
United States
Securities and Exchange Commission
Washington, D.C. 20549

Form 10-Q

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

For the quarterly period ended September 30, 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 16th STREET, SUITE 300
DENVER, COLORADO 80202
(Address of principal executive offices)

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

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 and Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. YES NO

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See 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 checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date:

Class	Outstanding at November 2, 2018
Class A Common Stock (\$.0001 par value)	77,090,149

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This report may contain 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 following: our history of operating losses; our ability to implement our revenue growth strategy achieve its target level of sales, generate cash flow from operations, and achieve break-even and better results; our ability to achieve profitability; our ability to generate breakeven cash flow to fund our operations; our success in implementing our plans to increase future sales, and installations and revenue; rules, regulations and policies pertaining to electricity pricing and technical interconnection of customer-owned electricity generation such as net energy metering; the continuation and level of government subsidies and incentives for solar energy; existing and new regulations impacting solar installations including electric codes; future shortages in supplies for solar energy systems; the adoption and general demand for solar energy; the impact of a drop in the price of conventional energy on demand for solar energy systems; seasonality of customer demand and adverse weather conditions inhibiting our ability to install solar energy systems; changing and updating technologies and the issues presented by these new technologies related to customer demand and our product offering; geographic concentration of revenue from the sale of solar energy systems in Hawaii, California and east coast states; non-compliance with or loss or suspension of licenses required for installation of solar energy systems; loss of key personnel and ability to attract necessary personnel; our failure to accurately predict future warranty claims; adverse outcomes arising from litigation and legal disputes to which we may be subject from time to time; our ability to continue to obtain services and components from suppliers, installers and other vendors; disruption of our supply chain from equipment manufacturers and potential shortages of components for solar energy systems; factors impacting the timely installation of solar energy systems; competition; costs associated with safety and construction risks; continued access to competitive third party financiers to finance customer solar installations; the ability to obtain requisite international product certification of POWERHOUSE™ 3.0; our ability to successfully and timely commercialize POWERHOUSE™ 3.0 during 2019; in future years achieve market share; our ability to satisfy the conditions and our obligations under the POWERHOUSE™ 3.0 license agreement; our ability to manage supply chain in order to have production levels and pricing of the POWERHOUSE™ 3.0 shingles to be competitive; our ability to successfully expand its operations and employees and realize profitable revenue growth from the sale and installation of POWERHOUSE™ 3.0, and to the extent, anticipated; RGS Energy's ability to realize revenue from sales of POWERHOUSE™ arising from the California Energy Commissions' mandate for solar systems with new home building commencing in 2020; our ability to realize revenue from written reservations for initial POWERHOUSE™ deliveries; our ability to obtain future written reservations for POWERHOUSE™ deliveries; and RGS Energy's ability to obtain future purchase orders for POWERHOUSE™ deliveries; competition in the built-in photovoltaic solar system business; our ability to successfully and timely expand its POWERHOUSE™ 3.0 business outside of the United States; foreign exchange risks associated with the POWERHOUSE™ 3.0 business; intellectual property infringement claims related to the POWERHOUSE™ 3.0 business; the performance of the Solar Division; the adequacy of, and access to, capital necessary to implement its revenue growth strategy; RGS Energy's ability to satisfy the conditions to receive additional funds underlying the investor promissory notes received in the 2018 convertible note offering; RGS Energy's ability to satisfy equity conditions and other covenants in the transaction documents for the offering of convertible notes due April 9, 2019; whether RGS Energy will receive any proceeds from exercise of common stock warrants; rules, regulations and policies pertaining to electricity pricing and technical interconnection of customer-owned electricity generation such as net energy metering; the continuation and level of government and utility incentives for solar energy; changes in general economic, business and political conditions, including tariffs on imported solar cells and changes in the financial markets; the impact on future hypothetical earnings per share of future employee incentive compensation by cash bonuses and stock option awards; future cancellations of our backlog; our ability to meet customer expectations; risks and liabilities associated with placing employees and technicians in our customers' homes and businesses; product liability claims; future data security breaches, or our inability to protect personally identifiable information or other information about our customers; the volatile market price of our Class A common stock; our ability to receive cash payments under the Investor Notes (as defined below); our ability to pay the balance due at maturity of our convertible notes due April 9, 2019 if the holders thereof do not convert them or are not forced to convert; the dilutive effect of future issuances of stock, options, warrants or other securities and the effect on the market price of our Class A common stock; the low likelihood that we will pay any cash dividends on our Class A common stock for the foreseeable future; anti-takeover provisions in our organizational documents; the probability of the occurrence and potential magnitude of cybersecurity incidents; the adequacy of preventative actions taken to reduce cybersecurity risks and the associated costs, including, if appropriate, discussing the limits of the company's ability to prevent or mitigate certain cybersecurity risks; the terms of some of our outstanding securities and transaction documents entered into in connection with past offerings restrict our ability to enter into certain transactions or obtain financing, and could result in our paying premiums or penalties to the holders of some of our outstanding securities; our ability to meet The Nasdaq Capital Market continued listing requirements; and such other factors as discussed throughout Part I, Item 1A, Risk Factors and Part II, Item 7, Management's Discussion and Analysis of Financial Conditions and Results of Operations of our Annual Report on Form 10-K for the year ended December 31, 2017 ("2017 10-K") and Part I, Item 2, Management's Discussion and Analysis of Financial Conditions and Results of Operations and Part II, Item 1A, Risk Factors included in our Quarterly Reports on Form 10-Q for the period ended March 31, 2018, June 30, 2018 and this report.

Any forward-looking statement made by us in this report 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 – FINANCIAL INFORMATION

Item 1. Financial Statements

REAL GOODS SOLAR, INC.
Condensed Consolidated Balance Sheets (unaudited)

(in thousands, except share and per share data)	September 30, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash	\$ 8,593	\$ 1,170
Accounts receivable, net	1,415	2,393
Inventory, net	1,207	1,950
Deferred costs on uncompleted contracts	271	615
Costs in excess of billings on uncompleted contracts	12	-
Other current assets	1,086	1,264
Current assets of discontinued operations	550	1,242
Total current assets	13,134	8,634
Property and equipment, net	869	1,156
POWERHOUSE™ license	1,305	1,114
Goodwill	-	1,338
Net investment in sales-type leases and other assets	1,384	1,437
Noncurrent assets of discontinued operations	293	579
Total assets	<u>\$ 16,985</u>	<u>\$ 14,258</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Derivative liabilities	\$ 4,148	\$ -
Convertible debt, net of deferred cost and discount	218	1
Accounts payable	674	1,387
Accrued liabilities	1,690	1,441
Deferred revenue and other current liabilities	716	1,392
Current liabilities of discontinued operations	507	721
Total current liabilities	7,953	4,942
Other liabilities	897	2,329
Common stock warrant liabilities	782	76
Non-current liabilities of discontinued operations	721	745
Total liabilities	10,353	8,092
Commitments and contingencies (Note 5)		
Shareholders' equity:		
Preferred stock, par value \$.0001 per share; 50,000,000 shares authorized; no shares issued and outstanding	-	-
Class A common stock, par value \$.0001 per share; 150,000,000 shares authorized; 57,191,766 and 8,151,845 shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively	13	8
Class B common stock, par value \$.0001 per share; 50,000,000 shares authorized; no shares issued and outstanding	-	-
Additional paid-in capital	237,493	205,830
Proxy contest consideration	-	810
Accumulated deficit	(230,874)	(200,482)
Total shareholders' equity	6,639	6,166
Total liabilities and shareholders' equity	<u>\$ 16,985</u>	<u>\$ 14,258</u>

See accompanying notes.

REAL GOODS SOLAR, INC.
Condensed Consolidated Statements of Operations (unaudited)

(in thousands, except per share data)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
Contract revenue:				
Sale and installation of solar energy systems	\$ 3,590	\$ 3,685	\$ 9,531	\$ 9,755
Service	280	320	763	888
Leasing, net	15	14	44	39
Contract expenses:				
Installation of solar energy systems	3,237	3,466	9,078	9,210
Service	332	426	1,065	1,235
Customer acquisition	841	1,774	2,822	4,025
Contract loss	(525)	(1,647)	(2,627)	(3,788)
Operating expense	2,493	2,662	7,374	8,094
Goodwill impairment	-	-	1,338	-
Litigation	20	77	181	212
Operating loss	(3,038)	(4,386)	(11,520)	(12,094)
Change in fair value of derivative liabilities and loss on debt extinguishment	(14,366)	6	(17,413)	(351)
Amortization of debt discount and deferred loan costs	(866)	-	(2,301)	-
Other income	5	13	960	-
Loss from continuing operations, net of tax	(18,265)	(4,367)	(30,274)	(12,445)
Loss from discontinued operations, net of tax	(29)	(55)	(118)	(43)
Net loss	<u>\$ (18,294)</u>	<u>\$ (4,422)</u>	<u>\$ (30,392)</u>	<u>\$ (12,488)</u>
Net loss per share – basic and diluted:				
From continuing operations	(0.49)	(0.58)	(1.43)	(1.89)
From discontinued operations	-	(0.01)	(0.01)	(0.01)
Net loss per share – basic and diluted	<u>\$ (0.49)</u>	<u>\$ (0.59)</u>	<u>\$ (1.44)</u>	<u>\$ (1.90)</u>
Weighted-average shares outstanding:				
Basic and Diluted	<u>36,959</u>	<u>7,481</u>	<u>21,196</u>	<u>6,567</u>

See accompanying notes.

REAL GOODS SOLAR, INC.

Condensed Consolidated Statement of Changes in Shareholders' Equity (unaudited)

(in thousands, except share data)	Class A Common Stock		Additional Paid - in Capital	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount			
Balance, January 1, 2018	8,151,845	\$ 8	\$ 206,640	\$ (200,482)	\$ 6,166
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	39,448,253	4	17,060	-	17,064
Proceeds from warrant exercises related to 2018 Note Offering	7,391,668	1	12,091	-	12,092
Share-based compensation	-	-	178	-	178
Common stock issued to settle proxy contest	600,000	-	-	-	-
Net loss	-	-	-	(30,392)	(30,392)
Balance, September 30, 2018	57,191,766	\$ 13	\$ 237,493	\$ (230,874)	\$ 6,632

See accompanying notes.

REAL GOODS SOLAR, INC.
Condensed Consolidated Statements of Cash Flows (unaudited)

(in thousands except share data)	For the Nine Months Ended September 30,	
	2018	2017
Operating activities:		
Net loss	\$ (30,392)	\$ (12,488)
Loss from discontinued operations	(118)	(43)
Loss from continuing operations	(30,274)	(12,445)
Adjustments to reconcile net loss to net cash used in operating activities - continuing operations:		
Depreciation	313	303
Share based compensation expense	178	249
Goodwill impairment	1,338	-
Change in fair value of derivative liabilities and loss on debt extinguishment	17,413	351
Bad debt (recovery) expense	(18)	54
Inventory obsolescence	-	274
Amortization of debt discount and deferred loan cost	2,301	-
Gain on settlement of liability	(942)	-
Changes in operating assets and liabilities:		
Accounts receivable, net	996	471
Costs in excess of billings on uncompleted contracts	(12)	(73)
Inventory	753	(1,067)
Deferred costs on uncompleted contracts	344	(20)
Net investment in sales-type leases and other current assets	(77)	(149)
Other non-current assets	53	(434)
Accounts payable	(966)	(1,028)
Accrued liabilities	191	318
Billings in excess of costs on uncompleted contracts	-	(107)
Deferred revenue and other current liabilities	(676)	263
Other liabilities	(489)	9
Net cash used in operating activities - continuing operations	(9,574)	(13,031)
Net cash provided by (used in) operating activities - discontinued operations	612	(46)
Net cash used in operating activities	(8,962)	(13,077)
Investing activities:		
Payments related to POWERHOUSE™ license	(191)	(64)
Purchases of property and equipment	(26)	(680)
Net cash used in investing activities	(217)	(744)
Financing activities:		
Proceeds from warrants	9,109	-
Restricted cash released upon conversion of debt	-	173
Proceeds from issuance of 2018 Notes, net of costs	4,545	-
Proceeds from the issuance of common stock, net of costs	830	16,029
Proceeds from collection of Investor Notes	2,118	-
Principal payments on revolving line of credit	-	(663)
Net cash provided by financing activities	16,602	15,539
Net increase in cash	7,423	1,718
Cash at beginning of period	1,170	2,940
Cash at end of period	\$ 8,593	\$ 4,658
Non-cash items		
Initial up-front POWERHOUSE™ license fee	\$ -	\$ 1,000
Convertible notes interest paid with common stock	-	125
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	17,063	-
Issuance of Class A common stock for exercise of common stock warrants	3,814	-
Accrued closing costs on the 2018 Notes	430	-

See accompanying notes.

Notes to Condensed Consolidated Financial Statements

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

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

These consolidated financial statements have been prepared on the going concern basis, which presumes the realization of assets and the settlement of liabilities in the normal course of operations. The application of the going concern basis is dependent upon the Company achieving profitable operations to generate sufficient cash flows to fund continued operations, or, in the absence of adequate cash flows from operations, obtaining additional financing. The Company has reported losses from operations for the three months and nine months ended September 30, 2018 and 2017 and has an accumulated deficit of \$231 million at September 30, 2018. These factors raise substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

The Company is the licensee of POWERHOUSE™, an in-roof solar shingle using technology developed by the Dow Chemical Company that it believes will improve results of operations and generate cash flow. The Company received product certification from UL on November 2, 2018 and has begun to manufacture the shingles. To commercialize POWERHOUSE™, the Company has received approximately \$15 million since April 9, 2018.

Principles of Consolidation

We have prepared our unaudited interim condensed consolidated financial statements included herein pursuant to the rules and regulations of the SEC. Certain information and note disclosures normally included in annual financial statements prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) have been condensed or omitted pursuant to these rules and regulations, although we believe that the disclosures made are adequate to make the information not misleading. In our opinion, the unaudited interim financial statements contain all adjustments (consisting of only normal recurring adjustments) necessary to present fairly, in all material respects, our condensed consolidated financial position as of September 30, 2018, the interim results of operations for the three months and nine months ended September 30, 2018 and 2017, and cash flows for the nine months ended September 30, 2018 and 2017. These interim statements have not been audited. The balance sheet as of December 31, 2017 was derived from our audited consolidated financial statements included in our 2017 10-K. The interim condensed consolidated financial statements contained herein should be read in conjunction with our audited financial statements, including the notes thereto, for the year ended December 31, 2017.

Discontinued Operations

During 2014, we committed to a plan to sell certain contracts and rights comprising our large commercial installations business, otherwise known as our former Commercial segment. At the same time, we determined not to enter into further large commercial installation contracts in the mainland United States. Most contracts in process at December 31, 2014 were substantially completed during 2015 and remaining work was completed during 2016. We report this business as a discontinued operation, separate from our continuing operations. See Note 13. Discontinued Operations.

Liquidity and Financial Resources Update

The Company has experienced recurring operating losses and negative cash flow from operations which have necessitated: (i) developing plans to grow revenue to generate positive cash flow and (ii) raising additional capital. No assurances can be given that the Company will be successful with its plans to grow revenue for profitable operations or, if necessary, raise additional capital. See Note 6. Shareholders' Equity and Note 7. Convertible Debt for transactions raising capital during 2018.

The Company's plans to grow revenue are:

- Manufacture and sell solar shingles under the POWERHOUSE™ license. As the Company received United Laboratories (“UL”) certification, the Company has commenced activities to manufacture, market and sell POWERHOUSE™ 3.0 to roofing companies and new home builders. The Company has received written reservations for POWERHOUSE™ 3.0;
- Leverage the POWERHOUSE™ brand to generate leads and revenue for the Residential and Sunetric segments.

Until the Company is successful in implementing its plans to increase revenue for profitable operations, the Company expects to have a cash outflow from operating activities. The Company initially expects to have cash outflow from operating activities for commercialization of POWERHOUSE™ 3.0 and prepayments with supply chain manufacturers as sales of the product commence. Additionally, the Company will be required to make the remaining “Initial License” payment of \$2 million, which will be recorded as a cash outflow in investing activities.

To provide funds to commercialize POWERHOUSE™ 3.0, on March 30, 2018, the Company entered into the Securities Purchase Agreement for the 2018 Note Offering (as defined and further discussed in Note 7. Convertible Debt). Cash proceeds received by the Company including hypothetical cash receipts related specifically to the 2018 Note Offering are summarized below:

	<i>Cash</i>	<i>Principal and Additional Amount</i>	<i>Common Stock Warrants</i>
At closing of the offering on April 9, 2018	\$ 5,000,000	\$ 11,500,000	9,857,143
Additional amounts arising from Shareholder approval reset	-	25,577,431	-
Conversions of 2018 Notes (Note 7) to Class A common stock	-	(26,310,968)	-
Exercises of common stock warrants	8,278,667	-	(7,391,667)
Placement Agent Fees	(602,457)	-	-
Funding of Investor Notes	2,118,000	-	-
As of September 30, 2018	14,794,210	10,766,463	2,465,476
Activity during the period October 1 to October 31, 2018			
Conversions of 2018 Notes (Note 7) to Class A common stock	-	(3,768,769)	-
Exercises of common stock warrants	-	-	-
Placement Agent Fees	(4,550)	-	-
Funding of Investor Notes	65,000	-	-
As of October 31, 2018	14,854,660	6,997,694	2,465,476
Expected future activity:			
Exercises of common stock warrants	559,293	-	(1,735,317)
Exercises of Placement Agent common stock warrants	-	-	(730,159)
Funding of remaining balance on Investor Notes	2,817,000	-	-
Conversions of 2018 Notes (Note 7) to Class A common stock	-	(6,997,694)	-
Placement Agent Fees	(197,190)	-	-
Expected net cash from the 2018 Convertible Note Offering	<u>\$ 18,033,763</u>	<u>\$ -</u>	<u>-</u>

The expected activity above reflects:

* The Company receiving cash of \$3.4 million from the Investor Notes and warrants (Note 7. Convertible Debt).

* The noteholders converting shares represented by Additional Amount under the 2018 Notes (Note 7. Convertible Debt) into Class A common stock at the reset price of \$0.3067

The Company has access to cash from exercise of common stock warrants issued in transactions arranged prior to the 2018 Notes (as defined and further discussed in Note 7. Convertible Debt). The maximum cash from exercise of other common stock warrants is the mathematical result of the number of warrant shares times the respective exercise price per share. The majority of these common stock warrants have exercise prices at or below \$3.10 per share and would result in cash receipts of \$19.2 million if all investors elect cash exercises (not cashless exercises). No assurances can be given that the investors will exercise their remaining common stock warrants.

The Company believes it has arranged for the capital to commercialize POWERHOUSE™ 3.0. No assurances can be given that the Company will successfully commercialize POWERHOUSE™ 3.0.

2. Significant Accounting Policies

The Company made no changes to its significant accounting policies during the nine months ended September 30, 2018, however it implemented ASC 606 as discussed in Note 3. Revenue and accounted for the recognition of derivative liabilities and warrant liabilities related to the 2018 Note Offering as discussed in Note 7. Convertible Debt.

Common Stock Warrants

The Company accounts for common stock warrants in accordance with applicable accounting guidance provided in Financial Accounting Standards Board (“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 the Company’s warrants are accounted for as liabilities due to provisions either allowing the warrant holder to request redemption, at the intrinsic value of the warrant, upon a change of control, event of default or failure to deliver shares. The Company classifies these warrant liabilities with maturities of five years on the Condensed 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.

Derivatives

The 2018 Notes contain conversion features which have been accounted for in accordance with FASB ASC 815, *Derivatives and Hedging*. The conversion options are embedded within the 2018 Notes but have been separated as (i) their economic characteristics and risks do not clearly and closely relate to the 2018 Notes (ii) the 2018 Notes are not remeasured at fair value and (iii) a separate instrument with the same terms as the conversion options would be considered a derivative. Additionally, the conversion options meet all the criteria of a derivative in that they have an underlying (conversion price) and notional amount (potential shares), the conversion options do not require an initial net investment and the conversion options provide for net settlement. The conversion options have been initially measured at fair value and are revalued at each balance sheet date after their initial issuance with changes in the value recorded in earnings. 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, requires the Company to develop its own assumptions. The Company classifies these derivative liabilities with maturities of one year on the Condensed Consolidated Balance Sheet as short-term liabilities. When the conversion option has been exercised, for accounting purposes both liabilities (i.e., the debt host and the separated derivative liability) will be 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 will be recorded.

Recently Issued Accounting Standards

ASU 2018-13

In August 2018, FASB issued Accounting Standards Update No. 2018-13 (“ASU 2018-13”), *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure: Requirements for Fair Value Measurement*. The amendments in the Update remove, modify and add certain disclosure requirements for Fair Value Measurement. Effective in fiscal years beginning after December 15, 2019 the Company will no longer have to disclose the valuation processes for Level 3 fair value measurements. Early adoption is permitted, and the Company will assess the impact of ASU 2018-13 on any assets or liabilities within the scope of ASC 820.

ASU 2018-11

In July 2018, FASB issued Accounting Standards Update No. 2018-11 (“ASU 2018-11”), *Leases (Topic 842): Targeted Improvements*. The amendments in this Update provide entities with an additional (and optional) transition method to adopt the new leases standard. Additionally, the amendments in this Update provide lessors with a practical expedient, by class of underlying asset, to not separate nonlease components from the associated lease component and, instead, to account for those components as a single component if the nonlease components otherwise would be accounted for under the new revenue guidance (Topic 606). The Company is currently in the process of accumulating and evaluating all the necessary information required to properly account for its lease portfolio under the new standard. Additionally, the Company is considering a lease management system to support the ongoing accounting requirements and is evaluating additional changes to its processes and internal controls to ensure it meets the standard’s reporting and disclosure requirements. The Company is still evaluating the full impact on its condensed consolidated financial statements and related disclosures.

ASU 2018-10

In July 2018, FASB issued Accounting Standards Update No. 2018-10 (“ASU 2018-10”), *Codification Improvements to Topic 842, Leases*. The amendments in this update narrow aspects of the guidance issued in the amendments in Update 2016-02. The Company has previously disclosed that upon adoption of ASU 2016-02, right-of-use assets and lease liabilities will be recognized on the balance sheet in amounts that will be material. The Company will assess the impact of ASU 2018-10 in preparation for the adoption of ASU 2016-02.

ASU 2018-07

In June 2018, FASB issued Accounting Standards Update No. 2018-07 (“ASU 2018-07”), *Compensation – Stock Compensation (Topic 718) – Improvement to Nonemployee Share-Based Payment Accounting*. The amendments in this Update expand the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. Nonemployee share-based payment awards within the scope of Topic 718 are measured at grant-date fair value of the equity instruments that an entity is obligated to issue when the good has been delivered or the service has been rendered. The definition of the term grant date is amended to generally state the date at which a grantor and a grantee reach a mutual understanding of the key terms and conditions. Consistent with the accounting for employee share-based payment awards, an entity will consider the probability of satisfying performance conditions when nonemployee share-based payment awards contain such conditions. Generally, the classification of equity-classified nonemployee share-based payment awards will continue to be subject to the requirements of Topic 718 unless modified after the good has been delivered, the service has been rendered, any other conditions necessary to earn the right to benefit from the instruments have been satisfied, and the nonemployee is no longer providing goods or services. This eliminates the requirement to reassess classification of such awards upon vesting. This amendment is effective for public entities for fiscal years beginning after December 15, 2018 including interim periods within that fiscal year. The Company will assess the impact of ASU 2018-07 on any nonemployee share-based payments made in the future.

ASU 2018-05

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

ASU 2017-11

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

ASU 2016-09

In March 2016, the FASB issued ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting*, which amends ASC 718 and includes provisions intended to simplify various provisions related to how share-based payments are accounted for and presented in the financial statements. ASU 2016-09 eliminates the previous requirement to gross up the statement of cash flows between financing and operating to reflect the impact of windfall tax benefits has been eliminated. Instead, all tax related cash flows resulting from share-based payments will be reported as operating activities in the statement of cash flows. Additionally, the previous practice of classifying cash outflows related to an employee’s minimum statutory tax withholding as operating is no longer available. Instead, all such payments should be classified as financing. ASU 2016-09 is effective for public business entities for annual reporting periods beginning after December 15, 2016, and interim periods within those reporting periods. Due to the 2018 Incentive Plan (defined in Note 8. Share-Based Compensation), this guidance is effective for the current period however, there is no impact to the statement of cash flows.

ASU 2016-02

On February 25, 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e. lessees and lessors). The new standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases today. The new standard requires lessors to account for leases using an approach that is substantially equivalent to existing guidance for sales-type leases, direct financing leases and operating leases. The standard is effective for financial statements issued for fiscal years beginning after December 15, 2018, and interim periods therein. The Company will assess the impact of ASU 2016-02 on any leases.

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. Per our analysis performed as of the prior year ended December 31, 2017 no adjustments were required. For the nine months ended September 30, 2018, the adoption of ASC 606 has resulted in the following changes in significant accounting policies:

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 generally recognizes revenue for installation of PV solar systems at a point in time (“performance obligation”) following the transfer of control to the customer which typically occurs when installers have completed an installation of the PV solar system. Although ASC 606 is generally applied to a single contract with a customer, a portfolio approach may be acceptable if an entity reasonably expects that the effect of applying a portfolio approach to a group of contracts or group of performance obligations would not differ materially from considering each contract or performance obligation separately. The Company uses standard contract templates to initiate sales with customers which may vary based on customer type. As such, applying the portfolio approach to each type of customer contract would not differ materially from considering each contract on a standalone basis. The Company has used the portfolio approach in its analysis and determined that each project started during the nine months ended September 30, 2018 contains one performance obligation.

Each project’s transaction price is included within the contract and although there is only one performance obligation, certain complexities could exist which impact the transaction price. Specific to solarized programs, wherein the Company has a scalable price per watt to the homeowner based on the number of participating homes in the community, the Company may credit homeowners of previously executed contract. Any credits to homeowners on previously executed contracts are treated as adjustments to the transaction price via change order forms. For solarized program incentives, the Company uses the “most likely amount” method in determining any adjustments to the transaction price due to certainty of the credit amount prior to completion of the project. The Company has also considered financing components on projects started during the nine months ended September 30, 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 entered into during the current quarter are expected to be received within one year from project completion and no adjustments to the transactions prices were made.

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 does incur selling and marketing costs and sales commissions that otherwise would not have been incurred if the contract had not been obtained however, these costs are not recoverable from the customer and are expensed as incurred.

The Company may enter into contracts/projects in which control of the PV solar systems transfers to the customer over time. As of September 30, 2018, two contracts satisfied the requirement of control transferring over time.

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.

If a contract is separated into multiple performance obligations, the Company allocates the total transaction price to each performance obligation based on a budget vs actual ratio at each performance obligation. The Company does not sell contracts that have multiple performance obligations as PV systems are not functional until completely installed. More frequently, the Company sells a customized customer specific solution, which use the expected cost plus a profit margin to calculate the selling price at each performance obligation.

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. Refer to Note 12. Segment Information for disaggregated revenue disclosures.

4. Property and Equipment

Property and equipment, stated at cost, consisted of the following as of September 30, 2018 and December 31, 2017 respectively:

<u>(in thousands)</u>	<u>2018</u>	<u>2017</u>
Buildings and leasehold improvements	\$ 441	\$ 441
Furniture, fixtures and equipment	1,828	1,811
Software	2,135	2,135
Vehicles and machinery	1,023	1,044
Total property and equipment	5,427	5,431
Accumulated depreciation and amortization	(4,558)	(4,275)
Total property and equipment, net	<u>\$ 869</u>	<u>\$ 1,156</u>

5. Commitments and Contingencies

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

The Company leases vehicles for certain field personnel through operating leases. Leases range up to four years with varying termination dates through 2021.

The following schedule represents the annual future minimum payments of all leases as of September 30, 2018:

<u>(in thousands)</u>	<u>Future Minimum Lease Payments</u>
2018	\$ 222
2019	856
2020	506
2021	439
2022 and thereafter	112
Total future minimum lease payments	<u>\$ 2,135</u>

The Company incurred office and warehouse rent expense of \$0.2 million and automobile lease expense of \$0.1 million for the three months ended September 30, 2018 and \$0.5 million and \$0.2 million for the nine months ended September 30, 2018.

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 a liability for identified risks and uncertainties, based upon facts and circumstances currently available, that are both probable and estimable.

6. Shareholders' Equity

January 2018 Offering

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

The Series O warrant is exercisable at any time starting six months after issuance and will remain exercisable for a period of five years thereafter at an initial exercise price of \$1.47 per share, subject to adjustments for stock splits and similar events. The Series P warrant is exercisable immediately after issuance and for a period of five years thereafter at an initial exercise price of \$1.15 per share, of which \$1.14 was paid at the closing with \$0.01 per share payable upon exercise. On January 4, 2018, the investor paid \$0.01 per share of Class A common stock to exercise the Series P warrant.

2018 Convertible Note Offering

In connection with the issuance of the 2018 Note Offering, described in Note 7. Convertible Debt, the Company issued \$10.75 million in principal and original issue discount of the 2018 Notes and Series Q warrants exercisable into 9,126,984 shares of Class A common stock. At the closing of that transaction, the Company also sold warrants to the Placement Agents to purchase 730,159 shares of Class A common stock. See Footnote 1. Organization, Nature of Operations, and Principals of Consolidation for a rollforward of cash, principal and additional amounts of notes and share converted since issuance of the note through October 31, 2018.

Option Exercises, 2018 Convertible Note Conversions and Warrant Exercises

During the nine months ended September 30, 2018 and 2017, the Company issued stock options as discussed in Note 8. Share-Based Compensation. During the nine months ended September 30, 2018, the Company issued 800,000 shares of its Class A common stock for the exercise of Series P warrants from the January 2018 Offering and 46,839,921 shares for the conversion of the 2018 Notes and exercise of Series Q warrants.

At September 30, 2018, the Company had the following shares of Class A common stock reserved for future issuance:

Stock options and grants outstanding under incentive plans	1,140,145
Common stock warrants outstanding	10,004,872
2018 Notes outstanding - derivative liability	35,104,215
Total shares reserved for future issuance	<u>46,249,232</u>

7. 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 \$0.75 million of original issue discount) of Senior Convertible 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 from each investor, in a combined aggregate amount of \$5 million (each, an "Investor Note"), secured by cash and/or securities held in investor accounts.

The 2018 Notes are 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 exercise price remained unchanged at \$0.3223.

The 2018 Notes contain negative and affirmative covenants, including a requirement that the Company on a quarterly basis has available cash of at least \$0.75 million. See Notes 1. Organization, Nature of Operations, and Principles of Consolidation, 2. Significant Accounting Policies and 9. Fair Value Measurements for additional information regarding the 2018 Note Offering.

8. Share-Based Compensation

On June 21, 2018, Company shareholders approved the Real Goods Solar 2018 Long-Term Incentive Plan (“2018 Incentive Plan”) which allows the Company to issue up to 1,300,000 Class A Common Stock shares. 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. All outstanding options are non-qualified and are generally granted with an exercise price equal to the closing market price of the Company’s stock on the date of the grant. Under the 2018 Incentive Plan, the Company granted non-qualified stock options (“2018 Options”) with an explicit requisite service period of 2.78 years and a maximum contractual term of seven years from the Effective Date. On the last day of each calendar quarter occurring after the Effective 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 Company uses a Black-Scholes pricing model to estimate the value of the 2018 Options as of the effective date and will account for forfeitures when they occur.

The table below presents a summary of the Company’s option activity for the nine months ended September 30, 2018 and twelve months ended December 31, 2017:

	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	<u>149</u>	<u>\$ 18,452.38</u>	2.60	\$ -
Exercisable at December 31, 2017	<u>141</u>	<u>\$ 19,418.30</u>	2.80	\$ -
Granted	1,140,000	1.08	-	-
Exercised	-	-	-	-
Forfeited or expired	(4)	1,428.00	-	\$ -
Outstanding at September 30, 2018	<u>1,140,145</u>	<u>\$ 3.47</u>	6.78	\$ -
Exercisable at September 30, 2018	<u>188,475</u>	<u>\$ 15.63</u>	6.75	\$ -

During the nine months ended September 30, 2018, the Company granted 1,140,000 stock options and cancelled four stock options versus zero grants of stock options and two cancellations of stock options during the nine months ended September 30, 2017. Total share-based compensation expense recognized was \$0.1 million and \$0.02 million during the three months ended September 30, 2018 and 2017 and \$0.2 million and \$0.2 million during the nine months ended September 30, 2018 and 2017, respectively.

9. Fair Value Measurements

The following tables present the fair values of derivative instruments included in our consolidated balance sheets as of September 30, 2018 and 2017 (in thousands):

	Fair Value of Derivative Instruments			
	Liability Derivatives			
	2018		2017	
Balance at September 30, 2018 (in thousands)	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives not designated as hedging instruments 2018 Notes Conversion Options	Current Liabilities	\$ 4,148	N/a	\$ -

**The Effect of Derivative Instrument on the Statement of Operations
for the Nine Months Ended September 30, 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	\$ (17,413)	\$ -
	Amortization of debt discount & deferred loan costs	(2,301)	-
		<u>\$ (19,714)</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 warrant allowing the warrant holder to request redemption, upon a change of control, failure to timely deliver shares of Class A common stock upon exercise or default. The Company classifies these warrant liabilities on the Condensed 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:

Balance at September 30, 2018 (in thousands)	Total	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Common stock warrant liability	\$ 782	-	-	\$ 782
Derivative liability	4,148	-	-	4,148
	<u>\$ 4,930</u>	<u>-</u>	<u>-</u>	<u>\$ 4,930</u>

For the Company's Level 3 measures, which represent Series Q warrants and the 2018 Notes Conversion Options, fair value is based on a Monte Carlo model and Lattice pricing model, respectively. The models are based, in part, upon unobservable inputs for which there is little or no market data, requiring the Company to develop its own assumptions. The Company used a market approach to value these liabilities.

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 September 30, 2018:

(in thousands)	Common Stock warrant liability	Embedded derivative liability	Total
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	(2,250)	-	(2,250)
Adjustment for exercise of common stock warrant liabilities	(3,814)	-	(3,814)
Derivative liability	-	3,195	3,195
Investor Notes	-	(2,882)	(2,882)
Change in the fair value of derivative liabilities and additional amounts earned	-	17,717	17,717
Conversions of 2018 Notes	-	(13,882)	(13,882)
Fair value of financial liabilities at September 30, 2018	<u>\$ 782</u>	<u>\$ 4,148</u>	<u>\$ 4,930</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 and September 30, 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%

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 and September 30, 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

2018 Options

The determination of the estimated fair value of the 2018 Options 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 September 30, 2018 are as follows:

	Vesting Period	Expected Life	Expected Dividend Rate	Risk-free Rate	Market Price Volatility
2018 Non-Qualified Stock Options	2.78 years	4.2 years	0%	2.70%	148.77%

10. 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 an impairment of goodwill of \$1.3 million during the nine months ended September 30, 2018.

11. Net Income (Loss) Per Share

Basic net income (loss) per share excludes any dilutive effects of options, warrants or our senior secured convertible notes due on April 1, 2019 (the “2016 Notes”). The Company computes basic net income (loss) per share using the weighted average number of shares of its Class A common stock outstanding during the period. The Company computes diluted net income (loss) per share using the weighted average number of shares of its Class A common stock and common stock equivalents outstanding during the period. The Company excluded common stock equivalents of 16.8 million and 6.5 million for the three months ended September 30, 2018 and 2017, respectively, and 46.2 million and 6.5 million for the nine months ended September 30, 2018 and 2017, respectively, from the computation of diluted net loss per share because their effect was antidilutive.

(In thousands, except per share data)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
Numerator for basic and diluted net loss per share	\$ (18,294)	\$ (4,422)	\$ (30,392)	\$ (12,488)
Denominator:				
Weighted average shares for basic net loss per share	36,959	7,481	21,196	6,567
Effect of dilutive securities:				
Weighted average of common stock, stock options and warrants	-	-	-	-
Denominators for diluted net loss per share	36,959	7,481	21,196	6,567
Net loss per share—basic and diluted	\$ (0.49)	\$ (0.59)	\$ (1.44)	\$ (1.90)

12. Segment Information

The Company operates as four reportable segments: (1) Residential – the installation of solar energy systems for homeowners, including lease financing thereof, and small business commercial in the continental U.S.; (2) Sunetric – the installation of solar energy systems for both homeowners and business owners (commercial) in Hawaii; (3) POWERHOUSE™ – the manufacturing and sale of solar shingles; and (4) Corporate. The Company discontinued its former large commercial segment and it is presented as discontinued operations.

Financial information for the Company’s segments and a reconciliation of the total of the reportable segments’ loss from operations to the Company’s consolidated net loss are as follows:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Contract revenue:				
Residential	\$ 3,328	\$ 3,101	\$ 9,185	\$ 9,220
Sunetric	552	918	1,148	1,462
POWERHOUSE™	-	-	-	-
Corporate	5	-	5	-
Consolidated contract revenue	3,885	4,019	10,338	10,682
Operating loss from continuing operations:				
Residential	(938)	(1,843)	(3,053)	(4,095)
Sunetric	(226)	(847)	(1,207)	(2,182)
POWERHOUSE™	(192)	-	(300)	-
Corporate	(1,682)	(1,696)	(6,960)	(5,817)
Operating Loss	(3,038)	(4,386)	(11,520)	(12,094)
Reconciliation of consolidated loss from operations to consolidated net loss:				
Change in fair value of derivative liabilities and loss on debt extinguishment	(14,366)	6	(17,413)	(351)
Amortization of debt discount & deferred loan costs	(866)	-	(2,301)	-
Other income	5	13	960	-
Loss from discontinued operations, net of tax	(29)	(55)	(118)	(43)
Net loss	\$ (18,294)	\$ (4,422)	\$ (30,392)	\$ (12,488)

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

(in thousands)	September 30, 2018	December 31, 2017
Total assets – continuing operations:		
Residential	\$ 3,646	\$ 5,877
Sunetric	658	2,142
POWERHOUSE™	1,404	1,140
Corporate	10,434	3,278
	<u>\$ 16,142</u>	<u>\$ 12,437</u>
Total assets – discontinued operations:		
Commercial	843	1,821
	<u>\$ 16,985</u>	<u>\$ 14,258</u>

13. Discontinued Operations

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

(in thousands)	For the Three Months Ended		For the Nine Months Ended	
	September 30,		September 30,	
	2018	2017	2018	2017
Major line items constituting pretax loss of discontinued operations:				
Contract revenue	\$ 30	\$ 4	\$ (32)	\$ 8
Contract expense (income)	1	(36)	(35)	(37)
Operating and other expense	58	95	121	88
Pretax loss from discontinued operations	<u>(29)</u>	<u>(55)</u>	<u>(118)</u>	<u>(43)</u>
Loss from discontinued operations, net of tax	<u>\$ (29)</u>	<u>\$ (55)</u>	<u>\$ (118)</u>	<u>\$ (43)</u>

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

(in thousands)	September 30, 2018	December 31, 2017
Carrying amounts of major classes of assets included as part of discontinued operations:		
Current assets:		
Accounts receivable, net	\$ 336	\$ 394
Costs in excess of billings on uncompleted contracts	-	62
Inventory, net	68	63
Other current assets	146	723
Total major classes of current assets of the discontinued operations	<u>550</u>	<u>1,242</u>
Noncurrent assets:		
Other noncurrent assets	293	579
Total noncurrent assets of discontinued operations	293	579
Total assets of the discontinued operations in the balance sheet	<u>\$ 843</u>	<u>\$ 1,821</u>
Carrying amounts of major classes of liabilities included as part of discontinued operations:		
Current liabilities:		
Accounts payable	\$ 270	\$ 270
Accrued liabilities	33	33
Deferred revenue and other current liabilities	204	418
Total current liabilities of discontinued operations	<u>507</u>	<u>721</u>
Noncurrent liabilities:		
Other liabilities	721	745
Total major classes of noncurrent liabilities of the discontinued operations	721	745
Total liabilities of the discontinued operations in the balance sheet	<u>\$ 1,228</u>	<u>\$ 1,466</u>

14. Subsequent Events

See Note 1. Organization, Nature of Operations, and Principles of Consolidation for information on activity after the period. On November 2, 2018, the Company received product certification from UL for POWERHOUSE™ 3.0. Under the terms of the license agreement with the Dow Chemical Company, the Company is to pay to the licensor \$2 million 30 days after receiving product certification and, accordingly, the Company incurred this liability as of November 2, 2018.

Item 2. 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 operations and financial condition. You should read this analysis in conjunction with our interim condensed consolidated financial statements and related footnotes. This discussion and analysis contains statements of a forward-looking nature relating to future events or our future financial performance. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results, level of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements, including those set forth in our 2017 10-K and in this report for the period ended September 30, 2018.

Overview

We are the exclusive manufacturer of POWERHOUSE™, an innovative in-roof solar shingle using technology developed by The Dow Chemical Company. We also sell, design and install solar systems for residential homeowners, commercial businesses, non-profit organizations and government entities. Our solar energy systems use high-quality solar photovoltaic modules. We use proven technologies and techniques to help customers achieve meaningful savings by reducing their utility costs. In addition, we help customers lower their reliance upon fossil fuel energy sources.

We 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.

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

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

POWERHOUSE™ License Agreement

A material significant event occurred on September 29, 2017 (the "Effective Date"), when we executed the international world-wide Technology License Agreement (the "License") with Dow, providing an exclusive domestic and international right to commercialize its POWERHOUSE™ in-roof solar shingle, an innovative and aesthetically pleasing solar shingle system developed by Dow. The POWERHOUSE™ 1.0 and 2.0 versions used CIGS (copper indium gallium selenide solar cells) technology which had a high manufacturing cost, resulting in the product not being consumer price friendly. Conversely, the POWERHOUSE™ 3.0 is being developed with traditional silicon solar cells to increase solar production and to provide a competitive consumer price point. The License requires us to commercialize and sell a minimum of 50 megawatts of solar within 5-years of the Effective Date to retain exclusive world-wide rights, a requirement we believe is achievable.

Under the terms of the License, we will produce, market and sell POWERHOUSE™ 3.0, for which we have agreed to a license fee of \$3 million and a running royalty fee equal to 2.5% against net sales of the POWERHOUSE™ product and services, payable quarterly in arrears. Further, we will be responsible for all post-Effective Date costs to obtain UL certification and for the prosecution of all related patents world-wide, which may be offset against the payment of the running royalty fee. The license fee is comprised of two payments. We paid the first \$1 million within 10 days of the Effective Date of the License in 2017 in accordance with the Trademark License Agreement (the "TLA"). The remaining \$2 million became due and payable within 30 days after we received UL product certification on November 2, 2018. As we have received product certification, we have begun commercialization of POWERHOUSE™ 3.0 entailing the manufacturing, marketing and sale of POWERHOUSE™ 3.0 to roofing companies.

As of September 30, 2018, we have invested approximately \$1.3 million that has been capitalized to the POWERHOUSE™ License, an intangible asset on the Consolidated Balance Sheet.

Key Metrics

Key operational metric, gross margin on residential segment, currently our largest segment

We utilize a job costing system whereby employees record their time to projects. We accumulate the cost of idle time reflecting the cost we incur to maintain a construction organization until our revenue grows, allowing for greater utilization of our construction organization. Cost of goods sold ("COGS") include direct project installation costs (materials, labor, travel, financing fees, and estimated warranty costs) and indirect costs for project installation support (including un-utilized labor of idle time of construction crews, supplies, and insurance). We employ an internal time reporting system to determine COGS and resulting gross margin percentage used by us to measure our 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 in anticipation of future growth of backlog. Gross margin percentage on actual installation time is not a measure defined by generally accepted accounting principles.

The majority of indirect labor costs are fixed, which impacts the gross margin percentage when we consider idle time. The decrease in gross margin quarter-over-quarter and year-over-year, shown below, is due to a greater mix of small commercial projects in 2018 as compared to 2017. These projects typically have lower margins than our residential installations.

	Three Months Ended		Nine Months Ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Gross margin % on actual installation time	25%	29%	24%	28%
Gross margin % including idle time	9%	16%	9%	13%

Backlog

Backlog represents the dollar amount of revenue that we may recognize 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 GAAP 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 and include anticipated revenues associated with (i) the original contract amounts, and (ii) change orders for which we have received written confirmations from the applicable customers. Backlog may not be indicative of future operating results, and projects in our backlog may be cancelled, modified or otherwise altered by customers. We can provide no assurance as to the profitability of our contracts reflected in backlog.

The following table summarizes changes to our backlog by segment during the nine-month period ended September 30, 2018:

(in thousands)	Residential	Sunetric	Totals
Backlog at December 31, 2017	\$ 10,521	\$ 2,244	\$ 12,765
Bookings from new awards ("Sales")	7,168	320	7,488
Cancellations and reductions on existing contracts	(3,068)	(791)	(3,859)
Amounts recognized in revenue upon installation	(2,212)	(295)	(2,507)
Backlog at March 31, 2018	12,409	1,478	13,887
Bookings from new awards ("Sales")	8,010	167	8,177
Cancellations and reductions on existing contracts	(3,069)	(111)	(3,180)
Amounts recognized in revenue upon installation	(3,087)	(114)	(3,201)
Backlog at June 30, 2018	14,263	1,420	15,683
Bookings from new awards ("Sales")	7,004	151	7,155
Cancellations and reductions on existing contracts	(3,208)	(273)	(3,481)
Amounts recognized in revenue upon installation	(3,112)	(485)	(3,597)
Backlog at September 30, 2018	\$ 14,947	\$ 813	\$ 15,760

We have determined that for optimum internal operations, and customer satisfaction, that a backlog equivalent to a few months of sales is optimal.

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

Critical Accounting Policies and Estimates

There were no material changes to our critical accounting policies or estimates during the nine months ended September 30, 2018 from those disclosed in our 2017 10-K. The adoption of ASC 606 related to revenue recognition has not had a material impact on our results of operation, financial condition or cash flows.

Results of Operations

Three Months Ended September 30, 2018 Compared to Three Months Ended September 30, 2017

Contract revenue:

Sale and installation of solar energy systems. Sale and installation of solar energy system revenue decreased by \$0.1 million, or 3%, to \$3.6 million during the three months ended September 30, 2018, from \$3.7 million during the three months ended September 30, 2017. The residential segment achieved a 10% increase in revenue during the three months ended September 30, 2018 over three months ended September 30, 2017. This is primarily due to a steady growth in backlog from the consistent increase in sales during 2018. The Sunetric segment's revenue decreased 44% during this same period. This is primarily due to the installation of a large commercial project in the third quarter of 2017.

Contract expenses:

Installation of solar energy systems. Installation of solar energy system expenses decreased \$0.2 million, or 7%, to \$3.2 million during the three months ended September 30, 2018, from \$3.5 million during the three months ended September 30, 2017. The reduction of contract expenses comes primarily from the Sunetric segment relative to the lower revenue for the three months ended September 30, 2018 as compared to 2017.

Customer acquisition. Customer acquisition expense decreased \$1.0 million during the three months ended September 30, 2018, or 5.3%, to \$0.8 million during the three months ended September 30, 2018 from \$1.8 million during the three months ended September 30, 2017. This decrease is due to increased efficiencies in sales persons' performance coupled with a reduction in the size of our sales team. Additionally, with the decrease in personnel there was a corresponding decrease in marketing expenses.

Operating Expenses. Operating expenses for the three months ended September 30, 2018 was \$2.5 million compared to \$2.7 million during the three months ended September 30, 2017. The decrease was mainly due to reduction in labor costs as a result of our February 2018 strategic realignment and a reduction in the use of IT consultants when compared to the prior year period. Additionally, beginning in the second quarter of 2017 and continuing throughout the remainder of the year, we incurred excessive costs related to the 2017 annual shareholder meeting proxy contest which was resolved in January of 2018.

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 7. 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 three months ended September 30, 2017.

Nine months Ended September 30, 2018 Compared to Nine Months Ended September 30, 2017

Contract revenue:

Sale and installation of solar energy systems. Sale and installation of solar energy system revenue decreased \$0.3 million, or 3%, to \$9.5 million during the nine months ended September 30, 2018, from \$9.8 million during the nine months ended September 30, 2017. This is primarily the result of the Rhode Island Program reaching its 2017 and 2018 funding cap earlier than expected. The cap in the 2017 funding deferred first quarter 2018 installations until the second quarter resulting in a decline in installation revenue during the first quarter of 2018 compared to the first quarter of 2017. Additionally, the Rhode Island Program reached its 2018 funding cap in July of 2018 deferring installations until the second quarter of 2019.

Contract expenses:

Installation of solar energy systems. Installation of solar energy system expenses remained constant at approximately \$9 million during the nine months ended September 30, 2018 as compared to September 30, 2017. Direct expenses decreased year-over-year, offset by an increase in new fleet agreements and auto and workers' compensation insurance.

Customer acquisition. Customer acquisition expense decreased \$1.2 million during the nine months ended September 30, 2018, or 30%, to \$2.8 million during the nine months ended September 30, 2018. This decrease is due to a reduction in labor costs related to our February 2018 strategic realignment. Additionally, with the decrease in personnel there was a corresponding decrease in marketing expenses. We grew new sales 12% compared to the prior year as a result of greater performance by our sales team.

Operating expense. Operating expenses decreased \$0.7 million, or 9%, to \$7.4 million during the nine months ended September 30, 2018 compared to \$8.1 million during the nine months ended September 30, 2017. The decrease was mainly due to reduction in labor costs as a result of our February 2018 strategic realignment and a reduction in the use of consultants when compared to the same period in prior year. Additionally, beginning in the second quarter of 2017 and continuing throughout the remainder of the year, we incurred excessive costs related to the 2017 annual shareholder meeting proxy contest which was resolved in January of 2018.

Goodwill impairment. Goodwill impairment increased by \$1.3 million during the nine months ended September 30, 2018 due to the results of our annual impairment testing. We concluded that the fair value of the goodwill no longer exceeds its carrying value and wrote off the goodwill balance.

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 7. 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 nine months ended September 30, 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.

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.

Liquidity and Financial Resources Update

We have experienced recurring operating losses and negative cash flow from operations which have necessitated: (i) developing plans to grow revenue to generate positive cash flow and (ii) raising additional capital. No assurances can be given that we will be successful with its plans to grow revenue for profitable operations or, if necessary, raising additional capital. See Note 6. Shareholders Equity and Note 7. Convertible Debt for transactions raising capital during 2018.

Our plans to grow revenue are:

- Manufacture and sell solar shingles under the POWERHOUSE™ license. As we received UL certification, we have commenced activities to manufacture, market and sell POWERHOUSE™ 3.0 to roofing companies and new home builders. We have received written reservations for POWERHOUSE™ 3.0;
- Leverage the POWERHOUSE™ brand to generate leads and revenue for the Residential and Sunetric segments.

Until we are successful in implementing our plans to increase revenue for profitable operations, we expect to have a cash outflow from operating activities. We initially expect to have cash outflow from operating activities for commercialization of POWERHOUSE™ 3.0 and prepayments with supply chain manufacturers as sales of the product commence. Additionally, we will be required to make the remaining “Initial License” payment of \$2 million, which will be recorded as a cash outflow in investing activities.

To provide funds to commercialize POWERHOUSE™ 3.0, on April 9, 2018, we consummated the 2018 Note Offering (as defined and further discussed in Note 7. Convertible Debt). Cash proceeds received by the Company including hypothetical cash receipts related specifically to the 2018 Note Offering are summarized below:

	<u>Cash</u>	<u>Principal and Additional Amount</u>	<u>Common Stock Warrants</u>
At closing of the offering on April 9, 2018	\$ 5,000,000	\$ 11,500,000	9,857,143
Additional amounts arising from Shareholder approval reset	-	25,577,431	-
Conversions of 2018 Notes (Note 7) to Class A common stock	-	(26,310,968)	-
Exercises of common stock warrants	8,278,667	-	(7,391,667)
Placement Agent Fees	(602,457)	-	-
Funding of Investor Notes	2,118,000	-	-
As of September 30, 2018	14,794,210	10,766,463	2,465,476
Activity during the period October 1 to October 31, 2018			
Conversions of 2018 Notes (Note 7) to Class A common stock	-	(3,768,769)	-
Exercises of common stock warrants	-	-	-
Placement Agent Fees	(4,550)	-	-
Funding of Investor Notes	65,000	-	-
As of October 31, 2018	14,854,660	6,997,694	2,465,476
Expected future activity:			
Exercises of common stock warrants	559,293	-	(1,735,317)
Exercises of Placement Agent common stock warrants	-	-	(730,159)
Funding of remaining balance on Investor Notes	2,817,000	-	-
Conversions of 2018 Notes (Note 7) to Class A common stock	-	(6,997,694)	-
Placement Agent Fees	(197,190)	-	-
Expected net cash from the 2018 Convertible Note Offering	<u>\$ 18,033,763</u>	<u>\$ -</u>	<u>-</u>

The expected activity above reflects:

* The Company receiving cash of \$3.4 million from the Investor Notes and warrants (Note 7. Convertible Debt).

* The noteholders converting shares represented by Additional Amount under the 2018 Notes (Note 7. Convertible Debt) into Class A common stock at the reset price of \$0.3067

We have access to cash from exercise of common stock warrants issued in transactions arranged prior to the 2018 Notes. The maximum cash from exercise of other common stock warrants is the mathematical result of the number of warrant shares times the respective exercise price per share. The majority of these common stock warrants have exercise prices at or below \$3.10 per share and would result in cash receipts of \$19.7 million if all investors elect cash exercises (not cashless exercises). No assurances can be given that the investors will exercise their remaining common stock warrants.

We believe we have arranged for the capital to commercialize POWERHOUSE™ 3.0. No assurances can be given that we will successfully commercialize POWERHOUSE™ 3.0.

We believe that we have sufficient capital resources for the ensuing 12 months.

Cash Flows

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

	For the Nine Months Ended September 30,	
	2018	2017
Net cash (used in) provided by:		
Operating activities - continuing operations	\$ (9,574)	\$ (13,031)
Operating activities - discontinued operations	612	(46)
Operating activities	(8,962)	(13,077)
Investing activities	(217)	(744)
Financing activities	16,602	15,539
Net increase in cash	<u>\$ 7,423</u>	<u>\$ 1,718</u>

Continuing Operations

Operating activities. Our operating activities used net cash of \$9.6 million and \$13 million during the nine months ended September 30, 2018 and 2017, respectively. Our cash outflow from operations was \$3.4 million less than the prior year period arising from: (i) purchasing approximately \$1.8 million less inventory and (ii) our operating loss exclusive of our goodwill impairment charge being approximately \$2.0 million less than the prior year period.

Investing activities. During the nine months ended September 30, 2018, we incurred \$0.2 million of charges related to our investment in obtaining UL certification for POWERHOUSE™.

Financing activities. We raised net cash of approximately \$16 million from the issuances of securities during each of the nine months ended September 30, 2018 and 2017.

Discontinued Operations

Operating activities. We collected net cash of \$0.8 million from a long-term receivable.

Off-Balance Sheet Arrangements

We do not participate 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 and as a result we do not have and are not reasonably likely to have future off-balance sheet arrangements.

Risk Factors

We caution that there are risks and uncertainties that could cause our actual results to be materially different from those indicated by forward-looking statements that, from time-to-time, we make in filings with the SEC, news releases, reports, proxy statements, registration statements and other written communications as well as oral forward-looking statements made by our representatives. These risks and uncertainties include, but are not limited to, those risks set forth listed in the section entitled “RISK FACTORS” in our 2017 10-K, which is on file with the SEC. Except for the historical information contained herein, the matters discussed in this analysis are forward-looking statements that involve risk and uncertainties, including, but not limited to, general economic and business conditions, competition, pricing, brand reputation, consumer trends, and other factors which are often beyond our control.

The risks and uncertainties we have described are not the only ones facing our Company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations. We do not undertake any obligation to update forward-looking statements except as required by law.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

Item 4. Controls and Procedures

Evaluation of Disclosure 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. Based upon their evaluation as of September 30, 2018, they have concluded that those disclosure controls and procedures are effective.

Changes in Internal Control over Financial Reporting

During the nine months ended September 30, 2018, we concluded that the material weakness previously reported during the second quarter of fiscal 2018 has been remediated. Due to the remediation measure, this resulted in a change in internal controls over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, the Company may be involved in legal proceedings that are considered to be in the normal course of business. There were no material developments to previously reported legal proceedings during the three months ended September 30, 2018.

Item 1A. Risk Factors

There have been no material changes from the risk factors disclosed in Item 1A of the Company’s 2017 10-K.

Item 6. Exhibits.

Exhibit No.	Description
<u>10.1</u>	<u>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)).</u>
<u>31.1*</u>	<u>Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934</u>
<u>31.2*</u>	<u>Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934</u>
<u>32.1**</u>	<u>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</u>
<u>32.2**</u>	<u>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</u>

Exhibit No.	Description
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

* Filed herewith

** Furnished herewith

SIGNATURES

Pursuant to the requirements 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.
(Registrant)

Date: November 06, 2018

By: /s/ Dennis Lacey
Dennis Lacey
Chief Executive Officer and Director
(Authorized Officer)

Date: November 06, 2018

By: /s/ Alan Fine
Alan Fine
Chief Financial Officer and Treasurer
(Principal Financial Officer)

Date: November 06, 2018

By: /s/ Nicolle Dorsey
Nicolle Dorsey
Principal Accounting Officer and Controller

CERTIFICATION

I, Dennis Lacey, certify that:

1. I have reviewed this quarterly report on Form 10-Q 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 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 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: November 06, 2018

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

CERTIFICATION

I, Alan Fine, certify that:

1. I have reviewed this quarterly report on Form 10-Q 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 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 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: November 06, 2018

/s/ Alan Fine

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

**CERTIFICATIONS 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 Quarterly Report of Real Goods Solar, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2018, as filed with the U.S. Securities and Exchange Commission on the date hereof (the "Report"), I, Dennis Lacey, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of 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: November 06, 2018

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

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the U.S. Securities and Exchange Commission or its staff upon request.

CERTIFICATIONS PURSUANT TO 18 U.S.C. SECTION 1350

In connection with the Quarterly Report of Real Goods Solar, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2018, as filed with the U.S. Securities and Exchange Commission on the date hereof (the "Report"), I, Alan Fine, Principal Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

Date: November 06, 2018

/s/ Alan Fine

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

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the U.S. Securities and Exchange Commission or its staff upon request.
