

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, 2018

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 (1)</u>	<u>Name of Each Exchange on Which Registered</u>
Class A Common Stock, \$.0001 par value	None

Securities registered pursuant to section 12(g) of the Act: (1)  
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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes  No

Indicate by check mark 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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised 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 \$8,926,996 as of June 30, 2018, based upon the closing price on the Nasdaq Capital Market on June 29, 2018. The registrant does not have non-voting common equity.

As of April 10, 2019, 108,902,754 shares of the registrant's Class A common stock and no shares of the registrant's Class B common stock were outstanding.

(1) The Registrant's Class A Common Stock is currently registered pursuant to Section 12(b) of the Act. On March 12, 2019, The Nasdaq Stock Market LLC filed a Form 25-NSE with the Securities and Exchange Commission which delisted the Class A Common Stock from Nasdaq on March 22, 2019 and is expected to deregister the Class A Common Stock from Section 12(b) of the Act on June 10, 2019. The Registrant plans to register the Class A common stock under Section 12(g) of the Act before June 10, 2019.

---

---

---

---

REAL GOODS SOLAR, INC.

Annual Report on Form 10-K

For the Fiscal Year Ended December 31, 2018

INDEX

	<b>Page Number</b>
<b>PART I</b>	
<a href="#">Item 1. Business</a>	<a href="#">4</a>
<a href="#">Item 1A. Risk Factors</a>	<a href="#">10</a>
<a href="#">Item 1B. Unresolved Staff Comments</a>	<a href="#">19</a>
<a href="#">Item 2. Properties</a>	<a href="#">19</a>
<a href="#">Item 3. Legal Proceedings</a>	<a href="#">19</a>
<a href="#">Item 4. Mine Safety Disclosures</a>	<a href="#">19</a>
<b>PART II</b>	
<a href="#">Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</a>	<a href="#">19</a>
<a href="#">Item 6. Selected Consolidated Financial Data</a>	<a href="#">20</a>
<a href="#">Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations</a>	<a href="#">20</a>
<a href="#">Item 7A. Quantitative and Qualitative Disclosures About Market Risk</a>	<a href="#">29</a>
<a href="#">Item 8. Financial Statements</a>	<a href="#">30</a>
<a href="#">Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</a>	<a href="#">55</a>
<a href="#">Item 9A. Controls and Procedures</a>	<a href="#">55</a>
<a href="#">Item 9B. Other Information</a>	<a href="#">55</a>
<b>PART III</b>	
<a href="#">Item 10. Directors, Executive Officers and Corporate Governance</a>	<a href="#">56</a>
<a href="#">Item 11. Executive Compensation</a>	<a href="#">59</a>
<a href="#">Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</a>	<a href="#">64</a>
<a href="#">Item 13. Certain Relationships and Related Transactions, and Director Independence</a>	<a href="#">65</a>
<a href="#">Item 14. Principal Accountant Fees and Services</a>	<a href="#">66</a>
<b>PART IV</b>	
<a href="#">Item 15. Exhibits and Financial Statement Schedules</a>	<a href="#">67</a>
<a href="#">Item 16. Form 10-K Summary</a>	<a href="#">74</a>
<b>SIGNATURES</b>	<a href="#">75</a>

### **CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS**

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties, including statements regarding the Company's results of operations and financial positions, and the Company's business and financial strategies. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they provide our current beliefs, expectations, assumptions and forecasts about future events, and include statements regarding our future results of operations and financial position, business strategy, budgets, projected costs, plans and objectives of management for future operations. The words "anticipate," "believe," "plan," "estimate," "expect," "future," "intend," "strategy," "likely," "seek," "may," "will" and similar expressions as they relate to us are intended to identify such forward-looking statements. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. Therefore, you should not rely on any of these forward-looking statements.

Important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements include, without limitation, the factors discussed throughout Part I, Item 1A, Risk Factors and Part II, Item 7, Management's Discussion and Analysis of Financial Conditions and Results of Operations of this Annual Report on Form 10-K.

Any forward-looking statement made by us in this Annual Report on Form 10-K is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise, except as required by applicable law.

## Part I

### Item 1. Business.

#### Overview

RGS Energy and its subsidiaries (“RGS”, “we,” “us,” or the “Company”) have provided solar energy systems to homeowners, and commercial building owners in the United States since 1978. 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.

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 has been developed with traditional silicon solar cells to increase solar production and to provide a competitive consumer price point. On November 2, 2018 we received United Laboratories (“UL”) certification for POWERHOUSE™ 3.0 and began to commercialize the product in North America. We have engaged third-party manufacturers for production and distribution logistics and to provide services to the home building and roofing industries.

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 15. 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.

#### Recent Developments

The Nasdaq Stock Market LLC suspended trading of our Class A common stock on February 15, 2019 and filed a Form 25-NSE with the Securities and Exchange Commission on March 12, 2019, which delisted the Class A common stock from Nasdaq at the opening of the trading session on March 22, 2019 and is expected to deregister the Class A Common Stock from Section 12(b) of the Act on June 10, 2019.

On March 7, 2019, we announced we had commenced a process to explore strategic alternatives focusing on maximizing shareholder value. Strategic alternatives to consider may include, among others, a sale of the Company, a business combination such as a merger with another party, or a strategic investment financing which would allow the Company to continue its current business plan of commercializing POWERHOUSE™ solar shingles. We have not set a timeline for this process and there can be no assurance that the strategic alternatives review process will result in a transaction or other strategic change or outcome. We do not expect to discuss or disclose further developments regarding the strategic alternatives review process unless and until our Board of Directors has approved a specific course of action or we have otherwise determined that further disclosure is appropriate or required by law.

On March 27, 2019, our Board of Directors determined to exit our mainland residential solar business to focus on the POWERHOUSE™ in-roof shingle market and reduce overall cash outflow, with the goal of maximizing future shareholder value. We believe this structure and realignment enables us to effectively manage our operations and resources. This realignment is expected to result in the reduction of workforce payroll plus burden of approximately \$4.0 million annually. Revenues and net loss in 2018 for the mainland residential solar business were approximately \$8.9 million and \$6.3 million, respectively. In order for us to convert our existing backlog to revenue, we plan to use authorized integrators to complete installations throughout the remainder of 2019.

As previously reported on Form 8-K filed April 4, 2019, on April 2, 2019, we closed a registered offering in which we issued and sold (i) 15,938,280 shares of Class A common stock, (ii) prepaid Series S Warrants to purchase 1,430,141 shares of Class A common stock and (iii) Series R Warrants to purchase 17,368,421 shares of Class A common stock pursuant to the terms of the Securities Purchase Agreement dated April 2, 2019 between us and three institutional and accredited investors. The investors paid \$0.19 per share of Class A common stock and \$0.18 per share of Class A common stock underlying the Series S Warrant for aggregate gross proceeds of \$3.3 million at the closing and before \$0.35 million of expenses.

#### 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. We plan to sell the product directly to homebuilders and develop a network of authorized roofers. We have started to market POWERHOUSE™ 3.0 in the United States and hope to expand internationally in the future.

We believe that as we have just started manufacturing and marketing POWERHOUSE™, it will take us several quarters to commercialize this new product and achieve a balance between customer demand and the manufacturing production by our contract supply chain. We believe that we will require time to build brand awareness for this new product and, accordingly, we expect our sales to begin slowly and grow in future periods.

- *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 enter new markets. We plan to expand into new states of operation in 2019. 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 and others 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 what we believe is a better and more engaging customer experience.

### **Our Competitive Strengths**

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

Historically, we believe our customers select us because:

- *We have been in the solar industry for over 40 years.*
- *Flexible menu of product financing options.* Our customers can utilize cash, loans, and third-party ownership agreements, such as leasing and power purchase agreements, to acquire our products.
- *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.

### **Description of our Product and Services**

We had two operating divisions as of the end of 2018: (i) POWERHOUSE™ and (ii) Solar Division.

*POWERHOUSE™:* On September 29, 2017, we executed the License with Dow, to commercialize POWERHOUSE™ 3.0. Under the terms of the License, we have exclusive world-wide rights through 2034, the expiration of Dow's applicable patents. The License requires that we obtain United Laboratories ("UL") certification to commercialize and sell a minimum of 50 megawatts of solar within 5-years after obtaining UL certification to retain exclusive world-wide rights, a requirement we believe is achievable. We obtained UL certification on November 2, 2018. We have entered into third-party manufacturing agreements with suppliers and have begun to market POWERHOUSE™ solar shingles to a network of new home builders and roofers.

*Solar Division:* The Solar Division performs installations of residential and commercial solar systems in the continental United States (also referred to as "Mainland") and in Hawaii, doing business as Sunetric. We 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 2018 was approximately 8.7 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 system 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™*: Our 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 is the equivalent of the photovoltaic module and racking of a traditional solar energy installation. We do not install these systems. Instead, we manufacture the solar shingle for distribution to our targeted customers.

*Solar Division*: The Solar Division sells and installs traditional modules and racking photovoltaic solar energy systems. We do not manufacture any of these components. We purchase all components from the manufacturer or their distributors.

### *Warranty Terms*

*POWERHOUSE™*: We 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 home builder 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.

*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 make available to our *POWERHOUSE™* local roofing company customers a business-to-business lender to finance their purchases from us.

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

Our targeted customers for our POWERHOUSE™ in-roof solar shingle include (i) homeowners, (ii) local roofing companies, (iii) solar installation companies, (iv) custom homebuilders and (v) mass market homebuilders. We utilize our call center to contact customers in our geographic markets. We offer additional services, such as marketing support, referrals and on-site training to roofing companies that complete our requirements for becoming a POWERHOUSE™ Professional.

We have and plan to continue to make marketing expenditures to develop brand name recognition for POWERHOUSE™. Our marketing has to-date included digital marketing, attendance at trade shows and expos, and we have arranged for television presentations.

In the Solar Division, we have trained our residential and commercial 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** – We employ an outside commercial sales force in the east coast markets and Hawaii to generate new business and complete sales orders. Effective March 1, 2018, we completed a realignment of our sales teams resulting in the elimination of our east coast residential sales force.
- **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. To align our business with marketplace, and our sales teams with the consumer, we continue to expand our online market presence.

## Customers

**POWERHOUSE™:** Our customers will include homeowners, new homebuilders, engineering, procurement and construction ("EPC") solar companies and roofers in the re-roof market. We estimate there are approximately 7 million re-roofs and new home construction 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. Oftentimes, 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 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 are produced by a manufacturer located in China and shipped to our U.S. based manufacturer of the baseplate for assembly into a solar shingle. The solar shingle is then shipped to our third-party logistics provider to warehouse and distribute kitted systems 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.



## Competition

*POWERHOUSE™*: The Dow Chemical Company developed the *POWERHOUSE™* solar shingle and holds various related worldwide patents. Since we obtained the exclusive License 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 Tesla, Inc., Suntegra and CertainTeed, whom we compete with on market penetration, price and aesthetics. We believe we compete favorably with these companies.

*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.

Other sources of competition are other solar energy system providers such as Tesla, Inc., Vivint Solar Inc., Sunrun Inc., Sungevity, Inc., and many others. These companies may offer products that are similar to our solar energy systems, and we primarily compete with these companies based on price. We believe that we compete favorably with these companies.

## Regulations

*POWERHOUSE™*: We will have to maintain compliance with UL standards on *POWERHOUSE™* 3.0 solar shingles and on any future new product 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, 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 energy 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 have offered 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 most recent 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. The SREC II program was ultimately extended until November 26, 2018, at which point the first applications for SMART were accepted. The first SMART incentive allocations began January 15, 2019.

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 photovoltaic modules under Section 201 of the Trade Act of 1974, unless specifically excluded. The 30% tariff declines 5% per year over the four-year term of the tariff. 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.

As we have just begun to market POWERHOUSE™ in-roof shingles, we do not have historical experience to assess seasonality for this line of business.

### **Employees**

As of April 10, 2019, we had approximately 70 total and full-time employees. None of our employees are represented by a labor union or subject to a collective bargaining agreement.

### **Offerings**

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 unaffiliated institutional and accredited investor. The purchase price was \$1.15 per share of Class A common stock. 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 Notes 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. As of December 31, 2018, the 2018 Notes Offering has resulted in our issuing 82 million shares of Class A common stock in exchange for gross proceeds of \$18.6 million, before placement agent fees and other expenses associated with the 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 it is uncertain when, or if, we may be able to achieve or sustain future profitability. If we do not become profitable on an ongoing basis, we may be unable to continue our operations.*

We have incurred net losses and have an accumulated deficit of \$243 million as of December 31, 2018. If we cannot improve our operating results and ultimately generate net income, we may be unable to continue our operations in the future.

Our financial statements as of December 31, 2018 were prepared under the assumption that we will continue as a going concern. The independent registered public accounting firm that audited our 2018 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. Management also concluded that substantial doubt exists in our ability to continue as a going concern, and 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 successfully commercialize POWERHOUSE™ or increase our sales, installations and revenue in order to achieve our goal of operating profitability.*

Our current levels of sales, installations and revenue are insufficient for profitable operations. We believe we must commercialize POWERHOUSE™ 3.0, the principle component of our revenue growth strategy, to achieve our goal of operating profitably. Alternatively, we must increase our sales, installations and revenue in our Solar Division to achieve our goal of operating profitably. If we are unsuccessful in executing these plans, we will be unable to increase revenue and will not achieve our goal of operating profitability.

*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.

*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.

*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 solar panels, cells, inverters, batteries or other products related to our business.*

During 2018, the United States and China each imposed new tariffs on various products imported from the other country. The U.S. tariffs include an additional 25% tariff on solar panels and cells that are manufactured in China and a tariff on inverters, certain batteries and other electrical equipment currently set at 25% effective January 1, 2019. The United States also has, from time to time, imposed, or announced tariffs on goods imported from other countries we use in our business. We cannot predict what actions may ultimately be taken with respect to tariffs or trade relations between the United States and other countries, what products may be subject to such actions, or what actions may be taken by the other countries in retaliation. The adoption and expansion of trade restrictions, the occurrence of a trade war, or other governmental action related to tariffs or trade agreements or policies has the potential to adversely impact our supply chain, our costs, our suppliers, and the U.S. economy, which could in turn adversely affect our business, financial condition and results of operation.

*An increase in our cost of materials could arise as a result of changes in the price of oil and the foreign currency exchange rate for Chinese yuan.*

The baseplate of our POWERHOUSE™ in-roof solar shingle is plastic and, accordingly, changes in the price of oil will affect our cost of this material. Currently, we purchase the solar laminate for our POWERHOUSE™ in-roof solar shingle from a Chinese manufacturer, and, accordingly, changes in the Chinese yuan versus the US Dollar will affect our cost of this material.

*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.

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.

*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 customer 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.

*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 historically have experienced 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 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:

- The adequacy of, and access to, capital necessary to commercialize POWERHOUSE™ 3.0;
- Our ability to satisfy the conditions and our obligations under the License;
- Our ability to grow a nationwide network of local roofers and solar installers to purchase POWERHOUSE™ solar shingles;
- Our ability to contract with homebuilders to purchase POWERHOUSE™ solar shingles for their communities;
- 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 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.

*Our License with Dow for the exclusive use of the POWERHOUSE™ trademark name is subject to our selling of 50 megawatts of POWERHOUSE™ 3.0 in-roof shingle within the first 5 years and failure to do so could adversely affect our business, financial condition and results of operation.*

If we do not sell 50 megawatts of POWERHOUSE™ 3.0 in-roof shingles during the first 5 years after obtaining UL certification, Dow has the right to amend the License to be non-exclusive. If that were to happen, Dow would be allowed to grant rights to others to sell POWERHOUSE™ 3.0 in-roof solar shingles and use associated intellectual property, thereby increasing competition, which could adversely affect our business, financial condition and results of operation.

*Our Solar Division operates in a highly competitive market with low barriers to entry and, accordingly, 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 Solar Division's 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.

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

We currently derive the vast majority of our Solar Division revenue from the sale of solar energy systems in east coast states. 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. We intend to expand our Solar Division into new states of operation. Any geographic expansion efforts that we may make may not be successful, which would limit our growth opportunities.

*Our Board of Directors has concluded that we will exit our mainland residential business and we may not generate the cost savings we expect.*

On March 27, 2019, our Board of Directors determined to exit our mainland residential solar business to focus on the POWERHOUSE™ in-roof shingle market and reduce overall cash outflow. This realignment is expected to result in the reduction of workforce payroll plus burden of approximately \$4.0 million annually. Revenues and net loss in 2018 for the mainland residential solar business were approximately \$8.9 million and \$6.3 million, respectively. In order for us to convert our existing backlog to revenue, we plan to use authorized integrators to complete installations throughout the remainder of 2019. These projected cost savings may not be attained, and we may not be successful at converting our existing backlog into revenue utilizing authorized integrators.

*Our Solar Division installs 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.

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

Many of our Solar Division customers, and prospective customers of our POWERHOUSE™ roofers and homebuilders, depend on loan 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 financing sources increase their fees or interest rates, the 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 in our Solar Division and we expect that prospective customers of our POWERHOUSE™ roofers similarly will rely on third parties to finance their purchases.

*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.

*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.



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

Our currently standard manufacturing warranty for our POWERHOUSE™ 3.0 solar shingles comes with an 11-year product warranty, which is the standard product warranty of most traditional solar panels today, and a 24-year power production warranty.

Our Solar Division provides warranties for workmanship and, in certain cases, in energy production and, accordingly 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.

*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 POWERHOUSE™ in-roof solar shingles and 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.

*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.

*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.

*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. 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.

*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.

*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.

*While we are exploring and evaluating strategic alternatives, we may not be successful in identifying or completing any strategic alternative and any such strategic alternative may not yield additional value for shareholders.*

On March 7, 2019, we announced that we had commenced a review of strategic alternatives which could result in, among other things, the possible sale of the Company. Our exploration of strategic alternatives may not result in the identification or consummation of any transaction. In addition, we may incur substantial expenses associated with identifying and evaluating potential strategic alternatives. The process of exploring strategic alternatives may be time consuming and disruptive to our business operations, and if we are unable to effectively manage the process, our business, financial condition and results of operations could be adversely affected. Any potential transaction and the related valuation would be dependent upon a number of factors that may be beyond our control, including, among other factors, market conditions, industry trends, the interest of third parties in our business and the availability of financing to potential buyers on reasonable terms.

#### **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;
- short-term investment in our Class A common stock by investors;
- 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.

*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 April 10, 2019, there were an aggregate of approximately 29 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 adjustment in the future.

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.

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.

*Our common stock could become subject to the Securities and Exchange Commission's "penny stock" regulations, which may limit the liquidity of Class A common stock held by our shareholders.*

The SEC has adopted regulations which generally define a "penny stock" to be an equity security that has a market price of less than \$5.00 per share, subject to specific exemptions. Based on our Class A common stock's trading price below \$5.00 per share, if we are unable in the future to continue to satisfy an available exemption from the definition of "penny stock", then our Class A common stock would be considered a penny stock for purposes of federal securities laws. Penny stock is subject to regulations, which affect the ability of broker-dealers to sell such securities. Broker-dealers who recommend a penny stock to persons (other than established customers and accredited investors) must make a special written suitability determination and receive the purchaser's written agreement to a transaction prior to sale.

If penny stock regulations apply to our Class A common stock, it may be difficult to trade the stock because compliance with the regulations can delay and/or preclude certain trading transactions. Broker-dealers could be discouraged from effecting transactions in our Class A common stock if penny stock regulations apply because of the sales practice and disclosure requirements. This could adversely affect the liquidity or price of our Class A common stock and impede the sale of the Class A common stock in the secondary market.

*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.

*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 and the Securities and Exchange Commission, 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.

**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:

<u>Primary Locations</u>	<u>Size (sq. ft.)</u>	<u>Use</u>	<u>Lease Expiration</u>	<u>Business Segment</u>
Denver, CO	12,477	Corporate Headquarters	May-22	All
Bloomfield, CT	10,450	Office and warehouse	Nov-19	Solar Division
Kailua, HI	10,000	Office and warehouse	Dec-19	Solar Division

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.**

**Market Information and Holders**

Effective February 15, 2019, our Class A common stock was quoted on the OTCQX® Markets Group under the symbol "RGSE." Any over-the-counter market quotations reflect inter-dealer prices, without retail mark-up, mark-down or commissions and may not necessarily represent actual transactions. Prior to such date, our Class A common stock traded on the Nasdaq Capital Market under the same symbol.

On April 10, 2019, we had 89 shareholders of record and 108,902,754 shares of \$.0001 par value Class A common stock and zero shares of \$.0001 par value Class B common stock outstanding.

**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.

**Sale of Unregistered Securities**

As previously reported, on April 9, 2018, we issued an aggregate of \$10.75 million in principal amount and \$10 million funding amount (reflecting an original issue discount of \$750,000) of Series A senior convertible notes due April 9, 2019 (the "Series A Notes"), Series B senior secured convertible notes due April 9, 2019 (the "Series B Notes") and Series Q Warrants to purchase 9,270,457 shares of Class A common stock. The Company previously reported the conversion and exercise features, as applicable, and the terms of the 2018 Notes and the Series Q Warrants in its Current Reports on Form 8-K filed on April 2, 2018, April 10, 2018 and August 29, 2018, and these descriptions are incorporated herein by reference.

Between April 9, 2018 and July 8, 2018, (i) the holders of the Series A Notes converted (a) an aggregate principal amount of \$5,670,500 into 4,500,397 shares of Class A common stock, (b) an aggregate Additional Amount (as defined in the Series A Notes) of \$7,514,525 into 5,963,958 shares of Class A common stock, in each case at a conversion price of \$1.26 per share, (ii) the holders of the Series B Notes converted an aggregate principal amount of \$600,000 into 476,190 shares of the Class A common stock, and (iii) the holders of Series Q Warrants exercised warrants for 7,100,000 shares of Class A common stock at an exercise price of \$1.12 per share.

Between July 19, 2018 and August 26, 2018, (i) the holders of the Series A Notes converted (a) an aggregate principal amount of \$22,700 into 47,341 shares of Class A common stock, (b) an aggregate Additional Amount (as defined in the Series A Notes) of \$5,868,724 into 8,493,108 shares of Class A common stock, (c) an aggregate Original Issue Discount (as defined in the Series A Notes) of \$25,943 into 80,493 shares of Class A common stock, in each case at a conversion price of \$0.3223 per share, (ii) the holders of the Series B Notes converted (a) an aggregate principal amount of \$252,956 into 770,992 shares of the Class A common stock, (b) an aggregate Additional True-Up Amount (as defined in the Series B Notes) of \$2,661,962 into 7,072,505 shares of Class A common stock, in each case at a conversion price of \$0.3223 per share, and (iii) the holders of Series Q Warrants exercised warrants for 291,667 shares of Class A common stock at an exercise price of \$0.3223 per share.

Between August 27, 2018 and December 31, 2018, (i) the holders of the Series A Notes converted (a) an aggregate principal amount of \$33,525 into 109,309 shares of Class A common stock, (b) an aggregate Additional Amount (as defined in the Series A Notes) of \$5,205,994 into 16,974,335 shares of Class A common stock, (c) an aggregate Original Issue Discount (as defined in the Series A Notes) of \$482,707 into 1,573,872 shares of Class A common stock in each case at a conversion price of \$0.3067 per share, (ii) the holders of the Series B Notes converted (a) an aggregate principal amount of \$3,937,544 into 12,838,422 shares of the Class A common stock, (b) an aggregate Additional True-Up Amount (as defined in the Series B Notes) of \$4,270,859 into 13,925,200 shares of Class A common stock, in each case at a conversion price of \$0.3067 per share, and (iii) the holders of Series Q Warrants exercised warrants for 1,290,000 shares of Class A common stock at an exercise price of \$0.3223 per share.

As previously reported, the issuance of the shares of Class A common stock upon conversion of the 2018 Notes and exercise of the Series Q Warrants was exempt from registration under Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act"), and Securities Act Rule 506(b). The holders of the 2018 Notes and Series Q Warrants are sophisticated, accredited investors and acquired the securities for their own accounts for investment purposes. Further, the transaction documents pursuant to which the holders purchased the 2018 Notes and Series Q Warrants 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 2018 Notes or exercise of the Series Q Warrants, subject to the terms of the transaction documents.

All other sales of unregistered securities during 2018 were either registered or previously reported in our Current Reports on Form 8-K or Quarterly Reports on Form 10-Q.

#### **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 contain 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

For the last 40 years, we have been a residential and small business commercial solar EPC company. 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 the POWERHOUSE™ in-roof solar shingle, an innovative and aesthetically pleasing solar shingle system developed by Dow. During 2018, we received UL certification for POWERHOUSE™ 3.0 and manufactured our initial solar shingles during December 2018. We anticipate that in the future, the majority of our revenue will arise from sales of POWERHOUSE™ in-roof solar shingles to local roofing companies, solar installers and homebuilders.

We, including our predecessors, have more than 40 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.

We operate as three reportable segments: (1) Solar Division – the installation of solar energy systems for homeowners, including lease financing thereof, and small business commercial in the United States; (2) POWERHOUSE™ - the manufacturing and sales of solar shingles; and (3) Other – corporate operations. On March 27, 2019, our Board of Directors determined to exit its mainland residential solar business to focus on the POWERHOUSE™ in-roof shingle market and reduce overall cash outflow, with the goal of maximizing future shareholder value. We believe this structure and realignment enables us to effectively manage our operations and resources.

As an EPC, 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.

As manufacturer of POWERHOUSE™, we will recognize revenue upon shipment of materials related to customer purchase order fulfillment. During 2018, we established a supply chain to manufacture POWERHOUSE™. We also began building a nationwide network of local roofers and solar installers. We received our first purchase order from a customer on December 27, 2018 and shipped to the customer in January 2019.

### *POWERHOUSE™ License*

A material significant event occurred on September 29, 2017 (the “Effective Date”), when we executed the License with Dow, providing us an exclusive domestic and international right to commercialize the 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 version was developed with traditional silicon solar cells to increase solar production and to provide a competitive consumer price point.

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 allows us to market the POWERHOUSE™ 3.0 product using the Dow name.

Under the terms of the License, we will produce, market and sell POWERHOUSE™ 3.0, for which we paid a license fee of \$3 million along with a royalty fee equal to 2.5% against net sales of the POWERHOUSE™ product and services, payable quarterly in arrears. Further, we were responsible for all costs to obtain UL certification and we are responsible for the prosecution of all related patents world-wide, which may be offset against the payment of the royalty fee. During December 2018, we began commercialization of POWERHOUSE™ 3.0 entailing the manufacturing, marketing and sale of POWERHOUSE™ 3.0 to roofing companies.

As of December 31, 2018, we have invested approximately \$3.2 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 Mainland Residential Operations, Currently Our Largest EPC Operating Unit*

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 which is 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.

Our gross margin percentage on actual installations and with idle time decreased year over year in part due to a greater mix of small commercial projects in 2018 as compared to 2017, as these projects typically have lower margins than our residential installations. Additionally, a majority of indirect labor costs are fixed, which lowers the gross margin % with idle time when there is a decline in revenue as we experienced in 2018 vs. 2017.

	Twelve Months Ended	
	December 31, 2018	December 31, 2017
Gross margin percentage on actual installation time	21%	24%
Gross margin percentage including idle time	6%	13%

### 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 for our Solar Division for the years ended December 31, 2018 and December 31, 2017:

(in thousands)	Solar Division
Backlog at January 1, 2017	\$ 9,375
Bookings from new awards (“Sales”)	26,596
Cancellations and reductions on existing contracts	(9,206)
Amounts recognized in revenue upon installation	(14,000)
Backlog at December 31, 2017	12,765
Bookings from new awards (“Sales”)	26,744
Cancellations and reductions on existing contracts	(12,835)
Amounts recognized in revenue upon installation	(11,017)
Backlog at December 31, 2018	\$ 15,657

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, and (iii) delays to installing their system within their desired timeframe which are often a result of prolonged periods of time to receive local utility approval for installations. We determined that for optimum internal operations, and customer satisfaction, that a backlog equivalent to a few months of sales is optimal.

### Revenue Growth Strategy

Our plans to increase revenue include:

- Manufacture, market and sell the POWERHOUSE™ 3.0 to roofing companies, solar installers and 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;
- Expand our EPC operations to new states; and
- Expand our network of authorized third-party installers.

## Recent Developments

As of previously reported on Form 8-K filed February 8, 2019, we received a written notification from The Nasdaq Stock Market (“Nasdaq”) on February 6, 2019, that our Class A common stock would be suspended from trading on the Nasdaq Capital Market effective as of the open of business on February 15, 2019 as a result of failing to regain compliance with the \$1.00 per share minimum bid price requirement for continued inclusion on Nasdaq based on Listing Rule 5550(a)(2). As a result, we moved trading of our Class A common stock to the OTCQX® as of the open of trading on February 15, 2019.

On March 27, 2019, our Board of Directors determined to exit our mainland residential solar business to focus on the POWERHOUSE™ in-roof shingle market and reduce overall cash outflow, with the goal of maximizing future shareholder value. We believe this structure and realignment enables us to effectively manage our operations and resources. This realignment is expected to result in the reduction of workforce payroll plus burden of approximately \$4.0 million annually. Revenues and net loss in 2018 for the mainland residential solar business were approximately \$8.9 million and \$6.3 million, respectively. In order for us to convert our existing backlog to revenue, we plan to use authorized integrators to complete installations throughout the remainder of 2019.

## 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*

Effective January 1, 2018, we have adopted “Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 606 – *Revenue from Contracts with Customers* related to revenue recognition. Under the standard, revenue is recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services using a five-step model to achieve that principle. In addition, the standard requires disclosures to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. We have elected to adopt the modified retrospective method for transitioning this accounting standard which requires that the cumulative effect of applying the revenue standard to existing contracts be recorded as an adjustment to retained earnings. Based on our review of contracts that were not substantially completed on December 31, 2017, there was no impact to the opening retained earnings balance.

#### *Deferred Revenue*

When we receive consideration, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a sales contract, we record deferred revenue, which represents a contract liability. We recognize deferred revenue as net sales after we have satisfied our performance obligations to the customer and all revenue recognition criteria are met.

#### *Revenue Recognition – Installation of photovoltaic modules (“PV”) solar systems*

We use standard contract templates to initiate sales with customers and determined that each project started during the year ended December 31, 2018 contains one performance obligation. Although the contract states multiple services which are capable of being distinct, they are considered a single integrated output to the customer which is customized for each customer. As such all the services promised within a contract are considered one performance obligation. We recognize revenue for installation of PV solar systems over time following the transfer of control to the customer which typically occurs as the PV solar system is being installed. If control transfers over time, revenue is recognized based on the extent of progress towards the completion of the performance obligation. The method utilized by us to measure the progress towards completion requires judgment and is based on the products and services provided. We utilize the input method to measure the progress of our contracts because it best depicts the transfer of assets to the customer which incurs as materials are consumed by the project. The input method measures the progress towards completion based on the ratio of costs incurred to date (“actual cost”) to the total estimated costs (“budget”) at completion of performance obligation. Revenue, including estimated fees, are recorded proportionally as costs are incurred. Costs to fulfill include materials, labor and/or subcontractors’ costs, and other direct costs. Indirect costs and costs to procure the panels, inverters, and other system miscellaneous costs needed to satisfy the performance obligation are excluded since the customer does not gain control of those items until delivered to the site. Including the costs of those items would overstate the extent of our performance.

Each project's transaction price is included within the contract and although there is only one performance obligation, changes to the contract price could take place after fulfillment of the performance obligation. We have considered financing components on projects started during the year ended December 31, 2018 and elected the use of a practical expedient where an entity need not adjust the promised amount of consideration for the effects of a significant financing component if the entity expects, at contract inception, that the period between when the entity transfers a promised service to the customer and when the customer pays for that good or service will be one year or less. All receivables from projects are expected to be received within one year from project completion and there were no adjustments to the contract values.

Under ASC 606, we are required to recognize as an asset the incremental costs of obtaining a contract with a customer if those costs are expected to be recovered. We incur sales commissions that otherwise would not have been incurred if the contract had not been obtained. These costs are recoverable; however, we have elected the use of a practical expedient to expense these costs as incurred as the amortization period of the asset would be less than one year.

#### *Revenue Recognition – Operations & Maintenance*

We generally recognize revenue for standard, recurring commercial operations and maintenance services over time as customers receive and consume the benefits of such services, which typically include corrective maintenance, data hosting or energy/deck monitoring services for a period. These services are treated as stand-ready performance obligations and are satisfied evenly over the length of the agreement, so we have elected a time-based method to measure progress and recorded revenue using a straight-line method.

#### *Revenue Recognition – Service & Warranty*

Warranties for workmanship and roof penetration are included within each contract. These warranties cannot be purchased separately from the related services, are intended to safeguard the customer against workmanship defects and does not provide any incremental service to the customer. It is necessary for us to perform the specified tasks to provide assurance that the final product complies with agreed-upon specifications and likely do not give rise to a separate performance obligation. We will continue to account for any related warranties in accordance with ASC 460-10 and record an accrual for potential warranty costs at the completion of a project. Any services provided to a customer outside of warranties such as system inspections are recognized upon completion of the service.

#### *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 for our Solar Division segments 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 net realizable value. 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.

POWERHOUSE™ inventories are recorded at the lower of cost (incurred from third party supply channel manufacturers) or net realizable value. Cost is determined using the first-in, first-out method. Management will establish an estimated excess and obsolete inventory reserve based on slow-moving and obsolete inventory. At December 31, 2018, there was no excess and obsolete inventory reserve.

## Warranties

Currently, our standard manufacturing warranty for our POWERHOUSE™ solar shingle comes with a 11-year product warranty, which is the standard product warranty of most traditional solar panels today, and a 24-year power production warranty. We receive warranties from our supply chain matching the terms of the POWERHOUSE™ solar shingle warranty.

We warrant our EPC 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. We assess the accrued warranty reserve regularly and adjust the amounts as necessary based on actual experience and changes in future estimates.

## Goodwill and Purchased Intangibles

We review goodwill for impairment annually during the second quarter, or more frequently if a triggering event occurs between impairment testing dates. As a result of the annual impairment test, we fully impaired the goodwill balance charging an impairment loss to the consolidated statement of operations during the second quarter of 2018.

Up-front POWERHOUSE™ 3.0 license payments when incurred, costs to obtain UL certification and legal costs to acquire the License are initially capitalized and thereafter amortized to operations, commencing November 2018 after UL certification, on a straight-line basis over the expected life of the License through 2034.

## Common Stock Warrants

We account for common stock warrants in accordance with applicable accounting guidance provided in FASB ASC 480, *Liabilities – Distinguishing Liabilities from Equity*, as either liabilities or as equity instruments depending on the specific terms of the warrant agreement. Certain of our 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, event of default or failure to deliver shares. We classify these warrant liabilities on the Consolidated Balance Sheet as current or long-term liabilities based on their expiration date. They are revalued at each balance sheet date after their initial issuance with changes in the value recorded in earnings. The Company used a Monte Carlo pricing model to value these warrant liabilities. The Monte Carlo pricing model, which is based, in part, upon unobservable inputs for which there is little or no market data, requires the Company to develop its own assumptions. The assumptions used on April 9, 2018, June 30, 2018, September 30, 2018 and December 31, 2018 to value the common stock warrant liabilities are as follows:

	Exercise Price	Strike Floor	Closing Market Price (average)	Risk-free Rate	Dividend Yield	Market Price Volatility	Remaining Term (years)
Warrant Liability April 09, 2018	\$ 1.12	\$ 0.97	\$ 0.85	2.60%	0.00%	120%	5.00
Warrant Liability June 30, 2018	\$ 0.55	\$ 0.19	\$ 0.57	2.72%	0.00%	115%	4.78
Warrant Liability September 30, 2018	\$ 0.32	\$ 0.19	\$ 0.39	2.93%	0.00%	115%	4.53
Warrant Liability December 31, 2018	\$ 0.32	N/a	\$ 0.52	2.49%	0.00%	120%	4.28

The Company also holds common stock warrants which have been classified in equity. Upon conversion of the warrants, the Company determines the fair value of the warrants exercised using the share price and records the impact to common stock and additional paid-in capital.

## Derivatives

The 2018 Notes contained conversion features which have been accounted for in accordance with FASB ASC 815, *Derivatives and Hedging*. The conversion options were embedded within the 2018 Notes but have been separated as (i) their economic characteristics and risks did not clearly and closely relate to the 2018 Notes (ii) the 2018 Notes were not remeasured at fair value and (iii) a separate instrument with the same terms as the conversion options would be considered a derivative. The 2018 Notes also contained various redemption clauses (contingent) that met all the criteria of a derivative and were measured and recorded at fair value at the date of issuance and were revalued at each balance sheet date with changes in the value recorded in earnings.

We used a Lattice pricing model to value these derivative liabilities. The Lattice pricing model, which is based, in part, upon unobservable inputs for which there is little or no market data, requires us to develop its own assumptions. We classified these derivative liabilities on the Consolidated Balance Sheet as short-term liabilities since they had maturities of one year. When the conversion option was exercised, for accounting purposes both liabilities (i.e., the debt host and the separated derivative liability) were subject to extinguishment accounting. As such, a gain or loss upon extinguishment of the two liabilities equal to the difference between the recorded value of the liabilities and the fair value of the consideration issued to extinguish them was recorded. The assumptions used on April 9, 2018, June 30, 2018, September 30, 2018 and December 31, 2018 to value the derivative liabilities are as follows:

	Conversion Price	Closing Market Price (average)	Risk-free Rate	Dividend Yield	Market Price Volatility	Remaining Term (years)	Debt Yield	Soft Call Threshold	First Redemption Period	Second Redemption Period
Derivative Liability April 09, 2018	\$ 1.26	\$ 0.85	2.08%	0.00%	110%	1.00	60%	\$ 2.52	20%	25%
Derivative Liability June 30, 2018	\$ 0.55	\$ 0.57	2.23%	0.00%	130%	0.78	60%	\$ 2.52	20%	25%
Derivative Liability September 30, 2018	\$ 0.31	\$ 0.39	2.36%	0.00%	125%	0.53	60%	\$ 2.52	20%	25%
Derivative Liability December 31, 2018	\$ 0.31	\$ 0.52	2.45%	0.00%	90%	0.28	60%	\$ 2.52	20%	25%

#### 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 11. 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. Expected volatilities were based on a value calculated using the historical stock price volatility. Expected life was 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 was 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 was used in the option valuation model. The assumptions used to value to 2018 Options as of December 31, 2018 are as follows:

#### 2018 Non-Qualified Stock Options

Grant Date	Vesting Period	Expected Life	Expected Dividend Rate	Risk-free Rate	Market Price Volatility
June 21, 2018	2.78 years	4.2 years	0%	2.70%	148.77%
September 4, 2018	2.82 years	5.7 years	0%	2.78%	147.40%
September 10, 2018	2.81 years	5.7 years	0%	2.83%	146.66%
October 15, 2018	2.96 years	4.3 years	0%	2.96%	149.82%
October 29, 2018	2.92 years	4.3 years	0%	2.87%	150.34%

#### 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. A valuation allowance is established if it is more likely than not that a deferred tax asset will not be realized. In determining the appropriate valuation allowance, we consider projected realization of tax benefits based on expected levels of future taxable income, available tax planning strategies, and our overall deferred tax position.

## Results of Operations

### Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

#### POWERHOUSE™ Segment:

We received our first purchase order from a customer on December 27, 2018 and shipped to the customer in January 2019. Accordingly, we have no revenue during 2018 from POWERHOUSE™ and a backlog of one transaction. We commenced amortization of the POWERHOUSE™ license upon receiving UL approval on November 2, 2018 and have recorded two months of amortization expense of \$0.03 million.

#### Solar Division Segments:

##### Contract revenue:

*Sale and installation of solar energy systems.* Sale and installation of solar energy system revenue decreased \$2.5 million, or 17.9%, to \$11.5 million during the twelve months ended December 31, 2018, from \$14.0 million during the twelve months ended December 31, 2017. During the twelve months ended December 31, 2018, installations decreased 0.5 megawatts to 2.8 as compared to the 3.3 megawatts installed during the twelve months ended December 31, 2017. This decrease was primarily due to slower sales in the beginning of the year and a decline in our weighted average selling price per watt of 2.6%. Additionally, limitations including cutbacks of major incentive programs in Massachusetts and Rhode Island caused delays in the installation of our backlog in the fourth quarter of 2018 as approvals required for installation were not available. This delayed the installation of many projects in the fourth quarter, as Massachusetts and Rhode Island comprised a significant portion of our backlog in 2018. As previously disclosed, we are exiting our mainland residential solar business.

##### Contract expenses:

*Installation of solar energy systems.* Installation of solar energy system expenses decreased \$1.9 million, or 14.5%, to \$11.2 million during the twelve months ended December 31, 2018, from \$13.1 million during the twelve months ended December 31, 2017, 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, 2018, our residential segments gross margin without idle time declined due to a 2.6% decline in the average selling price per watt exceeding the 0.8% decline in the costs of installation per watt.

*Customer acquisition.* Customer acquisition expense decreased \$2.3 million during the twelve months ended December 31, 2018, or 38.9%, to \$3.6 million from \$5.9 million during the twelve months ended December 31, 2017. This decrease is primarily attributable to a reduction in workforce related to a targeted focus on increasing individual sales team member key performance indicators (“KPIs”) and a more selective hiring process allowed for significant improvements in lead performance. Our continued efforts to refine our digital lead development also played a large role in the decrease.

Operating expense: Operating expenses decreased \$1.0 million, or 9.2%, to \$9.8 million during the twelve months ended December 31, 2018 compared to \$10.8 million during the twelve months ended December 31, 2017, primarily due to a decrease in labor and legal fees.

#### Other Segment:

*Goodwill impairment.* Goodwill impairment increased by \$1.3 million during the year ended December 31, 2018 due to the results of our annual impairment testing. We concluded that the fair value of the goodwill no longer exceeded its carrying value and wrote off the goodwill balance.

*Litigation and proxy contest expense.* Litigation and proxy contest expenses during the twelve months ended December 31, 2018 was \$0.2 million compared to \$1.5 million during the twelve months ended December 31, 2017. The decrease of \$1.3 million is primarily attributable to nonrecurring proxy contest expenses of \$1.2 million in 2017. Our legal expenses may increase in subsequent periods. See Note 7. Commitments and Contingencies.

*Change in fair value of derivative liabilities, loss on debt extinguishment and amortization of debt discount & deferred loan costs.* The issuance of the 2018 Notes, subsequent conversions and revaluation of the derivative liabilities resulted in our recording derivative liabilities as disclosed in Note 9. Convertible Debt. Additionally, interest expense increased due to the accretion of the debt discount and deferred loan costs related to the 2018 Notes. No such transaction occurred during the year ended December 31, 2017.

*Other (income) expenses.* Other expenses primarily represent a gain on settlement of a long-term liability with a directors and officers liability insurance provider.

## Liquidity and Capital Resources

Our historical operating results indicate substantial doubt exists related to our ability to continue as a going concern. Management's plans and actions, which are intended to mitigate the substantial doubt raised by our historical operating results in order to satisfy our estimated liquidity needs for a period of 12 months from the issuance of the consolidated financial statements, are discussed below. As we cannot predict, with certainty, the outcome of our actions to generate liquidity, or whether such actions would generate the expected liquidity as currently planned, management's plans to mitigate the risk and extend cash resources through the evaluation period, are not considered probable under current accounting standards for assessing an entity's ability to continue as a going concern.

As of December 31, 2018, we have cash of \$5.8 million, working capital of \$6.9 million, debt of \$0.5 million and shareholders' equity of \$10.8 million.

We have experienced recurring operating losses and negative cash flow from operations which have necessitated:

- Exiting the mainland residential division and execution of a reduction in workforce, see Note 16. Subsequent Events;
- Focusing on growing POWERHOUSE™ revenue through a re-allocation of personnel to POWERHOUSE™ sales and initiating sales to other solar installers and distribution companies; and
- Raising additional capital. See Note 8. Shareholders Equity and Note 16. Subsequent Events for transactions to raise capital during the second quarter of 2019.

No assurances can be given that we will be successful with our plans to grow revenue for profitable operations.

We have historically incurred a cash outflow from our operations as our revenue has not been at a level for profitable operations. As discussed above, a key component of our revenue growth strategy is the sale of our POWERHOUSE™ 3.0 in-roof solar shingle. We obtained UL certification for POWERHOUSE™ at the close of 2018 and therefore only recently begun to market POWERHOUSE™ at the start of 2019. We believe that we will require several quarters for us to generate sales to meet our goals for profitable operations.

The first quarter of the year has always been one of our slowest sales periods and as such, this is a period of higher cash outflow. POWERHOUSE™ 3.0 sales during the first quarter of 2019 have been materially less than our expectations and, accordingly, we raised additional capital during the second quarter of 2019.

Additionally, we have arranged with a third-party specialty lender to provide financing to our POWERHOUSE™ roofers for their purchases of POWERHOUSE™ in-roof shingles. Under this agreement, we are to be paid the next day after the roofers place a purchase order and, accordingly, when roofers avail themselves of this financing, we do not have accounts receivable, enhancing our cash flow from operations.

As discussed above, (i) we expect that future sales of POWERHOUSE™ 3.0 in-roof solar shingles will be our primary source of revenue and (ii) we only recently began marketing POWERHOUSE™ 3.0, and accordingly, we expect to incur a quarterly cash outflow for a portion of 2019. We have placed purchase orders with our supply chain partners for inventory to be converted to revenue.

The Company has prepared its business plan for the ensuing twelve months, which includes the following:

- Exit from the mainland residential division which historically has generated material cash outflows;
- Generate POWERHOUSE™ revenue through sales to local roofing companies, home builders and EPC companies;
- Convert current mainland residential backlog into revenue through authorized third-party integrators; and
- Increase sales and installations with commercial customers on the mainland and sales and installations of residential and commercial systems in Hawaii.

## Cash Flows

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

	<u>2018</u>	<u>2017</u>
Net cash (used in) provided by:		
Operating activities	(12,367)	(16,035)
Investing activities	(2,146)	(1,959)
Financing activities	19,174	16,224
Net increase (decrease) in cash	<u>\$ 4,661</u>	<u>\$ (1,770)</u>

*Operating activities.* Cash outflow from operations for the twelve-month period ended December 31, 2018 decreased \$3.7 million as compared to the twelve-month period ended December 31, 2017. This decrease in cash used in operations was primarily due to a reduction of \$2.3 million in our customer acquisition costs and a reduction in payroll costs corresponding to a reduction in personnel. Additionally, we collected on receivables from certain previously installed commercial projects and settled on litigation related to a large commercial project which released funds previously held in escrow.

*Investing activities.* During the year ended December 31, 2018, cash outflows for investing activities increased \$0.2 million as compared to the twelve-months ended December 31, 2017. We made payments to the Dow Chemical Company attributable to the License of \$2.0 million in 2018 and \$1.0 million in 2017. Additionally, in 2017 we had approximately \$0.8 million in capital expenditures.

*Financing activities.* Cash inflow from financing activities increased \$3.0 million to \$19.2 million in 2018 from \$16.2 million in 2017. The increase is due to capital raising activities in 2018 providing net cash inflows of \$19.2 million consisting of (i) \$9.9 million related to the 2018 Notes (ii) \$8.7 million related to exercise of warrants and (iii) \$1.8 million related to the January 2018 Offering less payments for transaction costs of \$1.2 million, as compared to cash inflows of \$17.5 million related to the February 2017 offerings discussed in Note 8. Shareholders' Equity. Additionally, in 2017 we paid \$1.0 million to close our revolving line of credit.

### 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.**

**Index to consolidated financial statements**

<a href="#">Reports of independent registered public accounting firms</a>	<a href="#">31</a>
Real Goods Solar, Inc. Consolidated Financial Statements:	
<a href="#">Consolidated balance sheets</a>	<a href="#">33</a>
<a href="#">Consolidated statements of operations</a>	<a href="#">34</a>
<a href="#">Consolidated statements of changes in shareholders' equity</a>	<a href="#">35</a>
<a href="#">Consolidated statements of cash flows</a>	<a href="#">36</a>
<a href="#">Notes to consolidated financial statements</a>	<a href="#">37</a>



## Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors  
Real Goods Solar, Inc.  
Denver, Colorado

### ***Opinion on the Consolidated Financial Statements***

We have audited the accompanying consolidated balance sheet of Real Goods Solar, Inc. (the “Company”) and subsidiaries as of December 31, 2018, the related consolidated statements of operations, shareholders’ equity, and cash flows for the year ended December 31, 2018, 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 financial position of the Company and subsidiaries at December 31, 2018, and the results of their operations and their cash flows for the year ended December 31, 2018, 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 and negative cash flows from operations and has an accumulated deficit, which raises 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 audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our 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 that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our 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/ BDO USA, LLP

We have served as the Company's auditor since 2018.  
Dallas, Texas  
April 15, 2019

## 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. (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, except for the reclassification adjustments applied to the 2017 financial statements as described under the heading *Discontinued Operations* in Note 2 as to which the date is April 15, 2019.

We have served as the Company’s auditor from 2017 to 2018.

REAL GOODS SOLAR, INC.

Consolidated Balance Sheets

(in thousands, except share and per share data)	As of December 31,	
	2018	2017
<b>ASSETS</b>		
Current assets:		
Cash	\$ 5,831	\$ 1,170
Accounts receivable, net	1,340	2,787
Costs in excess of billings	11	62
Inventory, net	1,595	2,013
Deferred costs on uncompleted contracts	236	615
Other current assets	1,613	1,987
Total current assets	10,626	8,634
Property and equipment, net	778	1,154
POWERHOUSE™ license, net	3,202	1,114
Goodwill	-	1,338
Net investment in sales-type leases and other assets	1,654	2,018
Total assets	<u>\$ 16,260</u>	<u>\$ 14,258</u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Convertible debt, net	336	1
Accounts payable	862	1,657
Accrued liabilities	1,571	1,474
Deferred revenue and other current liabilities	956	1,810
Total current liabilities	3,725	4,942
Other liabilities	1,242	3,074
Common stock warrant liabilities	511	76
Total liabilities	<u>5,478</u>	<u>8,092</u>
Commitments and contingencies (Note 7)		
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; 91,859,638 and 8,151,845 shares issued and outstanding at December 31, 2018 and 2017, respectively	17	8
Class B common stock, par value \$.0001 per share; 50,000,000 shares authorized; no shares issued and outstanding	-	-
Additional paid-in capital	253,331	206,640
Accumulated deficit	(242,566)	(200,482)
Total shareholders' equity	<u>10,782</u>	<u>6,166</u>
Total liabilities and shareholders' equity	<u>\$ 16,260</u>	<u>\$ 14,258</u>

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,	
	2018	2017
Contract revenue:		
Sale and installation of solar energy systems	\$ 11,511	\$ 14,030
Service	1,159	1,509
Leasing, net	59	53
Contract expenses:		
Installation of solar energy systems	11,177	13,135
Service	1,589	1,623
Customer acquisition	3,616	5,918
Contract loss	(3,653)	(5,084)
Operating expense	9,793	10,789
Proxy contest expense	-	1,186
Goodwill impairment	1,338	-
Litigation	187	327
Operating loss	(14,971)	(17,386)
Change in fair value of derivative liabilities and loss on debt extinguishment	(27,134)	(379)
Amortization of debt discount and deferred loan costs	(1,042)	(3)
Other income	1,063	68
Net loss	\$ (42,084)	\$ (17,700)
Net loss per share:		
Basic and Diluted	\$ (1.18)	\$ (2.55)
Weighted-average shares outstanding:		
Basic and Diluted	35,618	6,950

See accompanying notes to consolidated financial statements.

REAL GOODS SOLAR, INC.

Consolidated Statement of Changes in Shareholders' Equity

(in thousands, except share data)	Class A Common Stock		Additional Paid - in Capital	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount			
Balances, January 1, 2017	1,183,151	\$ 8	\$ 187,752	\$ (182,782)	\$ 4,978
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>Balances, December 31, 2017</b>	<b>8,151,845</b>	<b>\$ 8</b>	<b>\$ 206,640</b>	<b>\$ (200,482)</b>	<b>\$ 6,166</b>
Proceeds from January 2018 Offering of common stock issuance and warrant exercises, net of costs	1,600,000	-	1,524	-	1,524
Issuance and conversion of 2018 Notes, net of costs	72,826,126	8	31,816	-	31,824
Proceeds from warrant exercises related to 2018 Note Offering	8,681,667	1	13,088	-	13,089
Share-based compensation	-	-	263	-	263
Common stock issued to settle proxy contest	600,000	-	-	-	-
Net Loss	-	-	-	(42,084)	(42,084)
<b>Balances, December 31, 2018</b>	<b>91,859,638</b>	<b>\$ 17</b>	<b>\$ 253,331</b>	<b>\$ (242,566)</b>	<b>\$ 10,782</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,	
	2018	2017
<b>Operating activities:</b>		
Net loss	\$(42,084)	\$(17,700)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	401	415
Amortization of POWERHOUSE™ License	33	-
Share-based compensation expense	263	249
Goodwill impairment	1,338	-
Change in fair value of derivative liabilities and loss on debt extinguishment	27,134	379
Amortization of debt discount and issuance costs	1,042	-
Bad debt expense	37	353
Inventory obsolescence	32	398
Gain on settlement of liability	(942)	-
(Gain) loss on sale of assets	-	(3)
Loss on settlement of proxy contest	-	810
Changes in operating assets and liabilities:		
Accounts receivable	1,410	397
Costs in excess of billings on uncompleted contracts	51	164
Inventory	386	(872)
Deferred costs on uncompleted contracts	379	(217)
Net investment in sales-type leases and other current assets	277	(945)
Other non-current assets	364	542
Accounts payable	(834)	(804)
Accrued liabilities	97	(844)
Billings in excess of costs on uncompleted contracts	-	(107)
Deferred revenue and other current liabilities	(854)	664
Other liabilities	(897)	1,086
Net cash used in operating activities	(12,367)	(16,035)
<b>Investing activities:</b>		
Payments related to POWERHOUSE™ license	(2,121)	(1,114)
Purchases of property and equipment	(25)	(432)
Payments related to RGS 365™ portal	-	(413)
Net cash used in investing activities	(2,146)	(1,959)
<b>Financing activities:</b>		
Proceeds from warrants	9,614	1,064
Proceeds from issuance of 2018 Notes	5,000	-
Proceeds from collection of Investor Notes	4,891	-
Proceeds from the issuance of common stock	920	16,187
Payments for transaction costs	(1,251)	(158)
Restricted cash released upon conversion of debt	-	173
Principal borrowings on revolving line of credit	-	1,498
Principal payments on revolving line of credit	-	(2,540)
Net cash provided by financing activities	19,174	16,224
Net increase (decrease) in cash	4,661	(1,770)
Cash at beginning of year	1,170	2,940
Cash at end of year	\$ 5,831	\$ 1,170
<b>Supplemental cash flow information:</b>		
Income taxes paid	-	-
Interest paid	-	8
<b>Non-cash items</b>		
Proxy contest settlement payment in shares of common stock	-	810
Debt discount arising from 2018 Note Offering	10,088	-
Embedded derivative liability with 2018 Note Offering	12,987	-
Common stock warrant liability with 2018 Note Offering	6,818	-
Issuance of Class A common stock for conversion of 2018 Notes, net of costs	31,824	-
Issuance of Class A common stock for exercise of common stock warrants	13,089	-
Interest paid with common stock	-	125

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 in the solar energy systems business as (i) the manufacturer of POWERHOUSE™ 3.0 in-roof solar shingles under a license agreement with Dow Global Technologies LLC (“Dow”) and (ii) a residential and commercial solar energy engineering, procurement, and construction firm (“EPC”).

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.

#### *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 for its POWERHOUSE™ in-roof solar shingle. The License allows RGS to market the POWERHOUSE™ 3.0 product using the Dow name, and under the terms of the License agreed to a license fee of \$3 million. The license fee was comprised of two payments; the first \$1 million was paid in connection with the Effective Date of the License in 2017 and the remaining \$2 million was paid in 2018 in connection with receiving UL certification. 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.

The Company obtained UL certification for POWERHOUSE™ 3.0 during November 2018, immediately after which the Company commenced commercialization of POWERHOUSE™ 3.0 entailing the manufacturing, marketing and sale of POWERHOUSE™ 3.0 to roofing companies and homebuilders. The first purchase order for POWERHOUSE™ 3.0 was received from a customer on December 27, 2018 and shipped to the customer in January 2019.

#### *Liquidity and Financial Resources Update*

The Company’s historical operating results indicate substantial doubt exists related to its ability to continue as a going concern. Management’s plans and actions, which are intended to mitigate the substantial doubt raised by the Company’s historical operating results in order to satisfy its estimated liquidity needs for a period of 12 months from the issuance of the consolidated financial statements, are discussed below. As the Company cannot predict, with certainty, the outcome of its actions to generate liquidity, or whether such actions would generate the expected liquidity as currently planned, management’s plans to mitigate the risk and extend cash resources through the evaluation period, are not considered probable under current accounting standards for assessing an entity’s ability to continue as a going concern.

As of December 31, 2018, the Company has cash of \$5.8 million, working capital of \$6.9 million, debt of \$0.5 million and shareholders’ equity of \$10.8 million.

The Company has experienced recurring operating losses and negative cash flow from operations which have necessitated:

- Exiting the mainland residential division and execution of a reduction in workforce, see Note 16. Subsequent Events;
- Focusing on growing POWERHOUSE™ revenue through a re-allocation of personnel to POWERHOUSE™ sales and initiating sales to other solar installers and distribution companies; and
- Raising additional capital. See Note 8. Shareholders Equity and Note 16. Subsequent Events for transactions to raise capital during the second quarter of 2019.

No assurances can be given that the Company will be successful with its plans to grow revenue for profitable operations.

The Company has historically incurred a cash outflow from its operations as its revenue has not been at a level for profitable operations. As discussed above, a key component of the Company’s revenue growth strategy is the sale of the POWERHOUSE™ 3.0 in-roof solar shingle. The Company obtained UL certification for POWERHOUSE™ at the close of 2018 and therefore only recently begun to market POWERHOUSE™ at the start of 2019. The Company believes that it will require several quarters to generate sales to meet its goals for profitable operations.

The first quarter of the year has always been one of the Company's slowest sales periods and as such, this is a period of higher cash outflow. POWERHOUSE™ 3.0 sales during the first quarter of 2019 have been materially less than the Company's expectations and, accordingly, the Company raised additional capital during the second quarter of 2019.

As discussed above, (i) the Company expects that future sales of POWERHOUSE™ 3.0 in-roof solar shingles will be its primary source of revenue and (ii) the Company only recently began marketing POWERHOUSE™ 3.0, and accordingly, expects to incur a quarterly cash outflow for a portion of 2019.

*Errors Identified in Previously Issued Consolidated Financial Statements*

During the preparation of the 2018 consolidated financial statements, the Company identified an error in the accounting for the 2018 Note Offering (Note 9. Convertible Debt). The Company incorrectly included debt issue costs of \$0.6 million in the calculation of the debt discount and loss upon issuance, which resulted in amortization of debt discount being overstated and the loss on debt extinguishment to be understated. As a result, "change in fair value of derivative liabilities and loss on debt extinguishment" was understated by \$0.5 million and \$0.7 million and "amortization of debt discount and deferred loan costs" was overstated by \$0.8 million and \$0.7 million for the quarters ended June 30, 2018, and September 30, 2018, respectively. The Company evaluated the impact of the error on its previously issued financial statements and concluded that the impact was not material. The error was corrected in the fourth quarter of 2018 and resulted in a net impact of \$0.09 million.



## 2. Significant Accounting Policies

### *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.

### *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. The Company had previously reported this business as a discontinued operation, separate from the Company's continuing operations. As of December 31, 2018, this business no longer met the criteria to be presented as discontinued operations. The remaining assets and liabilities were reclassified out of discontinued operations to continuing operations on the consolidated balance sheet as of December 31, 2017. Income from discontinued operations on the consolidated statements of operations was reclassified into the loss related to current continuing operations for the years ended December 31, 2018 and 2017 and had no impact on net loss. References to any gains or losses from discontinued operations as well as net cash used or provided by discontinued operations were removed, with these amounts reclassified into the continuing operations figures for the years ending December 31, 2018 and 2017. The 2017 financial statements have been reclassified to eliminate the presentation of the business as a discontinued operation and did not result in a material change.

### *Cash*

The Company considers all highly liquid instruments with an original maturity of three months or less to be cash equivalents. Cash equivalents consist primarily of 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 \$0.5 million and \$0.8 million December 31, 2018 and 2017, respectively.

### *Inventory*

Inventory for our Solar Division consists primarily of solar energy system components (such as solar panels and inverters) 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 \$0.7 and \$0.6 million at December 31, 2018 and 2017, respectively.

POWERHOUSE™ inventories are recorded at lower of cost (incurred from third party supply channel manufacturers) or net realizable value. Cost is determined using the FIFO method. Management will establish an estimated excess and obsolete inventory reserve based on slow-moving and obsolete inventory. At December 31, 2018, there was no excess and obsolete inventory reserve.

### *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*

Intangible assets arising from business combinations, such as acquired customer contracts and relationships (collectively, “customer relationships”), licenses, trademarks, 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 early adopted ASU 2017-04 during the second quarter of 2018 while performing its annual impairment test. 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 quantitative impairment test is performed. The estimated fair value of the reporting unit is compared with its carrying value (including goodwill) and if the carrying value exceeds estimated fair value, an impairment charge is recorded. As a result of the annual impairment test, the Company fully impaired the Goodwill balance charging an impairment loss to the Consolidated Statement of Operations.

Fair value of the reporting unit 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.

The Company capitalized the up-front POWERHOUSE™ 3.0 license payment, costs to obtain UL certification and legal costs to acquire the License. The intangible asset is amortized to operations, commencing November 2018 after UL certification, on a straight-line basis over the expected life of the License through 2034. As of December 31, 2018, the intangible asset had a carrying cost of \$3.2 million, with \$0.03 million in related amortization. The estimated amortization expense for each of the five succeeding fiscal years is expected to be \$0.2 million per annum.

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 the Company’s significant accounting policy related to revenue please see Note 3. Revenue.

### *Share-Based Compensation*

The Company recognizes compensation expense for share-based awards based on the estimated fair value of the award on the date of grant and 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 11. 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. A valuation allowance is established if it is more likely than not that a deferred tax asset will not be realized. In determining the appropriate valuation allowance, the Company considered projected realization of tax benefits based on expected levels of future taxable income, available tax planning strategies, and its overall deferred tax position. To identify any uncertain tax positions, the Company reviews (1) the decision to exclude from the tax return certain income or transactions; (2) the assertion that a particular equity restructuring (e.g., a spin-off transaction) is tax-free when that position might actually be uncertain, and; (3) the decision not to file a tax return in a particular jurisdiction for which such a return might be required in tax years that are still subject to assessment or challenge under relevant tax statutes. The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company records interest related to unrecognized tax benefits in interest expense and penalties in selling, general, and administrative expenses when applicable.

### Warranties

The Company warrants its EPC 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. The Company assesses the accrued warranty reserve quarterly and adjusts the amounts as necessary based on actual experience and changes in future estimates.

The Company's manufacturing warranties for its POWERHOUSE™ solar shingle, are an 11-year product warranty, which is the standard product warranty of most traditional solar panels today, and a 24-year power production warranty. The Company receives warranties from its supply chain matching the terms of the POWERHOUSE™ solar shingle warranty. As of December 31, 2018, there were no POWERHOUSE™ sales which required an estimate of warranty liability.

### 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 10,445,294 and 5,857,861 shares have been omitted from net loss per share for 2018 and 2017, respectively, as they are anti-dilutive. The Series O warrants, Series Q warrants, and the 2018 Notes are considered participating securities, and as such, are entitled to participate in any dividends or distribution of assets made by the Company. There was no effect on earnings per share for these participating securities as the Company operated with a net loss for both 2018 and 2017. See Note 8. Shareholders' Equity for a description of these transactions.

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,	
	2018	2017
Numerator for basic and diluted net loss per share	\$ (42,084)	\$ (17,700)
Denominator:		
Weighted average shares for basic net loss per share	35,618	6,950
Effect of dilutive securities:		
Weighted average of common stock, stock options and warrants	-	-
Denominators for diluted net loss per share	35,618	6,950
Net loss per share—basic and diluted	\$ (1.18)	\$ (2.55)

### 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 three reporting segments: Solar Division, POWERHOUSE™ and corporate expenses ("other segment").

### Common Stock Warrants

The Company accounts for common stock warrants as either liabilities or as equity instruments depending on the specific terms of the warrant agreement. Certain of the Company's warrants are accounted for as liabilities due to redemption provisions that are outside the control of the Company. The Company classifies these warrant liabilities with maturities of five years on the Consolidated Balance Sheet as long-term liabilities. They are revalued at each balance sheet date after their initial issuance with changes in the value recorded in earnings. The Company used a Monte Carlo pricing model to value these warrant liabilities. The Company also has issued common stock warrants which have been classified in equity. Upon exercise of the warrants, the Company determines the fair value of the warrants exercised using the share price and records the impact to common stock and additional paid-in capital.

## *Derivatives*

The Company's Senior Convertible Notes issued on April 9, 2018 (the "2018 Notes") contained conversion features and various redemption clauses that were required to be bifurcated and were initially measured and recorded at fair value and were revalued at each balance sheet date with changes in the value recorded in earnings. Each of the 2018 Notes gave the holder the right to convert the 2018 Notes into shares of Class A common stock at a set strike price ("conversion feature"). In addition to the conversion feature, redemption of the 2018 Notes could have been triggered by failure to notify the holders timely of a change in control, subsequent placement and failure to timely deliver shares to convert the 2018 Notes. The Company used a Lattice pricing model to value these derivative liabilities. The Lattice pricing model, which is based, in part, upon unobservable inputs for which there is little or no market data, required the Company to develop its own assumptions. Upon completing our fair value estimate of the derivative liabilities, the Company determined that the fair value exceeded the cash proceeds received and recorded a loss upon issuance. This loss was recorded within the "Change in fair value of derivative liabilities and loss on debt extinguishment" in our Consolidated Statements of Operations and the derivative liabilities are classified as short-term in the Consolidated Balance Sheet as of December 31, 2018, due to their maturity in April 2019. Upon exercise of the conversion option, the derivative liabilities and related debt host were accounted for as an extinguishment whereby a gain or loss was recognized in an amount equal to the difference between the recorded value of the liabilities and the fair value of the consideration issued to extinguish them.

## *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. The Company's leased systems are treated as sales-type leases under GAAP accounting policies due to the present value of their minimum lease payments exceeding 90% of the fair value at lease inception.

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 2018-20, ASU 2018-11, ASU 2018-01 and ASU 2016-02

In February 2016, the FASB established Topic 842, Leases, by issuing Accounting Standards Update (ASU) No. 2016-02, which requires lessees to recognize leases on-balance sheet and disclose key information about leasing arrangements. Topic 842 was subsequently amended by ASU No. 2018-01, Land Easement Practical Expedient for Transition to Topic 842; ASU No. 2018-10, Codification Improvements to Topic 842, Leases; and ASU No. 2018-11, Targeted Improvements. The new standard establishes a right-of-use model (ROU) that requires a lessee to recognize a ROU asset and lease liability on the balance sheet for all leases with a term longer than 12 months. Leases will be classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the income statement. The new standard is effective for the Company on January 1, 2019. A modified retrospective transition approach is required, applying the new standard to all leases existing at the date of initial application. An entity may choose to use either (1) its effective date or (2) the beginning of the earliest comparative period presented in the financial statements as its date of initial application. The Company has adopted the new standard on January 1, 2019 and used the effective date as its date of initial application. Consequently, financial information will not be updated and the disclosures required under the new standard will not be provided for dates and periods before January 1, 2019. The new standard provides a number of optional practical expedients in transition. The Company has elected the 'package of practical expedients'. The Company expects that this standard will have a material effect on our financial statements for contracts in which the Company is the lessee. While the Company continues to assess all of the effects of adoption, the Company currently believe the most significant effects relate to (1) the recognition of new ROU assets and lease liabilities on our balance sheet for our real estate and vehicle operating leases and (2) providing significant new disclosures about our leasing activities. The Company has made an accounting policy election to exclude immaterial leases from lease accounting and will continue to expense them as incurred similar to our capitalization policy. The new standard also provides practical expedients for an entity's ongoing accounting. The Company has elected the short-term lease recognition exemption for all leases that qualify. This means, for those leases that qualify, the Company will not recognize ROU assets or lease liabilities, and this includes not recognizing ROU assets or lease liabilities for existing short-term leases of those assets in transition. The Company has also elected the practical expedient to not separate lease and non-lease components for all of our leases.

The accounting standards noted above also requires lessors to classify leases as sales-type, direct financing or operating leases. The Company currently holds leases of solar systems where it is the lessor. While the Company continues to evaluate certain aspects of the new standard, it does not expect the new standard to have a material effect on its financial statements for contracts where the Company is the lessor and it does not expect a significant change in our sales-type leasing activities between now and adoption. The Company believes substantially all of its leases will continue to be classified as sales-type leases under the new standard. While the new standard identifies maintenance as a non-lease component of equipment lease contracts, the Company will account for solar system leases and associated maintenance service components as a single, combined lease component. Consequently, the Company does not expect the new standard's changed guidance on contract components to significantly affect its financial reporting.

#### 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 ASU 2017-11 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 ASU 2017-11 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 ASU 2017-11 are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The amendments in Part II of ASU 2017-11 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.

#### *Recently Adopted Accounting Standards*

#### 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. The Company early adopted ASU 2017-04 during the second quarter of 2018 while performing its annual impairment test. As a result, the Company fully impaired the Goodwill balance charging an impairment loss to the consolidated statement of operations.

#### 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. The Company adopted 2014-09 as of January 1, 2018 and utilized the modified retrospective method. See Note 3. Revenue below for all required disclosures.

### 3. Revenue

Effective January 1, 2018, the Company has adopted “ASC 606 – *Revenue from Contracts with Customers*” related to revenue recognition. Under the standard, revenue is recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services using a five-step model to achieve that principle. In addition, the standard requires disclosures to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The Company has elected to adopt the modified retrospective method for transitioning this accounting standard which requires that the cumulative effect of applying the revenue standard to existing contracts be recorded as an adjustment to retained earnings. Based on the Company’s review of contracts that were not substantially completed on December 31, 2017, there was no impact to the opening retained earnings balance.

#### *Deferred Revenue*

When the Company receives consideration, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a sales contract, it records deferred revenue, which represents a contract liability. The Company recognizes deferred revenue as net sales after it has satisfied its performance obligations to the customer and all revenue recognition criteria are met.

#### *Revenue Recognition – Installation of photovoltaic modules (“PV”) solar systems*

The Company uses standard contract templates to initiate sales with customers and determined that each project started during the year ended December 31, 2018 and each project that was not substantially complete at the adoption date, contains one performance obligation. Although the contract states multiple services which are capable of being distinct, they are considered a single integrated output to the customer which is customized for each customer. As such all the services promised within a contract are considered one performance obligation. The Company generally recognizes revenue for installation of PV solar systems over time following the transfer of control to the customer which typically occurs as the PV solar system is being installed. If control transfers over time, revenue is recognized based on the extent of progress towards the completion of the performance obligation. The method utilized by the Company to measure the progress towards completion requires judgment and is based on the products and services provided. The Company utilizes the input method to measure the progress of its contracts because it best depicts the transfer of assets to the customer which incurs as materials are consumed by the project. The input method measures the progress towards completion based on the ratio of costs incurred to date (“actual cost”) to the total estimated costs (“budget”) at completion of performance obligation. Revenue, including estimated fees, are recorded proportionally as costs are incurred. Costs to fulfill include materials, labor and/or subcontractors’ costs, and other direct costs. Indirect costs and costs to procure the panels, inverters, and other system miscellaneous costs needed to satisfy the performance obligation are excluded since the customer does not gain control of those items until delivered to the site. Including the costs of those items would overstate the extent of our performance.

Each project’s transaction price is included within the contract and although there is only one performance obligation, changes to the contract price could take place after fulfillment of performance obligation. The Company has considered financing components on projects started during the year ended December 31, 2018 and elected the use of a practical expedient where an entity need not adjust the promised amount of consideration for the effects of a significant financing component if the entity expects, at contract inception, that the period between when the entity transfers a promised service to the customer and when the customer pays for that good or service will be one year or less. Typically, the payments are received as the performance obligation is being satisfied with a final payment received after the solar system has been installed. All receivables from projects are expected to be received within one year from project completion and there were no adjustments to the contract value.

Under ASC 606, the Company is required to recognize as an asset the incremental costs of obtaining a contract with a customer if those costs are expected to be recovered. The Company incurs sales commissions that otherwise would not have been incurred if the contract had not been obtained. These costs are recoverable; however, the Company has elected the use of a practical expedient to expense these costs as incurred as the amortization period of the asset would be less than one year.

#### *Revenue Recognition – Operations & Maintenance*

The Company generally recognizes revenue for standard, recurring commercial operations and maintenance services over time as customers receive and consume the benefits of such services, which typically include corrective maintenance, data hosting or energy/deck monitoring services for a period. These services are treated as stand-ready performance obligations and are satisfied evenly over the length of the agreement, so the Company has elected a time-based method to measure progress and recorded revenue using a straight-line method.

### Revenue Recognition – Service & Warranty

Warranties for workmanship and roof penetration are included within each contract. These warranties cannot be purchased separately from the related services, are intended to safeguard the customer against workmanship defects and does not provide any incremental service to the customer. It is necessary for the Company to perform the specified tasks to provide assurance that the final product complies with agreed-upon specifications and likely do not give rise to a separate performance obligation. The Company will continue to account for any related warranties in accordance with ASC 460-10 and record an accrual for potential warranty costs at the completion of a project. Any services provided to a customer outside of warranties such as system inspections are recognized upon completion of the service.

Adoption of the standard related to revenue recognition had no impact to cash from or used in operating, financing, or investing on our consolidated cash flows statements. In the following table, revenue is disaggregated by primary geographical market and includes a reconciliation of the disaggregated revenue with the reportable segments for the years ended December 31, 2018 and 2017.

<b>Reportable Segments</b>					
<b>December 31, 2018</b>					
(in thousands)					
<b>Primary Geographical Regions</b>	<b>Solar Division</b>	<b>POWERHOUSE™</b>	<b>Total reportable segments</b>	<b>All other segments</b>	<b>Total</b>
East	\$ 10,022	\$ -	\$ 10,022	\$ -	\$ 10,022
West	2,681	-	2,681	25	2,706
	<u>\$ 12,703</u>	<u>\$ -</u>	<u>\$ 12,703</u>	<u>\$ 25</u>	<u>\$ 12,728</u>

<b>Reportable Segments</b>					
<b>December 31, 2017</b>					
(in thousands)					
<b>Primary Geographical Regions</b>	<b>Solar Division</b>	<b>POWERHOUSE™</b>	<b>Total reportable segments</b>	<b>All other segments</b>	<b>Total</b>
East	\$ 12,324	\$ -	\$ 12,324	\$ -	\$ 12,324
West	3,262	-	3,262	6	3,268
	<u>\$ 15,586</u>	<u>\$ -</u>	<u>\$ 15,586</u>	<u>\$ 6</u>	<u>\$ 15,592</u>

#### 4. 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>2018</b>	<b>2017</b>
Buildings and leasehold improvements	\$ 441	\$ 441
Furniture, fixtures and equipment	1,832	1,811
Software	2,135	2,135
Vehicles and machinery	1,142	1,167
Total property and equipment	5,550	5,554
Accumulated depreciation and amortization	(4,772)	(4,400)
Total property and equipment, net	<u>\$ 778</u>	<u>\$ 1,154</u>

Depreciation on other property, plant and equipment is calculated using the straight-line method to allocate their depreciable amounts over their estimated useful lives as follows:

	<b>Useful lives</b>
Buildings	40 years
Leasehold improvements	3-5 years
Furniture, fixtures and equipment	3-5 years
Software	3-15 years
Vehicles and machinery	2-7 years

For the years ended December 31, 2018 and 2017, depreciation expense was \$0.4 million per annum.

## 5. Accrued Liabilities

Accrued expenses consist of the following:

<b>(in thousands)</b>	<b>2018</b>	<b>2017</b>
Accrued Expenses	\$ 924	\$ 524
Accrued Compensation	476	690
Other	69	130
Accrued Project Costs	102	130
Total	<u>\$ 1,571</u>	<u>\$ 1,474</u>

## 6. 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. In 2018, Mobomo continued to provide data hosting services which totaled approximately \$20,000.

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.

## 7. 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 May 2022.

The following schedule represents the annual future minimum payments of all leases as of December 31, 2018:

<b>(in thousands)</b>	<b>Future Minimum Lease Payments</b>
2019	\$ 848
2020	505
2021	378
2022	112
2023 and thereafter	-
Total minimum lease payments	<u>\$ 1,843</u>

The Company incurred office and warehouse rent expense of \$0.6 million and \$0.7 million for the years ended December 31, 2018 and 2017, respectively. The Company incurred automobile lease expense of \$0.3 million and \$0.4 million for the years ended December 31, 2018 and 2017, 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.

## 8. Shareholders’ Equity

### *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 \$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 the Company and one unaffiliated institutional and accredited investor. The purchase price was \$1.15 per share of Class A common. The Company received net proceeds of approximately \$1.5 million at the closing, after deducting commissions to the placement agents and estimated offering expenses associated with the offering.

### 2018 Convertible Note Offering

On March 30, 2018, the Company entered into a Securities Purchases Agreement with two unaffiliated institutional and accredited investors for a private placement (the "2018 Notes Offering", see Note 9) of up to \$10.75 million in principal amount and \$10 million funding amount (reflecting \$750,000 of original issue discount) of the 2018 Notes, and Series Q Warrants to purchase 9,270,457 shares of Class A Common Stock. As of December 31, 2018, a total of 73 million shares of Class A common stock had been issued upon conversion of the 2018 Notes, and 8.7 million shares of Class A common stock had been issued upon exercise of the Series Q warrants in exchange for gross proceeds of \$8.7 million, before placement agent fees and other expenses.

### Option Exercises, 2018 Convertible Note Conversions and Warrant Exercises

During the twelve months ended December 31, 2018, the Company issued stock options as discussed in Note 11. Share-Based Compensation. During the twelve months ended December 31, 2018, the Company issued 800,000 shares of its Class A common stock upon exercise of Series P warrants and 81,507,793 shares upon conversion of the 2018 Notes and exercise of Series Q warrants.

At December 31, 2018, RGS had the following shares of Class A common stock reserved for future issuance:

Stock options and grants outstanding under incentive plans	1,206,645
Common stock warrants outstanding	8,714,871
2018 Notes outstanding - derivative liability	1,726,423
Total shares reserved for future issuance	<u>11,647,939</u>

The table below summarizes the Company's warrant activity:

	<b>Issuances</b>
Warrants outstanding at December 31, 2016	682,693
Issuances	8,178,580
Exercised	<u>(3,007,412)</u>
Warrants outstanding at December 31, 2017	5,853,861
Issuances	12,385,143
Expired	(42,465)
Exercised	<u>(9,481,668)</u>
Warrants outstanding at December 31, 2018	<u>8,714,871</u>

## 9. Convertible Debt

### *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 Note Offering") of up to \$10.75 million in principal amount and \$10 million funding amount (reflecting \$750,000 of original issue discount) of Series A Senior Convertible Notes ("Series A Notes"), Series B Senior Secured Convertible Notes ("Series B Notes," and collectively with the Series A Notes, the "2018 Notes"), and Series Q warrants (the "Series Q Warrants") to purchase 9,126,984 shares of Class A Common Stock. On April 9, 2018, the Company closed the 2018 Note Offering. At the closing on April 9, 2018, the Company received \$5 million of the gross proceeds and two secured promissory notes, one 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. These Investor Notes are presented net of the convertible debt carrying amount on the Consolidated Balance Sheets due to right of offset. All amounts outstanding under the 2018 Notes matured and were due and payable on or before the one-year anniversary of the issuance of the 2018 Notes ("Maturity Date").

The 2018 Notes did not incur interest other than upon the occurrence of an event of default, in which case the 2018 Notes bore interest at 18% per year ("Interest Rate"). The 2018 Notes were convertible at any time, at the option of the holders, into shares of Common Stock at a conversion price. The initial fixed conversion price ("ICP") was \$1.2405 per share, subject to reduction, as described below, and adjustment for stock splits, stock dividends, and similar events.

The ICP of the 2018 Notes were subject to reduction subsequent to shareholder approval. On June 21, 2018 the Company held its 2018 annual shareholder meeting at which time the shareholders approved the 2018 Note Offering and thereby initiating a reset period which enabled the note holders to earn additional amounts ("Additional Amounts"), effectively a make-whole for amounts previously converted. As a result of the shareholder approval, the conversion price of the 2018 Notes and the exercise price of the Series Q Warrants were reset. Subsequent to that date, the Company agreed to permanently reduce the conversion price of the 2018 Notes from \$0.3223 to \$0.3067 effective on August 27, 2018. The 2018 Notes were convertible at any time, at the option of the holder, into shares of the Company's Class A common stock at a conversion price equal to \$0.3067. The Series Q Warrants were exercisable into shares of the Company's Class A common stock at an exercise price of \$0.3223 per share.

If the Company were to have consummated a Subsequent Placement, subject to some exceptions, a Note holder would have had the right to require that the Company redeem, in whole or in part, a portion of the amounts owed by the Company to such holder under a Note in cash. A Note holder could also have required the Company to redeem all or a portion of its 2018 Note in connection with a transaction resulting from a Change of Control and upon the occurrence of an event of default.

The 2018 Notes contained customary events of default, including but not limited to: (i) failure to file or have declared effective by the SEC the applicable registration statement required by the Registration Rights Agreement within certain time periods or failure to keep the registration statement effective as required by the Registration Rights Agreement, (ii) failure to maintain the listing of the Common Stock, (iii) failure to make payments when due under the Notes, (iv) breaches of covenants, and (v) bankruptcy or insolvency. The occurrence of an event of default under the 2018 Notes would have triggered default interest and would have caused an Equity Condition Failure, which may mean that the Company would have been unable to force mandatory conversion of the Notes and that Note Holders may not be required to prepay the Investor Note under a mandatory prepayment event. Following an event of default, Note holders could have required the Company to redeem all or any portion of their Notes in cash at a conversion price equal to the greater of (i) 125% of the amount to be redeemed, and (ii) the product of (A) the amount to be redeemed divided by the conversion price, multiplied by (B) the product of (x) 125% multiplied by (y) the greatest closing sale price of the Common Stock on any trading day during the period commencing on the date immediately preceding such event of default and ending on the date the Company makes the entire redemption payment.

The principal amount of the Series B Notes was considered restricted principal until collection of the Investor Notes was received by the Company ("Restricted Principal"). Upon any offset, the restricted principal under a Series B Note would automatically and simultaneously be reduced, on a dollar-for-dollar basis, in an amount equal to the principal amount of an investor's Investor Note cancelled and offset. Under the terms of the Series B Notes, the Company granted a security interest to each investor in such investor's Investor Note to secure the Company's obligations under the applicable Series B Note. Each investor perfected its security interest by taking possession of such investor's Investor Note at the closing.

Each Series Q Warrant is immediately exercisable and will expire five years from the date of issuance. Initially, only 75% of the shares of Common Stock issuable upon exercise of a Series Q Warrant may be exercised, which amount increases upon an investor's prepayment under such investor's Investor Note. A holder may not exercise any of the Series Q Warrants, and the Company may not issue shares of Common Stock upon exercise of any of the Series Q Warrants if, after giving effect to the exercise, a holder together with (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the issuance date, directly or indirectly managed or advised by the holder's investment manager or any of its affiliates or principals, (ii) any direct or indirect affiliates of the holder or any of the foregoing, (iii) any person acting or who could be deemed to be acting as a group together with the holder or any of the foregoing and (iv) any other persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the holder's and certain other "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 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.

As disclosed in Note 2. Significant Accounting Policies, the warrants issued in connection with the 2018 Note Offering as well as the embedded derivatives were accounted for as liabilities that had been initially measured and recorded at fair value and were revalued at each balance sheet date after their initial issuance with the changes in value recorded in earnings. These conversion options accounted for as embedded derivatives were incorporated into the 2018 Notes to incentivize the holders to provide the Company with short term funding for POWERHOUSE™. See Note 10. Fair Value Measurements for information about the techniques the Company uses to measure the fair value of our derivative instruments. The fair value of the embedded derivatives and Series Q warrants exceeded the proceeds received from the 2018 Notes Offering which was recognized as a loss within the line item “Change in fair value of derivative liabilities and loss on debt extinguishment” in the statement of operations.

#### **10. 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 present the fair values of derivative instruments included in our consolidated balance sheets as of December 31, 2018 and 2017 (in thousands):

**Fair Value of Derivative Instruments**

	Liability Derivatives			
	2018		2017	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
<b>Balance at December 31, 2018</b>				
Derivatives not designated as hedging instruments				
Derivative liability	Convertible debt, net	\$ 344	N/a	\$ -

**The Effect of Derivative Instrument on the Statement of Operations for the Nine Months Ended December 31, 2018 and 2017**

Derivatives not designated as hedging instruments	Location of Loss Recognized in Statement of Operations	Amount of Loss Recognized in Statement of Operations	
		2018	2017
2018 Notes Conversion Options			
	Change in fair value of derivative liabilities and loss on debt extinguishment	\$ (27,134)	\$ -
	Amortization of debt discount & deferred loan costs	(1,042)	-
		<u>\$ (28,176)</u>	<u>\$ -</u>

The Company accounts for Series Q warrants in accordance with ASC 480. The Series Q warrants are accounted for as liabilities due to provisions in the warrants allowing the warrant holders to request redemption, upon a change of control, and failure to timely deliver shares of Class A common stock upon exercise or default. The Company classifies these warrant liabilities on the Consolidated Balance Sheet as long-term liabilities, which are revalued at each balance sheet date subsequent to their initial issuance. The Company used a Monte Carlo pricing model to value these warrant liabilities. The Monte Carlo pricing model, which is based, in part, upon unobservable inputs for which there is little or no market data, requires the Company to develop its own assumptions. 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, 2018 (in thousands)</b>	<b>Total</b>	<b>Quoted Prices</b>		
		<b>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	\$ 511	-	-	\$ 511
Derivative liability	344	-	-	344
	<u>\$ 855</u>	<u>-</u>	<u>-</u>	<u>\$ 855</u>

The following table shows the reconciliation from the beginning to the ending balance for the Company's common stock warrant liability and embedded derivative liability measured at fair value on a recurring basis using significant unobservable inputs (i.e. Level 3) for the period ended December 31, 2018:

<b>(in thousands)</b>	<b>Common Stock warrant liability</b>	<b>Embedded derivative liability</b>	<b>Total</b>
Fair value of financial liabilities at December 31, 2017	\$ 76	\$ -	\$ 76
Common stock warrant liability	6,818	-	6,818
Expiration of common stock warrant liabilities	(48)	-	(48)
Change in the fair value of common stock warrant liabilities, net	(1,940)	-	(1,940)
Adjustment for exercise of common stock warrant liabilities	(4,395)	-	(4,395)
Derivative liability	-	3,195	3,195
Investor Notes	-	(109)	(109)
Change in the fair value of derivative liabilities and additional amounts earned	-	17,910	17,910
Conversions of 2018 Notes	-	(20,652)	(20,652)
Fair value of financial liabilities at December 31, 2018	<u>\$ 511</u>	<u>\$ 344</u>	<u>\$ 855</u>

#### 2018 Notes Derivative Liability

The fair value of the 2018 Notes derivative liabilities was derived using a Lattice pricing model, which 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 assumptions used on April 9, 2018, June 30, 2018, September 30, 2018 and December 31, 2018 to value the derivative liabilities are as follows:

	<b>Conversion Price</b>	<b>Closing Market Price (average)</b>	<b>Risk-free Rate</b>	<b>Dividend Yield</b>	<b>Market Price Volatility</b>	<b>Remaining Term (years)</b>	<b>Debt Yield</b>	<b>Soft Call Threshold</b>	<b>First Redemption Period</b>	<b>Second Redemption Period</b>
Derivative Liability April 09, 2018	\$ 1.26	\$ 0.85	2.08%	0.00%	110%	1.00	60%	\$ 2.52	20%	25%
Derivative Liability June 30, 2018	\$ 0.55	\$ 0.57	2.23%	0.00%	130%	0.78	60%	\$ 2.52	20%	25%
Derivative Liability September 30, 2018	\$ 0.31	\$ 0.39	2.36%	0.00%	125%	0.53	60%	\$ 2.52	20%	25%
Derivative Liability December 31, 2018	\$ 0.31	\$ 0.52	2.45%	0.00%	90%	0.28	60%	\$ 2.52	20%	25%

### Common Stock Warrants

The fair value of Series Q Warrants was derived using a Monte Carlo pricing model, which 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 assumptions used on April 9, 2018, June 30, 2018, September 30, 2018 and December 31, 2018 to value the common stock warrant liabilities are as follows:

	<u>Exercise Price</u>	<u>Strike Floor</u>	<u>Closing Market Price (average)</u>	<u>Risk-free Rate</u>	<u>Dividend Yield</u>	<u>Market Price Volatility</u>	<u>Remaining Term (years)</u>
Warrant Liability April 09, 2018	\$ 1.12	\$ 0.97	\$ 0.85	2.60%	0.00%	120%	5.00
Warrant Liability June 30, 2018	\$ 0.55	\$ 0.19	\$ 0.57	2.72%	0.00%	115%	4.78
Warrant Liability September 30, 2018	\$ 0.32	\$ 0.19	\$ 0.39	2.93%	0.00%	115%	4.53
Warrant Liability December 31, 2018	\$ 0.32	N/a	\$ 0.52	2.49%	0.00%	120%	4.28

### 2018 Options

The determination of the estimated fair value of the 2018 Options (as defined in Note 10) using the Black-Scholes option-pricing model was affected by the Company's stock price as well as assumptions regarding a number of complex and subjective variables. Expected volatilities were based on a value calculated using the historical stock price volatility. Expected life was 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 was 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 was used in the option valuation model. The assumptions used to value to 2018 Options as of December 31, 2018 are as follows:

#### 2018 Non-Qualified Stock Options

<u>Grant Date</u>	<u>Vesting Period</u>	<u>Expected Life</u>	<u>Expected Dividend Rate</u>	<u>Risk-free Rate</u>	<u>Market Price Volatility</u>
June 21, 2018	2.78 years	4.2 years	0%	2.70%	148.77%
September 4, 2018	2.82 years	5.7 years	0%	2.78%	147.40%
September 10, 2018	2.81 years	5.7 years	0%	2.83%	146.66%
October 15, 2018	2.96 years	4.3 years	0%	2.96%	149.82%
October 29, 2018	2.92 years	4.3 years	0%	2.87%	150.34%

### Nonrecurring Fair Value Measurements

The Company tests its long-lived assets for impairment annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable or that the carrying value may exceed its fair value.

As described in Note 12. Goodwill Impairment, during the second quarter of 2018, the Company recorded a \$1.3 million impairment charge related to goodwill measured at fair value on a nonrecurring basis. When recognizing an impairment charge, the carrying value of the asset is reduced to fair value and the difference is recorded within operating earnings in our consolidated statements of operations. The fair value measurements included in the indefinite-lived intangible impairments were primarily based on significant unobservable inputs (Level 3) developed using company-specific information.

### Other Financial Instruments

The Company's financial instruments consist primarily of cash and cash equivalents, accounts receivable, accounts payable, deferred revenue and convertible debt. The carrying values of these financial instruments approximate their fair values, due to their short-term nature.

## 11. 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 could be issued or subject to awards under the plan. Employees, members of the Board of Directors, consultants, service providers and advisors were eligible to participate in the 2008 Long-Term Incentive Plan. The 2008 Long-Term Incentive Plan expired under its terms in 2018. All outstanding options are nonqualified and were generally granted with an exercise price equal to the closing market price of the Company's Class A common 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.

On June 21, 2018, Company shareholders approved the Real Goods Solar 2018 Long-Term Incentive Plan (the “2018 Incentive Plan”) which allows the Company to issue, or grant awards for, up to 1,300,000 shares of Class A common stock. Employees or individuals who perform services for the Company are eligible to participate in the 2018 Incentive Plan, which terminates upon the earlier of a board resolution terminating the 2018 Incentive Plan or ten years after the effective date of June 21, 2018, unless extended by action of the Board of Directors for up to an additional five years. All options are non-qualified and are generally granted with an exercise price equal to the closing market price of the Company’s Class A common stock on the date of the grant. Under the 2018 Incentive Plan, the Company granted multiple non-qualified stock options (“2018 Options”) with various requisite service periods, described in Note 9 Fair Value Measurements, which expire seven years from the grant date. On the last day of each calendar quarter occurring after the grant date, the 2018 Options will vest at 8.3% contingent on continuous employment. The 2018 Options are classified as equity and measured using the “fair-value-based method” with share-based compensation expense recognized in the income statement on a straight-line basis over the requisite service for the entire award.

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 ASC 718, 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 utilizes 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 tables below present a summary of the Company’s option activity as of December 31, 2018 and 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, 2017	185	\$ 15,736.67	3.30	\$ -
Granted	-	-		
Exercised	-	-		
Forfeited or expired	(36)	4,990.00		
Outstanding at December 31, 2017	149	\$ 18,452.38	2.60	\$ -
Exercisable at December 31, 2017	141	\$ 19,418.30	2.80	\$ -
Granted	1,331,500	0.96		
Exercised	-	-		
Forfeited or expired	(125,004)	1.13		
Outstanding at December 31, 2018	1,206,645	\$ 3.22	6.58	\$ -
Exercisable at December 31, 2018	268,189	\$ 11.26	6.53	\$ -

The Company granted 1,331,500 stock options and cancelled 125,004 stock options and did not grant any stock options and cancelled 36 stock options during 2018 and 2017, respectively. The Company’s share-based compensation cost charged against income for continuing operations was approximately \$0.2 million and \$0.2 million during the years 2018 and 2017, respectively.

## 12. Goodwill Impairment

The Company performed its annual test of goodwill as of June 30, 2018, and based on the results of this test, the Company determined that the fair value of the goodwill no longer exceeded the carrying amount. The fair value was determined using a discounted cash flow valuation technique and resulted in the full impairment of goodwill of \$1.3 million charging an impairment loss to the consolidated statement of operations during the twelve months ended December 31, 2018.

## 13. Supplier Concentration

The Company relies on a limited number of third-party suppliers to provide the components used in our POWERHOUSE™ in-roof solar shingles and our solar energy systems. The production of POWERHOUSE™ solar laminates, connectors and wire harnesses is concentrated in China so it is reasonably possible that operations could be disrupted in the future.

#### 14. 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 Company recognized the income tax effects of the 2017 Tax Act in its financial statements in accordance with Staff Accounting Bulletin (SAB) No. 118, which provides SEC staff guidance for the application of ASC Topic 740, Income Taxes. The Company has finalized its accounting for the income tax effects of the 2017 Tax Act.

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 in 2017. The Company had \$0 of income tax expense (benefit) for the years ended December 31, 2018 and 2017. Variations from the federal statutory rate are as follows:

(in thousands)	Years ended December 31,	
	2018	2017
Expected federal income tax expense (benefit) at statutory rate of 21% and 35% at December 31, 2018 and 2017, respectively	\$ (8,888)	\$ (6,191)
Effect of permanent other differences		
Debt extinguishment	5,145	170
Transaction Cost Amortization	552	-
Other	319	(28)
Effect of valuation allowance	3,479	(12,572)
Other	39	(1,147)
Impact of change in federal tax rate on deferred tax asset	-	20,479
State income tax expense (benefit), net of federal benefit	(646)	(690)
	<u>\$ -</u>	<u>\$ 21</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, 2018 and 2017 are as follows:

(in thousands)	2018	2017
Deferred tax assets (liabilities)		
Provision for doubtful accounts	\$ 138	\$ 195
Inventory-related expense	195	209
Accrued liabilities	367	444
Depreciation and amortization	2,084	2,128
Net operating loss carry-forwards	39,154	35,754
Other	705	719
Total deferred tax assets	42,643	39,449
Valuation allowance	(42,643)	(39,449)
Total net deferred tax assets	<u>\$ -</u>	<u>\$ -</u>

At December 31, 2018, RGS had \$140.7 million of federal net operating loss carryforwards expiring, if not utilized, beginning in 2020 and \$14.1 million with no expiration. Additionally, the Company had \$142.8 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 2018 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 increased by approximately \$3.5 million for the year ended December 31, 2018 as a result of its operating loss for the year. 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, 2018, 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, 2018, utilizing the new federal income tax rate of 21%, the Company estimates that the maximum amount of such distributions to Gaia could aggregate \$1.1 million.

## 15. 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)	2018	2017
Contract revenue:		
Solar Division	12,703	15,586
POWERHOUSE™	-	-
Other	25	6
Consolidated contract revenue	12,728	15,592
Operating loss from continuing operations:		
Solar Division	(5,855)	(8,729)
POWERHOUSE™	(598)	(20)
Other	(8,518)	(8,637)
Operating Loss	(14,971)	(17,386)
Reconciliation of consolidated loss from operations to consolidated net loss:		
Other income	1,063	68
Change in fair value of derivative liabilities and loss on debt extinguishment	(27,134)	(379)
Amortization of debt discount and deferred loan costs	(1,042)	(3)
Net loss	(42,084)	(17,700)

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)	2018	2017
Total assets:		
Solar Division	\$ 10,615	\$ 9,840
POWERHOUSE™	1,366	1,140
Other	4,279	3,278
	\$ 16,260	\$ 14,258

## 16. Subsequent Events

On March 29, 2019, the Company announced an operational realignment to exit its mainland residential solar business so as to focus on the POWERHOUSE™ in-roof shingle market. Revenues and net loss in 2018 for the mainland residential solar business were approximately \$8.9 million and \$6.3 million, respectively.

On April 4, 2019, the Company closed a registered offering in which it issued and sold (i) 15,938,280 shares of Class A common stock, (ii) prepaid Series S Warrants to purchase 1,430,141 shares of Class A common stock and (iii) Series R Warrants to purchase 17,368,421 shares of Class A common stock pursuant to the terms of the Securities Purchase Agreement dated April 2, 2019 between the Company and the investors. The investors paid \$0.19 per share of Class A common stock and \$0.18 per share of Class A common stock underlying the Series S Warrant for aggregate gross proceeds of \$3.3 million at the closing and before \$0.34 million of expenses.

**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, 2018, they have concluded that those disclosure controls and procedures are effective.

**Changes in Internal Control over Financial Reporting**

No changes in our internal control over financial reporting occurred during the fourth quarter ended December 31, 2018 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, 2018. 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, 2018, 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	53	Director and Chairman
Dennis Lacey	65	Director and Chief Executive Officer
Pavel Bouska	65	Director
Robert L. Scott	72	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 53—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 65—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 65—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 72—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	65	Chief Executive Officer and Director
Alan Fine	65	Chief Financial Officer and Chief Administrative Officer
Nicolle Dorsey	40	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 65—**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 40— Ms. Dorsey joined the Company in September 2016 as Assistant Controller before she was named the Company’s Principal Accounting Officer and Controller 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 Master 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 2018 and the representations of our directors and executive officers that no additional filings were required, the following persons failed to file on a timely basis reports required by Section 16(a): Ian Bowles filed one late Form 4 related to the reporting of two separate transactions of grants of stock options, Pavel Bouska filed one late Form 4 related to the reporting of two separate transactions of grants of stock options, Robert L. Scott filed one late Form 4 related to the reporting of two separate transactions of grants of stock options, Dennis Lacey filed one late Form 4 related to the reporting of a grant of stock options, Alan Fine filed one late Form 4 related to the reporting of a grant of stock options, and Nicolle Dorsey filed one late Form 3 related to the reporting of securities beneficially owned at the time of her appointment as principal accounting officer and one Form 4 related to the reporting of a grant of stock options.

#### **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 <https://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.

#### **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: <https://investors.rgsenergy.com/corporate-governance/documents-charters>. Our Audit Committee currently consists of Robert Scott, Pavel Bouska, and Ian Bowles, and each member of the Audit Committee is independent consistent with the requirements of the Public Company Accounting Oversight Board and within the meaning of the 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</b>	<b>Option Awards (1)</b>	<b>Totals</b>
Dennis Lacey	2018	\$ 375,972	\$ 211,600	\$ 587,572
Chief Executive Officer and Director	2017	\$ 375,000	\$ -	\$ 375,000
Alan Fine	2018	\$ 191,346	\$ 85,800	\$ 277,146
Chief Financial Officer and Chief Administrative Officer	2017	\$ 185,000	\$ -	\$ 185,000
Nicolle Dorsey (2)	2018	\$ 127,914	\$ 42,600	\$ 170,514
Principal Accounting Officer and Controller	2017	\$ 100,346	\$ -	\$ 100,346

- (1) The amounts in the *Option Awards* column reflect the aggregated grant date fair value of awards granted during 2018 and 2017, 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 11. Share-Based Compensation to our audited financial statements, included in Item 8 of this Annual Report on Form 10-K. 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 2017.
- (2) Ms. Dorsey commenced service as our Principal Accounting Officer and Controller 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, 2018.

Name	Option Awards			
	Number of Securities Underlying		Option Exercise Price (1)	Option Expiration Date (1)
	Unexercised Options (1)			
Exercisable	Unexercisable			
Dennis Lacey	12	-	\$ 45,120	2/28/2021
	4	-	\$ 26,520	7/17/2021
	25	-	\$ 24,720	8/18/2021
	24	10 <sup>(2)</sup>	\$ 1,428	6/1/2022
	47,500	142,500	\$ 1.08	6/21/2025
	1,667	18,333	\$ 0.32	10/15/2025
Alan Fine	1	-	\$ 31,800	7/7/2021
	2	-	\$ 14,760	10/19/2021
	5	-	\$ 1,428	6/1/2022
	18,750	56,250	\$ 1.08	6/21/2025
	1,250	13,750	\$ 0.32	10/15/2025
Nicolle Dorsey	8,750	26,250	\$ 1.08	6/21/2025
	1,250	13,750	\$ 0.32	10/15/2025

- (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 11. Share-Based Compensation to our audited financial statements, included in Item 8 of this Annual Report. Except as expressly noted, the unexercisable options vest in 8.3% equal quarterly installments on the last day of each calendar quarter following the grant, contingent on continuous employment.
- (2) 25% of the options vested immediately upon grant, and the remaining 75% subsequently vest in equal quarterly installments of 5% following the grant.

### 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. Effective January 1, 2019, the Company will match 100% of employee contributions up to 3% of salary plus 50% of employee contributions greater than 3% but not to exceed 5% of salary. 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.

During 2018, 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 contribution matching 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 2018 Long-Term Incentive Plan award package.

## Stock Option Grant Timing Practices

Our Compensation Committee administers and grants awards under our 2018 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 2018, 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. We entered into an amendment to the employment agreement on November 19, 2018 to increase the severance payment Mr. Lacey is eligible for if his employment with the Company is terminated without Cause (as defined in the employment agreement) within 12 months after a Change of Control (as defined in the employment agreement) or if Mr. Lacey terminates his employment for "Good Reason" (as defined in the employment agreement). 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, 2017 or 2018.

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 24 months of Mr. Lacey's most recent base salary plus 200% of 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 vested and the remaining 75% subsequently vest in equal quarterly installments of 5% following the grant. The options awarded to Mr. Lacey include 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 at a rate of 5.0% 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 employee’s 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.

On November 14, 2018, we entered into change in control agreements (the “Change in Control Agreements”) with certain executive officers, employees that report directly to the Company’s Chief Executive Officer and certain other employees considered to be part of the Company’s senior leadership, including with each of Mr. Fine and Ms. Dorsey. The Change in Control Agreements are in substantially the same form and provide that in the event a Change in Control (as defined below) occurs, and either (i) any successor to the Company as a result of a Change in Control fails to assume the Company’s obligations under the applicable Change in Control Agreement, or (ii) within the one-year period immediately following the consummation of the Change in Control, the subject employee’s employment with the Company is (a) involuntarily terminated by the Company without Business Reasons (as defined in the Change in Control Agreement) or (b) voluntarily terminated by the subject employee for Good Reason (as defined in the Change in Control Agreement), then such employee shall receive a lump sum severance payment equal to a percentage of the sum of his or her base salary plus target bonus for the year in question. Mr. Fine’s and Ms. Dorsey’s percentage is 100%. The Change in Control Agreements were approved to promote the incentive employees to stay with the Company during and after a potential future change in control transaction to promote shareholders’ interests and preserve value.

A “change in control” is defined in the Change in Control Agreements as a single transaction or a series of related transactions of any one or more of the following (subject to some exceptions): (i) any merger, consolidation or business combination of the Company with or into any other entity or person, or any other reorganization, in each case in which the equity holders of the Company immediately prior to such merger, consolidation, business combination or reorganization, own less than 50% of the voting power of the surviving entity immediately after such merger, consolidation, business combination or reorganization, (ii) any transaction in which in excess of 50% of the Company’s voting power is transferred to a person or a group other than the equity holders of the Company immediately prior to such transaction(s), or (iii) a sale or other disposition of all or substantially all of the assets of the Company.

Other than as described above, we have not entered into traditional employment agreements or change in control agreement 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 and the Change in Control Agreements with Mr. Fine and Ms. Dorsey, each 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.”

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. 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 2018, 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, 2018 for each director who served during 2018 and was compensated for his or her service other than as a named executive officer.

Name	Fees Earned or Paid in Cash	Option Awards (1)	Totals
Ian Bowles	\$ 50,600	\$ 50,200	\$ 100,800
Robert L. Scott	\$ 44,600	\$ 50,200	\$ 94,800
Pavel Bouska	\$ 30,200	\$ 50,200	\$ 80,400

- (1) The amounts in the *Option Awards* column reflect the aggregated grant date fair value of awards granted during 2018 and 2017, 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 11. Share-Based Compensation to our audited financial statements, included in Item 8 of this Annual Report on Form 10-K. All directors have 50,008 option awards outstanding as of December 31, 2018.

## 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, 2018:

	Number of securities to be issued upon exercise of outstanding options	Weighted average exercise price of outstanding options	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by security holders	1,206,645	\$ 3.22	93,500

### BENEFICIAL OWNERSHIP OF SHARES

The following table sets forth information with respect to the beneficial ownership of our Class A common stock as of April 11, 2019 (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 April 11, 2019, there were 108,902,754 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 Management LP (2)	8,961,318	7.81%
Intracoastal Capital, LLC (3)	8,942,342	7.80%
Dennis Lacey (4)	436,662	*
Alan Fine (5)	122,478	*
Nicolle Dorsey (6)	14,150	*
Pavel Bouska (7)	35,829	*
Ian Bowles (8)	165,830	*
Robert L. Scott (9)	65,825	*
All directors and executive officers as a group (6 persons) (10)	840,774	0.91%

\* 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 April 11, 2019.
- (2) According to information available to the Company, consists of (i) 3,055,657 shares of our Class A common stock; (ii) 2,503,516 shares of our Class A common stock issuable upon exercise of warrants that are currently exercisable (subject to a 4.99% beneficial ownership limitation); and (iii) 3,402,145 shares of our Class A common stock issuable upon exercise of warrants that are currently exercisable (subject to a 9.99% beneficial ownership limitation), which together represent 7.81% of our outstanding shares of Class A common stock as of April 11, 2019. Does not include additional shares of Class A common stock issuable upon exercise of additional 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 4.99% 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. Hudson Bay Capital Management LP may be deemed to be the beneficial owner of all shares of Class A common stock underlying the securities held by Hudson Bay Master Fund Ltd. Mr. Gerber disclaims beneficial ownership of these securities. The address of Hudson Bay Master Fund Ltd. is c/o Hudson Bay Capital Management LP, 777 Third Avenue, 30<sup>th</sup> Floor, New York, NY 10017.
- (3) According to a Schedule 13G filed April 11, 2019 by Intracoastal Capital LLC ("Intracoastal"), Mitchell P. Kopin and Daniel B. Asher and information available to the Company. Consists of (i) 3,255,658 shares of our Class A common stock; (ii) 100,008 shares of our Class A common stock issuable upon exercise of warrants that are currently exercisable (subject to a 4.99% beneficial ownership limitation); and (iii) 5,586,676 shares of our Class A common stock issuable upon exercise of warrants that are currently exercisable (subject to a 9.99% beneficial ownership limitation), which together represent 7.80% of our outstanding shares of Class A common stock as of April 11, 2019. The reporting persons share voting and dispositive power over the shares. Mr. Kopin and Mr. Asher, each of whom are managers of Intracoastal, share voting control and investment discretion over the securities held by Intracoastal. As a result, each of Mr. Kopin and Mr. Asher may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities held by Intracoastal. The address of Intracoastal and Mr. Kopin is 245 Palm Trail, Delray Beach, FL 33483. The address of Mr. Asher is 111 W. Jackson Boulevard, Suite 2000, Chicago, IL 60604.
- (4) Consists of (i) 170,000 shares of our Class A common stock owned by Mr. Lacey, (ii) 155,000 shares of our Class A common stock owned by a limited partnership, of which Mr. Lacey and his spouse are each a general partner and a limited partner, over which Mr. Lacey shares voting and investment power with his spouse, (iii) 45,000 shares of our Class A common stock owned by Mr. Lacey's spouse, (iv) 49,232 shares of our Class A common stock issuable upon exercise of stock options that are currently exercisable and (v) 17,430 share of our Class A common stock issuable upon exercise of stock options exercisable within 60 days after April 11, 2019.
- (5) Consists of (i) 95,000 shares of our Class A common stock, (ii) 20,008 shares of our Class A common stock issuable upon exercise of stock options that are currently exercisable and (iii) 7,470 share of our Class A common stock issuable upon exercise of stock options exercisable within 60 days after April 11, 2019.
- (6) Consists of (i) 10,000 shares of our Class A common stock issuable upon exercise of stock options that are currently exercisable and (iii) 4,150 share of our Class A common stock issuable upon exercise of stock options exercisable within 60 days after April 11, 2019.

- (7) Consists of (i) 20,004 shares of our Class A common stock, (ii) 11,675 shares of our Class A common stock issuable upon exercise of stock options that are currently exercisable and (iii) 4,150 share of our Class A common stock issuable upon exercise of stock options exercisable within 60 days after April 11, 2019.
- (8) Consists of (i) 150,005 shares of our Class A common stock, (ii) 11,675 shares of our Class A common stock issuable upon exercise of stock options that are currently exercisable and (iii) 4,150 share of our Class A common stock issuable upon exercise of stock options exercisable within 60 days after April 11, 2019.
- (9) Consists of (i) 50,000 shares of our Class A common stock, (ii) 11,675 shares of our Class A common stock issuable upon exercise of stock options that are currently exercisable and (iii) 4,150 share of our Class A common stock issuable upon exercise of stock options exercisable within 60 days after April 11, 2019.
- (10) Includes Messrs. Lacey, Fine, Dorsey, Bouska, Bowles, and Scott.

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

#### **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 either was a “related person” at the time of, or became a “related person” as a result of, entering into the transactions listed 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 April 1, 2019, the maturity date of the 2016 Notes, 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. On April 1, 2019, we made a payment of \$1,281.02 to pay off the outstanding principal balance and related accrued interest under the 2016 Notes.

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 April 9, 2018, we sold \$3,225,000 in principal amount and \$3 million funding amount (reflecting \$225,000 of original issue discount) of 2018 Notes and Series Q Warrants to purchase 2,781,137 shares of our Class A common stock to Hudson Bay as part of the 2018 Notes Offering. The 2018 Notes do not bear interest other than upon the occurrence of an event of default, in which case the 2018 Notes bear interest at 18% per year. As of April 9, 2019, the maturity date of the 2018 Notes, we have converted into shares of our Class A common stock \$3,199,800 in principal, \$5,249,145 of Additional Amount (as defined in the Series A Notes) and \$3,132,508 of Additional True-Up Amount (as defined in the Series B Notes). As a result, we have issued an aggregate of 24,099,375 shares of Class A common stock to Hudson Bay. The largest amount of principal outstanding since January 1, 2018 and the date of this Annual Report on Form 10-K was \$1,725,000. On April 9, 2019, we made a payment of \$50,200 to pay off the remaining outstanding principal balance under the 2018 Notes. At the closing, we received approximately \$1.5 million from Hudson Bay. After closing and as of April 10, 2019, we have received approximately \$2.9 million from Hudson Bay upon exercise of Series Q Warrants.

On April 2, 2019, we sold an aggregate of \$1.1 million of units to Hudson Bay as part of a registered offering of an aggregate amount of \$3.3 million of (i) “primary units,” each consisting of one share of our Class A common stock and a Series R Warrant to purchase one share of Class A common stock, and (ii) “alternative units,” each consisting of a Prepaid Series S Warrant to purchase one share of Class A common stock and a Series R Warrant to purchase one share of Class A common stock. We sold the primary units at an initial price of \$0.19 per unit and the alternative units as a price of \$0.18 per unit. Hudson Bay purchased 5,573,935 primary units and 5,810,309 alternative units. As a result of the April 2, 2019 offering, Hudson Bay received an aggregate of 5,337,561 shares of our Class A common stock, a Series R warrant to purchase 5,573,935 shares of our Class A common stock, and a Series S warrant to purchase 236,374 shares of our Class A common stock.

##### *Transactions with Intracoastal Capital*

We believe that Intracoastal Capital, LLC (“Intracoastal”) became, and currently is, a “related person” as a result of being the beneficial owner of more than 5% of our outstanding Class A common stock when we entered into the transaction listed below.

On April 2, 2019, we sold an aggregate of \$1.0 million of units to Intracoastal as part of a registered offering of an aggregate amount of \$3.3 million of (i) “primary units,” each consisting of one share of our Class A common stock and a Series R Warrant to purchase one share of Class A common stock, and (ii) “alternative units,” each consisting of a Prepaid Series S Warrant to purchase one share of Class A common stock and a Series R Warrant to purchase one share of Class A common stock. We sold the primary units at an initial price of \$0.19 per unit and the alternative units as a price of \$0.18 per unit. Intracoastal purchased 5,263,157 primary units and 5,263,157 alternative units. As a result of the April 2, 2019 offering, Intracoastal received an aggregate of 5,263,157 shares of our Class A common stock, and a Series R warrant to purchase 5,263,157 shares of our Class A common stock.



#### *Transaction with Iroquois*

We believe that Iroquois Master Fund, Ltd became a “related person” as a result of the transaction described below as a result of becoming the beneficial owner of more than 5% of our outstanding Class A common stock. Insofar as we have been able to ascertain, as of April 10, 2019, Iroquois is not a “related person.”

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, 2018, and April 10, 2019, the Company had paid an aggregate amount of \$0.5 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**

The Board of Directors has determined and confirmed that each of Messrs. Bowles, Bouska and Scott do not have a material relationship with Real Goods Solar, Inc. that would interfere with the exercise of independent judgment and are independent as defined by the applicable laws and regulations and the listing standards of Nasdaq. 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 December 5, 2018, our Audit Committee engaged BDO USA, LLP (“BDO”) as the Company’s new principal accountant to audit the Company’s financial statements for the fiscal year ending December 31, 2018. During our two most recent fiscal years and through December 5, 2018, we did not consult with BDO regarding either (i) the application of accounting principles to a specific completed or contemplated transaction or the type of audit opinion that might be rendered on our financial statements, and neither a written report nor oral advice was provided to us that was an important factor considered by us in reaching a decision as to an accounting, auditing or financial reporting issue, or (ii) any matter that was either the subject of a disagreement or other reportable event.

The following table presents fees billed for professional accounting fees and services rendered for the years ended December 31, 2018 and December 31, 2017 from our principal accounting firm BDO:

Audit and Non-Audit Fees (in \$000's)	2018	2017
Audit fees (1)	\$ 338	\$ -

- (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.

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 2018, 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:

Exhibit No.	Description
<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>
3.4	Articles of Incorporation of Real Goods Solar, Inc., revised to reflect correction made by Statement of Correction to Articles of Incorporation (Incorporated by reference to Exhibit 3.4 to Real Goods Solar's Registration Statement on Form S-1 filed April 15, 2019 (Commission File No. 333-_____)).
<a href="#">3.5</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>



Exhibit No.	Description
4.4	<u>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)).</u>
4.5	<u>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)).</u>
4.6	<u>Form of Warrant, dated July 9, 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)).</u>
4.7	<u>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)).</u>
4.8	<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>
4.9	<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>
4.10	<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>
4.11	<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>
4.12	<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>
4.13	<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>

Exhibit No.	Description
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 4.3 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>
4.29	<a href="#">Form of Series O Warrant, dated January 4, 2018, issued to the investor party to the Securities Purchase Agreement, dated January 2, 2018 (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed January 2, 2018 (Commission File No. 001-34044)).</a>
4.30	<a href="#">Form of Series P Warrant, dated January 4, 2018, issued to the investor party to the Securities Purchase Agreement, dated January 2, 2018 (Incorporated by reference to Exhibit 4.2 to Real Goods Solar's Current Report on Form 8-K filed January 2, 2018 (Commission File No. 001-34044)).</a>
4.31	<a href="#">Placement Agency Warrant, dated January 4, 2018, issued to Westpark Capital, Inc. (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed January 4, 2018 (Commission File No. 001-34044)).</a>
4.32	<a href="#">Form of Series A Senior Convertible Note, dated April 9, 2018, issued to the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044)).</a>
4.33	<a href="#">Form of Series B Senior Secured Convertible Note, dated April 9, 2018, issued to the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 4.2 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044)).</a>
4.34	<a href="#">Form of Series Q Warrants, dated April 9, 2018, issued to the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 4.3 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044)).</a>
4.35	<a href="#">Form of Secured Promissory Notes, dated April 9, 2018, issued to Real Goods Solar, Inc. under the Note Purchase Agreement, dated April 9, 2018 by each of the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 4.4 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044)).</a>
4.36	<a href="#">Form of Placement Agent Warrant, dated April 9, 2018, issued by Real Goods Solar, Inc. to WestPark Capital, Inc. (Incorporated by reference to Exhibit 4.5 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044)).</a>
4.37	<a href="#">Form of Series R Warrant, dated April 2, 2019, issued to the investors under the Securities Purchase Agreement, dated April 2, 2019 (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed April 2, 2019 (Commission File No. 001-34044)).</a>
4.38	<a href="#">Form of Series S Warrant, dated April 2, 2019, issued to the investors under the Securities Purchase Agreement, dated April 2, 2019 (Incorporated by reference to Exhibit 4.2 to Real Goods Solar's Current Report on Form 8-K filed April 2, 2019 (Commission File No. 001-34044)).</a>
4.39	<a href="#">Form of Placement Agent Warrant, dated as of April 4, 2019, issued to Dawson James Securities, Inc. (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed April 4, 2019 (Commission File No. 001-34044)).</a>
4.40	Placement Agent Warrant, dated as of April 1, 2016, issued to Roth Capital Partners, LLC (Incorporated by reference to Exhibit 4.16 to Real Goods Solar's Registration Statement on Form S-1 filed April 15, 2019 (Commission File No. 333-230885)).
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>
10.4	<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>



Exhibit No.	Description
<a href="#">10.5</a>	<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>
<a href="#">10.6</a>	<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>
<a href="#">10.7</a>	<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>
<a href="#">10.8</a>	<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>
<a href="#">10.9</a>	<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>
<a href="#">10.10</a>	<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>
<a href="#">10.11*</a>	<a href="#">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)).</a>
<a href="#">10.12*</a>	<a href="#">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)).</a>
<a href="#">10.13</a>	<a href="#">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)).</a>
<a href="#">10.14</a>	<a href="#">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)).</a>
<a href="#">10.15</a>	<a href="#">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)).</a>
<a href="#">10.16</a>	<a href="#">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)).</a>

Exhibit No.	Description
10.17	<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>
10.18	<a href="#"><u>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)).</u></a>
10.19	<a href="#"><u>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)).</u></a>
10.20	<a href="#"><u>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)).</u></a>
10.21	<a href="#"><u>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)).</u></a>
10.22	<a href="#"><u>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)).</u></a>
10.23	<a href="#"><u>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)).</u></a>
10.24	<a href="#"><u>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)).</u></a>
10.25	<a href="#"><u>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)).</u></a>
10.26	<a href="#"><u>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)).</u></a>
10.27	<a href="#"><u>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)).</u></a>
10.28	<a href="#"><u>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)).</u></a>
10.29	<a href="#"><u>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)).</u></a>

Exhibit No.	Description
<a href="#">10.30</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="#">10.31</a>	<a href="#">Form of Securities Purchase Agreement, dated January 2, 2018, between Real Goods Solar, Inc. and the purchaser party thereto (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed January 2, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.32</a>	<a href="#">Cooperation Agreement dated January 2, 2018, between Real Goods Solar, Inc. and Iroquois Capital Management LLC, Iroquois Master Fund LTD, Iroquois Capital Investment Group LLC, Richard Abbe and Kimberly Page (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed January 3, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.33*</a>	<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>
<a href="#">10.34</a>	<a href="#">Placement Agency Agreement, dated January 29, 2018, between Real Goods Solar, Inc. and WestPark Capital, Inc. (Incorporated by reference to Exhibit 1.1 to Real Goods Solar's Quarterly Report on Form 10-Q filed August 14, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.35</a>	<a href="#">Securities Purchase Agreement, dated March 30, 2018, among Real Goods Solar, Inc. and the investor parties thereto (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed April 2, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.36</a>	<a href="#">Form of Amendment No. 1 to Securities Purchase Agreement, dated April 9, 2018, between Real Goods Solar, Inc. and each of the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.37</a>	<a href="#">Registration Rights Agreement, dated April 9, 2018, among Real Goods Solar, Inc. and the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.38</a>	<a href="#">Form of Note Purchase Agreement, dated April 9, 2018, between Real Goods Solar, Inc. and each of the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 10.3 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.39</a>	<a href="#">Form of Master Netting Agreement, dated April 9, 2018, between Real Goods Solar, Inc. and each of the investors under the Securities Purchase Agreement, dated March 30, 2018 (Incorporated by reference to Exhibit 10.4 to Real Goods Solar's Current Report on Form 8-K filed April 10, 2018 (Commission File No. 001-34044)).</a>

Exhibit No.	Description
<a href="#">10.40</a>	<a href="#">Registration Rights Agreement, dated June 5, 2018, among Real Goods Solar, Inc., Iroquois Master Fund Ltd. and Iroquois Capital Investment Group LLC (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed June 7, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.41*</a>	<a href="#">Real Goods Solar, Inc. 2018 Long-Term Incentive Plan (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed June 21, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.42*</a>	<a href="#">Form of Real Goods Solar, Inc. Employee Stock Option Agreement (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Current Report on Form 8-K filed June 21, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.43</a>	<a href="#">Form of Letter Agreement, dated August 29, 2018, between Real Goods Solar, Inc. and each holder of Series A Senior Convertible Notes and Series B Senior Secured Convertible Notes, in each case due April 9, 2019 (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed August 29, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.44*</a>	<a href="#">Form of Change in Control Agreement entered into on November 14, 2018 between Real Goods Solar, Inc. and each of, among others, Alan Fine and Nicolle Dorsey (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed November 20, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.45*</a>	<a href="#">Amendment to Employment Agreement, dated November 19, 2018, between Real Goods Solar, Inc. and Dennis Lacey (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Current Report on Form 8-K filed November 20, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.46*</a>	<a href="#">Real Goods Solar, Inc. 2019 Incentive Compensation Plan (Incorporated by reference to Exhibit 10.3 to Real Goods Solar's Current Report on Form 8-K filed November 20, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.47*</a>	<a href="#">Real Goods Solar, Inc. 2019 One-Time Special Discretionary Bonus Plan (Incorporated by reference to Exhibit 10.4 to Real Goods Solar's Current Report on Form 8-K filed November 20, 2018 (Commission File No. 001-34044)).</a>
<a href="#">10.48</a>	<a href="#">Engagement Letter, dated March 19, 2019, among Real Goods Solar, Inc. and Dawson James Securities, Inc. (Incorporated by reference to Exhibit 1.1 to Real Goods Solar's Current Report on Form 8-K filed April 2, 2019 (Commission File No. 001-34044)).</a>
<a href="#">10.49</a>	<a href="#">Form of Securities Purchase Agreement, dated April 2, 2019, 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 April 2, 2019 (Commission File No. 001-34044)).</a>
<a href="#">10.50</a>	<a href="#">Form of Leak-Out Agreement (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Current Report on Form 8-K filed April 2, 2019 (Commission File No. 001-34044)).</a>
<a href="#">10.51</a>	<a href="#">Form of Indemnification Agreement and schedule of directors and officers who have entered into such agreement (Incorporated by reference to Exhibit 10.2 to Real Goods Solar's Quarterly Report on Form 10-Q filed November 14, 2012 (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 BDO USA, LLP (filed herewith)</a>
<a href="#">23.2</a>	<a href="#">Consent of Moss Adams LLP (filed herewith)</a>
<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.



**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 15, 2019

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 15, 2019
<u>/s/ Dennis Lacey</u> Dennis Lacey	Chief Executive Officer and Director (Principal Executive Officer)	April 15, 2019
<u>/s/ Pavel Bouska</u> Pavel Bouska	Director	April 15, 2019
<u>/s/ Alan Fine</u> Alan Fine	Chief Financial Officer and Treasurer (Principal Financial Officer)	April 15, 2019
<u>/s/ Nicolle Dorsey</u> Nicolle Dorsey	Principal Accounting Officer and Controller	April 15, 2019
<u>/s/ Robert L. Scott</u> Robert L. Scott	Director	April 15, 2019

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**

Real Goods Solar, Inc.  
Denver, Colorado

We hereby consent to the incorporation by reference in the Registration Statements on Form S-1 (No. 333-211915), Registration Statement on Form S-1 (filed on April 15, 2019), Form S-3 (Nos. 333-198238 and 333-218581) and Form S-8 (Nos. 333-153642, 333-186722, 333-193663, 333-208106 and 333-225971) of Real Goods Solar, Inc. of our report dated April 15, 2019, relating to the consolidated financial statements which appear in this Form 10-K. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

/s/ BDO USA, LLP

Dallas, Texas

April 15, 2019

---

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements on Form S-1 (No. 333-211915), Form S-1 (filed on April 15, 2019), Form S-3 (Nos. 333-198238 and 333-218581), and Form S-8 (Nos. 333-153642, 333-186722, 333-193663, 333-208106, and 333-225971) of our report dated April 2, 2018, except for the reclassification adjustments applied to the 2017 financial statements as described under the heading *Discontinued Operations* in Note 2 as to which the date is April 15, 2019, relating to the 2017 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 on Form 10-K for the year ended December 31, 2018.

/s/ Moss Adams LLP

---

Denver, Colorado  
April 15, 2019

---

## 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 15, 2019

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

---

## 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 15, 2019

/s/ Alan Fine

---

Alan Fine  
Chief Financial Officer and Treasurer  
(Principal Financial Officer)

---

**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, 2018, as filed with the U.S. Securities and Exchange Commission on the date hereof (the "Report"), I, Dennis Lacey, Chief Executive Officer, 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 15, 2019

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

---



**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, 2018, as filed with the U.S. Securities and Exchange Commission on the date hereof (the "Report"), I, Alan Fine, Chief Financial 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 15, 2019

/s/ Alan Fine

Alan Fine

Chief Financial Officer and Treasurer

(Principal Financial Officer)

---