loss carryforwards expiring, if not utilized, beginning in 2020.

Utilization of the net operating loss carry-forwards may be subject to annual limitation under applicable federal and state ownership change limitations and, accordingly, net operating losses may expire before utilization. The Company has not completed a Section 382 analysis through December 2017 and therefore has not determined the impact of any ownership changes, as defined under Section 382 of the Internal Revenue Code has occurred in prior years. Therefore, the net operating loss carryforwards above do not reflect any possible limitations and potential loss attributes to such ownership changes. However, the Company believes that upon completion of a Section 382 analysis, as a result of prior period ownership changes, substantially all of the net operating losses will be subject to limitation.

The Company's valuation allowance decreased by approximately \$12.6 million for the year ended December 31, 2017 as a result of its operating loss for the year and the change in the corporate tax rate from the TCJA. The valuation allowance was determined in accordance with the provisions of ASC 740, Income Taxes, which requires an assessment of both negative and positive evidence when measuring the need for a valuation allowance. Based upon the available objective evidence and the Company's history of losses, management believes it is more likely than not that the net deferred tax assets will not be realized. At December 31, 2017, the Company has a valuation allowance against its deferred tax assets net of the expected income from the reversal of its deferred tax liabilities.

The Company's predecessor, Real Goods Trading Corporation, was acquired by Gaiam, Inc. (now known as Gaia, Inc. and hereinafter as Gaia) in 2001. Gaia operated Real Goods Trading Corporation essentially as a separate business until 2008 when operations were consolidated into the corporate entity, Real Goods Solar, Inc., upon its formation. Following the Company's initial public offering, a tax sharing agreement was entered into with Gaia. The Company is required, under the terms of its tax sharing agreement with Gaia, to distribute to Gaia the tax effect of certain tax loss carryforwards as utilized by the Company in preparing its federal, state and local income tax returns. At December 31, 2017, utilizing the new federal income tax rate of 21% under the TCJA, the Company estimates that the maximum amount of such distributions to Gaia could aggregate \$1.0 million.

## 10. Segment Information

Financial information for the Company's segments and a reconciliation of the total of the reportable segments' income (loss) from operations (measures of profit or loss) to the Company's consolidated net loss are as follows:

(in thousands)	2017	2016
<b>Contract revenue:</b>		
Residential	12,841	13,333
Sunetric	2,329	4,150
POWERHOUSE™	-	-
Other	6	-
Consolidated contract revenue	15,176	17,483
<b>Operating loss from continuing operations:</b>		
Residential	(6,055)	(3,346)
Sunetric	(3,045)	(1,667)
POWERHOUSE™	(20)	-
Other	(8,638)	(6,523)
Operating Loss	(17,758)	(11,536)
<b>Reconciliation of consolidated loss from operations to consolidated net loss:</b>		
Interest expense	-	(2,872)
Derivative and other	170	2,645
Debt accretion expense and loss on extinguishment	(486)	(14,067)
Gain from discontinued operations, net of tax	374	502
Net loss	(17,700)	(25,328)

The following is a reconciliation of reportable segments' assets to the Company's consolidated total assets. The Other segment includes certain unallocated corporate amounts.

(in thousands)	2017	2016
<b>Total assets – continuing operations:</b>		
Residential	\$ 5,877	\$ 7,159
Sunetric	2,142	1,196
POWERHOUSE™	1,140	-
Other	3,278	3,857
	\$ 12,437	\$ 12,212
<b>Total assets – discontinued operations:</b>		
Commercial	1,821	2,161
	\$ 14,258	\$ 14,373

## 11. Discontinued Operations

On September 30, 2014, the Company committed to a plan to sell certain net assets and rights comprising its large commercial installations business, otherwise known as its former Commercial segment, and focus its efforts and resources on its Residential and Sunetric segments. This represented a strategic shift that had a major effect on the Company's operations and financial results.

Accordingly, the assets and liabilities, operating results, and operating and investing activities cash flows for the former Commercial segment are presented as a discontinued operation separate from the Company's continuing operations, for all periods presented in these consolidated financial statements and footnotes, unless indicated otherwise.

The following is a reconciliation of the major line items constituting pretax loss of discontinued operations to the after-tax loss of discontinued operations that are presented in the condensed consolidated statements of operations as indicated:

(in thousands)	Years ended December 31,	
	2017	2016
Major line items constituting pretax loss of discontinued operations:		
Contract revenue	\$ 416	\$ 394
Contract expense (income)	(41)	(90)
Operating and other expense	72	(50)
Pretax income from discontinued operations	\$ 385	534
Income from discontinued operations, net of tax	\$ 374	\$ 502

The following is a reconciliation of the carrying amounts of major classes of assets and liabilities of the discontinued operations to the total assets and liabilities of the discontinued operations presented separately in the condensed consolidated balance sheets as indicated:

(in thousands)	December 31, 2017	December 31, 2016
Carrying amounts of major classes of assets included as part of discontinued operations:		
Current assets:		
Accounts receivable, net	\$ 394	\$ 536
Costs in excess of billings on uncompleted contracts	62	207
Inventory, net	63	37
Other current assets	723	129
Total major classes of current assets of the discontinued operations	1,242	909
Noncurrent assets:		
Other noncurrent assets	579	1,252
Total noncurrent assets of discontinued operations	579	1,252
Total assets of the discontinued operations in the balance sheet	\$ 1,821	\$ 2,161
Carrying amounts of major classes of liabilities included as part of discontinued operations:		
Current liabilities:		
Accounts payable	\$ 270	\$ 285
Accrued liabilities	33	523
Deferred revenue and other current liabilities	418	113
Total current liabilities of discontinued operations	721	921
Noncurrent liabilities:		
Other liabilities	745	761
Total major classes of noncurrent liabilities of the discontinued operations	745	761
Total liabilities of the discontinued operations in the balance sheet	\$ 1,466	\$ 1,682



## 12. Subsequent Events

### *Cooperation Agreement*

On January 2, 2018, the Company entered into the Cooperation Agreement with Iroquois Capital Management LLC, Iroquois Master Fund LTD, Iroquois Capital Investment Group LLC, Richard Abbe and Kimberly Page (collectively, "Iroquois Capital"), wherein Iroquois Capital has agreed to (i) immediately terminate, and cease any and all solicitation and other efforts with respect to, the solicitation of proxies in opposition to the Company's proposals for the 2017 annual meeting of shareholders, (ii) withdraw (and not resubmit) Iroquois' proxy statement in opposition to the Company's proposals for the 2017 annual meeting of shareholders, and (iii) promptly notify the staff of the Securities and Exchange Commission in writing that it is terminating the solicitation of proxies in opposition to the Company's proposals for the 2017 annual meeting of shareholders. Additionally, at the 2017 annual meeting of shareholders, Iroquois Capital agreed to appear in person or by proxy and vote all shares of the Company's Class A common stock beneficially owned by Iroquois Capital in favor of (i) the election of the Company's director nominees, (ii) the approval of an amendment to the Company's 2008 Long-Term Incentive Plan to increase the number of shares authorized for issuance and the number of shares that a participant may receive in a fiscal year, and (iii) the ratification of the appointment of Moss Adams LLP to audit the Company's consolidated financial statements for the 2017 fiscal year. Further, at any subsequent shareholders' meeting during the "standstill period" described below, Iroquois has agreed to vote all shares of the Company's Class A common stock beneficially owned by Iroquois in favor of the election of director nominees nominated for election by the Company's board of directors or its Nominating and Corporate Governance Committee and against the removal of any directors whose removal is not recommended by the Company's board of directors.

Under the terms of the Cooperation Agreement, Iroquois Capital has agreed to certain customary standstill provisions with respect to Iroquois Capital's actions with regard to the Company and its Class A common stock during a "standstill period" commencing on the date of the Cooperation Agreement and ending at 11:59 p.m., Eastern Time, on such date that is 30 calendar days prior to the expiration of the advance notice period for the submission by shareholders of director nominations for consideration at the Company's 2022 annual meeting of shareholders, as set forth in the advance notice provisions of the Company's Bylaws. These provisions restrict, among other things, Iroquois' ability to engage in certain proxy solicitations, make certain shareholder proposals, call meetings of shareholders, obtain representation on the Company's board of directors, institute litigation against the Company, or remove any of the Company's directors.

Pursuant to the Cooperation Agreement, the Company issued to Iroquois Master Fund LTD and Iroquois Capital Investment Group LLC, 456,000 and 144,000 unregistered and restricted shares of Class A common stock respectively as reimbursement for expenses incurred in connection with the 2017 annual meeting of shareholders and the negotiation, execution and effectuation of the Cooperation Agreement. Further, the Company and Iroquois Capital has agreed to cooperate in good faith to enter into a registration rights agreement, with customary terms reasonably acceptable to the Company, granting to Iroquois Capital piggyback registration rights with respect to the shares of Class A common stock Iroquois Capital has received pursuant to the Cooperation Agreement. As described in Note 5. Commitments and Contingencies, the Company has recognized \$0.8 million of consideration to be transferred in the Equity section of the Balance Sheet and recorded a like amount as a loss on settlement in the Statement of Operations, resulting in zero impact to shareholders' equity at December 31, 2017.

See Note 6. Shareholders' Equity for information regarding the Company's January 4, 2018 offering, the amendment to the 2008 Long-Term Incentive Plan and the 2018 Offering.

The Company has evaluated events up to the filing date of these interim financial statements and determined that, other than what has been disclosed above, no further subsequent event activity required disclosure.

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

None.

**Item 9A. Controls and Procedures.**

Our chief executive officer and principal financial officer conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Based upon their evaluation as of December 31, 2017, they have concluded that those disclosure controls and procedures are effective.

As of the last business day of our second fiscal quarter (June 30, 2017), our public float, as calculated in accordance with Rule 12b-2 under the Securities Exchange Act of 1934, as amended (“Rule 12b-2”), was less than \$50 million. As such, we are considered a smaller reporting company.

**Changes in Internal Control over Financial Reporting**

No changes in our internal control over financial reporting occurred during the year ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Management’s Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2017. In making the assessment, our management used the criteria set forth in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission in “*Internal Control-Integrated Framework*” (commonly referred to as the “2013 COSO” framework). Based on that assessment, our management concluded that, as of December 31, 2017, our internal control over financial reporting is effective based on those criteria.

**Attestation Report of the Registered Public Accounting Firm**

This Form 10-K does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management’s report was not subject to attestation by our registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit us to provide only management’s report in this Form 10-K.

**Item 9B. Other Information.**

None.

### PART III

#### Item 10. Directors, Executive Officers and Corporate Governance.

##### DIRECTORS

The following table sets forth the names and ages of our current directors:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Ian Bowles	52	Director and Chairman
Dennis Lacey	64	Director and Chief Executive Officer
Pavel Bouska	63	Director
Robert L. Scott	71	Director

Each director serves for a one-year term. Biographical information for each director, including the years in which they began serving as directors and their positions with the Company, are set forth below.

##### **IAN BOWLES—age 52—Chairman of the Company’s Board of Directors.**

Mr. Bowles has served as a director since December 2013. He is Co-founder and Managing Director of WindSail Capital Group, a Boston-based investment firm providing growth capital to emerging clean energy companies; a position he has held since March 2011. Mr. Bowles is also Senior Director of Albright Stonebridge Group, a global strategy firm based in Washington, DC; a position he has held since February 2011. From January 2007 to January 2011, he served as Secretary of Energy and Environmental Affairs of Massachusetts, during which time he oversaw all aspects of energy and environmental regulation and policy in Massachusetts. Earlier in his career, Mr. Bowles served on the White House staff for President Bill Clinton, holding the posts of Senior Director of Global Environmental Affairs at the National Security Council and Associate Director of the White House Council on Environmental Quality.

Our board of directors believes that Mr. Bowles brings significant strategic focus, regulatory and public policy expertise and financial and industry experience.

##### **DENNIS LACEY—age 64—Director and Chief Executive Officer.**

Mr. Lacey joined the Company in February 2014 as Senior Vice President Finance and became the President of our Residential Solar Division in April 2014 and our Chief Executive Officer and a director in August 2014. Mr. Lacey also served as our acting Principal Financial Officer from October 2014 to February 2017. He brings to his role as Chief Executive Officer more than 25 years of executive financial management experience. Before joining RGS, Mr. Lacey served as the Chief Financial Officer of Community Enhancement Group REIT, Inc., formed to invest in multi-family properties and acquire REIT status, between May 2012 and February 2014. Between January 2010 and March 2012, Mr. Lacey served as Chief Financial Officer and Vice President of Stream Global Services, a publicly-traded company providing business process outsourcing services. Between September 2006 and December 2009, he was the head of capital markets for Republic Financial Corporation, a private investment firm engaged in aircraft leasing and alternative asset management. Before that, Mr. Lacey held a number of senior executive positions at Imperial Bancorp, a \$6 billion publicly-traded commercial bank best known for its high-tech lending practice before it was acquired by Comerica. At Imperial Bancorp, he served as Executive Vice President and Chief Financial Officer, President of the SBA Division, and President of the Equipment Leasing Division. Mr. Lacey also served as President and Chief Executive Officer of Capital Associates, a publicly traded equipment leasing company. He previously served as Chief Financial Officer of two multi-billion dollar publicly-traded companies: TeleTech Holdings, Inc., one of the largest customer experience management companies in the United States, and CKE Restaurants, Inc., an owner, operator and franchisor of popular brands in the quick-service restaurant industry. Earlier in his career, Mr. Lacey was an audit partner at Coopers & Lybrand, an accounting firm.

Our board of directors believes that Mr. Lacey brings significant senior leadership management, operational and financial experience.

**PAVEL BOUSKA—age 63—Director.**

Mr. Bouska has served as a director since September 2012. Mr. Bouska has been an independent business consultant since 2006. From 2003 to 2006, he was the Chief Executive Officer and served as a director of ionSKY Inc., a wireless Internet service provider. Between 1999 and 2003, Mr. Bouska served as Executive Vice President and Chief Information Officer of Gaia, Inc. (formerly known as Gaiam, Inc.), as Chief Executive Officer of Gaiam Energy Tech, Inc., the renewable energy division of Gaia that later became Real Goods Solar, and as a director of Gaiam.com, Inc., an e-commerce subsidiary of Gaia. In addition, Mr. Bouska served as a director of Gaia between 1991 and 1999. From 1988 to 1999, he served as Chief Information Officer and Vice President, Information Technology of Corporate Express, Inc., a corporate supplier, as it grew from \$2.0 million of gross revenues to a Fortune 500 company. From 1985 to 1988 Mr. Bouska worked as project leader at sd&a software company in Munich, Germany. He has experience with organization management and technology deployment in rapidly growing and changing environments, business unit integrations, and mergers and acquisitions. From 2002 to 2012, Mr. Bouska has also served as President and chairman of the Board of Sunshine Fire Protection District in Boulder, Colorado.

Our board of directors believes that Mr. Bouska brings significant senior leadership, strategic focus, business development, and renewable energy experience.

**ROBERT L. SCOTT—age 71—Director.**

Mr. Scott has served as a director since June 2012. Mr. Scott has advised and assisted a number of companies since retiring as a partner from Arthur Andersen, LLP. From May to November 2009, he served as the interim Chief Financial Officer of Square Two Financial (formerly, Collect America), a private consumer debt company, assisting them with financial administration and transition to a permanent Chief Financial Officer. From 2004 to 2008, Mr. Scott assisted Colorado Mountain Development, engaged in retail land sales primarily in Texas, to improve financial reporting and accounting systems and help transition toward the sale and relocation of the business. During 2003 and 2004, Mr. Scott served as a consultant to KRG Capital Partners, LLC, a Denver-based private equity firm, assisting them with due diligence investigations of certain target companies. Mr. Scott joined Arthur Andersen, LLP, a public accounting firm, in 1970 and was admitted as partner in 1981, continuing through his retirement in 2002. Within Arthur Andersen's Audit & Business Advisory Group, Mr. Scott served clients in numerous life cycle stages and industries including construction, venture capital, energy exploration and development, manufacturing, cable and satellite television, software development, real estate and manufacturing.

Our board of directors believes that Mr. Scott brings exceptional technical skills in accounting, internal controls, taxation, equity compensation, and public company matters.

**EXECUTIVE OFFICERS**

The following table sets forth the names and ages of our current executive officers:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Dennis Lacey	64	Chief Executive Officer and Director
Alan Fine	64	Chief Financial Officer and Chief Administrative Officer
Nicolle Dorsey	39	Principal Accounting Officer and Controller

Our executive officers are appointed annually by our board of directors. Biographical information about Mr. Lacey is included herein under the heading “**DIRECTORS.**”

**ALAN FINE**—age 64—Mr. Fine joined the Company in July 2014 as the Director of Commercial Accounting and Finance, was appointed the Company’s Treasurer and Principal Accounting Officer in October 2014, and was later appointed the Company’s Principal Financial Officer in February 2016, while continuing to serve as the Company’s Treasurer. In September 2017, he was named the Company’s Chief Financial Officer and Chief Administrative Officer. Before joining the Company, he served as the Chief Financial Officer and Principal Accounting Officer of Roomlinx, Inc., a public company engaged in in-room guest entertainment systems servicing the hospitality industry, between August 2011 and June 2014. From May 2008 to June 2011, Mr. Fine served as the Chief Financial Officer and Director of Operations for Pearlstine Distributors, a privately held distributor of Anheuser Busch, Samuel Adams, Heineken, New Belgium and other craft beers to the Charleston, South Carolina market. From November 1997 to May 2000, he served as the Vice President of Finance at Colorado Greenhouse, an international producer of hydroponic tomatoes. Before that, Mr. Fine served as the Chief Financial Officer of Gold Coast Beverage Distributors, a beer and water wholesaler serving Southern Florida, from May 1994 to July 1997. Mr. Fine has a bachelor of science degree in accounting from Loyola College of Maryland, a bachelor of science degree in civil engineering from UMASS, Lowell and is a licensed certified public accountant in Pennsylvania.

**NICOLLE DORSEY**—age 39— Ms. Dorsey joined the Company in September 2016 as Assistant Controller before she was named the Company’s Controller and Principal Accounting Officer in September 2017. Before joining the Company, she worked for Cloud Peak Energy, a publicly held coal producing company, from April 2014 to March 2016. Prior to that Ms. Dorsey worked in public accounting, auditing and performing compliance work for energy sector clients. Ms. Dorsey has a BBA degree in accounting and a Masters of Accountancy from the University of Wisconsin, and is a licensed certified public accountant in Colorado.

#### **SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE**

Section 16(a) of the Exchange Act requires our directors, officers and shareholders who beneficially own more than 10% of the outstanding shares of our Class A common stock to file with the Securities and Exchange Commission reports of ownership and changes in ownership of our Class A common stock and other equity securities of our company. Our directors, officers and 10% holders are required by Securities and Exchange Commission regulations to furnish us with copies of all of the Section 16(a) reports they file.

Based solely upon a review of the copies of the forms furnished to us during or with respect to 2017 and the representations of our directors and executive officers that no additional filings were required. The following person failed to file on a timely basis a report required by Section 16(a): Nicolle Dorsey has failed to file related to the reporting of securities beneficially owned at the time of her appointment as principal accounting officer.

#### **CODE OF ETHICS**

We have adopted a Code of Ethics applicable to our employees, including our principal executive officer, principal financial officer, principal accounting officer and persons performing similar functions. We have posted a copy of our Code of Ethics on the Investor Relations section of our Internet website at <http://investors.rgsenergy.com/corporate-governance/documents-charters>. Our full board of directors must approve in advance any waivers of the Code of Ethics. We will post any amendments or waivers from our Code of Ethics that apply to our executive officers and directors on the “Code of Ethics” section of our Internet website located at <http://investors.rgsenergy.com/corporate-governance/documents-charters>.

#### **AUDIT COMMITTEE**

Our board of directors has a separately designated standing audit committee which has been established in accordance with section 3(a)(58)(A) of the Exchange Act. We have adopted a written charter for the audit committee, which can be found in the Investor Relations section of our website at: <http://investors.rgsenergy.com/governance>. Our audit committee currently consists of Robert Scott, Pavel Bouska, and Ian Bowles, and each member of the audit committee is independent within the meaning of rules of the Nasdaq Stock Market. Mr. Scott serves as chairperson of the audit committee and is an “audit committee financial expert,” as defined in Item 407(d)(5)(ii) of Regulation S-K. For the relevant experience of Mr. Scott, please refer to his biography included under the heading “**DIRECTORS**” above. Our audit committee is responsible for the appointment, compensation and oversight of our auditor and for approval of any non-audit services provided by the auditor. Our audit committee also oversees (a) management’s maintenance of the reliability and integrity of our accounting policies and financial reporting and disclosure practices; (b) management’s establishment and maintenance of processes to assure that an adequate system of internal control over financial reporting is functioning; and (c) management’s establishment and maintenance of processes to assure our compliance with all laws, regulations and company policies relating to financial reporting.

**Item 11. Executive Compensation.****Summary Compensation Table**

The following table includes information concerning compensation for each of the last two completed fiscal years for our principal executive officer, and the other named executive officers of our company.

<b>Name and Principal Position</b>	<b>Year</b>	<b>Salary (1)</b>	<b>Option Awards (2)</b>	<b>Totals</b>
Dennis Lacey (3)	2017	\$ 375,000	–	\$ 375,000
Chief Executive Officer and Director	2016	\$ 376,442	–	\$ 376,442
Alan Fine (4)	2017	\$ 185,000	–	\$ 185,000
Chief Financial and Administrative Officer	2016	\$ 163,846	–	\$ 163,846
Thomas Mannik (5)	2017	\$ 129,002	–	\$ 129,002
Principal Accounting Officer and Controller	2016	\$ 133,846	–	\$ 133,846
Nicolle Dorsey (6)	2017	\$ 100,346	–	\$ 100,346
Principal Accounting Officer and Controller				

- (1) The Salary column represents amounts earned during those years and, because of the timing of payments, do not represent amounts paid during those years. The annual base salary rate for Mr. Lacey was \$375,000 for all of 2017 and 2016; for Mr. Fine, \$185,000 for all of 2017, and \$160,000 and \$185,000 for portions of 2016; for Mr. Mannik, \$155,000 for all of 2017 until his resignation, and \$130,000 and \$155,000 for portions of 2016; and for Ms. Dorsey, \$92,000 and \$125,000 for portions of 2017.
- (2) The amounts in the *Option Awards* column reflect the aggregated grant date fair value of awards granted during 2017 and 2016, all of which were computed in accordance with FASB ASC Topic 718. Assumptions used in the calculation of the aggregated grant date fair value for these options are included in Note 8. Share-Based Compensation to our audited financial statements, included in Item 8 of this Annual Report. The terms of the options are described under the Outstanding Equity Awards at Fiscal Year-End Table below. The Company did not grant any option awards to its named executive officers during 2016 or 2017.
- (3) Mr. Lacey commenced service as our Chief Executive Officer and director on August 18, 2014.
- (4) Mr. Fine commenced service as our Principal Accounting Officer on October 14, 2014, was named the Principal Financial Officer on February 3, 2016, and subsequently named the Chief Financial Officer and Chief Administrative Officer on September 12, 2017.
- (5) Mr. Mannik commenced service as our Principal Accounting Officer on February 3, 2016 and resigned his position effective September 21, 2017.
- (6) Ms. Dorsey commenced service as our Principal Accounting Officer on September 21, 2017.

## Outstanding Equity Awards at Fiscal Year-End

The following table includes certain information with respect to unexercised options previously awarded to our executive officers named above in the Summary Compensation Table and outstanding as of December 31, 2017.

	Option Awards				
	Number of Securities Underlying Unexercised Options (1)		Option Exercise Price (1)	Option Expiration Date (1)	
	Exercisable	Unexercisable			
Dennis Lacey	12	—	\$ 45,120	02/28/2021	
	4	—	\$ 26,520	07/17/2021	
	25	—	\$ 24,720	08/18/2021	
	26	8(2)	\$ 1,428	06/30/2020	
Alan Fine	1	—	\$ 31,800	07/07/2021	
	2	—	\$ 14,760	10/19/2021	
	5	—	\$ 1,428	06/30/2020	
Thomas Mannik (3)	—	—	—	—	
Nicolle Dorsey (3)	—	—	—	—	

- (1) The exercise price of the options is equal to the closing stock market price of our Class A common stock on the date of grant and the options expire seven years from the date of grant except as noted. For further information, see Note 8. Share-Based Compensation to our audited financial statements, included in Item 8 of this Annual Report.
- (2) 25% of the options vested immediately upon grant, and the remaining 75% of the options vest over five years, 5% each quarter commencing on June 30, 2016.
- (3) Mr. Mannik and Ms. Dorsey did not hold any unexercised options as of December 31, 2017.

## Generally Available Benefit Programs

We maintain a tax-qualified 401(k) Plan, which provides for broad-based employee participation. Our executive officers are eligible to participate in the 401(k) Plan on the same basis as other employees. We do not provide defined benefit pension plans or defined contribution retirement plans to our executives or other employees other than our 401(k) Plan described herein.

In fiscal 2017, our named executive officers were eligible to receive the same health care coverage that was generally available to our other employees. Our benefit programs include medical, dental and vision insurance, long-term and short-term disability insurance, life and accidental death and dismemberment insurance, health and dependent care flexible spending accounts, business travel insurance, wellness programs (including chiropractic, massage therapy, acupuncture, and fitness classes), relocation/expatriate programs and services, educational assistance, and certain other benefits.

Our compensation committee believes that our 401(k) Plan and the other generally available benefit programs allow us to remain competitive for employee talent, and that the availability of the benefit programs generally enhances employee productivity and loyalty to us. The main objectives of our benefits programs are to give our employees access to quality healthcare, financial protection from unforeseen events, assistance in achieving retirement financial goals, and enhanced health and productivity, in full compliance with applicable legal requirements. Typically, these generally available benefits do not specifically factor into decisions regarding an individual executive officer's total compensation or 2008 Long-Term Incentive Plan award package.

## Stock Option Grant Timing Practices

Our compensation committee administers and grants awards under our 2008 Long-Term Incentive Plan, and has granted to our chief executive officer the authority to make awards to our employees that do not report directly to the chief executive officer. During fiscal 2017, our chief executive officer, compensation committee and board of directors consistently applied the following guidelines for stock option grant timing practices:

- New Employees: stock option grants to new hires are effective on the first day of the new employee's employment with us or upon approval by our chief executive officer, compensation committee or board of directors, as applicable, and the exercise price for the options is set at the closing price of our Class A common stock on that date.
- Existing Employees: stock option grants to existing employees are effective on the date that our chief executive officer, compensation committee or board of directors, as applicable, approves the grant, and the exercise price for the options is set at the closing price of our Class A common stock on that date.

## Employment Agreements and Compensation of our Named Executive Officers

On June 1, 2015, we entered into a written employment agreement with Dennis Lacey, outlining the terms of his employment as our Chief Executive Officer. Pursuant to the terms of the employment agreement, Mr. Lacey will receive an initial annual base salary of \$375,000. Our board of directors may, in its sole discretion, adjust his base salary but may not reduce the base salary unless such reduction is done in connection with a broad reduction of compensation of our management.

For each fiscal year, Mr. Lacey is eligible for an annual performance bonus of up to 100% of his base salary, subject to such terms and conditions and upon achievement of performance targets as determined by the board of directors or a committee created by its board of directors. Mr. Lacey must be an employee on the date a performance bonus is to be paid to be eligible to receive it. We did not pay Mr. Lacey any bonuses for 2016 or 2017.

Mr. Lacey is eligible to participate in the Company's 401(k) plan and is eligible for expense reimbursement for business expenses incurred in connection with his duties under his employment agreement. Mr. Lacey is also eligible for coverage under group insurance plans and to receive fringe benefits made available to the Company's executive and management employees. The Company will pay the premiums for coverage of Mr. Lacey and his dependents under such insurance plans.

The term of the employment agreement continues until terminated and may be terminated as described below and (i) by mutual agreement between the parties, (ii) automatically upon Mr. Lacey's death or disability, (iii) by Mr. Lacey for any or no reason upon 30 days' prior written notice, and (iv) by the Company for "cause," as discussed below, effective immediately. If terminated in this manner, the Company will pay to Mr. Lacey any accrued but unpaid base salary, accrued but unused vacation and reimbursable business expenses and Mr. Lacey is not entitled to any severance benefits. "Cause" is defined as Mr. Lacey (i) violating in any material respect any term of the employment agreement or a nondisclosure agreement entered into with the Company in 2014, (ii) violating any Company policy, procedure or guideline that results in material harm to the Company, (iii) acting with gross negligence in the performance of his duties resulting in harm to the Company, (iv) engaging in any of the following forms of misconduct: commission of any felony or any misdemeanor involving dishonesty or moral turpitude; theft or misuse of Company's property; illegal use or possession of any controlled substance; discriminatory or harassing behavior, whether or not illegal under federal, state or local law; or falsifying any document or making any materially false or misleading statement relating to his employment, or (v) failing to cure, within 30 days, any material injury to the economic or ethical welfare of the Company caused by his malfeasance, gross misconduct or material inattention to his duties and responsibilities under the employment agreement (such cure right being limited to one occurrence unless otherwise agreed to by the board of directors).

In addition to the foregoing, if the Company terminates Mr. Lacey's employment without "cause," Mr. Lacey is entitled to severance compensation equal to 12 months of his most recent base salary, which shall be payable in equal installments in accordance with the Company's standard payroll practice. However, if the Company terminates Mr. Lacey's employment within 12 months after the consummation of a change of control (as defined in the employment agreement and as discussed below), such severance payment shall equal 12 months of Mr. Lacey's most recent base salary plus the maximum performance bonus that Mr. Lacey may earn for such fiscal year and shall be payable in one lump sum within 30 calendar days after termination of employment. A "change of control" means any transaction or series of related transactions (i) the result of which is that any person or persons controlling, controlled by or under common control with such person becomes the beneficial owner of more than 50% of the issued and outstanding Company voting stock (including securities convertible or exercisable for voting stock), (ii) that results in the sale of all or substantially all of the Company's assets, or (iii) that results in a consolidation or merger whereby the Company is not the surviving entity. Mr. Lacey's receipt of severance compensation is conditioned on his executing release and confidentiality agreements as further described in the employment agreement.



Furthermore, subject to notice and cure periods, Mr. Lacey may terminate the employment agreement for “good reason,” if, without Mr. Lacey’s prior consent, (i) the Company materially breaches its obligations under the employment agreement, (ii) following a change of control, the successor company fails to assume the Company’s obligations under the employment agreement, or (iii) within 12 months after a change of control, (A) Mr. Lacey is no longer the Chief Executive Officer of the surviving company, (B) his duties are materially altered or his authority is materially diminished, (C) his employment-related benefits are materially diminished, or (D) the Company’s principal executive offices are moved more than 25 miles from their current location. A termination for “good reason” is deemed to be a termination by the Company without “cause.”

On May 31, 2015 and in connection with entering into the employment agreement, our board of directors granted Mr. Lacey options to purchase 34 shares of the Company’s Class A common stock at an exercise price of \$1,428 per share under the Incentive Plan. At the time of grant, 25% of the options immediately vest and the remaining 75% subsequently vest in equal quarterly installments over the five-year period following the grant. The options awarded to Mr. Lacey are subject to the terms of a new standard form of Employee Stock Option Agreement adopted by the compensation committee in May 2015, under which we expect to grant options under the Incentive Plan, and includes the following terms and conditions:

- The options expire on the seventh anniversary of the effective date of the applicable stock option grant and may not be exercised after the close of business on the applicable expiration date;
- The options vest over a five-year period at a rate of 5.00% on the last day of each calendar quarter occurring after the effective date of the applicable grant so long as the grantee has been continuously employed from the effective date of grant through the applicable vesting date;
- All of the unvested shares will vest immediately prior to the consummation of a change in control (which definition is substantively the same as the description of the definition of change of control in the employment agreement), provided that the grantee is an employee on the date the change in control is consummated;
- Vesting ceases on the date the grantee ceases to be an employee;
- Following the last day of employment, vested options may be exercised at any time during the lesser of (i) 30 days starting the day after the last date of employment, or (ii) the remaining term of the options; provided that if termination occurs (A) due to death or disability while grantee is employed, the options may be exercised at any time during the lesser of (1) one year starting the day after the last date of employment, or (2) the remaining term of the options, or (B) due to retirement, the option may be exercised at any time during the lesser of (1) the three month period commencing on the first day after the employees last day of employment, or, if employee dies during the three month period commencing on the first day after employee’s last day of employment, then the one year period commencing on the first day after the employee’s last day of employment with RGS, or (2) the remaining term of the option; and
- In connection with their receipt of stock options under the Employee Stock Option Agreement, employees agree to be subject to typical non-disparagement, confidentiality and non-compete provisions.

Other than as described below, we have not entered into traditional employment agreements with any other named executive officers. Generally, those named executive officers who have been granted stock options, are subject to covenants concerning confidentiality, non-competition, non-solicitation of employees and customers and assignment of inventions contained in our standard form of stock option agreement executed upon grant.

#### **Potential Payments Upon Termination or Change-in-Control**

Pursuant to the terms of the employment agreement with Mr. Lacey, Mr. Lacey is entitled to receive the severance payments in the amount and pursuant to the terms described above in “Employment Agreements and Compensation for our Named Executive Officers — Dennis Lacey.”

Our standard form of stock option agreement provides that option vesting ceases upon termination of employment. A former employee may exercise vested options (i) within 30 days (generally), (ii) within three months (upon retirement at or after normal retirement age) or (iii) within one year (upon termination due to death or disability or (iv) within one year (after a change of control) after termination, but in no event after the expiration term of the applicable option. Additionally, 100% of unvested options immediately vest upon the occurrence of a change of control.

## Accounting and Tax Considerations

In designing our compensation programs, we take into consideration the accounting and tax effect that each element will or may have on us and our executive officers and other employees. We aim to keep the expense related to our compensation programs as a whole within certain affordability levels. When determining how to apportion between differing elements of compensation, our goal is to meet our objectives while maintaining relative cost neutrality. For instance, if we increase benefits under one program resulting in higher compensation expense, we may seek to decrease costs under another program in order to avoid a compensation expense that is above the level then deemed affordable under existing circumstances. For options, we recognize a charge to earnings for accounting purposes equally from the grant date until the end of the vesting period.

We believe we have structured our compensation program to comply with Internal Revenue Code Sections 162(m) and 409A. Under Section 162(m), a limitation is placed on tax deductions of any publicly-held corporation for individual compensation to certain executives of such corporation exceeding \$1 million in any taxable year, unless the compensation is performance-based. If an executive is entitled to nonqualified deferred compensation benefits that are subject to Section 409A, and such benefits do not comply with Section 409A, then the benefits are taxable in the first year they are not subject to a substantial risk of forfeiture. In such case, the service provider is subject to regular federal income tax, interest and an additional federal income tax of 20% of the benefit includible in income. We do not believe we have individuals with non-performance based compensation paid in excess of the Internal Revenue Code Section 162(m) tax deduction limit.

## Director Compensation Policy

During 2017, directors who were not employees of our company or its affiliates were paid an annual retainer of \$20,000 plus fees of \$1,000 for each in-person board meeting attended, \$200 for each telephonic board meeting attended, \$500 for each committee meeting attended and \$200 for each telephonic committee meeting attended. Members of each standing committee receive an annual fee of \$4,000 and chairpersons of each standing committee receive an annual fee of \$10,000.

## Director Compensation Table

The following table provides compensation information for the year ended December 31, 2017 for each director who served during 2017 and was compensated for his or her service other than as a named executive officer.

<u>Name</u>	<u>Fees Earned or Paid in Cash</u>
David Belluck (1)	\$ 34,533
Pavel Bouska	\$ 30,600
Ian Bowles	\$ 39,900
John Schaeffer (2)	\$ 24,600
Robert L. Scott	\$ 44,200

(1) Effective August 30, 2017, Mr. Belluck resigned as a director of the Company.

(2) Effective March 9, 2018, Mr. Schaeffer resigned as a director of the Company.

**Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.****Equity Compensation Plan Information**

The following table summarizes equity compensation plan information for our Class A common stock as of December 31, 2017:

	Number of securities to be issued upon exercise of outstanding options, and rights	Weighted average exercise price of outstanding options, and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by security holders	149	\$ 18,452	52,536

**BENEFICIAL OWNERSHIP OF SHARES**

The following table sets forth information with respect to the beneficial ownership of our Class A common stock as of March 26, 2018 (except as noted) for (i) each person (or group of affiliated persons) who, insofar as we have been able to ascertain, beneficially owned more than 5% of the outstanding shares of our Class A common stock, (ii) each director, (iii) each executive officer named in the Summary Compensation Table above, and (iv) all current directors and executive officers as a group. As of March 26, 2018, there were 10,351,845 shares of our Class A common stock and no shares of our Class B common stock outstanding.

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership (1)	Percent of Class
Hudson Bay Capital Fund, Ltd. (2)	1,148,927	9.99%
Iroquois Master Fund, Ltd. (3)	605,000	5.52%
Dennis Lacey (4)	15,070	*
Alan Fine (5)	8	*
Thomas Mannik (6)	-	*
Nicolle Dorsey (7)	-	*
Pavel Bouska (8)	8	*
Ian Bowles (9)	8	*
Robert L. Scott (10)	8	*
All directors and executive officers as a group (7 persons) (11)	15,102	*

\* Indicates less than 1% ownership.

- (1) This table is based upon information supplied by officers, directors and principal shareholders directly to the Company or on Schedules 13D and 13G and Forms 3, 4 and 5 filed with the Securities and Exchange Commission. All beneficial ownership is direct and the beneficial owner has sole voting and investment power over the securities beneficially owned unless otherwise noted. Share amounts and percent of class include stock options exercisable and restricted stock vesting within 60 days after March 30, 2018.
- (2) According to a Schedule 13G/A filed on February 2, 2018 by Hudson Bay Capital Management LP, and information available or provided to the Company. Consists of (i) an estimated 4,000 shares of our Class A common stock issuable under the 2016 Notes (subject to a 9.99% beneficial ownership limitation; calculated using the “Conversion Price” (as defined in the 2016 Notes) floor price of \$0.25,); and (ii) upon exercise of 1,144,927 warrants that are currently exercisable (subject to a 9.99% beneficial ownership limitation), which together represent 9.99% of our outstanding shares of Class A common stock as of March 30, 2018. Does not include additional shares of Class A common stock issuable under the 2016 Notes and upon exercise of warrants because the holder does not have the right to receive such shares if the holder, together with certain attribution parties, would beneficially own in excess of 9.99% of the outstanding shares of our Class A common stock. 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.
- (3) According to a Schedule 13D filed on January 16, 2018 by Iroquois Master Fund Ltd., Iroquois Capital Management, LLC, Iroquois Capital Investment Group LLC (“ICIG”), Richard Abbe, and Kimberly Page, and information available or provided to the Company. Consists of an aggregate of (i) 605,000 shares of our Class A common stock (subject to a 9.99% beneficial ownership limitation). Excluded from the reporting persons beneficial ownership are 805,144 additional shares of Class A common stock issuable upon exercise of warrants subject to a 4.99% blocker provision owned by each of Iroquois Master Fund Ltd. and Iroquois Capital Investment Group LLC. Iroquois Master Fund Ltd., Iroquois Capital Management, LLC, Mr. Abbe and Ms. Page each are deemed beneficial owners of the 461,000 shares of stock owned by Iroquois Master Fund Ltd. ICIG and Mr. Abbe are deemed beneficial owners of the 144,000 shares of stock owned by ICIG. The reporting persons share voting power and dispositive power over their respective shares. Mr. Abbe, who serves as the President of Iroquois Capital Management, LLC and ICIG, and Ms. Page, who serves as a Director of Iroquois Master Fund, Ltd., have shared voting control and investment discretion over the securities held by Iroquois. As a result, each of Mr. Abbe and Ms. Page may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities held by Iroquois. The address of Iroquois, Mr. Abbe and Ms. Page is 205 East 42<sup>nd</sup> Street, 20<sup>th</sup> Floor, New York, NY 10017.

- (4) Consists of (i) 15,000 shares of our Class A common stock, (ii) 69 shares of our Class A common stock issuable upon exercise of stock options that are currently exercisable and (iii) 1 share of our Class A common stock issuable upon exercise of stock options exercisable within 60 days after March 27, 2018.
- (5) Consists of 8 shares of our Class A common stock issuable upon exercise of stock options that are currently exercisable.
- (6) Mr. Mannik does not currently hold any shares of our Class A common stock.
- (7) Ms. Dorsey does not currently hold any shares of our Class A common stock.
- (8) Consists of 8 shares of our Class A common stock issuable upon exercise of stock options that are currently exercisable.
- (9) Consists of 8 shares of our Class A common stock issuable upon exercise of stock options that are currently exercisable.
- (10) Consists of 8 shares of our Class A common stock issuable upon exercise of stock options that are currently exercisable.
- (11) Includes Messrs. Lacey, Fine, Mannik, Dorsey, Bouska, Bowles, and Scott.

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

**CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

**Related Party Transactions**

The following is a description of certain transactions involving us and persons who are considered “related persons,” as such term is defined in Item 404 of Regulation S-K.

*Transactions with Hudson Bay*

We believe that Hudson Bay Master Fund, Ltd. (“Hudson Bay”) currently is a “related person” as a result of being the beneficial owner of more than 5% of our outstanding Class A common stock. In addition, we believe that Hudson Bay was a “related person” when we entered into the transactions described below.

On April 1, 2016, we sold \$6.0 million in principal amount of 2016 Notes and Series G warrants to purchase 4,980 shares of our Class A common stock to Hudson Bay as part of our \$10.0 million offering of convertible notes and Series G warrants on April 1, 2016. As a result of the purchase of the 2016 Notes, Hudson Bay became the beneficial owner of up to 9.99% of our outstanding Class A common stock. The 2016 Notes bear interest at 8% per annum (or 18% per annum during an event of default). As of March 30, 2018, we have not made any cash payments in satisfaction of principal or accrued interest to Hudson Bay, however we have converted into shares of our Class A common stock, \$5,999,000 in principal and \$274,395 in accrued interest owed to Hudson Bay. As a result, we have issued an aggregate of 334,303 shares of our Class A common stock to Hudson Bay. The largest amount of principal outstanding since January 1, 2017 and the date of this Annual Report on Form 10-K was \$124,000. As of March 30, 2018, the outstanding principal balance under Hudson Bay’s 2016 Note is \$1,000.

On February 6, 2017, we sold an aggregate of \$2.6 million of units to Hudson Bay as part of a public offering of an aggregate amount of \$11.5 million of (i) “primary units” consisting of one share of our Class A common stock, and a Series K warrant to purchase one share of our Class A common stock and (ii) “alternative units” consisting of a prepaid Series L warrant to purchase one share of our Class A common stock, and a Series K Warrant to purchase one share of Common Stock (the “February 6, 2017 Offering”). We sold the primary units at an initial purchase price of \$3.10 per unit and the alternative units at an initial purchase price of \$3.09 per unit. Hudson Bay purchased 290,323 primary units and 547,146 alternative units. As a result of the February 6, 2017 Offering, Hudson Bay received an aggregate of 290,323 shares of our Class A common stock, a Series K warrant to purchase 837,469 shares of our Class A common stock and a Series L warrant to purchase 547,146 shares of our Class A common stock.

On February 9, 2017, we sold an aggregate of \$2.7 million of units to Hudson Bay as part of a registered offering of an aggregate amount of \$6.0 million of (i) “primary units” consisting of one share of our Class A common stock, and a Series M warrant to purchase 75% of one share of our Class A common stock, and (ii) “alternative units” consisting of a prepaid Series N warrant to purchase one share of our Class A common stock, and a Series M Warrant to purchase 75% of one share of Common Stock (the “February 9, 2017 Offering”). We sold the primary units at an initial purchase price of \$2.50 per unit and the alternative units at an initial purchase price of \$2.49 per unit. Hudson Bay purchased 500,000 primary units and 600,000 alternative units. As a result of the February 9, 2017 Offering, Hudson Bay received an aggregate of 500,000 shares of our Class A common stock, a Series M warrant to purchase 825,000 shares of our Class A common stock, and a Series N warrant to purchase 600,000 shares of our Class A common stock.

On January 4, 2018, we sold (i) 800,000 shares of the Company’s Class A common stock, (ii) a prepaid Series P Warrant to purchase 800,000 shares of Common Stock (the “Series P Warrant Shares”), and (iii) a Series O Warrant to purchase 1,600,000 shares of Common Stock (the “Series O Warrant Shares”) to Hudson Bay for aggregate gross proceeds of approximately \$1.8 million. We sold the shares of common stock at a purchase price of \$1.15 per share, and the share of common stock underlying the Series P Warrant at a purchase price of \$1.14 per share.

On March 30, 2018, we entered into the Securities Purchase Agreement for the 2018 Offering, as further described in Item 1 – Offerings. Upon closing of the 2018 Offering, we will issue to Hudson Bay a Series A Note in the principal amount of \$1.725 million, a Series B Note in the principal amount of \$1.5 million and a Series Q Warrant exercisable into 2,781,137 shares of Class A common stock. In exchange, we will receive \$1.5 million in cash and an Investor Note in the principal amount of \$1.5 million.

#### *Transaction with Iroquois*

We believe that Iroquois Master Fund, Ltd. currently is a “related person” as a result of being the beneficial owner of more than 5% of our outstanding Class A common stock. We believe that Iroquois Master Fund, Ltd became a “related person” as a result of the transaction described below.

On January 2, 2018, we entered into a Cooperation Agreement with Iroquois Capital Management LLC, Iroquois Master Fund, Ltd., Iroquois Capital Investment Group LLC, Richard Abbe and Kimberly Page (collectively, “Iroquois Capital”), wherein Iroquois Capital agreed to (i) immediately terminate, and cease any and all solicitation and other efforts with respect to, the solicitation of proxies in opposition to our proposals for the 2017 annual meeting of shareholders, (ii) withdraw (and not resubmit) Iroquois’ proxy statement in opposition to our proposals for the 2017 annual meeting of shareholders, and (iii) promptly notify the staff of the U.S. Securities and Exchange Commission in writing that it is terminating the solicitation of proxies in opposition to the our proposals for the 2017 annual meeting of shareholders.

Pursuant to the Cooperation Agreement, we issued to Iroquois Master Fund LTD and Iroquois Capital Investment Group LLC, 456,000 and 144,000 unregistered and restricted shares of Class A common stock respectively as reimbursement for expenses incurred in connection with the 2017 annual meeting of shareholders and the negotiation, execution and effectuation of the Cooperation Agreement.

#### *Transaction with Mobomo, LLC*

On May 23, 2017, the Company entered into an agreement with Mobomo, LLC for the design and development of certain intellectual property for a total fee of \$516,000. The intellectual property consisted of an integrated mobile phone application and the new RGS 365™ customer portal. As of December 31, 2017, and March 30, 2018, the Company had paid an aggregate amount of \$0.4 million; and under the agreement the Company has an accrued expense of \$0.1 million.

Mobomo’s Chief Executive Officer Brian Lacey is the son of the Company’s CEO Dennis Lacey. The Company approved the agreement in accordance with its related-party transaction policy.

## Our Policies Regarding Review, Approval or Ratification of Related-Party Transactions

Any related-party transaction is reviewed by disinterested members of management and, if material, by disinterested members of our board of directors or a committee thereof to ensure that the transaction reflects terms that are at least as favorable for us as we would expect in a similar transaction negotiated at arm's length by unrelated parties.

## DIRECTOR INDEPENDENCE

Our board of directors currently consists of four members and meets regularly during the year. Our board of directors has determined that each of Messrs. Bouska, Bowles and Scott are independent as defined by the listing standards of the Nasdaq Stock Market. Membership on our audit committee, compensation committee and nominating and corporate governance committee is limited to independent directors within the meaning of the Nasdaq Marketplace Rules.

### Item 14. Principal Accounting Fees and Services.

Effective April 12, 2017, our audit committee approved a resolution to retain Hein & Associates LLP as our independent accountants to audit our financial statements for the fiscal year ended December 31, 2017. Hein & Associates LLP merged with Moss Adams LLP on November 16, 2017. On February 8, 2018, our shareholders ratified the appointment of Moss Adams LLP to audit our consolidated financial statements for the 2017 fiscal year.

The following table presents fees billed for professional accounting fees and services rendered for the year ended December 31, 2017 from our principal accounting firm Moss Adams LLP as well as our former principal accounting firm Hein & Associates LLP; and to Hein & Associates LLP for professional accounting fees and services rendered for the year ended December 31, 2016:

Audit and Non-Audit Fees (in \$000's)	2017			2016
	Moss Adams	Hein	Totals	Hein
Audit fees (1)	\$ 157	\$ 84	\$ 241	\$ 270
Audit related fees (2)	-	-	-	-
Tax fees (3)	-	-	-	37
Totals	\$ 157	\$ 84	\$ 241	\$ 307

- (1) Audit fees are fees that were charged for the audit of our annual financial statements included in our annual report on Form 10-K and review of unaudited financial statements included in our quarterly reports on Form 10-Q; for services that are normally provided by the auditor in connection with statutory and regulatory filings or engagements; and all costs and expenses in connection with the above.
- (2) Audit related fees consisted of accounting consultations and additional audit procedures in connection with a business acquisition and related filings.
- (3) Tax fees represent tax advice and tax compliance services primarily in connection with a business acquisition and other transactions.

In accordance with the policies of our audit committee and legal requirements, all services to be provided by our independent registered public accounting firm are pre-approved by our audit committee. For 2017, our audit committee pre-approved all such services. Pre-approved services include audit services, audit-related services, tax services and other services. In some cases, pre-approval is provided by the full audit committee for up to one year, and such services relate to a particular defined task or scope of work and are subject to a specific budget. In other cases, the chairperson of our audit committee has the delegated authority from our audit committee to pre-approve additional services, and such action is then communicated to the full audit committee at the next audit committee meeting. To avoid certain potential conflicts of interest, the law prohibits a publicly traded company from obtaining certain non-audit services from its auditing firm. If we need such services, we obtain them from other service providers.

## PART IV

### Item 15. Exhibits, Financial Statement Schedules.

Documents filed as part of this report are as follows:

2. Consolidated Financial Statements.  
See listing of Consolidated Financial Statements included as part of this Form 10-K in Item 8 of Part II.
2. Exhibits:  
The following exhibits are incorporated by reference into or are filed or furnished with this report as indicated below:

<b>Exhibit No.</b>	<b>Description</b>
<a href="#">3.1</a>	<a href="#">Articles of Incorporation of Real Goods Solar, Inc. (Incorporated by reference to Exhibit 3.1 to Real Goods Solar's Quarterly Report on Form 10-Q filed November 8, 2016 (Commission File No. 001-34044)).</a>
<a href="#">3.2</a>	<a href="#">Certificate of Designation of Preferences, Rights and Limitations of Series A 12.5% Mandatorily Convertible Preferred Stock (Incorporated by reference to Exhibit 3.2 to Real Goods Solar's Quarterly Report on Form 10-Q filed November 8, 2016 (Commission File No. 001-34044)).</a>
<a href="#">3.3</a>	<a href="#">Statement of Correction to Articles of Incorporation of Real Goods Solar, Inc. (Incorporated by reference to Exhibit 3.3 to Real Goods Solar, Inc.'s Quarterly Report on Form 10-Q filed May 10, 2017 (Commission File No. 001-34044)).</a>
<a href="#">3.4</a>	<a href="#">Bylaws of Real Goods Solar, Inc. (Incorporated by reference to Exhibit 3.2 to Real Goods Solar's Amendment No. 1 to Registration Statement on Form S-1 filed March 28, 2008 (Commission File No. 333-149092)).</a>
<a href="#">4.1</a>	<a href="#">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)).</a>
<a href="#">4.2</a>	<a href="#">Warrant, dated March 26, 2013, pursuant to the Second Loan Modification and Reinstatement Agreement, dated November 13, 2012, among Silicon Valley Bank, Real Goods Energy Tech, Inc., Real Goods Trading Corporation, Earth Friendly Energy Group Holdings, LLC, Alteris Renewables, Inc., Earth Friendly Energy Group, LLC, Solar Works, LLC, Alteris RPS, LLC, and Alteris ISI, LLC (Incorporated by reference to Exhibit 10.21 to Real Goods Solar's Annual Report on Form 10-K filed April 1, 2013 (Commission File No. 001-34044)).</a>
<a href="#">4.3</a>	<a href="#">Warrant, dated March 27, 2013, issued to Silicon Valley Bank pursuant to the Third Loan Modification Agreement, dated March 27, 2013, among Silicon Valley Bank, Real Goods Energy Tech, Inc., Real Goods Trading Corporation, and Alteris Renewables, Inc. (Incorporated by reference to Exhibit 10.22 to Real Goods Solar's Annual Report on Form 10-K filed April 1, 2013 (Commission File No. 001-34044)).</a>
<a href="#">4.4</a>	<a href="#">Form of Warrant, dated June 3, 2013, issued to the investors under the Securities Purchase Agreement, dated May 24, 2013, among Real Goods Solar, Inc. and the investors identified therein (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed June 3, 2013 (Commission File No. 001-34044)).</a>
<a href="#">4.5</a>	<a href="#">Form of Warrant, dated November 20, 2013, issued pursuant to the Underwriting Agreement, dated November 15, 2013 by and between the Company and Cowen and Company (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed November 21, 2013 (Commission File No. 001-34044)).</a>
<a href="#">4.6</a>	<a href="#">Form of Warrant, dated July 2, 2014, issued to the investors under the Securities Purchase Agreement, dated July 2, 2014, among Real Goods Solar, Inc. and the investors identified therein (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed July 3, 2014 (Commission File No. 001-34044)).</a>
<a href="#">4.7</a>	<a href="#">Warrant, dated June 6, 2014, issued to Silicon Valley Bank pursuant to the Joinder and Sixth Loan Modification Agreement, dated June 6, 2014, among Real Goods Energy Tech, Inc., Real Goods Trading Corporation, Alteris Renewables, Inc., Real Goods Syndicated, Inc., Mercury Energy, Inc., Real Goods Solar, Inc. - Mercury Solar, Elemental Energy, LLC, Sunetric Management LLC and Silicon Valley Bank (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Quarterly Report on Form 10-Q filed August 19, 2014 (Commission File No. 001-34044)).</a>



Exhibit No.	Description
4.8	<a href="#"><u>Warrant, dated November 19, 2014, issued to Silicon Valley Bank pursuant to the Seventh Loan Modification Agreement, dated November 19, 2014, among Real Goods Energy Tech, Inc., Real Goods Trading Corporation, Alteris Renewables, Inc., Real Goods Syndicated, Inc., Mercury Energy, Inc., Real Goods Solar, Inc. - Mercury Solar, Elemental Energy, LLC, Sunetric Management LLC and Silicon Valley Bank (Incorporated by reference to Exhibit 4.8 to Real Goods Solar's Annual Report on Form 10-K filed March 31, 2015 (Commission File No. 001-34044)).</u></a>
4.9	<a href="#"><u>Combined Form of Warrant issued to investors on February 26 and 27, 2015 (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed February 24, 2015 (Commission File No. 001-34044)).</u></a>
4.10	<a href="#"><u>Warrant to Purchase Common Stock dated February 27, 2015, issued to WestPark Capital, Inc. (Incorporated by reference to Exhibit 4.2 to Real Goods Solar's Quarterly Report on Form 10-Q filed May 11, 2015 (Commission File No. 001-34044)).</u></a>
4.11	<a href="#"><u>Waiver and Amendment Agreement, dated March 31, 2015, among Real Goods Solar, Inc. and the investor party thereto (Incorporated by reference to Exhibit 4.3 to Real Goods Solar's Quarterly Report on Form 10-Q filed May 11, 2015 (Commission File No. 001-34044)).</u></a>
4.12	<a href="#"><u>Form of Series F Warrant issued to investors on June 30 and July 1, 2015 (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed June 26, 2015 (Commission File No. 001-34044)).</u></a>
4.13	<a href="#"><u>Form of Warrant to Purchase Common Stock, dated June 30, 2015, issued to WestPark Capital, Inc. (Incorporated by reference to Exhibit 4.3 to Real Goods Solar's Quarterly Report on Form 10-Q filed August 10, 2015 (Commission File No. 001-34044)).</u></a>
4.14	<a href="#"><u>Form of Senior Secured Convertible Note issued to the investors under the Securities Purchase Agreement, dated April 1, 2016 (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed April 1, 2016 (Commission File No. 001-34044)).</u></a>
4.15	<a href="#"><u>Form of Series G Warrants issued to the investors under the Securities Purchase Agreement, dated April 1, 2016 (Incorporated by reference to Exhibit 4.2 to Real Goods Solar's Current Report on Form 8-K filed April 1, 2016 (Commission File No. 001-34044)).</u></a>
4.16	<a href="#"><u>Form of Termination and Amendment Agreement, dated May 12, 2016, between Real Goods Solar, Inc. and each of the investors party to the Securities Purchase Agreement, dated April 1, 2016 (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Quarterly Report on Form 10-Q filed May 12, 2016 (Commission File No. 001-34044)).</u></a>
4.17	<a href="#"><u>Form of Series H Warrant, dated September 14, 2016, issued to investors participating in the September 14, 2016 public unit offering (Incorporated by reference to Exhibit 4.17 to Amendment No. 5 to Real Goods Solar's Registration Statement on Form S-1 filed September 7, 2016 (Commission File No. 333-211915)).</u></a>
4.18	<a href="#"><u>Form of Real Goods Solar Series A 12.5% Mandatorily Convertible Preferred Stock Certificate (Incorporated by reference to Exhibit 4.18 to Amendment No. 3 to Real Goods Solar's Registration Statement on Form S-1 filed August 25, 2016 (Commission File No. 333-211915)).</u></a>
4.19	<a href="#"><u>Representative Warrant to Purchase Units Consisting of Series A 12.5% Mandatorily Convertible Preferred Stock and Series H Warrant to Purchase Common Stock, dated September 14, 2016, issued to Roth Capital Partners, LLC (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed September 14, 2016 (Commission File No. 001-34044)).</u></a>
4.20	<a href="#"><u>Form of Series I Warrant, dated December 8, 2016, issued to investors party the Securities Purchase Agreement, dated December 8, 2016 (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed December 13, 2016 (Commission File No. 001-34044)).</u></a>
4.21	<a href="#"><u>Form of Series J Warrant, dated December 8, 2016, issued to investors party the Securities Purchase Agreement, dated December 8, 2016 (Incorporated by reference to Exhibit 4.2 to Real Goods Solar's Current Report on Form 8-K filed December 13, 2016 (Commission File No. 001-34044)).</u></a>
4.22	<a href="#"><u>Placement Agent Warrant, dated December 13, 2016, issued to Roth Capital Partners, LLC (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed December 14, 2016 (Commission File No. 001-34044)).</u></a>
4.23	<a href="#"><u>Form of Series K Warrant, dated February 6, 2017, issued to investors party to the Securities Purchase Agreement, dated February 1, 2017 (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed February 2, 2017 (Commission File No. 001-34044)).</u></a>
4.24	<a href="#"><u>Form of Series L Warrant, dated February 6, 2017, issued to investors party to the Securities Purchase Agreement, dated February 1, 2017 (Incorporated by reference to Exhibit 4.2 to Real Goods Solar's Current Report on Form 8-K filed February 2, 2017 (Commission File No. 001-34044)).</u></a>

Exhibit No.	Description
4.25	<a href="#">Placement Agency Warrant, dated February 6, 2017, issued to Roth Capital Partners, LLC (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed February 6, 2017 (Commission File No. 001-34044)).</a>
4.26	<a href="#">Form of Series M Warrant, dated February 9, 2017, issued to investors party to the Securities Purchase Agreement, dated February 7, 2017 (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Amendment No. 1 Current Report on Form 8-K/A filed February 15, 2017 (Commission File No. 001-34044)).</a>
4.27	<a href="#">Form of Series N Warrant, dated February 9, 2017, issued to investors party to the Securities Purchase Agreement, dated February 7, 2017 (Incorporated by reference to Exhibit 4.2 to Real Goods Solar's Amendment No. 1 Current Report on Form 8-K/A filed February 15, 2017 (Commission File No. 001-34044)).</a>
4.28	<a href="#">Placement Agency Warrant, dated February 9, 2017, issued to Roth Capital Partners, LLC (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Amendment No. 1 Current Report on Form 8-K/A filed February 15, 2017 (Commission File No. 001-34044)).</a>
10.1*	<a href="#">Form of Real Goods Solar, Inc. Employee Stock Option Agreement (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Amendment No. 1 to Registration Statement on Form S-1 filed March 28, 2008 (Commission File No. 333-149092)).</a>
10.2*	<a href="#">Amended and Restated Real Goods Solar, Inc. 2008 Long-Term Incentive Plan (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed February 12, 2018 (Commission File No. 001-34044)).</a>
10.3	<a href="#">Tax Sharing and Indemnification Agreement between Real Goods Solar, Inc. and Gaiam, Inc. (Incorporated by reference to Exhibit 10.7 to Real Goods Solar's Amendment No. 3 to Registration Statement on Form S-1 filed April 17, 2008 (Commission File No. 333-149092)).</a>
10.5	<a href="#">Shareholders Agreement, dated December 19, 2011, between Real Goods Solar, Inc. and Riverside Renewable Energy Investments, LLC (Incorporated by reference to Exhibit 10.4 to Real Goods Solar's Current Report on Form 8-K filed December 21, 2011 (Commission File No. 001-34044)).</a>
10.7	<a href="#">First Amendment to Tax Sharing Agreement, dated December 19, 2011, between Real Goods Solar, Inc. and Gaiam, Inc. (Incorporated by reference to Exhibit 10.17 to Real Goods Solar's Annual Report on Form 10-K filed April 1, 2013 (Commission File No. 001-34044)).</a>
10.13	<a href="#">Securities Purchase Agreement, dated May 24, 2013, among Real Goods Solar, Inc. and the investors thereunder (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed May 24, 2013 (Commission File No. 001-34044)).</a>
10.19	<a href="#">Securities Purchase Agreement, dated July 2, 2014, among Real Goods Solar, Inc. and the investors thereunder (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed July 3, 2014 (Commission File No. 001-34044)).</a>
10.20	<a href="#">Form of Registration Rights Agreement, dated July 9, 2014, among Real Goods Solar, Inc. and the investors under the Securities Purchase Agreement, dated July 2, 2014, among Real Goods Solar, Inc. and such investors (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Current Report on Form 8-K filed July 3, 2014 (Commission File No. 001-34044)).</a>
10.24	<a href="#">Placement Agency Agreement, dated February 23, 2015, between Real Goods Solar, Inc. and WestPark Capital, Inc. (Incorporated by reference to Exhibit 1.1 to Real Goods Solar's Current Report on Form 8-K filed February 24, 2015 (Commission File No. 001-34044)).</a>
10.25	<a href="#">Form of Securities Purchase Agreement, dated February 23, 2015, among Real Goods Solar, Inc. and the investors thereunder (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed February 24, 2015 (Commission File No. 001-34044)).</a>

Exhibit No.	Description
10.31*	<a href="#"><u>Employment Agreement, dated June 1, 2015, between Real Goods Solar, Inc. and Dennis Lacey (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed June 3, 2015 (Commission File No. 001-34044)).</u></a>
10.32*	<a href="#"><u>Form of Employee Stock Option Agreement (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Current Report on Form 8-K filed June 3, 2015 (Commission File No. 001-34044)).</u></a>
10.34	<a href="#"><u>Placement Agency Agreement, dated June 25, 2015, between Real Goods Solar, Inc. and WestPark Capital, Inc. (Incorporated by reference to Exhibit 1.1 to Real Goods Solar's Current Report on Form 8-K filed June 26, 2015 (Commission File No. 001-34044)).</u></a>
10.36	<a href="#"><u>Form of Securities Purchase Agreement, dated June 25, 2015, among Real Goods Solar, Inc. and the investors party thereto (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed June 26, 2015 (Commission File No. 001-34044)).</u></a>
10.39	<a href="#"><u>Amended and Restated Loan and Security Agreement, dated March 30, 2016, among Real Goods Solar, Inc., RGS Financing, Inc., Real Goods Energy Tech, Inc., Alteris Renewables, Inc., Real Goods Syndicated, Inc., Mercury Energy, Inc., Real Goods Solar, Inc. – Mercury Solar, Elemental Energy, LLC, Sunetric Management LLC and Solar Solutions and Distribution, LLC (Incorporated by reference to Exhibit 10.3 to Real Goods Solar's Quarterly Report on Form 10-Q filed May 12, 2016 (Commission File No. 001-34044)).</u></a>
10.40	<a href="#"><u>Securities Purchase Agreement, dated April 1, 2016, among Real Goods Solar, Inc. and the investors party thereto (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed April 1, 2016 (Commission File No. 001-34044)).</u></a>
10.41	<a href="#"><u>Registration Rights Agreement, dated April 1, 2016, among Real Goods Solar, Inc. and the investors party thereto (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Current Report on Form 8-K filed April 1, 2016 (Commission File No. 001-34044)).</u></a>
10.42	<a href="#"><u>Form of Deposit Account Control Agreement, dated April 1, 2016, among Real Goods Solar, Inc., Bank of Hawaii and the investors party thereto (Incorporated by reference to Exhibit 10.3 to Real Goods Solar's Current Report on Form 8-K filed April 1, 2016 (Commission File No. 001-34044)).</u></a>
10.43	<a href="#"><u>Voting Agreement, dated April 1, 2016, between Real Goods Solar, Inc. and Riverside Renewable Energy Investments, LLC (Incorporated by reference to Exhibit 10.4 to Real Goods Solar's Current Report on Form 8-K filed April 1, 2016 (Commission File No. 001-34044)).</u></a>
10.47	<a href="#"><u>Argonaut Insurance Company General Indemnity Agreement, made as of April 20, 2009, by and among Argonaut Insurance Company, Gaiam, Inc., Real Goods Solar, Inc. and Regrid Power, Inc. (Incorporated by reference to Exhibit 10.8 to Real Goods Solar's Quarterly Report on Form 10-Q filed August 22, 2016 (Commission File No. 001-34044)).</u></a>
10.48	<a href="#"><u>Final Acceptance Payment and Performance Bond, made as of February 15, 2013, by and among Argonaut Insurance Company, Real Goods Energy Tech, Inc. and GASNA 14P, LLC (Incorporated by reference to Exhibit 10.9 to Real Goods Solar's Quarterly Report on Form 10-Q filed August 22, 2016 (Commission File No. 001-34044)).</u></a>
10.49	<a href="#"><u>Continuation Certificate issued by Argonaut Insurance Company on October 13, 2015 (Incorporated by reference to Exhibit 10.10 to Real Goods Solar's Quarterly Report on Form 10-Q filed August 22, 2016 (Commission File No. 001-34044)).</u></a>
10.51	<a href="#"><u>Underwriting Agreement, dated September 9, 2016, between Real Goods Solar, Inc., Roth Capital Partners, LLC and WestPark Capital, Inc. (Incorporated by reference to Exhibit 1.1 to Real Goods Solar's Current Report on Form 8-K filed September 13, 2016 (Commission File No. 001-34044)).</u></a>
10.52	<a href="#"><u>Form of Lock-Up Agreement, dated September 14, 2016, entered into by each of the directors, officers, and Riverside Renewable Energy Investments, LLP, in connection with the September 14, 2016 public unit offering (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed September 13, 2016 (Commission File No. 001-34044)).</u></a>
10.53	<a href="#"><u>Placement Agency Agreement, dated December 8, 2016, among Real Goods Solar, Inc., Roth Capital Partners, LLC and WestPark Capital, Inc. (Incorporated by reference to Exhibit 1.1 to Real Goods Solar's Current Report on Form 8-K filed December 13, 2016 (Commission File No. 001-34044)).</u></a>

<b>Exhibit No.</b>	<b>Description</b>
<a href="#">10.54</a>	<a href="#">Form of Securities Purchase Agreement, dated December 8, 2016, among Real Goods Solar, Inc. and the purchasers party thereto (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed December 13, 2016 (Commission File No. 001-34044)).</a>
<a href="#">10.55</a>	<a href="#">Form of Leak-Out Agreement, dated December 8, 2016, entered into by \$10,000 or greater investors party to the Securities Purchase Agreement, dated December 8, 2016 (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Current Report on Form 8-K filed December 13, 2016 (Commission File No. 001-34044)).</a>
<a href="#">10.56</a>	<a href="#">Form of Amendment to Securities Purchase Agreement, dated December 12, 2016, among Real Goods Solar, Inc. and the purchasers party thereto (Incorporated by reference to Exhibit 10.3 to Real Goods Solar's Current Report on Form 8-K filed December 13, 2016 (Commission File No. 001-34044)).</a>
<a href="#">10.57</a>	<a href="#">Placement Agency Agreement, dated February 1, 2017, between Real Goods Solar, Inc. and Roth Capital Partners, LLC (Incorporated by reference to Exhibit 1.1 to Real Goods Solar's Current Report on Form 8-K filed February 2, 2017 (Commission File No. 001-34044)).</a>
<a href="#">10.58</a>	<a href="#">Form of Securities Purchase Agreement, dated February 1, 2017, among Real Goods Solar, Inc. and the purchasers party thereto (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed February 2, 2017 (Commission File No. 001-34044)).</a>
<a href="#">10.59</a>	<a href="#">Form of Leak-Out Agreement, dated February 1, 2017, among Real Goods Solar, Inc. and certain purchasers party to the Securities Purchase Agreement, dated February 1, 2017 (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Current Report on Form 8-K filed February 2, 2017 (Commission File No. 001-34044)).</a>
<a href="#">10.60</a>	<a href="#">Placement Agency Agreement, dated February 7, 2017, between Real Goods Solar, Inc. and Roth Capital Partners, LLC (Incorporated by reference to Exhibit 1.1 to Real Goods Solar's Current Report on Form 8-K filed February 8, 2017 (Commission File No. 001-34044)).</a>
<a href="#">10.61</a>	<a href="#">Form of Securities Purchase Agreement, dated February 7, 2017, among Real Goods Solar, Inc. and the purchasers party thereto (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Amendment No. 1 Current Report on Form 8-K/A filed February 15, 2017 (Commission File No. 001-34044)).</a>
<a href="#">10.62</a>	<a href="#">Form of Leak-Out Agreement, dated February 7, 2017, among Real Goods Solar, Inc. and certain purchasers party to the Securities Purchase Agreement, dated February 7, 2017 (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Current Report on Form 8-K filed February 8, 2017 (Commission File No. 001-34044)).</a>
<a href="#">10.63</a>	<a href="#">Master Services Agreement, dated May 23, 2017, between Real Goods Solar, Inc. and Mobomo, LLC (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Quarterly Report on Form 10-Q filed August 14, 2017 (Commission File No. 001-34044)).</a>
<a href="#">10.64</a>	<a href="#">Statement of Work, dated May 24, 2017, between Real Goods Solar, Inc. and Mobomo, LLC (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Quarterly Report on Form 10-Q filed August 14, 2017 (Commission File No. 001-34044)).</a>
<a href="#">10.65</a>	<a href="#">Technology License Agreement, dated September 29, 2017, by and between Real Goods Solar, Inc. and Dow Global Technologies LLC (Incorporated by reference to Exhibit 10.1 to Real Goods Solar, Inc.'s Current Report on Form 8-K filed October 4, 2017 (Commission File No. 001-34044)).</a>
<a href="#">10.66</a>	<a href="#">Engagement Agreement, dated December 13, 2017, among Real Goods Solar, Inc. and WestPark Capital, Inc. (Incorporated by reference to Exhibit 1.1 to Real Goods Solar, Inc.'s Current Report on Form 8-K filed January 2, 2018 (Commission File No. 001-34044)).</a>
<a href="#">21.1</a>	<a href="#">Subsidiaries of the Registrant (filed herewith)</a>
<a href="#">23.1</a>	<a href="#">Consent of Moss Adams LLP (filed herewith)</a>
<a href="#">23.2</a>	<a href="#">Consent of Hein &amp; Associates LLP (filed herewith)</a>

<b>Exhibit No.</b>	<b>Description</b>
<a href="#">31.1</a>	<a href="#">Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934 (filed herewith)</a>
<a href="#">31.2</a>	<a href="#">Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934 (filed herewith)</a>
<a href="#">32.1</a>	<a href="#">Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)</a>
<a href="#">32.2</a>	<a href="#">Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)</a>
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

\* Indicates management contract or compensatory plan or arrangement.

+ This exhibit excludes schedules and exhibits pursuant to Item 601(b)(2) of Regulation S-K, which the registrant agrees to furnish supplementally to the Securities and Exchange Commission upon request by the Commission.

**Item 16. Form 10-K Summary.**

None.

## SIGNATURES

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

Real Goods Solar, Inc.

/s/ Dennis Lacey

By: Dennis Lacey  
Chief Executive Officer and Director  
(Principal Executive Officer)

April 2, 2018

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Ian Bowles</u> Ian Bowles	Chairman of the Board	April 2, 2018
<u>/s/ Dennis Lacey</u> Dennis Lacey	Chief Executive Officer and Director (Principal Executive Officer)	April 2, 2018
<u>/s/ Pavel Bouska</u> Pavel Bouska	Director	April 2, 2018
<u>/s/ Alan Fine</u> Alan Fine	Chief Financial Officer and Treasurer	April 2, 2018
<u>/s/ Nicolle Dorsey</u> Nicolle Dorsey	Principal Accounting Officer and Controller	April 2, 2018
<u>/s/ Robert L. Scott</u> Robert L. Scott	Director	April 2, 2018

Real Goods Solar, Inc.

<b>Subsidiaries</b>	<b>State or Country of Incorporation or Registration</b>
Real Goods Energy Tech, Inc. (1)	Colorado
Alteris Renewables, Inc. (1)	Delaware
Real Goods Solar, Inc. – Mercury Solar (1)	New York
RGS Financing, Inc. (1)	Colorado
Elemental Energy, LLC (1)(2)	Hawaii
Mercury Energy, Inc. (1)	Delaware

(1) Owned by Real Goods Solar, Inc.

(2) Doing business as “Sunetric.”

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements (Form S-1 No. 333-211915, Forms S-3 Nos. 333-189500, 333-197766, 333-198238, 333-206271, 333-215985 and 333-218581, and Forms S-8 Nos. 333-153642, 333-186722, 333-193663, and 333-208106) of our report dated April 2, 2018, relating to the consolidated financial statements of Real Goods Solar, Inc. (which report expresses an unqualified opinion and includes an explanatory paragraph regarding going concern uncertainty), appearing in this Annual Report (Form 10-K) for the year ended December 31, 2017.

/s/ Moss Adams LLP

Denver, Colorado  
April 2, 2018

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in Registration Statements on Form S-1 (No. 333-211915), Forms S-3 (Nos. 333-189500, 333-197766, 333-198238, 333-206271, 333-215985 and 333-218581), and Forms S-8 (Nos. 333-153642, 333-186722, 333-193663, and 333-208106) of Real Goods Solar, Inc., of our report dated March 9, 2017 relating to our audits of the consolidated financial statements, which appears in this Annual Report on Form 10-K for the year ended December 31, 2017.

/s/Hein & Associates LLP

Denver, Colorado  
April 2, 2018

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## CERTIFICATION

I, Dennis Lacey, certify that:

1. I have reviewed this annual report on Form 10-K of Real Goods Solar, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 2, 2018

/s/ Dennis Lacey  
Dennis Lacey  
Chief Executive Officer  
(Principal Executive Officer)

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## CERTIFICATION

I, Alan Fine, certify that:

1. I have reviewed this annual report on Form 10-K of Real Goods Solar, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 2, 2018

/s/ Alan Fine

Alan Fine

Chief Financial Officer and Treasurer

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**CERTIFICATION OF CEO PURSUANT TO**

**18 U.S.C. SECTION 1350**

**As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the report of Real Goods Solar, Inc. (the "Company") on Form 10-K for the year ended December 31, 2017, as filed with the U.S. Securities and Exchange Commission on the date hereof (the "Report"), I, Dennis Lacey, Chief Executive Officer and acting Principal Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 2, 2018

/s/ Dennis Lacey  
Dennis Lacey  
Chief Executive Officer  
(Principal Executive Officer)

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**CERTIFICATION OF CFO PURSUANT TO**

**18 U.S.C. SECTION 1350**

**As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the report of Real Goods Solar, Inc. (the "Company") on Form 10-K for the year ended December 31, 2017, as filed with the U.S. Securities and Exchange Commission on the date hereof (the "Report"), I, Alan Fine, Principal Accounting Officer and Treasurer, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 2, 2018

/s/ Alan Fine

Alan Fine

Chief Financial Officer and Treasurer

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