



2017
ANNUAL REPORT

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This year was a breakout year for Sunrun. We are now the residential market leader and largest residential solar, storage and energy services company in the United States. In 2017, we grew deployments by 15% and turned structurally cash flow positive."

April 26th, 2018

Dear Shareholders,

This year was a breakout year for Sunrun. We are now the residential market leader and largest residential solar, storage and energy services company in the United States. In 2017, we grew deployments by 15% and turned structurally cash flow positive, generating \$43 million on a normalized basis.¹ We expanded our home solar and battery service, Brightbox; we forged new strategic partnerships; and we provided reliable 24/7 solar power to fire stations in hurricane-ravaged Puerto Rico, further demonstrating the value of fast-to-market distributed energy resources.

During 2017, we brought our 'solar as a service' model to seven new states, bringing our markets to 22 states and DC, and introduced Brightbox in New York, Arizona and Nevada. Sunrun now has delivered clean, reliable and affordable solar energy to more than 180,000 customers and created more than 3,000 local American jobs, and many more through our channel partners. In 2017, Sunrun reached a record of more than 1.2 gigawatts of cumulative solar energy deployed, which eliminated more than 1.7 million metric tons of CO₂ from entering the atmosphere.

We believe the runway for growth remains massive. While 1.5 million American families have adopted solar, that is still only 2% of the 74 million single family homes in the U.S.² In markets like Hawaii, where the value proposition was first evident, penetration has reached 28 percent.³ We also know that solar is what customers want. A 2016 Pew Research Center survey found that 89% of U.S. adults favor expanding the use of solar power.

OUR ENERGY SYSTEM IS CRUMBLING AND CUSTOMER NEEDS ARE NOT BEING MET.

The United States suffers from the greatest number of power outages in the developed world. The majority of energy consumers today lack choice, experience unreliable service, and are increasingly concerned about the environmental and public health consequences of fossil fuels.

Utilities were originally designed to deliver a reliable service at a reasonable price to the public. Economies of scale made them natural monopolies; the bigger the utility, the cheaper the power. This model worked in the past because growing businesses and households continuously demanded more power. However, during the previous decade, demand for electricity stopped increasing due to more energy-efficient technologies.

As a regulated monopoly, utilities pass costs to consumers with a guaranteed profit margin. Despite stagnant demand, they are spending billions of dollars to add capacity to our grid because the more they build, the more money they make. Additionally, more than 70% of America's transmission lines and large power transformers are 25 years old and will need to be replaced. Utilities are on a spending binge and, as a result, the cost of electricity has increased 3.1% per year for the last 14 years despite unprecedented declines in the cost of fuel.⁴

Last year alone there were more than 3,500 power outages affecting 36 million people across all 50 states.⁵ Of the outages, 86 major disturbances resulted in customers collectively experiencing over 1 billion hours without power.⁶ Aging infrastructure and extreme



weather will only increase the frequency of outages in the future.

Moreover, the utility sector generates around one-third of America's total greenhouse gas emissions and is the most polluting sector of our economy. EPA's research shows that reducing carbon pollution from electricity generation can prevent up to 3,600 premature deaths and up to 90,000 asthma attacks in children by 2030.⁷

AMERICANS WANT AFFORDABLE, CLEAN, RELIABLE ENERGY.

We have the technology to build an affordable, clean and reliable energy system that meets the needs of the American people. Distributed home solar and batteries are a responsive, customer-centered and cost effective solution that utilize existing infrastructure - home roofs and garages - negating the requirement to over-invest in bulky, centralized infrastructure that won't be needed in the next decade.

In the next few years, as we are witnessing in Australia, the resources from thousands of homes and businesses with solar panels and a battery will be pooled to replace an entire gas or coal-fired power plant. These home batteries will store solar energy generated from home roofs during the day and send it to the community when it is most needed. The battery also offers customers resilient

backup power when the electricity grid fails and, in areas with time-of-use rates, the flexibility to use energy stored in the battery when power prices are at a premium. It's a winning proposition for both individual households and their neighborhoods.

During the year we have seen a significant increase in the number of RFPs to leverage distributed energy resources for grid services. These opportunities are the foundational efforts for our strategy to build an affordable, clean, reliable energy system that puts consumers at the center.

I am particularly proud that Sunrun was able to assist relief efforts in Puerto Rico where, many months after the devastating hurricane, much of the island and its residents still remain without power and clean water. Sunrun partnered with local firefighters and non-profits to install solar and battery systems to power life-saving equipment for fire stations and water purification systems on the island.

Visiting the devastation in Puerto Rico reinforced to me the fragility of our existing energy system and the importance of adopting new technologies and move to a decentralized energy system. Puerto Rico is a microcosm of the extreme weather and power failures we are witnessing on the mainland.

We have the technology to build an affordable, clean and reliable energy system that meets the needs of the American people. Distributed home solar and batteries are a responsive, customer-centered and cost effective solution that utilize existing infrastructure - home roofs and garages - negating the requirement to over-invest in bulky, centralized infrastructure that won't be needed in the next decade

SUNRUN'S BREAKOUT YEAR

In 2017, we grew deployments 15%, which outpaced the market, increasing our market share by 4%. As of December 31, 2017 we had more than 180,000 customers. Our growing customer base remains our largest and most valuable strategic asset, and servicing customers' needs is at the heart of our strategy. We deployed systems that represented a project value of \$4.43 per watt, above our creation cost of \$3.34 per watt, generating \$314 million in net present value (NPV) and adding to a fleet representing Net Earning Assets of over \$1.1 billion, or over \$10 per share.

This year we expanded our Brightbox offering to six states. It is being met with strong demand and the pace of home battery adoption has surpassed our expectations. For example, in California, nearly 20% of new customers in our direct business are choosing to add a home battery to their solar service, and we expect this rate to accelerate rapidly.

Our outlook for 2018 remains bright. We expect to deliver an even stronger performance in 2018 than we did in 2017.

Our mission is to create a planet run by the sun. We look forward to bringing more American households an affordable, clean, reliable energy system.

Sincerely,



Lynn Jurich
CEO

1. \$43 million in cash generation in 2017 defined as change in consolidated total cash balance (including restricted cash) less any increases in recourse debt balances, adjusted for one-time items including accelerated inventory purchasing (approximately \$20 million) and \$8.8 million related to a prior business acquisition.
2. Current market penetration and potential homes calculation uses the U.S. Census 2016 American Community Survey data on detached, occupied single-family housing units and number of residential installations from GTM Research (through Oct. 2017).
3. State penetration data uses EIA Form 826 Residential PV Customers (through Oct. 2017) and housing stock uses U.S. Census 2016 American Community Survey data on detached, occupied single-family housing units.
4. Energy Information Agency. Average price per KWhr of electricity for the residential sector in Sunrun's current markets.
5. Eaton's 2017 Blackout Tracker Annual Report
6. Sunrun analysis of "Electric Emergency Incident and Disturbance Reports" published by the Energy Information Agency as of November 2017.
7. EPA Fact Sheet: Clean Power Plan By The Numbers. <https://archive.epa.gov/epa/cleanpowerplan/fact-sheet-clean-power-plan-numbers.html>

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2017

OR

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

Commission File Number 001-37511

Sunrun Inc.

(Exact name of Registrant as specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

595 Market Street, 29th Floor
San Francisco, California
(Address of principal executive offices)

26-2841711
(I.R.S. Employer
Identification No.)

94105
(Zip Code)

Registrant's telephone number, including area code: (415) 580-6900

Securities registered pursuant to Section 12(b) of the Act: Common Stock, Par Value \$0.0001 Per Share; Common Stock traded on the NASDAQ Global Select Stock Market

Securities registered pursuant to Section 12(g) of the Act: None

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

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

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

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

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

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definition of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised 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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, based on the closing price of the shares of common stock on The NASDAQ Stock Market on, June 30, 2017 (the last business day of the Registrant's most recently completed second fiscal quarter) was approximately \$591.3 million.

The number of shares of Registrant's Common Stock outstanding as of March 2, 2018 was 107,730,204.

Portions of the information called for by Part III of this Form 10-K is hereby incorporated by reference from the definitive Proxy Statements for our annual meeting of stockholders, which will be filed with the Securities and Exchange Commission not later than 120 days after December 31, 2017.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS.

The discussion in this Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as "may," "will," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans or intentions. Forward-looking statements contained in this Annual Report on Form 10-K include, but are not limited to, statements about:

- our ability to finance solar energy systems through financing arrangements with fund or other investors;
- our ability and intent to establish new investment funds;
- our dependence on the availability of rebates, tax credits and other financial incentives;
- determinations by the Internal Revenue Service or the U.S. Treasury Department of the fair market value of our solar energy systems;
- the retail price of utility-generated electricity or electricity from other energy sources;
- regulatory and policy development and changes;
- our ability to maintain an adequate rate of revenue growth;
- our industry's continued ability to cut costs associated with solar service offerings;
- our strategic partnerships and expected benefits of such partnerships;
- the sufficiency of our cash, investment fund commitments and available borrowings to meet our anticipated cash needs;
- our need to raise capital and finance our operations from new and existing investors;
- the potential impact of interest rates on our interest expense;
- our business plan and our ability to effectively manage our growth;
- our ability to further penetrate existing markets, expand into new markets and our expectations regarding market growth (including, but not limited to, expected cancellation rates);
- our expectations concerning relationships with third parties, including the attraction and retention of qualified channel partners;
- the impact of seasonality on our business;
- our investment in research and development;
- our expectations regarding certain performance objectives; and
- the calculation of certain of our key financial and operating metrics and accounting policies.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the section titled "Risk Factors" and elsewhere in this Annual Report on Form 10-K. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Annual Report on Form 10-K may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will

be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Annual Report on Form 10-K to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this Annual Report on Form 10-K and the documents that we reference in this Annual Report on Form 10-K and have filed with the Securities and Exchange Commission (the "SEC") as exhibits to this Annual Report on Form 10-K with the understanding that our actual future results, levels of activity, performance, and events and circumstances may be materially different from what we expect.

PART I

Item 1. Business.

Overview

Sunrun's (the "Company") mission is to provide homeowners with clean, affordable solar energy and storage, and a best-in-class customer experience. In 2007, we pioneered the residential solar service model, creating a hassle-free, low-cost solution for homeowners seeking to lower their energy bills. By removing the high initial cost and complexity that used to define the residential solar industry, we have fostered the industry's rapid growth and exposed an enormous market opportunity. Our relentless drive to increase the accessibility of solar energy is fueled by our enduring vision: to create a planet run by the sun.

We provide clean, solar energy to homeowners at a significant savings to traditional utility energy. We also offer battery storage along with solar systems to our customers in select markets. After inventing the residential solar service model and recognizing its enormous market potential, we have built the infrastructure and capabilities necessary to rapidly acquire and serve customers in a low-cost and scalable manner. Today, our scalable operating platform provides us with a number of unique advantages. First, we are able to drive distribution by marketing our solar service offerings through multiple channels, including our diverse partner network and direct-to-consumer operations. This multi-channel model supports broad sales and installation capabilities, which together allow us to achieve capital-efficient growth. Second, we are able to provide differentiated solutions to our customers that, combined with a great customer experience, we believe will drive meaningful margin advantages for us over the long term as we strive to create the industry's most valuable and satisfied customer base.

Our core solar service offerings are provided through our lease and power purchase agreements which we refer to as our "Customer Agreements" which provide homeowners with simple, predictable pricing for solar energy that is insulated from rising retail electricity prices. While homeowners have the option to purchase a solar energy system outright from us, most of our customers choose to buy solar as a service from us through our solar service offerings and enjoy the flexibility and savings that come from purchasing solar energy without the significant upfront investment of purchasing a solar energy system. With our solar service offerings, we install solar energy systems on our customers' homes and provide them the solar power produced by those systems for a 20-year initial term. In addition, we monitor, maintain and insure the system at no additional cost to our customers during the term of the contract. In exchange, we receive 20 years of predictable cash flows from high credit quality customers and qualify for tax and other benefits. We finance portions of these tax benefits and cash flows through tax equity and non-recourse debt structures in order to fund our upfront costs, overhead and growth investments. We develop valuable customer relationships that can extend beyond this initial contract term and provide us an opportunity to offer additional services in the future, such as our home battery storage service now being offered in Hawaii and California markets. Since our founding, we have continued to invest in a platform of services and tools to enable large scale operations for us and our partner network. The platform includes processes and software, as well as fulfillment through AEE Solar, racking through SnapNrack and acquisition marketing through Clean Energy Experts, LLC ("CEE"). We believe our platform empowers new market entrants and smaller industry participants to profitably serve our large and underpenetrated market without making the significant investments in technology and infrastructure required to compete effectively against established industry players by improving efficiencies and driving down system-wide costs. Our platform provides the support for our multi-channel model, which drives broad customer reach and capital-efficient growth.

Delivering a differentiated customer experience is core to our strategy. We emphasize a customized solution, including a design specific to each customer's home and pricing configurations that typically drive both customer savings and value to us. We believe that our passion for engaging our customers, developing a trusted brand, and providing a customized solar service offering resonates with our customers who are accustomed to a traditional residential power market that is often overpriced and lacking in customer choice.

We have experienced substantial growth in our business and operations since our inception in 2007. As of December 31, 2017, we operated the second largest fleet of residential solar energy systems in the United States, with approximately 180,000 customers across 22 states, as well as the District of Columbia. We have deployed an aggregate of 1,202 megawatts ("MW") as of December 31, 2017, and our Gross Earning Assets as of December 31, 2017 were approximately \$2.2 billion. Please see the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations — Key Operating Metrics" for more details on how we calculate Megawatts Deployed and Gross Earning Assets.

We also have a long track record of attracting low-cost capital from diverse sources, including tax equity and debt investors. From inception through March 2, 2018, we have raised tax equity investment funds to finance the previous and future installation of solar energy systems with an estimated value of \$6.2 billion.

Our Multi-Channel Capabilities

Our unique, multi-channel capabilities offer consumers a compelling solar service through scalable, cost-effective and consumer-friendly channels. Homeowners can access our products through three channels: direct-to-consumer, solar partnerships and strategic partnerships.

Direct-to-Consumer

We sell solar service offerings and install solar energy systems for homeowners through our direct-to-consumer channel. These solar energy systems are offered to homeowners either under a Customer Agreement or for purchase. This channel consists of an online lead generation function, a telesales and field sales team, a direct-to-home sales force, a retail sales team and an industry-leading installation organization.

Solar Partnerships

We contract with diverse solar organizations that act as either exclusive or non-exclusive (depending on the terms of their contract with us) distributors of our solar service offerings and subcontractors for the installation of the related solar energy systems. Because of our commitment to these solar organizations and our vested interest in their success, we refer to them as our “solar partners,” although the actual legal relationship is that of an independent contractor. Our solar partners include:

- Solar integrators: trained and trusted partners who originate customers for our solar service offerings and procure and install the solar energy systems on our customers’ homes on our behalf as our subcontractors. Partnerships with solar integrators allow us to expand our brand, quickly enter new markets and drive capital-efficient growth. We compensate our solar integrators on a per solar energy system basis for generating Customer Agreements for us and installation work they perform for us.
- Sales partners: sales and lead generation partners who provide us with high-quality leads and customers at competitive prices. We compensate our sales partners on a per customer basis for the sales and lead generation services they perform for us. All contracts are between the customer and us, based on a price set by us.
- Installation partners: trusted installation partners who procure and install a subset of our solar energy systems as our subcontractors and allow us to more efficiently deploy a mix of in-house and outsourced installation capabilities. We compensate our installation partners on a per solar energy system basis for the procurement of materials and installation work they perform for us. Installation partners are solely our subcontractors and do not enter into any agreements with our customers.

Our ability to connect specialized sales and installation firms on a single platform, which we license to our solar partners at no cost, allows us to enjoy the benefits of vertical integration without the additional fixed cost structure. This creates margin opportunities, system efficiencies and benefits from network effects in matching these ecosystem participants.

Strategic Partnerships

Our strategic partnerships encompass relationships with new market entrants not previously engaged in solar, including cable, consumer marketing, retail and specialized energy retail companies. Our strategic partners find the residential solar market attractive, but recognize that significant barriers to entry make partnerships the preferred method to reach solar customers. Through these strategic arrangements, we typically market our solar service offerings to the strategic partner’s customer base and install the solar energy systems directly or through one of our solar partners. We manage the customer experience and retain the value of the economic relationship through the term of the homeowner’s contract and potential renewal period. We have executed strategic partnerships in competitive processes that give us access to millions of potential customers. As our industry grows, we believe that our unique platform and deep partnership experience position us to be the partner of choice for new market entrants. We believe that these broad strategic relationships will help us drive down our customer acquisition costs and make solar accessible to even more homeowners.

The combination of direct-to-consumer, solar partnerships and strategic partnerships offers distinct advantages. The direct-to-consumer channel allows us to scale rapidly, drive incremental unit costs down over the long term, and refine operational processes to share with our partners. Our solar partnerships and strategic partnerships enable nimble market entry and exit, while allowing for capital efficient growth. Together, this multi-channel strategy supported by our open platform allows us to reach more customers with our leading solar service without compromising our ability to provide exceptional customer service.

Customer Agreements

Since we were founded in 2007, we have been providing solar energy to residential customers at prices typically below utility rates through a variety of offerings, most commonly through our leases and power purchase agreements which we refer to as our "Customer Agreements." Our two forms of Customer Agreements work the same way economically and have substantially the same contractual terms. Under our Customer Agreements, customers have the right to use and consume all electricity produced by the solar energy system. Either directly or through a partner, we construct a solar energy system on a customer's home which generates electricity at set prices through Customer Agreements which typically have an initial term of 20 years. Rates for both forms of our Customer Agreements can be fixed for the duration of the contract or escalated at a pre-determined percentage annually. Upon installation, a system is interconnected to the local utility grid. The home's energy usage is provided by the solar energy system with any additional energy needs provided by the local utility. Unless the solar energy system is connected to a battery, any excess solar energy that is not immediately used by our customers is exported to the utility grid using a bi-directional utility net meter, and the customer generally receives a credit for this excess power from their utility to offset future usage of utility-generated energy.

Although many of our homeowners choose to pay little-to-nothing upfront and instead receive a monthly bill, some customers choose to prepay an amount upfront, thereby reducing their monthly bill. The amount of an upfront payment is customized for each customer and typically ranges from \$0 to \$5,000 for customers paying monthly. Customers may also choose to fully prepay their 20-year contracts, and the average cost of these prepaid contracts is approximately \$15,500. The prepayment amount is based on the estimated amount of the solar energy system's output over the 20-year term of the Customer Agreement. If the estimated production of the solar energy system is less than the actual production for a given year after the first full year of the agreement, prepaid customers are refunded the difference at the end of each such year. If the solar energy system's energy production is in excess of the estimate, we allow customers to keep the excess energy at no charge. After the initial term of the Customer Agreement, customers have the option to renew their contracts for the remaining life of the solar energy system, typically at a 10% discount to then-prevailing power prices, to purchase the system from us at its fair market value, or have us remove the system.

Regardless of the type of Customer Agreement our customers choose, we operate the system and agree to monitor and maintain it in good condition at no cost to the customer. We offer an industry-leading performance guarantee to ensure that our customers are receiving the energy they expect at the price they expect. Our customers also receive up to a ten-year warranty for roof penetrations.

If a customer sells their home, the customer has the right to purchase the system or assign their Customer Agreement to the new homeowner, provided the new homeowner meets our credit requirements and agrees to be bound by the terms and conditions of the Customer Agreement. In connection with this service transfer, the customer may prepay all or a portion of the remaining payments due under the Customer Agreement to lower the monthly rate to be paid by the new homeowner. The amount of this prepayment may be reflected in the sales price of the home. If the customer fails to purchase the system or assign the agreement to a new homeowner, we may negotiate a Customer Agreement directly with the new homeowner on modified terms and/or look to the original customer for any past due or lost payments. We have completed thousands of service transfers and, from inception through December 31, 2017, the aggregate expected net present value of the Customer Agreements once assigned represented approximately 100% of what it was prior to assignment.

Sales and Marketing

We sell our solar energy offerings through a scalable sales organization using both a direct-to-consumer approach across online and offline channels and a diverse partner network that originates and/or installs our systems. We market and sell our products using direct channels, partner channels, mass media, digital media, canvassing, referral, retail, and field marketing. We sell to homeowners over the phone, in the field through canvassing and in-home sales and through retail sales channels through our strategic partners. We also partner with sales-only organizations that focus on direct-to-consumer marketing and sales on our behalf, typically with a Sunrun-branded offering at point of sale, which further increases our brand and reach. We believe that a customized, homeowner-focused selling process is important before, during and after the sale of our solar services.

We train our sales team to customize their consultative presentation to the individual homeowner based on guidelines and principles outlined in our training materials. We are able to provide our sales team with real-time data and pricing tools through our proprietary technology which is designed to generate a tailored product offering with optimized pricing based on the actual characteristics of a homeowner's home, including roof characteristics and shading, as well as actual energy usage. This allows our sales team to differentially price homes in the same geographic region quickly and effectively.

Competition

We believe that our primary competitors are the traditional utilities that supply electricity to our potential customers. We compete with these traditional utilities primarily based on price (cents per kilowatt hour), predictability of future prices (by providing pre-determined annual price escalations) and the ease by which homeowners can switch to electricity generated by our solar energy systems.

We also compete with companies that are not regulated like traditional utilities but that have access to the traditional utility electricity transmission and distribution infrastructure pursuant to state and local pro-competitive and consumer choice policies and with solar companies with business models that are similar to ours. We believe that we compete favorably with these companies based on our unique multi-channel approach and differentiated customer experience.

We also face competition from purely finance-driven organizations that acquire customers and then subcontract out the installation of solar energy systems, from installation businesses that seek financing from external parties, from large construction companies and utilities and from sophisticated electrical and roofing companies.

Research and Development

We believe continued investment in research and development is an important component of our on-going efforts to improve and expand our platform of services and tools. Our research and development expenses were \$15.1 million in 2017, \$10.2 million in 2016 and \$9.7 million in 2015.

Intellectual Property

As of December 31, 2017, we had 18 issued patents and 18 filed patent applications in the United States and foreign countries relating to a variety of aspects of our solar solutions. Our issued United States patents will expire 20 years from their respective filing dates, with the earliest expiring in 2029. We intend to file additional patent applications as we continue to innovate through our research and development efforts.

Government Regulation

Although we are not regulated as a public utility in the United States under applicable national, state or other local regulatory regimes where we conduct business, we compete primarily with regulated utilities. As a result, we have developed and are committed to maintaining a policy team to focus on the key regulatory and legislative issues impacting the entire industry. We believe these efforts help us better navigate local markets through relationships with key stakeholders and facilitate a deep understanding of the national and regional policy environment.

To operate our systems, we obtain interconnection permission from the applicable local primary electric utility. Depending on the size of the solar energy system and local law requirements, interconnection permission is provided by the local utility directly to us and/or our homeowners. In almost all cases, interconnection permissions are issued on the basis of a standard process that has been pre-approved by the local public utility commission or other regulatory body with jurisdiction over net metering policies. As such, no additional regulatory approvals are required once interconnection permission is given.

Our operations are subject to stringent and complex federal, state and local laws, including regulations governing the occupational health and safety of our employees and wage regulations. For example, we are subject to the requirements of the federal Occupational Safety and Health Act, as amended (“OSHA”), the U.S. Department of Transportation (“DOT”), and comparable state laws that protect and regulate employee health and safety.

Government Incentives

Federal, state and local government bodies provide incentives to owners, distributors, system integrators and manufacturers of solar energy systems to promote solar energy in the form of rebates, tax credits and other financial incentives such as system performance payments, payments for renewable energy credits associated with renewable energy generation and exclusion of solar energy systems from property tax assessments. These incentives enable us to lower the price we charge homeowners for energy from, and to lease, our solar energy systems, helping to catalyze homeowner acceptance of solar energy as an alternative to utility-provided power.

The federal government currently offers a 30% investment tax credit (“Commercial ITC”) under Section 48(a) of the Internal Revenue Code of 1986, as amended (the “Code”), for the installation of certain solar power facilities owned for business purposes. The depreciable basis of a solar facility is also reduced by 50% of the tax credit claimed. Similarly, the federal government currently offers a 30% investment tax credit under Section 25D of the Internal Revenue Code (“Residential ITC”), for the installation of certain solar power facilities owned by residential taxpayers. The Commercial ITC was set to step down to 10% and the Residential ITC was set to expire at the end of 2016. In December 2015, Congress passed legislation extending both the Commercial and Residential ITC for an additional five years with a ramp down from 30% to 26% for solar property commencing construction in 2020 and then further to 22% for solar property commencing construction in 2021. Current law provides that the Commercial ITC will be 10% for both (i) solar property commencing construction after 2021 and (ii) solar property that commenced construction during or prior to 2021 but is placed in service after 2023, and the Residential ITC will expire after 2021.

More than half of the states, and many local jurisdictions, have established property tax incentives for renewable energy systems that include exemptions, exclusions, abatements and credits. Many states also have adopted procurement requirements for renewable energy production. Twenty-nine states and the District of Columbia have adopted a renewable portfolio standard (and nine other states have some voluntary goal) that requires regulated utilities to procure a specified percentage of total electricity delivered in the state from eligible renewable energy sources, such as solar energy systems, by a specified date. To prove compliance with such mandates, utilities must surrender solar renewable energy credits (“SRECs”) to the applicable authority. Solar energy system owners such as our investment funds often are able to sell SRECs to utilities directly or in SREC markets.

While there are numerous federal, state and local government incentives that benefit our business, some adverse interpretations or determinations of new and existing laws can have a negative impact on our business. For example, in the state of Arizona, the Arizona Department of Revenue has determined that a personal property tax exemption on solar panels does not apply to solar panels that are leased (as opposed to owned), and has subjected our leased solar panels to personal property taxes. While we are challenging that determination, an adverse outcome will subject us and other solar companies to an increase in personal property taxes. If we pass this additional tax on to our customers in the form of higher prices, it could reduce or eliminate entirely the savings that these solar panels would otherwise provide to the customer. Although we are involved in ongoing litigation challenging the Arizona personal property tax determination, there can be no assurances that this litigation will be resolved in a manner that is favorable to us or other solar companies. If this litigation is not resolved in a manner that is favorable to us and other solar companies, it will adversely impact our operations in Arizona, and if we decide to pass the tax cost on to our customers, the price increase could adversely impact our ability to attract new customers in Arizona if it reduces or eliminates the savings that the solar panels would otherwise provide.

Employees

As of December 31, 2017, we had approximately 3,260 employees. We also engage independent contractors and consultants. None of our employees are covered by collective bargaining agreements. We have not experienced any work stoppages.

Corporate Information

Our principal executive offices are located at 595 Market Street, 29th Floor, San Francisco, California 94105, and our telephone number is (415) 580-6900. Our website address is www.sunrun.com. Information contained on, or that can be accessed through, our website does not constitute part of this Annual Report on Form 10-K and inclusions of our website address in this Annual Report on Form 10-K are inactive textual references only. We were formed in 2007 as a California limited liability company, and converted in 2008 into a Delaware corporation.

The Sunrun design logo, "Sunrun" and our other registered or common law trademarks, service marks or trade names appearing in this Annual Report on Form 10-K are the property of Sunrun Inc. Other trademarks and trade names referred to in this Annual Report on Form 10-K are the property of their respective owners.

Available Information

We file annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended. The public may obtain these filings at the Securities and Exchange Commission (the "SEC") Public Reference Room at 100 F Street, NE, Washington, DC 20549 or by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website at www.sec.gov that contains reports, proxy and information statements and other information that we file with the SEC electronically. Copies of our reports on Form 10-K, Forms 10-Q, Forms 8-K, and amendments to those reports may also be obtained, free of charge, electronically on the investor relations page on our website located at investors.sunrun.com as soon as reasonably practical after we file such material with, or furnish it to, the SEC.

We also use the investor relations page on our website as a channel of distribution for important company information. Important information, including press releases, analyst presentations and financial information regarding us, as well as corporate governance information, is routinely posted and accessible on the investor relations page on our website. Information on or that can be accessed through our website is not part of this Annual Report on Form 10-K, and the inclusion of our website address is an inactive textual reference only.

Item 1A. Risk Factors.

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes, before making a decision to invest in our common stock. The risks and uncertainties described below may not be the only ones we face. If any of the risks actually occur, our business, financial condition, results of operations, cash flows and prospects could be materially and adversely affected. In that event, the market price of our common stock could decline, and you could lose part or all of your investment.

Risks Related to Our Business and Our Industry

We need to raise capital to finance the continued growth of our residential solar service business. If capital is not available to us on acceptable terms, as and when needed, our business and prospects would be materially and adversely impacted. In addition, our business is affected by general economic conditions and related uncertainties affecting markets in which we operate. Volatility in current economic conditions could adversely impact our business, including our ability to raise financing.

Our future success depends on our ability to raise capital from third parties to grow our business. To date, we have funded our business principally through low-cost tax equity investment funds. If we are unable to establish new investment funds when needed, or upon desirable terms, the growth of our solar service business would be impaired. Changes in tax law could affect our ability to establish such tax equity investment funds, impact the terms of existing or future funds, or reduce the pool of capital available for us to grow our business.

The contract terms in certain of our existing investment fund documents contain various conditions with respect to our ability to draw on financing commitments from the fund investors, including conditions that restrict our ability to draw on such commitments if an event occurs that could reasonably be expected to have a material adverse effect on the fund or, in some instances, us. If we were not able to satisfy such conditions due to events related to our business, a specific investment fund, developments in our industry, including tax or regulatory changes, or otherwise, and as a result, we were unable to draw on existing funding commitments, we could experience a material adverse effect on our business, liquidity, financial condition, results of operations and prospects. If any of the investors that currently invest in our investment funds were to decide not to invest in future investment funds to finance our solar service offerings due to general market conditions, concerns about our business or prospects or any other reason, or materially change the terms under which they were willing to provide future financing, we would need to identify new investors to invest in our investment funds and our cost of capital may increase.

In addition, our business and results of operations are materially affected by conditions in the global capital markets and the economy. A general slowdown or volatility in current economic conditions, stemming from the level of U.S. national debt, currency fluctuations, unemployment rates, the availability and cost of credit, the U.S. housing market, inflation levels, negative interest rates, energy costs and concerns over a slow economic recovery could adversely affect our business, including our ability to raise financing.

There can be no assurance that we will be able to continue to successfully access capital in a manner that supports the growth of our business. Certain sources of capital may not be available in the future, and competition for any available funding may increase. We cannot be sure that we will be able to maintain necessary levels of funding without incurring high funding costs, unfavorable changes in the terms of funding instruments or the liquidation of certain assets. If we are unable to continue to offer a competitive investment profile, we may lose access to these funds or they may only be available on less favorable terms than those provided to our competitors or currently provided to us. If we are unable to arrange new or alternative methods of financing on favorable terms, our business, liquidity, financial condition, results of operations and prospects could be materially and adversely affected.

Rising interest rates will adversely impact our business.

Rising interest rates may increase our cost of capital. Our future success depends on our ability to raise capital from fund investors and obtain secured lending to help finance the deployment of our solar service offerings. Part of our business strategy is to seek to reduce our cost of capital through these arrangements to improve our margins, offset future reductions in government incentives and maintain the price competitiveness of our solar service offerings. Rising interest rates may have an adverse impact on our ability to offer attractive pricing on our solar service offerings to homeowners.

The majority of our cash flows to date have been from solar service offerings under Customer Agreements that have been monetized under various investment fund structures. One of the components of this monetization is the present value of the payment streams from homeowners who enter into these Customer Agreements. If the rate of return required by capital providers, including debt providers, rises as a result of a rise in interest rates, it will reduce the present value of the homeowner payment stream and consequently reduce the total value derived from this monetization. Any measures that we could take to mitigate the impact of rising interest rates on our ability to secure third-party financing could ultimately have an adverse impact on the value proposition that we offer homeowners.

The solar energy industry is an emerging market that is constantly evolving and may not develop to the size or at the rate we expect.

The solar energy industry is an emerging and constantly evolving market opportunity. We believe the solar energy industry will take several years to fully develop and mature, and we cannot be certain that the market will grow at the rate we expect. For example, we have experienced increases in cancellations of our Customer Agreements in certain geographic markets during certain periods throughout our operating history. Any future growth of the solar energy market and the success of our solar service offerings depend on many factors beyond our control, including recognition and acceptance of the solar service market by consumers, the pricing of alternative sources of energy, a favorable regulatory environment, the continuation of expected tax benefits and other incentives and our ability to provide our solar service offerings cost-effectively. If the markets for solar energy do not develop at the rate we expect, our business may be adversely affected.

Solar energy has yet to achieve broad market acceptance and depends in part on continued support in the form of rebates, tax credits and other incentives from federal, state and local governments. If this support diminishes, our ability to obtain external financing on acceptable terms, or at all, could be materially adversely affected. These types of funding limitations could lead to inadequate financing support for the anticipated growth in our business. Furthermore, growth in residential solar energy depends in part on macroeconomic conditions, retail prices of electricity and homeowner preferences, each of which can change quickly. Declining macroeconomic conditions, including in the job markets and residential real estate markets, could contribute to instability and uncertainty among homeowners and impact their financial wherewithal, credit scores or interest in entering into long-term contracts, even if such contracts would generate immediate and long-term savings.

Market prices of retail electricity generated by utilities or other energy sources could decline for a variety of reasons, as discussed further below. Any such declines in macroeconomic conditions or changes in homeowner preferences would adversely impact our business.

Our ability to provide our solar service offerings to homeowners on an economically viable basis depends in part on our ability to finance these systems with fund investors who seek particular tax and other benefits.

Our solar service offerings have been eligible for federal investment tax credits ("ITCs"), U.S. Treasury grants and other tax benefits. We have relied on, and will continue to rely on, tax equity investment funds, which are financing structures that monetize a substantial portion of those benefits, in order to finance our solar service offerings. If, for any reason, we were unable to continue to monetize those benefits through these arrangements, we may be unable to provide and maintain our solar service offerings for homeowners on an economically viable basis.

The availability of this tax-advantaged financing depends upon many factors, including:

- our ability to compete with other solar energy companies for the limited number of potential fund investors, each of which has limited funds and limited appetite for the tax benefits associated with these financings;
- the state of financial and credit markets;
- changes in the legal or tax risks associated with these financings; and
- non-renewal of these incentives or decreases in the associated benefits.

The federal government currently offers a 30% ITC (the “Commercial ITC”) under Section 48(a) of the Internal Revenue Code of 1986, as amended (the “Code”), for the installation of certain solar power facilities owned for business purposes. The depreciable basis of a solar facility is also reduced by 50% of the tax credit claimed. Similarly, the federal government currently offers a 30% investment tax credit (“Residential ITC”) for the installation of certain solar power facilities owned by residential taxpayers. The Commercial ITC was set to step down to 10% and the Residential ITC was set to expire at the end of 2016. However in December 2015, Congress passed legislation extending both the Commercial and Residential ITC for an additional five years with a ramp down from 30% to 26% for solar property commencing construction in 2020 and then further to 22% for solar property commencing construction in 2021. Current law provides that the Commercial ITC will be 10% for both (i) solar property commencing construction after 2021 and (ii) solar property which commenced construction during or prior to 2021 but which is placed in service after 2023, and the Residential ITC will expire after 2021.

Potential investors must remain satisfied that the funding structures that we offer will make the tax benefits associated with solar energy systems available to these investors, which depends on the investors’ assessment of the tax law, the absence of any unfavorable interpretations of that law and the continued application of existing tax law and interpretations to our funding structures. Adverse changes in existing law or interpretations of existing law by the Internal Revenue Service (the “IRS”) and the courts could reduce the willingness of investors to invest in funds associated with these solar energy systems. Moreover, corporate tax rate reductions could reduce the appetite for tax benefits overall, which could reduce the pool of available funds. Additionally, certain tax deductions, such as depreciation, will have less value to investors, requiring additional cash to be paid to investors to meet return demands. Accordingly, we cannot assure you that this type of financing will continue to be available to us. New investment fund structures or other financing mechanisms may also become available, and if we are unable to take advantage of these fund structures and financing mechanisms, we may be at a competitive disadvantage. If, for any reason, we were unable to finance our solar service offerings through tax-advantaged structures or if we were unable to realize or monetize Commercial ITCs or other tax benefits, we may no longer be able to provide our solar service offerings to new homeowners on an economically viable basis, which would have a material adverse effect on our business, financial condition and results of operations.

If the Internal Revenue Service or the U.S. Department of the Treasury makes determinations that the fair market value of our solar energy systems is materially lower than what we have claimed, we may have to pay significant amounts to our fund investors and our business, financial condition and prospects may be materially and adversely affected.

We and our fund investors claim the Commercial ITC or the U.S. Treasury grant in amounts based on the fair market value of our solar energy systems. We have obtained independent appraisals to determine the fair market values we report for claiming Commercial ITCs and U.S. Treasury grants. The IRS and the U.S. Treasury Department review these fair market values. With respect to U.S. Treasury grants, the U.S. Treasury Department reviews the reported fair market value in determining the amount initially awarded, and the IRS and the U.S. Treasury Department may also subsequently audit the fair market value and determine that amounts previously awarded must be repaid to the U.S. Treasury Department or that excess awards constitute taxable income for U.S. federal income tax purposes. With respect to Commercial ITCs, the IRS may review the fair market value on audit and determine that the tax credits previously claimed must be reduced. If the fair market value is determined in these circumstances to be less than what we reported, we may owe our fund investors an amount equal to this difference, plus any costs and expenses associated with a challenge to that valuation. We could also be subject to tax liabilities, including interest and penalties. If the IRS or the U.S. Treasury Department further disagrees now or in the future with the amounts we reported regarding the fair market value of our solar energy systems, or if we receive an adverse outcome with respect to the Department of the Treasury Inspector General investigation discussed elsewhere in this “Risk Factors” section and in the section entitled “Item 1. Legal Proceedings” elsewhere in this Annual Report on Form 10-K, it could have a material adverse effect on our business, financial condition and

prospects. For example, a hypothetical five percent downward adjustment in the fair market value of the solar energy systems related to approximately \$269.0 million in U.S. Treasury grants that we have received since the beginning of the U.S. Treasury grant program through December 31, 2014, would obligate us to repay approximately \$14.0 million to our fund investors. One of our investment funds has recently been selected for audit by the Internal Revenue Service (the “IRS”). In addition, two of our investors are currently being audited by the IRS, and these investor audits involve a review of the fair market value determination of our solar energy systems. If these investor audits result in an adverse finding, we may be subject to an indemnity obligation to these investors. Since we cannot determine how the IRS will evaluate system values used in claiming ITCs, we are unable to reliably estimate the maximum potential future payments that we would have to make under this obligation as of each balance sheet date.

We have historically benefited from declining costs in our industry, and our business and financial results may be harmed not only as a result of any increases in costs associated with our solar service offerings but also any failure of these costs to continue to decline as we currently expect. If we do not reduce our cost structure in the future, our ability to continue to be profitable may be impaired.

Declining costs related to raw materials, manufacturing and the sale and installation of our solar service offerings have been a key driver in the pricing of our solar service offerings and, more broadly, homeowner adoption of solar energy. While historically the prices of solar panels and raw materials have declined, the cost of solar panels and raw materials could increase in the future, and such products’ availability could decrease, due to a variety of factors, including trade barriers, export regulations, regulatory or contractual limitations, industry market requirements and changes in technology and industry standards. Any such cost increases or decreases in availability could slow our growth and cause our financial results and operational metrics to suffer.

For example, in the past, we and our solar partners purchased a significant portion of the solar panels used in our solar service offerings from manufacturers based in China or containing components from China. In April 2017, Suniva, Inc., a U.S.-based solar panel manufacturer (“Suniva”), filed a petition for global safeguards with the U.S. International Trade Commission (USITC), which included requests for the imposition of tariffs on crystalline silicon photovoltaic (CSPV) solar cells and the establishment of a minimum price for solar modules imported into the United States. Another solar panel manufacturer, SolarWorld AG, later joined Suniva’s petition. On September 22, 2017, the USITC determined that increased imports of solar panels and cells are a substantial cause of injury to the U.S. solar panel manufacturing industry. In January 2018, a 30% tariff was imposed on panels and a 30% tariff was imposed on cells after 2.5 gigawatts (GW) of imports. The tariffs step down 5% annually. This tariff could adversely affect our costs, our supply, or have other material adverse impacts on our business. For example, the tariff could be reflected in the purchase price of the solar panels and components we and our solar partners purchase and could adversely impact our future access to solar panels and components.

We may continue to make significant investments to drive growth in the future. Increases in any of these costs could adversely affect our results of operations and financial condition and harm our business and prospects. If we are unable to reduce our cost structure in the future, it could have a material adverse effect on our ability to be profitable and on our business and prospects.

We rely on net metering and related policies to offer competitive pricing to homeowners in all of our current markets, and changes to net metering policies may significantly reduce demand for electricity from our solar service offerings.

As of December 31, 2017, a substantial majority of states have adopted net metering policies. Net metering policies are designed to allow homeowners to serve their own load using on-site energy generation. Electricity that is generated by a solar energy system and consumed on-site avoids a retail energy purchase from the applicable utility, and excess electricity that is exported back to the electric grid generates a retail credit within a homeowner’s monthly billing period. At the end of the monthly billing period, if the homeowner has generated excess electricity within that month, the homeowner typically carries forward a credit for any excess electricity to be offset against future utility energy purchases. At the end of an annual billing period or calendar year, utilities either continue to carry forward a credit, or reconcile the homeowner’s final annual or calendar year bill using different rates (including zero credit) for the exported electricity.

Utilities, their trade associations, and fossil fuel interests in the country are currently challenging net metering policies, and seeking to either eliminate them, cap them, or impose charges on homeowners that have net metering. For example, in October 2015 the Hawaii Public Utilities Commission (the "Hawaii Commission") issued an order that eliminates net metering for all new customers. Currently, the Hawaii Commission has three options for rooftop solar customers: (i) one program providing customers with a credit when they export power during certain periods of time; (ii) one program that allows customers to install quickly, but they are generally not allowed to export electricity to the electrical grid; and (iii) another program paying customers for exported power at all times but at a lower rate and allowing the utility the ability to shut off customers' solar systems during grid emergencies. All existing net metering customers and customers who submitted net metering applications before October 12, 2015 are grandfathered indefinitely under the old rules. Some interim programs created by the Hawaii Commission are grandfathered for customers who applied in a timely fashion. We continue to build and service these systems.

In addition, in early 2016 we ceased new installations in Nevada in response to the elimination of net metering by the Public Utilities Commission of Nevada ("PUCN"). However, in September 2016, the PUCN issued an order grandfathering in customers under the prior net metering rules who had installed a solar energy system or had submitted a net metering application prior to December 31, 2015. Furthermore, in June 2017, the governor of Nevada signed legislation, AB 405, which restores net metering at a reduced credit - starting at 95% of the retail rate and declining as solar penetration increases - and grandfathers new customers for 20 years at the net metering rate in effect at the time they apply for interconnection. As another example, in December 2016, the Arizona Corporation Commission ("ACC") issued a decision to eliminate net metering and reduce export rates for new solar customers. To carry out this decision, specific rate changes applicable to Arizona solar customers are being determined in utility rate cases. For example, in 2017, Arizona Public Service Company ("APS") filed a rate case seeking reduced credit for solar exports and higher fixed charges. Intervenors agreed upon a settlement, which the ACC accepted in August 2017. In addition, the ACC held hearings beginning in November 2017 to consider rate changes applicable to solar customers proposed by Tuscon Electric Power ("TEP") and UNS Electric ("UNS"). The ACC has not made a decision in the TEP - UNS rate proceeding. In addition, New Hampshire issued its net metering order in June 2017, which removes a previously existing 100 MW cap on net metering and grandfathers in customers under existing rates until 2040.

Some states set limits on the total percentage of a utility's customers that can adopt net metering. For example, South Carolina has a net metering cap. New York and New Jersey currently have no net metering cap; however, these states have caps that trigger commission review of net metering policies. These policies could be subject to change in the future, and other states we serve now or in the future may adopt net metering caps. If the net metering caps in these jurisdictions are reached without an extension of net metering policies, homeowners in the future will not have access to the economic value proposition net metering allows. In addition, if overall solar consumer demand in South Carolina grows as expected in the coming year and the cap is not increased or otherwise extended, the South Carolina net metering cap will likely be reached. Our ability to sell our solar service offerings may be adversely impacted by the failure to extend existing limits to net metering or the elimination of currently existing net metering policies. The failure to adopt a net metering policy where it currently is not in place would pose a barrier to entry in those states. Additionally, the imposition of charges that only or disproportionately impact homeowners that have solar systems, or the introduction of rate designs such as the "unbundled" rates mentioned above, would adversely impact our business.

Electric utility statutes and regulations and changes to statutes or regulations may present technical, regulatory and economic barriers to the purchase and use of our solar service offerings that may significantly reduce demand for such offerings.

Federal, state and local government statutes and regulations concerning electricity heavily influence the market for our solar service offerings. These statutes and regulations relate to electricity pricing, net metering, incentives, taxation, competition with utilities, and the interconnection of homeowner-owned and third party-owned solar energy systems to the electrical grid. These statutes and regulations are constantly evolving. Governments, often acting through state utility or public service commissions, change and adopt different rates for residential customers on a regular basis and these changes can have a negative impact on our ability to deliver savings to homeowners.

Utilities, their trade associations, and fossil fuel interests in the country, each of which has significantly greater economic and political resources than the residential solar industry, are currently challenging solar-related policies to reduce the competitiveness of residential solar energy. Any adverse changes in solar-related policies could have a negative impact on our business and prospects. For example, in early 2016, we ceased new installations in Nevada as a result of the elimination of net metering (which was thereafter amended by the PUCN to grandfather in customers who had installed a solar energy system or submitted a net metering application prior to December 31, 2015). In June 2017, the governor of Nevada signed legislation, AB 405, which restores net metering at a reduced credit - starting at 95% of the retail rate and declining as solar penetration increases - and grandfathered customers for 20 years.

We face competition from traditional energy companies as well as solar energy companies.

The solar energy industry is highly competitive and continually evolving as participants strive to distinguish themselves within their markets and compete with large utilities. We believe that our primary competitors are the established utilities that supply energy to homeowners by traditional means. We compete with these utilities primarily based on price, predictability of price, and the ease by which homeowners can switch to electricity generated by our solar service offerings. If we cannot offer compelling value to homeowners based on these factors, then our business and revenue will not grow. Utilities generally have substantially greater financial, technical, operational and other resources than we do. As a result of their greater size, these competitors may be able to devote more resources to the research, development, promotion and sale of their products or respond more quickly to evolving industry standards and changes in market conditions than we can. Furthermore, these competitors are able to devote substantially more resources and funding to regulatory and lobbying efforts.

Utilities could also offer other value-added products or services that could help them compete with us even if the cost of electricity they offer is higher than ours. In addition, a majority of utilities' sources of electricity are non-solar, which may allow utilities to sell electricity more cheaply than us. Moreover, regulated utilities are increasingly seeking approval to "rate-base" their own residential solar businesses. Rate-basing means that utilities would receive guaranteed rates of return for their solar businesses. This is already commonplace for utility scale solar projects and commercial solar projects. While few utilities to date have received regulatory permission to rate-base residential solar or storage, our competitiveness would be significantly harmed should more utilities receive such permission because we do not receive guaranteed profits for our solar service offerings.

We also face competition from other residential solar service providers. Some of these competitors have a higher degree of brand name recognition, differing business and pricing strategies, and greater capital resources than we have, as well as extensive knowledge of our target markets. If we are unable to establish or maintain a consumer brand that resonates with homeowners, or competes with the pricing offered by our competitors, our sales and market share position may be adversely affected as our growth is dependent on originating new homeowners. We may also face competitive pressure from companies who offer lower priced consumer offerings than us.

We also compete with companies that are not regulated like traditional utilities but that have access to the traditional utility electricity transmission and distribution infrastructure. These energy service companies are able to offer homeowners electricity supply-only solutions that are competitive with our solar service offerings on both price and usage of solar energy technology while avoiding the long-term agreements and physical installations that our current fund-financed business model requires. This may limit our ability to attract homeowners, particularly those who wish to avoid long-term contracts or have an aesthetic or other objection to putting solar panels on their roofs.

We also face competition from purely finance-driven nonintegrated competitors that subcontract out the installation of solar energy systems, from installation businesses (including solar partners) that seek financing from external parties, from large construction companies and from electrical and roofing companies. In addition, local installers that might otherwise be viewed as potential solar partners may gain market share by being able to be the first providers in new local markets. Some of these competitors may provide energy at lower costs than we do. Finally, as declining prices for solar panels and related equipment has resulted in an increase in consumers purchasing instead of leasing solar energy systems, we face competition from companies that offer consumer loans for these solar panel purchases.

As the solar industry grows and evolves, we will continue to face existing competitors as well as new competitors who are not currently in the market (including those resulting from the consolidation of existing competitors) that achieve significant developments in alternative technologies or new products such as storage

solutions, loan products or other programs related to third-party ownership. Our failure to adapt to changing market conditions, to compete successfully with existing or new competitors and to adopt new or enhanced technologies could limit our growth and have a material adverse effect on our business and prospects.

Regulations and policies related to rate design could deter potential homeowners from purchasing our solar service offerings, reduce the value of the electricity we produce, and reduce the savings that our homeowners could realize from our solar service offerings.

All states regulate investor-owned utility retail electricity pricing. In addition, there are numerous publicly owned utilities and electric cooperatives that establish their own retail electricity pricing through some form of regulation or internal process. These regulations and policies could deter potential homeowners from purchasing our solar service offerings. For example, some utilities in states such as Arizona and Utah have sought and secured rate design changes that reduce credit for residential solar exports to below the retail rate and impose new charges for rooftop solar customers. Utilities in additional states such as New York may potentially follow suit. Such rate changes can include changing rates to charge lower volume-based rates – the rates charged for kilowatt hours of electricity purchased by a residential customer – raising unavoidable fixed charges that a homeowner is subject to when they purchase solar energy from third parties, and levying charges on homeowners based on their point of maximum demand during a month (referred to as “demand charge”). For example, the Massachusetts Department of Public Utilities recently approved Eversource's proposed demand charges on net metering customers in the state. APS also offers residential demand charge rate plans and if our solar customers have subscribed to those plans, they may not realize typical savings. These forms of rate design would adversely impact our business by reducing the value of the electricity our solar energy systems produce and reducing the savings homeowners receive by purchasing our solar service offerings. These proposals could continue in other states. In addition to changes in general rates charged to all residential customers, utilities are increasingly seeking solar-specific charges (which may be fixed charges, capacity-based charges, or other rate charges). Any of these changes could materially reduce the demand for our products and could limit the number of markets in which our products are competitive with electricity provided by the utilities. As mentioned above, in December 2016, the ACC issued a decision to eliminate net metering and reduce export rates for new solar customers. The specific rate changes applicable to Arizona solar customers may be determined in utility rate cases. As another example, in early 2016, we ceased new installations in Nevada in response to the elimination of net metering by the PUCN, which decision was amended by the PUCN in September 2016 to grandfather in customers who had installed a solar energy system or submitted a net metering application prior to December 31, 2015 under the prior net metering rules. In June 2017, the governor of Nevada signed legislation, AB 405, which restores net metering at a reduced credit - starting at 95% of the retail rate and declining as solar penetration increases - and grandfathered customers for 20 years.

Our business currently depends on the availability of utility rebates, tax credits and other financial incentives in addition to other tax benefits. The expiration, elimination or reduction of these rebates and incentives could adversely impact our business.

Our business depends on government policies that promote and support solar energy and enhance the economic viability of owning solar energy systems. U.S. federal, state and local governmental bodies provide incentives to owners, distributors, installers and manufacturers of solar energy systems to promote solar energy. These incentives include ITCs, as discussed above, as well as other tax credits, rebates and SRECs associated with solar energy generation. Some markets, such as New Jersey and Massachusetts, currently utilize SRECs. SRECs can be volatile and could decrease over time as the supply of SREC-producing solar energy systems installed in a particular market increases. For example, in New Jersey, because of the substantial supply of solar energy systems installed, the state is about to reach the solar carve-out under the state's Renewable Portfolio Standard. Unless pending legislation to expand New Jersey's solar carve-out is passed in the near term, SREC values will be adversely impacted. We rely on the incentives listed above to lower our cost of capital and to incent investors to invest in our funds, all of which enables us to lower the price we charge homeowners for our solar service offerings. These incentives have had a significant impact on the development of solar energy but they could change at any time, especially in light of the recent change in administration, as further described below. These incentives may also expire on a particular date (as discussed above with respect to the ITC), end when the allocated funding is exhausted, or be reduced, terminated or repealed without notice. The financial value of certain incentives may also decrease over time.

The current administration's proposed environmental policies may create regulatory uncertainty in the solar energy industry and may lead to a reduction or removal of various clean energy programs and initiatives designed

to curtail climate change. Such a reduction or removal of incentives could diminish the market for solar energy. Tax reform legislation known as the Tax Cuts and Jobs Act was enacted in December 2017, reducing the corporate tax rate to 21%, and limiting interest deductibility and allowing full and immediate expensing of capital costs. A reduction in the corporate tax rate and the expensing of capital costs could diminish the capacity of potential fund investors to benefit from tax incentives, and could require additional cash to be distributed to such fund investors in lieu of tax benefits. Furthermore, the current administration has made public statements regarding overturning or modifying policies of, or regulations enacted by, the prior administration that placed limitations on coal and gas electric generation, mining and/or exploration. Any effort to overturn federal and state laws, regulations or policies that are supportive of solar energy generation or that remove costs or other limitations on other types of energy generation that compete with solar energy projects could materially and adversely affect our business.

Our business model also relies on multiple tax exemptions offered at the state and local levels. For example, solar energy systems are generally not considered in determining values for calculation of local and state real and personal property taxes as a result of applicable property tax exemptions. If solar energy systems were not excluded, the property taxes payable by homeowners would be higher, which could offset any potential savings our solar service offerings could offer. For example, Arizona Department of Revenue has determined that the rule that solar energy systems have no value and add no value does not apply to solar panels that are leased (as opposed to owned) and has subjected our leased solar panels to personal property taxes in that state. While we are challenging that determination, an adverse outcome will subject us and other solar companies to an increase in personal property taxes. If we pass this additional tax on to our customers in the form of higher prices, it could reduce or eliminate entirely the savings that these solar panels would otherwise provide to the homeowner. We are involved in ongoing litigation challenging the Arizona personal property tax determination. In May 2017, the Arizona Court of Appeals upheld the tax court's ruling that the Arizona Department of Revenue had no legal authority to assess rooftop solar energy equipment, reversed the Tax Court's ruling that the statute, Section 42-11054(C)(2) is unconstitutional, and ruled that the counties have no authority to tax rooftop solar equipment. The Arizona Department of Revenue appealed that decision, which is currently pending before the Arizona Supreme Court, and there can be no assurances that this litigation will be resolved in a manner that is favorable to us or other solar companies. If this litigation is not resolved in a manner that is favorable to us and other solar companies, it will adversely impact our operations in Arizona. If we decide to pass the tax cost on to our customers, such price increase could adversely impact our ability to attract new customers in Arizona, and the savings that our current Arizona customers realize could be reduced or eliminated by the additional tax imposed, which will make our solar service offerings less attractive to those customers and could increase the risk of default from those customers. In addition, South Carolina counties do not currently assess property tax on residential solar energy systems, although state law does not provide for an explicit exemption. In general, we rely on certain state and local tax exemptions that apply to the sale of equipment, sale of power, or both. These state and local sales tax exemptions can be changed by the state legislature and other regulators, and such a change, for example if South Carolina were to begin assessing property tax on residential solar energy systems, could adversely impact our business.

We are not currently regulated as a utility under applicable laws, but we may be subject to regulation as a utility in the future or become subject to new federal and state regulations for any additional solar service offerings we may introduce in the future.

Most federal, state, and municipal laws do not currently regulate us as a utility. As a result, we are not subject to the various regulatory requirements applicable to U.S. utilities. However, any federal, state, local or otherwise applicable regulations could place significant restrictions on our ability to operate our business and execute our business plan by prohibiting or otherwise restricting our sale of electricity. These regulatory requirements could include restricting our sale of electricity, as well as regulating the price of our solar service offerings. For example, the New York Public Service Commission recently passed an order regulating distributed energy providers as if they were energy service companies, which increases the regulatory compliance burden in that state. If we were subject to the same regulatory authorities as utilities in the United States or if new regulatory bodies were established to oversee our business, then our operating costs could materially increase.

Our business depends in part on the regulatory treatment of third-party owned solar energy systems.

Our Customer Agreements are third-party ownership arrangements. Sales of electricity by third parties face regulatory challenges in some states and jurisdictions. These challenges pertain to issues such as whether third party-owned systems qualify for the same levels of rebates or other non-tax incentives available for homeowner-owned solar energy systems, whether third-party-owned systems are eligible at all for these incentives, and whether third-party-owned systems are eligible for net metering and the associated significant cost savings. Reductions in, or eliminations of, the current treatment of third-party arrangements could reduce demand for our solar service offerings, adversely impact our access to capital and cause us to increase the price we charge homeowners for energy.

Interconnection limits or circuit-level caps imposed by regulators may significantly reduce our ability to sell electricity from our solar service offerings in certain markets or slow interconnections, harming our growth rate and customer satisfaction scores.

Interconnection rules establish the circumstances in which rooftop solar will be connected to the electricity grid. Interconnection limits or circuit-level caps imposed by regulators may curb our growth in key markets. Utilities throughout the country have different rules and regulations regarding interconnection and some utilities cap or limit the amount of solar energy that can be interconnected to the grid. Our systems do not provide power to homeowners until they are interconnected to the grid.

Interconnection regulations are based on claims from utilities regarding the amount of solar electricity that can be connected to the grid without causing grid reliability issues or requiring significant grid upgrades. Although recent rulings from the Hawaii Utilities Commission have helped resolve some problems, historically, interconnection limits or circuit-level caps have slowed the pace of our installations in Hawaii. Similar interconnection limits could slow our future installations in Hawaii or other markets, harming our growth rate and customer satisfaction scores. Similarly, the Hawaii Public Utilities Commission recently required the activation of some advanced inverter functionality that may require more expensive equipment and more oversight of the operation of the solar systems over time.

We may be required to make payments or contribute assets to our investors upon the occurrence of certain events, including one-time reset or true-up payments or upon the exercise of a redemption option by one of our investors.

Our fund investors typically advance capital to us based on production capacity estimates. The models we use to calculate prepayments in connection with certain of our investment funds will be updated for each investment fund at a fixed date occurring after placement in service of all applicable solar energy systems or an agreed upon date (typically within the first year of the applicable term) to reflect certain specified conditions as they exist at such date including the ultimate system size of the equipment that was leased, how much it cost, and when it went into service. In some cases, these true-up models will also incorporate any changes in law, which would include any reduction in rates (and thus any reduction in the benefits of depreciation). As a result of this true-up, applicable payments are resized, and we may be obligated to refund a portion of the investor's prepayments or to contribute additional assets to the investment fund. In addition, certain of our fund investors have the right to require us to purchase their interests in the investment funds after a set period of time, generally at a price equal to the greater of a set purchase price or fair market value of the interests at the time of the repurchase. Any significant refunds, capital contributions or purchases that we may be required to make could adversely affect our liquidity or financial condition.

A material drop in the retail price of utility-generated electricity or electricity from other sources would harm our business, financial condition and results of operations.

We believe that a homeowner's decision to buy solar energy from us is primarily driven by a desire to lower electricity costs. Decreases in the retail prices of electricity from utilities or other energy sources would harm our ability to offer competitive pricing and could harm our business. The price of electricity from utilities could decrease as a result of:

- the construction of a significant number of new power generation plants, including nuclear, coal, natural gas or renewable energy technologies;
- the construction of additional electric transmission and distribution lines;
- a reduction in the price of natural gas or other natural resources as a result of new drilling techniques or other technological developments, a relaxation of associated regulatory standards, or broader economic or policy developments;
- energy conservation technologies and public initiatives to reduce electricity consumption; and
- development of new energy technologies that provide less expensive energy.

A reduction in utility electricity prices would make the purchase of our solar service offerings less attractive. If the retail price of energy available from utilities were to decrease due to any of these or other reasons, we would be at a competitive disadvantage. As a result, we may be unable to attract new homeowners and our growth would be limited.

It is difficult to evaluate our business and prospects due to our limited operating history.

Until 2014, we focused our efforts primarily on the sales, financing and monitoring of solar energy systems for residential customers, with installation provided by our solar partners. In February 2014, we acquired the residential sales and installation business of Mainstream Energy Corporation, its fulfillment business AEE Solar and its racking business SnapNrack (collectively, "MEC"). We have limited experience managing the fulfillment and racking lines of the MEC business, and we may not be successful in maintaining or growing the revenue from these businesses. Further, we have limited experience, in comparison to our solar partner model, in our direct-to-consumer business, and as a result, we may fail to grow as quickly or achieve the revenue scale targeted in connection with such a model. We may also be unsuccessful in expanding our customer base through installation of our solar service offerings within our current markets or in new markets we may enter. Additionally, we cannot assure you that we will be successful in generating substantial revenue from our current solar service offerings or from any additional solar service offerings we may introduce in the future. Our limited operating history, combined with the rapidly evolving and competitive nature of our industry, may not provide an adequate basis for you to evaluate our results of operations and business prospects. In addition, we only have limited insight into emerging trends, such as alternative energy sources, commodity prices in the overall energy market, and legal and regulatory changes that impact the solar industry, any of which could adversely impact our business, prospects and results of operations.

We have incurred losses and may be unable to achieve or sustain profitability in the future.

We have incurred net losses in the past and may continue to incur net losses as we increase our spending to finance the expansion of our operations, expand our installation, engineering, administrative, sales and marketing staffs, increase spending on our brand awareness and other sales and marketing initiatives, and implement internal systems and infrastructure to support our growth. We do not know whether our revenue will grow rapidly enough to absorb these costs and our limited operating history makes it difficult to assess the extent of these expenses or their impact on our results of operations. Our ability to achieve profitability depends on a number of factors, including but not limited to:

- growing our customer base;
- finding investors willing to invest in our investment funds on favorable terms;
- maintaining or further lowering our cost of capital;
- reducing the cost of components for our solar service offerings;
- growing and maintaining our channel partner network;
- growing our direct-to-consumer business to scale; and

- reducing our operating costs by lowering our customer acquisition costs and optimizing our design and installation processes and supply chain logistics.

Even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future.

Our results of operations may fluctuate from quarter to quarter, which could make our future performance difficult to predict and could cause our results of operations for a particular period to fall below expectations, resulting in a decline in the price of our common stock.

Our quarterly results of operations are difficult to predict and may fluctuate significantly in the future. We have experienced seasonal and quarterly fluctuations in the past and expect these fluctuations to continue. However, given that we are an early-stage company operating in a rapidly changing industry, those fluctuations may be masked by our recent growth rates and thus may not be readily apparent from our historical results of operations. As such, our past quarterly results of operations may not be good indicators of likely future performance.

In addition to the other risks described in this “Risk Factors” section, as well as the factors discussed in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section, the following factors could cause our results of operations and key performance indicators to fluctuate:

- the expiration or initiation of any governmental tax rebates or incentives;
- significant fluctuations in homeowner demand for our solar service offerings or fluctuations in the geographic concentration of installations of solar energy systems;
- changes in financial markets, which could restrict our ability to access available financing sources;
- seasonal or weather conditions that impact sales, energy production and system installations;
- the amount and timing of operating expenses related to the maintenance and expansion of our business, operations and infrastructure;
- announcements by us or our competitors of new products or services, significant acquisitions, strategic partnerships, joint ventures or capital-raising activities or commitments;
- changes in our pricing policies or terms or those of our competitors, including utilities;
- changes in regulatory policy related to solar energy generation;
- the loss of one or more key partners or the failure of key partners to perform as anticipated;
- actual or anticipated developments in our competitors’ businesses or the competitive landscape;
- actual or anticipated changes in our growth rate;
- general economic, industry and market conditions; and
- changes to our cancellation rate.

In the past, we have experienced seasonal fluctuations in sales and installations, particularly in the fourth quarter. This has been the result of decreased sales through the holiday season and weather-related installation delays. In addition, energy production is greater in the second and third quarters of the year, causing variability in operating lease revenue throughout the year. Our incentives revenue is also highly variable due to associated revenue recognition rules, as discussed in greater detail in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Seasonal and other factors may also contribute to variability in our sales of solar energy systems and product sales. For these or other reasons, the results of any prior quarterly or annual periods should not be relied upon as indications of our future performance. In addition, our actual revenue or key operating metrics in one or more future quarters may fall short of the expectations of investors and financial analysts. If that occurs, the trading price of our common stock could decline and you could lose part or all of your investment.

Our actual financial results may differ materially from any guidance we may publish from time to time.

We have in the past and may, from time to time, provide guidance regarding our future performance that represents our management's estimates as of the date such guidance is provided. Any such guidance is based upon a number of assumptions with respect to future business decisions (some of which may change) and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies (many of which are beyond our control). Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions that inform such guidance will not materialize or will vary significantly from actual results. Our ability to meet deployment volume, cost, net present value or any other forward-looking guidance is impacted by a number of factors including, but not limited to, the number of our solar energy systems sold versus leased, changes in installation costs, the availability of additional financing on acceptable terms, changes in the retail prices of traditional utility generated electricity, the availability of rebates, tax credits and other incentives, changes in policies and regulations including net metering and interconnection limits or caps, the availability of solar panels and other raw materials, as well as the other risks to our business that are described in this section. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date such guidance is provided. Actual results may vary from such guidance and the variations may be material. Investors should also recognize that the reliability of any forecasted financial data diminishes the farther in the future that the data is forecast. In light of the foregoing, investors should not place undue reliance on our financial guidance, and should carefully consider any guidance we may publish in context.

If we fail to manage our recent and future growth effectively, we may be unable to execute our business plan, maintain high levels of customer service or adequately address competitive challenges.

We have experienced significant growth in recent periods, and we intend to continue to expand our business within existing markets and in a number of new locations in the future. This growth has placed, and any future growth may place, a significant strain on our management, operational and financial infrastructure. In particular, we will be required to expand, train and manage our growing employee base and solar partners. Our management will also be required to maintain and expand our relationships with homeowners, suppliers and other third parties and attract new homeowners and suppliers, as well as to manage multiple geographic locations.

In addition, our current and planned operations, personnel, systems and procedures might be inadequate to support our future growth and may require us to make additional unanticipated investment in our infrastructure, including additional costs for the expansion of our employee base and our solar partners as well as marketing and branding costs. Our success and ability to further scale our business will depend, in part, on our ability to manage these changes in a cost-effective and efficient manner. If we cannot manage our growth, we may be unable to take advantage of market opportunities, execute our business strategies or respond to competitive pressures. This could also result in declines in quality or homeowner satisfaction, increased costs, difficulties in introducing new solar service offerings or other operational difficulties. Any failure to effectively manage growth could adversely impact our business and reputation.

Servicing our debt requires a significant amount of cash to comply with certain covenants and satisfy payment obligations, and we may not have sufficient cash flow from our business to pay our substantial debt and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.

We have substantial amounts of debt, including the working capital facility and the non-recourse debt facilities entered into by our subsidiaries, as discussed in more detail in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements. Specifically, as of December 31, 2017, we had outstanding borrowings of \$247.0 million on a bank line of credit maturing in April 2018. In February 2018, the maturity date was extended to April 1, 2020. In addition, our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures to operate our business. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to timely repay or otherwise refinance our indebtedness (including, but not limited to, the bank line of credit disclosed above) will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

We expect to incur substantially more debt in the future, which could intensify the risks to our business.

We and our subsidiaries expect to incur additional debt in the future, subject to the restrictions contained in our debt instruments. Our existing debt arrangements restrict our ability to incur additional indebtedness, including secured indebtedness, and we may be subject to similar restrictions under the terms of future debt arrangements. These restrictions could inhibit our ability to pursue our business strategies. Increases in our existing debt obligations would further heighten the debt related risk discussed above.

Furthermore, there is no assurance that we will be able to enter into new debt instruments on acceptable terms. If we were unable to satisfy financial covenants and other terms under existing or new instruments, or obtain waivers or forbearance from our lenders, or if we were unable to obtain refinancing or new financings for our working capital, equipment and other needs on acceptable terms if and when needed, our business would be adversely affected.

The production and installation of solar energy systems depends heavily on suitable meteorological conditions. If meteorological conditions are unexpectedly unfavorable, the electricity production from our solar service offerings may be below our expectations, and our ability to timely deploy new systems may be adversely impacted.

The energy produced and revenue and cash flows generated by a solar energy system depend on suitable solar and weather conditions, both of which are beyond our control. Furthermore, components of our systems, such as panels and inverters, could be damaged by severe weather or natural catastrophes, such as hailstorms, tornadoes, fires or earthquakes. In these circumstances, we generally would be obligated to bear the expense of repairing the damaged solar energy systems that we own. Sustained unfavorable weather also could unexpectedly delay the installation of our solar energy systems, leading to increased expenses and decreased revenue and cash flows in the relevant periods. Weather patterns could change, making it harder to predict the average annual amount of sunlight striking each location where our solar energy systems are installed. This could make our solar service offerings less economical overall or make individual systems less economical. Any of these events or conditions could harm our business, financial condition and results of operations.

Our business is concentrated in certain markets, putting us at risk of region specific disruptions.

As of December 31, 2017, approximately half of our customers were in California. Accordingly, our business and results of operations are particularly susceptible to adverse economic, regulatory, political, weather and other conditions in this market and in other markets that may become similarly concentrated, in particular the east coast, where we have seen significant growth recently. In addition, our corporate and sales headquarters are located in San Francisco, California, an area that is at a heightened risk of earthquakes. We may not have adequate insurance, including business interruption insurance, to compensate us for losses that may occur from any such significant events, including damage to our solar energy systems. A significant natural disaster, such as an earthquake, could have a material adverse impact on our business, results of operations and financial condition. In addition, acts of terrorism or malicious computer viruses could cause disruptions in our or our solar partners' businesses or the economy as a whole. To the extent that these disruptions result in delays or cancellations of installations or the deployment of our solar service offerings, our business, results of operations and financial condition would be adversely affected.

Loan financing developments could adversely impact our business.

The third-party ownership structure, which we bring to market through our solar service offerings, continues to be the predominant form of system ownership in the residential solar market in many states. However, with the development of new loan financing products, we have seen a modest shift from leasing to outright purchases of the solar energy system by the homeowner (i.e., a homeowner purchases the solar energy system outright instead of leasing the system from us). Continued increases in third-party loan financing products and outright purchases could result in the demand for long-term Customer Agreements to decline, which would require us to shift our product focus to respond to the market trend and could have an adverse effect on our business. In 2017, 2016 and 2015, the majority of our customers chose our solar service offerings as opposed to buying a solar energy system outright. Our financial model is impacted by the volume of homeowners who choose our solar service offerings, and an increase in the number of customers who choose to purchase solar energy systems (whether for cash or through third-party financing) may harm our business and financial results.

The federal government currently offers a 30% Residential ITC for the installation of certain solar power facilities owned by residential taxpayers. The Residential ITC was set to expire at the end of 2016. In December 2015, Congress passed legislation extending the Residential ITC for an additional five years with a ramp down from 30% to 26% for solar property commencing construction in 2020 and then further to 22% for solar property commencing construction in 2021. The Residential ITC is set to expire after 2021. Reductions in, eliminations of, or expirations of, governmental incentives such as the Residential ITC could reduce the number of customers who choose to purchase our solar energy systems.

Our growth depends in part on the success of our relationships with third parties, including our solar partners.

A key component of our growth strategy is to develop or expand our relationships with third parties. For example, we are investing resources in establishing strategic relationships with market players across a variety of industries, including large retailers, to generate new customers. These programs may not roll out as quickly as planned or produce the results we anticipated. A significant portion of our business depends on attracting and retaining new and existing solar partners. Negotiating relationships with our solar partners, investing in due diligence efforts with potential solar partners, training such third parties and contractors, and monitoring them for compliance with our standards require significant time and resources and may present greater risks and challenges than expanding a direct sales or installation team. If we are unsuccessful in establishing or maintaining our relationships with these third parties, our ability to grow our business and address our market opportunity could be impaired. Even if we are able to establish and maintain these relationships, we may not be able to execute on our goal of leveraging these relationships to meaningfully expand our business, brand recognition and customer base. This would limit our growth potential and our opportunities to generate significant additional revenue or cash flows.

We and our solar partners depend on a limited number of suppliers of solar panels and other system components to adequately meet anticipated demand for our solar service offerings. Any shortage, delay or component price change from these suppliers, or the acquisition of any of these suppliers by a competitor, could result in sales and installation delays, cancellations and loss of market share.

We and our solar partners purchase solar panels, inverters and other system components and batteries from a limited number of suppliers, making us susceptible to quality issues, shortages and price changes. If we or our solar partners fail to develop, maintain and expand our relationships with these or other suppliers, we may be unable to adequately meet anticipated demand for our solar service offerings, or we may only be able to offer our systems at higher costs or after delays. If one or more of the suppliers that we or our solar partners rely upon to meet anticipated demand ceases or reduces production, we may be unable to quickly identify alternate suppliers or to qualify alternative products on commercially reasonable terms, and we may be unable to satisfy this demand. The acquisition of a supplier by one of our competitors could limit our access to such components and require significant redesigns of our solar energy systems or installation procedures and have a material adverse effect on our business.

In particular, there are a limited number of suppliers of inverters, which are components that convert electricity generated by solar panels into electricity that can be used to power the home. For example, once we design a system for use with a particular inverter, if that type of inverter is not readily available at an anticipated price, we may incur delays and additional expenses to redesign the system. Further, the inverters on our solar energy systems generally carry only ten year warranties. If there is an inverter equipment shortage in a year when a substantial number of inverters on our systems need to be replaced, we may not be able to replace the inverters to maintain proper system functioning or may be forced to do so at higher than anticipated prices, either of which would adversely impact our business.

There have also been periods of industry-wide shortage of key components, including solar panels, in times of rapid industry growth. For example, new or unexpected changes in rooftop fire codes or building codes may require new or different system components to satisfy compliance with such newly effective codes or regulations, which may not be readily available for distribution to us or our suppliers. The manufacturing infrastructure for some of these components has a long lead time, requires significant capital investment and relies on the continued availability of key commodity materials, potentially resulting in an inability to meet demand for these components and, as a result, could negatively impact our ability to install systems in a timely manner. Further, any decline in the exchange rate of the U.S. dollar compared to the functional currency of our component suppliers could increase our component prices. Any of these shortages, delays or price changes could limit our growth, cause cancellations or adversely affect our operating margins, and result in loss of market share and damage to our brand.

As the primary entity that contracts with homeowners, we are subject to risks associated with construction, cost overruns, delays, customer cancellations, regulatory compliance and other contingencies, any of which could have a material adverse effect on our business and results of operations.

We are a licensed contractor in certain communities that we service, and we are ultimately responsible as the contracting party for every solar energy system installation. We may be liable, either directly or through our solar partners, to homeowners for any damage we cause to them, their home, belongings or property during the installation of our systems. For example, we either directly or through our solar partners, frequently penetrate homeowners' roofs during the installation process and may incur liability for the failure to adequately weatherproof such penetrations following the completion of construction. In addition, because the solar energy systems we or our solar partners deploy are high voltage energy systems, we may incur liability for any failure to comply with electrical standards and manufacturer recommendations.

Completing the sale and installation of a solar energy system requires many different steps including a site audit, completion of designs, permitting, installation, electrical sign-off and interconnection. Homeowners may cancel their Customer Agreement, subject to certain conditions, during this process until commencement of installation, and we have experienced increased customer cancellations in certain geographic markets during certain periods throughout our operating history. We or our solar partners may face customer cancellations, delays or cost overruns which may adversely affect our or our solar partners' ability to ramp up the volume of sales or installations in accordance with our plans. These cancellations, delays or overruns may be the result of a variety of factors, such as labor shortages or other labor issues, defects in materials and workmanship, adverse weather conditions, transportation constraints, construction change orders, site changes or roof conditions, geographic factors and other unforeseen difficulties, any of which could lead to increased cancellation rates, reputational harm and other adverse effects. For example, some customer orders are cancelled after a site visit if we determine that a customer needs to make repairs to or install a new roof, or that there is excessive shading on their property. If we continue to experience increased customer cancellations, our financial results will potentially be materially and adversely affected.

In addition, the installation of solar energy systems, energy-storage systems and other energy-related products requiring building modifications are subject to oversight and regulation in accordance with national, state and local laws and ordinances relating to building, fire and electrical codes, safety, environmental protection, utility interconnection and metering, and related matters. We also rely on certain of our employees to maintain professional licenses in many of the jurisdictions in which we operate, and our failure to employ properly licensed personnel could adversely affect our licensing status in those jurisdictions. It is difficult and costly to track the requirements of every individual authority having jurisdiction over our installations and to design solar energy systems to comply with these varying standards. Any new government regulations or utility policies pertaining to our systems may result in significant additional expenses to us and our homeowners and, as a result, could cause a significant reduction in demand for our solar service offerings.

While we have a variety of stringent quality standards that we apply in the selection of our solar partners, we do not control our suppliers and solar partners or their business practices. Accordingly, we cannot guarantee that they follow our standards or ethical business practices, such as fair wage practices and compliance with environmental, safety and other local laws. A lack of demonstrated compliance could lead us to seek alternative suppliers or contractors, which could increase our costs and result in delayed delivery or installation of our products, product shortages or other disruptions of our operations. Violation of labor or other laws by our suppliers and solar partners or the divergence of a supplier's or solar partners' labor or other practices from those generally accepted as ethical in the United States or other markets in which we do business could also attract negative publicity for us and harm our business, brand and reputation in the market.

We typically bear the risk of loss and the cost of maintenance, repair and removal on solar energy systems that are owned or leased by our investment funds.

We typically bear the risk of loss and are generally obligated to cover the cost of maintenance, repair and removal for any solar energy system that we sell or lease to our investment funds. At the time we sell or lease a solar energy system to an investment fund, we enter into a maintenance services agreement where we agree to operate and maintain the system for a fixed fee that is calculated to cover our future expected maintenance costs. If our solar energy systems require an above-average amount of repairs or if the cost of repairing systems were higher than our estimate, we would need to perform such repairs without additional compensation. If our solar energy systems, approximately half of which are located in California, are damaged as the result of a natural disaster beyond our control, losses could exceed or be excluded from, our insurance policy limits, and we could incur unforeseen costs that could harm our business and financial condition. We may also incur significant costs for taking other actions in preparation for, or in reaction to, such events. We purchase property insurance with industry standard coverage and limits approved by an investor's third-party insurance advisors to hedge against such risk, but such coverage may not cover our losses.

Disruptions to our solar production metering solution could negatively impact our revenues and increase our expenses.

Our ability to monitor solar energy production for various purposes depends on the operation of our metering solution. We could incur significant expense and disruption to our operations in connection with failures of our metering solution, including meter hardware failures and failure of the cellular technology that we use to communicate with those meters. Many of our meters operate on either the 2G or 3G cellular data networks, which are expected to sunset before the term of our contract with homeowners. Upgrading our metering solution may cause us to incur a significant expense. Additionally, our meters communicate data through proprietary software, which we license from our metering partners. Should we be unable to continue to license, on agreeable terms, the software necessary to communicate with our meters, it could cause a significant disruption in our business and operations.

Problems with product quality or performance may cause us to incur warranty expenses and performance guarantee expenses, may lower the residual value of our solar energy systems and may damage our market reputation and cause our financial results to decline.

Homeowners who buy energy from us under leases or power purchase agreements are covered by production guaranties and roof penetration warranties. As the owners of the solar energy systems, we or our investment funds receive a warranty from the inverter and solar panel manufacturers, and, for those solar energy systems that we do not install directly, we receive workmanship and material warranties as well as roof penetration warranties from our solar partners. For example, in 2015 and 2014, we had to replace a significant number of defective inverters, the cost of which was borne by the manufacturer. However, our customers were without solar service for a period of time while the work was done, which impacted customer satisfaction. Furthermore, one or more of our third-party manufacturers or solar partners could cease operations and no longer honor these warranties, leaving us to fulfill these potential obligations to homeowners. Further, we provide a performance guarantee with certain solar service offerings pursuant to which we compensate homeowners on an annual basis if their system does not meet the electricity production guarantees set forth in their agreement with us. Homeowners who buy energy from us under leases or power purchase agreements are covered by production guarantees equal to the length of the term of these agreements, typically 20 years.

Because of our limited operating history, we have been required to make assumptions and apply judgments regarding a number of factors, including our anticipated rate of warranty claims and the durability, performance and reliability of our solar energy systems. Our assumptions could prove to be materially different from the actual performance of our systems, causing us to incur substantial expense to repair or replace defective solar energy systems in the future or to compensate homeowners for systems that do not meet their production guarantees. Product failures or operational deficiencies also would reduce our revenue from power purchase or lease agreements because they are dependent on system production. Any widespread product failures or operating deficiencies may damage our market reputation and adversely impact our financial results.

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

If our solar service offerings, including our racking systems or other products, injured someone, we would be exposed to product liability claims. Because solar energy systems and many of our other current and anticipated products are electricity-producing devices, it is possible that consumers or their property could be injured or damaged by our products, whether by product malfunctions, defects, improper installation or other causes. We rely on third-party manufacturing warranties, warranties provided by our solar partners and our general liability insurance to cover product liability claims and have not obtained separate product liability insurance. Any product liability claim we face could be expensive to defend and divert management's attention. The successful assertion of product liability claims against us could result in potentially significant monetary damages that could require us to make significant payments, as well as subject us to adverse publicity, damage our reputation and competitive position and adversely affect sales of our systems and other products. In addition, product liability claims, injuries, defects or other problems experienced by other companies in the residential solar industry could lead to unfavorable market conditions to the industry as a whole, and may have an adverse effect on our ability to attract homeowners, thus affecting our growth and financial performance.

The value of our solar energy systems at the end of the associated term of the lease or power purchase agreement may be lower than projected, which may adversely affect our financial performance and valuation.

We depreciate the costs of our solar energy systems over their estimated useful life of 35 years. At the end of the initial 20-year term of the Customer Agreement, customers may choose to purchase their solar energy systems, ask to remove the system at our cost or renew their Customer Agreements. Homeowners may choose to not renew or purchase for any reason, such as pricing, decreased energy consumption, relocation of residence or switching to a competitor product.

Furthermore, it is difficult to predict how future environmental regulations may affect the costs associated with the removal, disposal or recycling of our solar energy systems. If the value in trade or renewal revenue is less than we expect, we may be required to recognize all or some of the remaining unamortized costs. This could materially impair our future results of operations.

Damage to our brand and reputation or failure to expand our brand would harm our business and results of operations.

We depend significantly on our brand and reputation for high-quality solar service offerings, engineering and customer service to attract homeowners and grow our business. If we fail to continue to deliver our solar service offerings within the planned timelines, if our solar service offerings do not perform as anticipated or if we damage any homeowners' properties or cancel projects, our brand and reputation could be significantly impaired. We also depend greatly on referrals from homeowners for our growth. Therefore, our inability to meet or exceed homeowners' expectations would harm our reputation and growth through referrals. Further, we have focused particular attention on expeditiously growing our direct sales force and our solar partners, leading us in some instances to hire personnel or partner with third parties who we may later determine do not fit our company culture. In addition, members of our direct sales force and our solar partners may engage in what is perceived as aggressive sales tactics that could be unappealing to customers, which could harm our brand and reputation with potential customers. If we cannot manage our hiring and training processes to avoid potential issues related to expanding our sales team or solar partners and maintain appropriate customer service levels, our business and reputation may be harmed and our ability to attract homeowners would suffer. In addition, if we were unable to achieve a similar level of brand recognition as our competitors, some of which currently have a broader brand footprint as a result of a larger direct sales force, more resources and longer operational history, we could lose recognition in the marketplace among prospective customers, suppliers and partners, which could affect our growth and financial performance. Our growth strategy involves marketing and branding initiatives that will involve incurring significant expenses in advance of corresponding revenues. We cannot assure you that such marketing and branding expenses will result in the successful expansion of our brand recognition or increase our revenues.

A failure to hire and retain a sufficient number of employees and service providers in key functions would constrain our growth and our ability to timely complete homeowners' projects and successfully manage homeowner accounts.

To support our growth, we need to hire, train, deploy, manage and retain a substantial number of skilled employees, engineers, installers, electricians, sales and project finance specialists. Competition for qualified personnel in our industry is increasing, particularly for skilled personnel involved in the installation of solar energy systems. We may be unable to attract or retain qualified and skilled installation personnel or installation companies to be our solar partners, which would have an adverse effect on our business. We and our solar partners also compete with the homebuilding and construction industries for skilled labor. As these industries grow and seek to hire additional workers, our cost of labor may increase. The unionization of the industry's labor force could also increase our labor costs. Shortages of skilled labor could significantly delay a project or otherwise increase our costs. Because our profit on a particular installation is based in part on assumptions as to the cost of such project, cost overruns, delays or other execution issues may cause us to not achieve our expected margins or cover our costs for that project. In addition, because we are headquartered in the San Francisco Bay Area, we compete for a limited pool of technical and engineering resources that requires us to pay wages that are competitive with relatively high regional standards for employees in these fields. Further, we need to continue to expand upon the training of our customer service team to provide high-end account management and service to homeowners before, during and following the point of installation of our solar energy systems. Identifying and recruiting qualified personnel and training them requires significant time, expense and attention. It can take several months before a new customer service person is fully trained and productive at the standards that we have established. If we are unable to hire, develop and retain talented customer service personnel, we may not be able to realize the expected benefits of this investment or grow our business.

In addition, to support the growth and success of our direct-to-consumer channel, we need to recruit, retain and motivate a large number of sales personnel on a continuing basis. We compete with many other companies for qualified sales personnel, and it could take many months before a new salesperson is fully trained on our solar service offerings. If we are unable to hire, develop and retain qualified sales personnel or if they are unable to achieve desired productivity levels, we may not be able to compete effectively.

If we or our solar partners cannot meet our hiring, retention and efficiency goals, we may be unable to complete homeowners' projects on time or manage homeowner accounts in an acceptable manner or at all. Any significant failures in this regard would materially impair our growth, reputation, business and financial results. If we are required to pay higher compensation than we anticipate, these greater expenses may also adversely impact our financial results and the growth of our business.

The loss of one or more members of our senior management or key employees may adversely affect our ability to implement our strategy.

We depend on our experienced management team, and the loss of one or more key executives could have a negative impact on our business. In particular, we are dependent on the services of our chief executive officer and co-founder, Lynn Jurich, and our Chairman and co-founder, Edward Fenster. We also depend on our ability to retain and motivate key employees and attract qualified new employees. Neither our founders nor our key employees are bound by employment agreements for any specific term, and we may be unable to replace key members of our management team and key employees in the event we lose their services. Integrating new employees into our management team could prove disruptive to our operations, require substantial resources and management attention and ultimately prove unsuccessful. An inability to attract and retain sufficient managerial personnel who have critical industry experience and relationships could limit or delay our strategic efforts, which could have a material adverse effect on our business, financial condition and results of operations.

We may not realize the anticipated benefits of past or future acquisitions, and integration of these acquisitions may disrupt our business and management.

We acquired MEC in February 2014 and Clean Energy Experts, LLC ("CEE") in April 2015. We may in the future acquire additional companies, project pipelines, products, or technologies or enter into joint ventures or other strategic initiatives. We may not realize the anticipated benefits of past or future acquisitions, and any acquisition has numerous risks that are not within our control. These risks include the following, among others:

- difficulty in assimilating the operations and personnel of the acquired company, especially given our unique culture;

- difficulty in effectively integrating the acquired technologies or products with our current products and technologies;
- difficulty in maintaining controls, procedures and policies during the transition and integration;
- disruption of our ongoing business and distraction of our management and employees from other opportunities and challenges due to integration issues;
- difficulty integrating the acquired company's accounting, management information and other administrative systems;
- inability to retain key technical and managerial personnel of the acquired business;
- inability to retain key customers, vendors and other business partners of the acquired business;
- inability to achieve the financial and strategic goals for the acquired and combined businesses;
- incurring acquisition-related costs or amortization costs for acquired intangible assets that could impact our results of operations;
- significant post-acquisition investments which may lower the actual benefits realized through the acquisition;
- potential failure of the due diligence processes to identify significant issues with product quality, legal and financial liabilities, among other things;
- potential inability to assert that internal controls over financial reporting are effective; and
- potential inability to obtain, or obtain in a timely manner, approvals from governmental authorities, which could delay or prevent such acquisitions.

Our failure to address these risks, or other problems encountered in connection with our past or future acquisitions, could cause us to fail to realize the anticipated benefits of these acquisitions or investments, cause us to incur unanticipated liabilities, and harm our business generally. Future acquisitions could also result in dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, amortization expenses, incremental expenses or the write-off of goodwill, any of which could harm our financial condition or results of operations.

Mergers and acquisitions of companies are inherently risky, may not produce the anticipated benefits and could adversely affect our business, financial condition or results of operations.

If we are unsuccessful in developing and maintaining our proprietary technology, including our BrightPath software, our ability to attract and retain solar partners could be impaired, our competitive position could be harmed and our revenue could be reduced.

Our future growth depends on our ability to continue to develop and maintain our proprietary technology that supports our solar service offerings, including our design and proposal software, BrightPath. In addition, we rely, and expect to continue to rely, on licensing agreements with certain third parties for aerial images that allow us to efficiently and effectively analyze a homeowner's rooftop for solar energy system specifications. In the event that our current or future products require features that we have not developed or licensed, or we lose the benefit of an existing license, we will be required to develop or obtain such technology through purchase, license or other arrangements. If the required technology is not available on commercially reasonable terms, or at all, we may incur additional expenses in an effort to internally develop the required technology. In addition, our BrightPath software was developed, in part, with U.S. federal government funding. When new technologies are developed with U.S. government funding, the government obtains certain rights in any resulting patents, including a nonexclusive license authorizing the government to use the invention for non-commercial purposes. These rights may permit the government to disclose our confidential information to third parties and to exercise "march-in" rights to use or allow third parties to use our patented technology. We are also subject to certain reporting and other obligations to the U.S. government in connection with funding for BrightPath. If we were unable to maintain our existing proprietary technology, our ability to attract and retain solar partners could be impaired, our competitive position could be harmed and our revenue could be reduced.

Our business may be harmed if we fail to properly protect our intellectual property, and we may also be required to defend against claims or indemnify others against claims that our intellectual property infringes on the intellectual property rights of third parties.

We believe that the success of our business depends in part on our proprietary technology, including our software, information, processes and know-how. We rely on copyright, trade secret and patent protections to secure our intellectual property rights. Although we may incur substantial costs in protecting our technology, we cannot be certain that we have adequately protected or will be able to adequately protect it, that our competitors will not be able to utilize our existing technology or develop similar technology independently, that the claims allowed with respect to any patents held by us will be broad enough to protect our technology or that foreign intellectual property laws will adequately protect our intellectual property rights. Moreover, we cannot be certain that our patents provide us with a competitive advantage. Despite our precautions, it may be possible for third parties to obtain and use our intellectual property without our consent. Unauthorized use of our intellectual property by third parties, and the expenses incurred in protecting our intellectual property rights, may adversely affect our business. In the future, some of our products could be alleged to infringe existing patents or other intellectual property of third parties, and we cannot be certain that we will prevail in any intellectual property dispute. In addition, any future litigation required to enforce our patents, to protect our trade secrets or know-how or to defend us or indemnify others against claimed infringement of the rights of third parties could harm our business, financial condition and results of operations.

The Office of the Inspector General of the U.S. Department of the Treasury has issued subpoenas to a number of significant participants in the rooftop solar energy installation industry, including us. The subpoena we received requires us to deliver certain documents in our possession relating to our participation in the U.S. Treasury grant program. These documents have been delivered to the Office of the Inspector General of the U.S. Department of Treasury, which is investigating the administration and implementation of the U.S. Treasury grant program.

In July 2012, we and other companies that are significant participants in both the solar industry and the cash grant program (under Section 1603 of the American Recovery and Reinvestment Act of 2009) received subpoenas from the U.S. Department of the Treasury's Office of the Inspector General. Our subpoena requested, among other things, documents that relate to our applications for U.S. Treasury grants and communications with certain other solar service companies or certain firms that appraise solar energy property for U.S. Treasury grant application purposes. The Inspector General is working with the Civil Division of the U.S. Department of Justice to investigate the administration and implementation of the U.S. Treasury grant program, including possible misrepresentations concerning the fair market value of the solar power systems submitted for grant under that program made in grant applications by companies in the solar industry, including us. We produced documents and testimony as requested by the Inspector General, and we intend to continue to cooperate fully with the Inspector General and the Department of Justice. We are not able to predict how long this review will be on-going. If, at the conclusion of the investigation, the Inspector General concludes that misrepresentations were made, the Department of Justice could decide to bring a civil action to recover amounts it believes were improperly paid to us. If it were successful in asserting this action, we could be required to pay damages and penalties for any funds received based on such misrepresentations (which, in turn, could require us to make indemnity payments to certain of our fund investors). Additionally, the period of time necessary to resolve the investigation is uncertain, and this matter could require significant management and financial resources that could otherwise be devoted to the operation of our business.

We are subject to legal proceedings, regulatory inquiries and litigation, and we may be named in additional legal proceedings, become involved in regulatory inquiries or be subject to litigation in the future, all of which are costly, distracting to our core business and could result in an unfavorable outcome, or a material adverse effect on our business, financial condition, results of operations, or the trading price for our securities.

We are involved in legal proceedings and receive inquiries from government and regulatory agencies. For example, in addition to the pending U.S. Department of the Treasury investigation discussed above, in connection with its review of the Department of Treasury's Section 1603 program, which allows taxpayers to receive cash grants for certain qualified renewable energy projects, the United States Senate Committee on Finance and the House Committee on Ways and Means sent us an inquiry regarding our use of solar energy incentives, third-party financing, and methods of determining cost basis for solar energy properties, to which we have responded. In the event that we are involved in significant disputes or are the subject of a formal action by a regulatory agency, we could be exposed to costly and time consuming legal proceedings that could result in any number of outcomes. Although outcomes of such actions vary, any current or future claims or regulatory actions initiated by or against us,

whether successful or not, could result in significant costs, costly damage awards or settlement amounts, injunctive relief, increased costs of business, fines or orders to change certain business practices, significant dedication of management time, diversion of significant operational resources, or otherwise harm our business.

If we are not successful in our legal proceedings and litigation, we may be required to pay significant monetary damages, which could hurt our results of operations. Lawsuits are time-consuming and expensive to resolve and divert management's time and attention. Although we carry general liability insurance, our insurance may not cover potential claims or may not be adequate to indemnify us for all liability that may be imposed. We cannot predict how the courts will rule in any potential lawsuit against us. Decisions in favor of parties that bring lawsuits against us could subject us to significant liability for damages, adversely affect our results of operations and harm our reputation.

A failure to comply with laws and regulations relating to our interactions with current or prospective residential customers could result in negative publicity, claims, investigations, and litigation, and adversely affect our financial performance.

Our business involves transactions with homeowners. We must comply with numerous federal, state and local laws and regulations that govern matters relating to our interactions with homeowners, including those pertaining to privacy and data security, consumer financial and credit transactions, home improvement contracts, warranties and direct-to-home solicitation. These laws and regulations are dynamic and subject to potentially differing interpretations, and various federal, state and local legislative and regulatory bodies may expand current laws or regulations, or enact new laws and regulations, regarding these matters. Changes in these laws or regulations or their interpretation could dramatically affect how we do business, acquire customers, and manage and use information we collect from and about current and prospective customers and the costs associated therewith. We strive to comply with all applicable laws and regulations relating to our interactions with residential customers. It is possible, however, that these requirements may be interpreted and applied in a manner that is inconsistent from one jurisdiction to another and may conflict with other rules or our practices. Our noncompliance with any such laws or regulations, or the perception that we or our solar partners have violated such laws or regulations or engaged in deceptive practices that could result in a violation, could also expose us to claims, proceedings, litigation and investigations by private parties and regulatory authorities, as well as substantial fines and negative publicity, each of which may materially and adversely affect our business. We have incurred, and will continue to incur, significant expenses to comply with such laws and regulations, and increased regulation of matters relating to our interactions with residential customers could require us to modify our operations and incur significant additional expenses, which could have an adverse effect on our business, financial condition and results of operations.

Compliance with occupational safety and health requirements and best practices can be costly, and noncompliance with such requirements may result in potentially significant penalties, operational delays and adverse publicity.

The installation of solar energy systems requires our employees and employees of our solar partners to work with complicated and potentially dangerous electrical systems. The evaluation and installation of our energy-related products require these employees to work in locations that may contain potentially dangerous levels of asbestos, lead or mold or other substances. We also maintain large fleets of vehicles that these employees use in the course of their work. There is substantial risk of serious injury or death if proper safety procedures are not followed. Our operations are subject to regulation under the U.S. Occupational Safety and Health Act ("OSHA") and equivalent state laws. Changes to OSHA requirements, or stricter interpretation or enforcement of existing laws or regulations, could result in increased costs. If we fail to comply with applicable OSHA regulations, even if no work-related serious injury or death occurs, we may be subject to civil or criminal enforcement and be required to pay substantial penalties, incur significant capital expenditures, or suspend or limit operations. Any accidents, citations, violations, injuries or failure to comply with industry best practices may subject us to adverse publicity, damage our reputation and competitive position and adversely affect our business.

We are exposed to the credit risk of homeowners and payment delinquencies on our accounts receivables.

Our Customer Agreements are typically for 20 years and require the homeowner to make monthly payments to us. Accordingly, we are subject to the credit risk of homeowners. As of December 31, 2017, the average FICO score of our customers under a lease or power purchase agreement with a monthly payment schedule remained at or above 740, which is generally categorized as a "Very Good" credit profile by the Fair Isaac Corporation. However, this may decline to the extent FICO score requirements under future investment funds are relaxed. While to date homeowner defaults have been immaterial, we expect that the risk of homeowner defaults may increase as we grow our business. Due to the immaterial amount of homeowner defaults to date, our reserve for this exposure is minimal, and our future exposure may exceed the amount of such reserves. If we experience increased homeowner credit defaults, our revenues and our ability to raise new investment funds could be adversely affected. If economic conditions worsen, certain of our homeowners may face liquidity concerns and may be unable to satisfy their payment obligations to us on a timely basis or at all, which could have a material adverse effect on our financial condition and results of operations.

Obtaining a sales contract with a potential customer does not guarantee that a potential customer will not decide to cancel or that we will need to cancel due to a failed inspection, which could cause us to generate no revenue from a product and adversely affect our results of operations.

Even after we secure a sales contract with a potential customer, we (either directly or through our solar partners) must perform an inspection to ensure the home, including the rooftop, meets our standards and specifications. If the inspection finds repairs to the rooftop are required in order to satisfy our standards and specifications to install the solar energy system, and a potential customer does not want to make such required repairs, we would lose that anticipated sale. In addition, per the terms of our Customer Agreements, a customer maintains the ability to cancel before commencement of installation, subject to certain conditions. Any delay or cancellation of an anticipated sale could materially and adversely affect our financial results, as we may have incurred significant expense and generated no revenue.

The requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain qualified board members and officers.

We are subject to the reporting requirements of the Exchange Act, the listing requirements of the NASDAQ Stock Market and other applicable securities rules and regulations. Compliance with these rules and regulations has increased our legal and financial compliance costs, made some activities more difficult, time-consuming or costly and increased demand on our systems and resources. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and results of operations and maintain effective disclosure controls and procedures and internal control over financial reporting. To maintain and improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could harm our business and results of operations. Although we have already hired additional employees to comply with these requirements, we may need to hire more employees in the future, which will increase our costs and expenses.

We use "open source" software in our solutions, which may require that we release the source code of certain software subject to open source licenses or subject us to possible litigation or other actions that could adversely affect our business.

We utilize software that is licensed under so-called "open source," "free" or other similar licenses. Open source software is made available to the general public on an "as-is" basis under the terms of a non-negotiable license. We currently combine our proprietary software with open source software but not in a manner that we believe requires the release of the source code of our proprietary software to the public. However, our use of open source software may entail greater risks than use of third-party commercial software. Open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. In addition, if we combine our proprietary software with open source software in a certain manner, we could, under certain open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create similar offerings with lower development effort and time.

We may also face claims alleging noncompliance with open source license terms or infringement or misappropriation of proprietary software. These claims could result in litigation, require us to purchase a costly license or require us to devote additional research and development resources to change our software, any of which would have a negative effect on our business and results of operations. In addition, if the license terms for open source software that we use change, we may be forced to re-engineer our solutions, incur additional costs or discontinue the use of these solutions if re-engineering cannot be accomplished on a timely basis. Although we monitor our use of open source software to avoid subjecting our offerings to unintended conditions, few courts have interpreted open source licenses, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to use our proprietary software. We cannot guarantee that we have incorporated or will incorporate open source software in our software in a manner that will not subject us to liability or in a manner that is consistent with our current policies and procedures.

Any security breach or unauthorized disclosure or theft of personal information we gather, store and use, or other hacking and phishing attacks on our systems, could harm our reputation and subject us to claims or litigation.

We receive, store and use personal information of homeowners, including names, addresses, e-mail addresses, credit information and other housing and energy use information, as well as the personal information of our employees. Unauthorized disclosure of such personal information, whether through breach of our systems by an unauthorized party, employee theft or misuse, or otherwise, could harm our business. In addition, computer malware, viruses, social engineering (predominantly spear phishing attacks), and general hacking have become more prevalent, have occurred on our systems in the past, and could occur on our systems in the future. Inadvertent disclosure of such personal information, or if a third party were to gain unauthorized access to the personal information in our possession, could result in claims or litigation arising from damages suffered by such individuals. In addition, we could incur significant costs in complying with the multitude of federal, state and local laws regarding the unauthorized disclosure of personal information. Our efforts to protect such personal information may be unsuccessful due to software bugs or other technical malfunctions; employees, contractor, or vendor error or malfeasance; or other threats that evolve. In addition, third parties may attempt to fraudulently induce employees or users to disclose sensitive information. Although we have developed systems and processes that are designed to protect the personal information we receive, store and use and to prevent or detect security breaches, we cannot assure you that such measures will provide absolute security. Finally, any perceived or actual unauthorized disclosure of such information could harm our reputation, substantially impair our ability to attract and retain homeowners and have an adverse impact on our business.

If our products do not work as well as planned or if we are unsuccessful in developing and selling new products or in penetrating new markets, our business, financial condition and results of operations could be adversely affected.

Our success and ability to compete are dependent on the products which we have developed or may develop in the future. There is a risk that the products that we have developed or may develop may not work as intended, or that the marketing of the products may not be as successful as anticipated. For example, we introduced our BrightBox energy storage system in Hawaii and California and completed the first installation in Hawaii in May 2016. If BrightBox does not work as intended or if BrightBox is not adopted in the future at the rate we expect, our business, financial condition and results of operations could be adversely affected. The development of new products generally requires substantial investment and can require long development and testing periods before they are commercially viable. We intend to continue to make substantial investments in developing new products and it is possible that that we may not develop or acquire new products or product enhancements that compete effectively within our target markets or differentiate our products based on functionality, performance or cost and thus our new technologies and products may not result in meaningful revenue. In addition, any delays in developing and releasing new or enhanced products could cause us to lose revenue opportunities and potential customers. Any technical flaws in product releases could diminish the innovative impact of our products and have a negative effect on customer adoption and our reputation. If we fail to introduce new products that meet the demands of our customers or target markets or do not achieve market acceptance, or if we fail to penetrate new markets, our business, financial conditions and results of operations could be adversely affected.

We are obligated to maintain proper and effective internal controls over financial reporting. We may not complete our analysis of our internal controls over financial reporting in a timely manner, or these internal controls may not be determined to be effective, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.

We are required, pursuant to the Exchange Act, to furnish a report by management on, among other things, the effectiveness of our internal controls over financial reporting. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal controls over financial reporting. When we are no longer an emerging growth company, our management report on internal control over financial reporting will need to be attested to by our independent registered public accounting firm. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

We may fail to establish and maintain effective internal control over financial reporting, in which case we may not detect errors on a timely basis and our consolidated financial statements may be materially misstated. In addition, we cannot guarantee that our internal control over financial reporting will prevent or detect all errors and fraud. The risk of errors is increased in light of the complexity of our business and investment funds. For example, we must deal with significant complexity in accounting for our fund structures and the resulting allocation of net income (loss) between our stockholders and noncontrolling interests under the hypothetical liquidation at book value ("HLBV") method as well as the income tax consequences of these fund structures. As we enter into additional investment funds, which may have contractual provisions different from those of our existing funds, the analysis as to whether we consolidate these funds, the calculation under the HLBV method, and the analysis of the tax impact could become increasingly complicated. This additional complexity could require us to hire additional resources and increase the chance that we experience errors in the future.

Historically, in connection with the audits of our consolidated financial statements for the years ended December 31, 2013 and 2012, we identified material weaknesses in our internal control over financial reporting relating to certain aspects of our financial statement close process and our accounting for income taxes. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of a company's annual or interim financial statements will not be prevented or detected on a timely basis. These material weaknesses resulted from an aggregation of deficiencies.

In addition, in the 2013 consolidated financial statements, we incorrectly accounted for our deferred tax liabilities, prepaid tax asset and the related amortization as it related to income taxes incurred on intercompany transactions. The foregoing resulted in the restatement of our 2012 consolidated financial statements. Subsequent to the quarter ended March 31, 2015, we also identified and corrected an immaterial error related to the accounting for taxes on intercompany transactions.

While we were able to determine in our management's report for fiscal years 2016 and 2017 that our internal control over financial reporting is effective, we may not be able to complete our evaluation, testing and any required remediation in a timely fashion in future fiscal years. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting that we are unable to remediate before the end of the same fiscal year in which the material weakness is identified, we will be unable to assert that our internal controls are effective. If we are unable to assert that our internal control over financial reporting is effective, we could lose investor confidence in the accuracy and completeness of our financial reports, which would cause the price of our common stock to decline. In addition, we could become subject to investigations by the NASDAQ Stock Market, the SEC or other regulatory authorities, which could require additional management attention and which could adversely affect our business.

We may be adversely affected by changes in U.S. tax laws.

On December 22, 2017 Congress and the current administration passed significant tax reform legislation including a change to the corporate tax rate. As part of this tax reform, the current corporate income tax rate was reduced, and there were other changes including limiting or eliminating various other deductions, credits and tax preferences. This reduction in the corporate income tax rate could reduce the value of certain benefits, such as depreciation, and reduce capacity for other benefits, such as tax credits. Limitations on, or elimination of, such tax benefits could significantly impact our ability to raise tax equity investment funds or impact the terms thereof, including the amount of cash distributable to third parties. At this time, the Company is estimating the potential impact on our tax equity investment funds, business, prospects and results of operations as a result of enactment, since the impact is dependent upon certain tax treatment elections and the specific timing of taxable income/losses in future years. The new legislation includes significant changes which require additional guidance to be issued by the IRS.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2017, we had U.S. federal net operating loss carryforwards of approximately \$699.6 million and state net operating loss carryforwards of approximately \$634.7 million, which begin expiring in varying amounts in 2028 and 2024, respectively, if unused. Under Sections 382 and 383 of the Code if a corporation undergoes an “ownership change,” the corporation’s ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes, such as research tax credits, to offset its post-change income and taxes may be limited. In general, an “ownership change” occurs if there is a cumulative change in our ownership by “5% shareholders” that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. Any such limitations on our ability to use our net operating loss carryforwards and other tax assets could adversely impact our business, financial condition and results of operations.

We may be required to record a charge to earnings if our goodwill or intangible assets become impaired.

We are required under generally accepted accounting principles to test goodwill for impairment at least annually or when events or changes in circumstances indicate that the carrying amount may be impaired, and to review our intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Factors that can lead to impairment of goodwill and intangible assets include significant adverse changes in the business climate and actual or projected operating results, declines in the financial condition of our business and sustained decrease in our stock price. As of December 31, 2017, our market capitalization did not exceed our carrying value and we performed a step 1 analysis in accordance with ASU 350 *Intangibles - Goodwill and Other* and determined that our fair value exceeded our carrying value and thus we did not have an impairment related to our goodwill. However, if we identify any factors that could indicate an impairment, including a sustained decrease in our stock price, we may be required to record charges to earnings if our goodwill becomes impaired.

Risks Related to Ownership of Our Common Stock

Our executive officers, directors and principal stockholders continue to have substantial control over us, which will limit your ability to influence the outcome of important matters, including a change in control.

Each of our executive officers, directors and each of our stockholders who beneficially own 5% or more of our outstanding common stock and their affiliates, in the aggregate, beneficially own approximately 52.4% of the outstanding shares of our common stock, based on the number of shares outstanding as of December 31, 2017. As a result, these stockholders, if acting together, will be able to influence or control matters requiring approval by our stockholders, including the election of directors and the approval of mergers, acquisitions or other extraordinary transactions. They may also have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. This concentrated control may have the effect of delaying or preventing a change in control of our company, could deprive our stockholders of an opportunity to receive a premium for their capital stock and might ultimately affect the market price of our common stock.

The market price of our common stock has been and may continue to be volatile, and you could lose all or part of your investment.

The trading price of our common stock has been volatile since our initial public offering, and is likely to continue to be volatile. Factors that could cause fluctuations in the market price of our common stock include the following:

- price and volume fluctuations in the overall stock market from time to time;
- volatility in the market prices and trading volumes of companies in our industry or companies that investors consider comparable;
- changes in operating performance and stock market valuations of other companies generally, or those in our industry in particular;
- sales of shares of our common stock by us or our stockholders;
- failure of securities analysts to maintain coverage of us, changes in financial estimates by securities analysts who follow us, or our failure to meet these estimates or the expectations of investors;
- the financial projections we may provide to the public, any changes in those projections or our failure to meet those projections;
- announcements by us or our competitors of new products or services;
- the public's reaction to our press releases, other public announcements and filings with the SEC;
- rumors and market speculation involving us or other companies in our industry;
- actual or anticipated changes in our results of operations;
- changes in tax and other incentives that we rely upon in order to raise tax equity investment funds;
- changes in the regulatory environment and utility policies and pricing, including those that could reduce the savings we are able to offer to customers;
- actual or anticipated developments in our business, our competitors' businesses or the competitive landscape generally;
- litigation involving us, our industry or both, or investigations by regulators into our operations or those of our competitors;
- announced or completed acquisitions of businesses or technologies by us or our competitors;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- changes in accounting standards, policies, guidelines, interpretations or principles;
- any significant change in our management; and
- general economic conditions and slow or negative growth of our markets.

Further, in recent years the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. In addition, the stock prices of many renewable energy companies have experienced wide fluctuations that have often been unrelated to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, government shutdowns, interest rate changes, or international currency fluctuations, may cause the market price of our common stock to decline. In the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been instituted against these companies. We are party to litigation which could result in substantial costs and a diversion of our management's attention and resources.

Sales of a substantial number of shares of our common stock in the public market, including by our existing stockholders, could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that these sales and others may have on the prevailing market price of our common stock.

In addition, certain of our stockholders have registration rights that would require us to register shares of our capital stock owned by them for public sale in the United States. We have also filed a registration statement to register shares of our common stock reserved for future issuance under our equity compensation plans. Subject to the satisfaction of applicable exercise periods and applicable volume and restrictions that apply to affiliates, the shares of our common stock issued upon exercise of outstanding options will become available for immediate resale in the public market upon issuance.

Future sales of our common stock may make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. These sales also could cause the market price of our common stock to decline and make it more difficult for you to sell shares of our common stock.

Anti-takeover provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws, as well as provisions of Delaware law, could impair a takeover attempt.

Our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law contain provisions which could have the effect of rendering more difficult, delaying, or preventing an acquisition deemed undesirable by our board of directors and therefore depress the trading price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws include provisions:

- creating a classified board of directors whose members serve staggered three-year terms;
- authorizing "blank check" preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock;
- limiting the liability of, and providing indemnification to, our directors and officers;
- limiting the ability of our stockholders to call and bring business before special meetings;
- requiring advance notice of stockholder proposals for business to be conducted at meetings of our stockholders and for nominations of candidates for election to our board of directors; and
- controlling the procedures for the conduct and scheduling of board of directors and stockholder meetings.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation law, which prevents certain stockholders holding more than 15% of our outstanding capital stock from engaging in certain business combinations without approval of the holders of at least two-thirds of our outstanding capital stock not held by such stockholder.

Any provision of our amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying or preventing a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock and could also affect the price that some investors are willing to pay for our common stock.

Provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws limit the ability of our stockholders to call special meetings and prohibit stockholder action by written consent.

Our amended and restated certificate of incorporation provides that our stockholders may not take action by written consent. Instead, any such actions must be taken at an annual or special meeting of our stockholders. As a result, our stockholders are not able to take any action without first holding a meeting of our stockholders called in accordance with the provisions of our amended and restated bylaws, including advance notice procedures set forth in our amended and restated bylaws. Our amended and restated bylaws further provide that special meetings of our stockholders may be called only by a majority of our board of directors, the chairman of our board of directors, our Chief Executive Officer or our President. As a result, our stockholders are not allowed to call a special meeting. These provisions may delay the ability of our stockholders to force consideration of a stockholder proposal, including a proposal to remove directors.

Provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws could preclude our stockholders from bringing matters before meetings of stockholders and delay changes in our board of directors.

Our amended and restated bylaws provide advance notice procedures for stockholders seeking to bring business before, or nominate candidates for election as directors at, our annual or special meetings of stockholders. In addition, our amended and restated certificate of incorporation provides that stockholders may remove directors only for cause. Any amendment of these provisions in our amended and restated bylaws or amended and restated certificate of incorporation would require approval by holders of at least 66 2/3% of our then outstanding capital stock. These provisions could preclude our stockholders from bringing matters before annual or special meetings of stockholders and delay changes in our board of directors.

Our amended and restated bylaws provide that a state or federal court located within the State of Delaware will be the sole and exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated bylaws provide that, unless we consent to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers or other employees to us or to our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or (iv) any action asserting a claim governed by the internal affairs doctrine shall be a state or federal court located within the state of Delaware, in all cases subject to the court's having personal jurisdiction over the indispensable parties names as defendants. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the choice of forum provision contained in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations and financial condition.

If securities or industry analysts cease publishing research or reports about us, our business, our market or our competitors, or if they adversely change their recommendations regarding our common stock, the market price of our common stock and trading volume could decline.

The market for our common stock is influenced by the research and reports that securities or industry analysts publish about us, our business, our market or our competitors. If any of the analysts who cover us adversely change their recommendations regarding our common stock, or provide more favorable recommendations about our competitors, the market price of our common stock would likely decline. If any of the analysts who cover us cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause the market price of our common stock and trading volume to decline.

We do not expect to declare any dividends in the foreseeable future.

We do not anticipate declaring any cash dividends to holders of our common stock in the foreseeable future. Consequently, investors may need to rely on sales of our common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. Investors seeking cash dividends should not purchase shares of our common stock.

Additional stock issuances could result in significant dilution to our stockholders.

We may issue additional equity securities to raise capital, make acquisitions or for a variety of other purposes. Additional issuances of our stock may be made pursuant to the exercise or conversion of new or existing convertible debt securities, warrants, stock options or other equity incentive awards to new and existing service providers. Any such issuances will result in dilution to existing holders of our stock. We rely on equity-based compensation as an important tool in recruiting and retaining employees. The amount of dilution due to equity-based compensation of our employees and other additional issuances could be substantial.

As an emerging growth company within the meaning of the Securities Act, we will utilize certain modified disclosure requirements, and we cannot be certain if these reduced requirements will make our common stock less attractive to investors.

We are an emerging growth company, and, for as long as we continue to be an emerging growth company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to “emerging growth companies.” These exemptions include not being required to have our independent registered public accounting firm audit our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We are utilizing, and we plan in future filings with the SEC to continue to utilize, the modified disclosure requirements available to emerging growth companies. As a result, our stockholders may not have access to certain information they may deem important. We could remain an “emerging growth company” for up to five years following the anniversary of our initial public offering, or until the earliest of (1) the last day of the first fiscal year in which our annual gross revenue reaches or exceeds \$1.0 billion, (2) the date that we become a “large accelerated filer” as defined in the Exchange Act, which could occur as early as January 1, 2019 or (3) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the preceding three-year period.

Item 1B. Unresolved Staff Comments.

Not applicable.

Item 2. Properties.

Our corporate headquarters and executive offices are located in San Francisco, California, where we occupy approximately 56,000 square feet of office space. We also maintain 51 other locations, consisting primarily of branch offices, warehouses, sales offices and design centers in thirteen states.

We lease all of our facilities and we do not own any real property. We believe that our current facilities are adequate to meet our ongoing needs. If we require additional space, we believe that we will be able to obtain additional facilities on commercially reasonable terms.

Item 3. Legal Proceedings.

See Note 21, *Commitments and Contingencies*, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information

Our common stock began trading on the NASDAQ Global Select Market under the symbol “RUN” on August 5, 2015.

Holders of Record

As of March 2, 2018, there were approximately 181 holders of record of common stock. Certain shares are held in “street” name and, accordingly, the number of beneficial owners of such shares is not known or included in the foregoing number.

Price Range of Our Common Stock

The following table sets forth the reported high and low sales prices of our common stock for the years ended December 31, 2017 and 2016, as regularly quoted on the NASDAQ Global Select Market:

	Year Ended December 31, 2017		Year Ended December 31, 2016	
	High	Low	High	Low
First Quarter.....	\$ 6.50	\$ 4.79	\$ 11.49	\$ 4.86
Second Quarter.....	\$ 7.35	\$ 4.59	\$ 8.45	\$ 5.11
Third Quarter.....	\$ 7.78	\$ 4.21	\$ 6.90	\$ 4.90
Fourth Quarter.....	\$ 6.73	\$ 5.31	\$ 7.34	\$ 4.15

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not expect to pay any dividends on our capital stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions and other factors that our board of directors may deem relevant. In addition, our credit agreements contain restrictions on payments of cash dividends.

Stock Price Performance Graph

The following stock performance graph compares our total stock return with the total return for (i) the NASDAQ Composite Index and the (ii) the Guggenheim Solar ETF, which represents a peer group of solar companies, for the period from August 5, 2015 (the date our common stock commenced trading on the NASDAQ Global Select Market) through December 31, 2017. The figures represented below assume an investment of \$100 in our common stock at the closing price of \$10.77 on August 5, 2015 and in the NASDAQ Composite Index and the Guggenheim Solar ETF on August 5, 2015 including the reinvestment of dividends into shares of common stock. The comparisons in the table are required by the Securities and Exchange Commission, or “SEC”, and are not intended to forecast or be indicative of possible future performance of our common stock. This graph shall not be deemed “soliciting material” or be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, or otherwise subject to the liabilities under that section, and shall not be deemed to be incorporated by reference into any of our filings under the Securities Act of 1933, as amended, or the Securities Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.



	Ticker	August 5, 2015	December 31, 2016	December 31, 2017
Sunrun Inc.	RUN	\$ 100.00	\$ 49.30	\$ 54.78
NASDAQ Composite Index.....	^IXIC	\$ 100.00	\$ 104.73	\$ 134.31
Guggenheim Solar ETF.....	TAN	\$ 100.00	\$ 52.30	\$ 79.31

Item 6. Selected Consolidated Financial Data.

You should read the following selected consolidated financial data below in conjunction with *Management's Discussion and Analysis of Financial Condition and Results of Operations* and the consolidated financial statements, related notes and other financial information included elsewhere in this Annual Report on Form 10-K. The selected consolidated financial data in this section is not intended to replace the consolidated financial statements and are qualified in their entirety by the consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

The selected consolidated statements of operations data for the years ended December 31, 2017, 2016 and 2015, and the selected consolidated balance sheet data as of December 31, 2017 and 2016 are derived from our audited consolidated financial statements included elsewhere in this Form 10-K. Our historical results are not necessarily indicative of the results that may be expected in the future.

	Year Ended December 31,		
	2017	2016	2015
	<i>(in thousands, except per share amounts)</i>		
Revenue:			
Operating leases and incentives.....	\$ 231,433	\$ 168,417	\$ 118,004
Solar energy systems and product sales.....	298,266	285,481	186,602
Total revenue.....	<u>529,699</u>	<u>453,898</u>	<u>304,606</u>
Operating expenses:			
Cost of operating leases and incentives.....	193,954	159,858	111,784
Cost of solar energy systems and product sales.....	254,131	239,381	168,751
Sales and marketing.....	137,115	162,781	145,477
Research and development.....	15,079	10,199	9,657
General and administrative.....	107,420	92,377	84,442
Amortization of intangible assets.....	4,204	4,206	3,695
Total operating expenses.....	<u>711,903</u>	<u>668,802</u>	<u>523,806</u>
Loss from operations.....	(182,204)	(214,904)	(219,200)
Interest expense, net.....	70,518	53,244	33,236
Other expenses (income), net.....	1,874	(840)	1,769
Loss before income taxes.....	<u>(254,596)</u>	<u>(267,308)</u>	<u>(254,205)</u>
Income tax expense (benefit).....	32,138	35,993	(5,299)
Net loss.....	<u>(286,734)</u>	<u>(303,301)</u>	<u>(248,906)</u>
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests.....	(411,259)	(394,988)	(220,660)
Net income (loss) attributable to common stockholders.....	<u>\$ 124,525</u>	<u>\$ 91,687</u>	<u>\$ (28,246)</u>
Less: Deemed dividend to convertible preferred stockholders.....	—	—	(24,890)
Net income (loss) available to common stockholders.....	<u>\$ 124,525</u>	<u>\$ 91,687</u>	<u>\$ (53,136)</u>
Net income (loss) per share available to common shareholders			
Basic.....	<u>\$ 1.18</u>	<u>\$ 0.90</u>	<u>\$ (0.96)</u>
Diluted.....	<u>\$ 1.15</u>	<u>\$ 0.87</u>	<u>\$ (0.96)</u>
Weighted average shares used to compute net income (loss) per share attributable to common stockholders			
Basic.....	<u>105,432</u>	<u>102,367</u>	<u>55,091</u>
Diluted.....	<u>108,206</u>	<u>104,964</u>	<u>55,091</u>

	As of December 31,	
	2017	2016
	<i>(in thousands)</i>	
Consolidated Balance Sheet Data:		
Cash and Restricted Cash.....	\$ 241,790	\$ 218,246
Solar energy systems, net.....	3,319,708	2,629,366
Total assets.....	3,927,874	3,572,818
Non-recourse debt, current portion.....	21,529	14,153
Recourse debt, net of current portion.....	247,000	244,000
Non-recourse debt, net of current portion.....	1,026,416	639,870
Redeemable noncontrolling interests.....	123,737	137,907
Total equity.....	1,166,074	924,186

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes thereto included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such differences include those identified below and those discussed in the section titled "Risk Factors" included elsewhere in this Annual Report on Form 10-K.

We provide clean, solar energy to homeowners at a significant savings compared to traditional utility energy. We have been selling solar energy to residential customers through a variety of offerings since we were founded in 2007. We, either directly or through one of our solar partners, install a solar energy system on a customer's home and either sell the system to the homeowner or, as is more often the case, sell the energy generated by the system to the homeowner pursuant to a lease or power purchase agreement ("PPA") with no or low upfront costs. We refer to these leases and PPAs as "Customer Agreements." Following installation, a system is interconnected to the local utility grid. The home's energy usage is provided by the solar energy system, with any additional energy needs provided by the local utility. Unless the solar energy system is connected to a battery, any excess solar energy that is not immediately used by the homeowners is exported to the utility grid using a bi-directional utility net meter, and the homeowner generally receives a credit for the excess energy from their utility to offset future usage of utility-generated energy.

We offer our solar service offerings both directly to the homeowner and through our solar partners, which include sales and installation partners, and strategic partners, which include retail partners. In addition, we sell solar energy systems directly to customers for cash. We also sell solar energy panels and other products (such as racking) to resellers. As of December 31, 2017, we provided our solar services to customers in 22 states, plus the District of Columbia, and sold solar energy panels and other products to resellers throughout the United States. Approximately half of our cumulative systems deployed are in California.

We compete mainly with traditional utilities. In the markets we serve, our strategy is to price the energy we sell below prevailing local retail electricity rates. As a result, the price our customers pay to buy energy from us through our solar service offerings varies depending on the state where the customer lives, the local traditional utility that otherwise provides electricity to the customer, as well as the prices other solar energy companies charge in that region. Even within the same neighborhood, site-specific characteristics drive meaningful variability in the revenue and cost profiles of each home. Using our proprietary technology, we target homes with advantageous revenue and cost characteristics, which means we are often able to offer pricing that allows customers to save more on their energy bill while maintaining our ability to meet our targeted returns. For example, with the insights provided by our technology, we can offer competitive pricing to customers with homes that have favorable characteristics, such as roofs that allow for easy installation, high electricity consumption, or low shading, effectively passing through the cost savings we are able to achieve on these installations to the homeowner.

Our ability to offer Customer Agreements depends in part on our ability to finance the purchase and installation of the solar energy systems by monetizing the resulting customer cash flows and related investment tax credits ("ITCs"), accelerated tax depreciation and other incentives from governments and local utilities. We monetize these incentives under tax equity investment funds, which are generally structured as non-recourse project financings. From inception to March 2, 2018, we have established 34 investment funds, which represent financing for an estimated \$6.2 billion in value of solar energy systems on a cumulative basis. We intend to establish additional investment funds and may also use debt, equity and other financing strategies to fund our growth.

In addition, completing the sale and installation of a solar energy system requires many different steps including a site audit, completion of designs, permitting, installation, electrical sign-off and interconnection. Homeowners may cancel their Customer Agreements with us, subject to certain conditions, during this process until commencement of installation. Customer cancellation rates can change over time and vary between markets. For example, we experienced increased customer cancellations in 2016 in certain markets.

Recent Developments

In February 2018, we and the lenders executed Amendment No. 5 (the "Amendment") to our \$250.0 million syndicated working capital facility dated as of April 1, 2015, as amended from time to time ("Credit Facility"). The Amendment extends the maturity date of the Credit Facility to April 1, 2020 from its current maturity date of April 1, 2018. Other terms of the Credit Facility remain substantially the same, except the Amendment (i) increases the minimum interest coverage ratio from 2.0:1.0 to 3.0:1.0 and (ii) requires the Company to maintain an unencumbered cash balance of \$30.0 million at the end of each calendar quarter starting on March 31, 2018. Under the terms of the Amendment, the interest coverage ratio was 8.2:1 as of September 30, 2017.

Investment Funds

Our Customer Agreements provide for recurring customer payments, typically over 20 years, and the related solar energy systems are generally eligible for ITCs, accelerated tax depreciation and other government or utility incentives. Our financing strategy is to monetize these benefits at a low weighted average cost of capital. This low cost of capital enables us to offer attractive pricing to our customers for the energy generated by the solar energy system on their homes. Historically, we have monetized a portion of the value created by our Customer Agreements and the related solar energy systems through investment funds. These assets are attractive to fund investors due to the long-term, recurring nature of the cash flows generated by our Customer Agreements, the high credit scores of our customers, the fact that energy is a non-discretionary good and our low loss rates. In addition, fund investors can receive attractive after-tax returns from our investment funds due to their ability to utilize ITCs, accelerated depreciation and certain government or utility incentives associated with the funds' ownership of solar energy systems.

From inception to March 2, 2018, we have formed 34 investment funds. Of these 34 funds, 27 are currently active and are described below. We have established different types of investment funds to implement our asset monetization strategy. Depending on the nature of the investment fund, cash may be contributed to the investment fund by the investor upfront or in stages based on milestones associated with the design, construction or interconnection status of the solar energy systems. The cash contributed by the fund investor is used by the investment fund to purchase solar energy systems. The investment funds either own or enter into a master lease with a Sunrun subsidiary for the solar energy systems, Customer Agreements and associated incentives. We receive on-going cash distributions from the investment funds representing a portion of the monthly customer payments received. We use the upfront cash, as well as on-going distributions to cover our costs associated with designing, purchasing and installing the solar energy systems. In addition, we also use debt, equity and other financing strategies to fund our operations. The allocation of the economic benefits between us and the fund investor and the corresponding accounting treatment varies depending on the structure of the investment fund.

We currently utilize three legal structures in our investment funds, which we refer to as: (i) lease pass-throughs, (ii) partnership flips and (iii) joint venture ("JV") inverted leases. We reflect lease pass-through arrangements on our consolidated balance sheet as a lease pass-through financing obligation. We record the investor's interest in partnership flips or JV inverted leases (which we define collectively as "consolidated joint ventures") as noncontrolling interests or redeemable noncontrolling interests. These consolidated joint ventures are usually redeemable at our option and, in certain cases, at the investor's option. If redemption is at our option or the consolidated joint ventures are not redeemable, we record the investor's interest as a noncontrolling interest and account for the interest using the hypothetical liquidation at book value ("HLBV") method. If the investor has the option to put their interest to us, we record the investor's interest as redeemable noncontrolling interest at the greater of the HLBV and the redemption value.

The table below provides an overview of our current investment funds (in millions, except number of funds and MW Deployed):

	Lease Pass-Through	Consolidated Joint Ventures	
		Partnership Flip	JV Inverted Lease
Consolidation.....	Owner entity consolidated, tenant entity not consolidated	Single entity, consolidated	Owner and tenant entities consolidated
Balance sheet classification.....	Lease pass-through financing obligation	Redeemable noncontrolling interests and noncontrolling interests	Redeemable noncontrolling interests and noncontrolling interests
Revenue from ITCs.....	Recognized annually over 5 years as the recapture period elapses	None	None
Method of calculating investor interest.....	Effective interest rate method	Greater of HLBV or redemption value	Greater of HLBV or redemption value; or pro rata
Liability balance as of December 31, 2017.....	\$ 144.2	N/A	N/A
Noncontrolling interest balance (redeemable or otherwise) as of December 31, 2017.....	N/A	\$ 440.0	\$ 37.8
Number of funds (as of December 31, 2017).....	5	18	4
MW deployed (as of December 31, 2017).....	129.4	693.8	114.2
Carrying value of solar energy systems, net (as of December 31, 2017).....	\$ 423.5	\$ 1,901.0	\$ 369.1
Contributions from third-party fund investors (through December 31, 2017).....	\$ 508.0	\$ 1,610.3	\$ 274.7

For further information regarding our investment funds, including the associated risks, see Item 1A. *Risk Factors*—"Our ability to provide our solar service offerings to homeowners on an economically viable basis depends in part on our ability to finance these systems with fund investors who seek particular tax and other benefits.", Note 11 *Cash Equity Financing*, Note 14, *Lease Pass-Through Financing Obligations*, Note 15, *VIE Arrangements* and Note 16, *Redeemable Noncontrolling Interests* to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K.

Lease Pass-Through

Lease Pass-Through. In this investment fund structure, we and the fund investor form two entities which facilitate the pass-through of the ITC or U.S. Treasury grants to the fund investors. In this structure we contribute solar energy systems to an "owner" entity in exchange for interests in the owner entity, and the fund investors contribute cash to a "tenant" entity in exchange for interests in the tenant entity.

Under our lease pass-through structure, in accordance with the provisions of Financial Accounting Standards Board (“FASB”), Accounting Standards Codification Topic 810 (“ASC 810”) *Consolidation*, we have determined that we are the primary beneficiary of the owner entity, and accordingly, we consolidate that entity. We have also determined that we are not the primary beneficiary of the tenant entity, and accordingly, we do not consolidate that entity.

In this investment fund structure, the investors make a series of large up-front payments as well as, in some instances, subsequent smaller quarterly lease payments through their respective tenant entity to the corresponding owner entity in exchange for the assignment of cash flows from Customer Agreements and certain other benefits associated with the Customer Agreements and related solar energy systems. We account for the payments from investors as borrowings by recording the proceeds received as lease pass-through financing obligations. The financing obligation is reduced by recurring customer payments received under the Customer Agreements assigned to the funds and, if applicable, any U.S. Treasury grants, the fair value of the ITCs monetized and proceeds from the contracted resale of assigned SRECs, as they are received by the investor over the term of the assignment agreement, which is approximately 20 years. We account for these investment funds in our consolidated financial statements as if we are the lessor in the arrangement with the customer, and we record on our consolidated financial statements activities arising from the Customer Agreements and any related U.S. Treasury grants, ITCs, incentive rebates and SREC sales. The interest charge on our lease pass-through financing obligations is imputed at the inception of the fund based on the effective interest rate in the arrangement giving rise to the obligation and is updated prospectively as appropriate.

In certain arrangements, we agree to defer a portion of the up-front payments by arranging a loan between one of our indirectly wholly owned subsidiaries to a subsidiary of the investor’s tenant entity. There is a legal right to offset the loan against the financing obligation if an event of default has occurred. Therefore, the lease pass-through related to these types of arrangements is recorded net of the loan.

Consolidated Joint Ventures

Partnership Flips. Under partnership flip structures, we and our fund investors contribute cash into a partnership entity. The partnership uses the cash to acquire solar energy systems developed by us and leases them under Customer Agreements. Each fund investor receives a rate of return, typically on an after-tax basis, which varies by investment fund. Prior to the fund investor receiving its contractual rate of return or for a time period specified in the contractual arrangements, the fund investor receives a significant portion of the value attributable to customer payments, a majority of the accelerated tax depreciation and substantially all of the ITCs. After the fund investor receives its contractual rate of return or after the specified time period, we receive substantially all of the value attributable to the remaining customer payments and other incentives.

Included within the Partnership Flips is the cash equity financing the Company entered into in December 2016. The Company pooled and transferred its interests in certain financing funds into a special purpose entity (“SPE”) with a new investor. The Company did not recognize a gain or loss on the transfer of its interests in the financing funds and continues to consolidate the financing funds. The SPE’s assets and cash flows are not available to the other creditors of the Company, and the investor has no recourse to the Company’s other assets.

Under our partnership flip structures, we have determined that we control the variable interest entity (“VIE”), and accordingly we consolidate the entity and record the investor’s interest as either noncontrolling interests or redeemable noncontrolling interests in our consolidated balance sheets.

Inverted Leases. Under our inverted lease structure, we and the fund investor set up a multi-tiered investment vehicle that is comprised of two partnership entities which facilitate the pass through of the tax benefits to the fund investors. In this structure we contribute solar energy systems to an “owner” partnership entity in exchange for interests in the owner partnership and the fund investors contribute cash to a “tenant” partnership in exchange for interests in the tenant partnership, which in turn makes an investment in the owner partnership entity in exchange for interests in the owner partnership. The owner partnership uses the cash contributions received from the tenant partnership to purchase systems from us and/or fund installation of such systems. The owner partnership leases the contributed solar energy systems to the tenant partnership under a master lease, and the tenant partnership pays the owner partnership rent for those systems both upfront and on an ongoing basis. The tenant partnership sells energy from the solar energy systems to customers pursuant to the terms of the applicable Customer Agreements. Customer payments made to the tenant partnership are used to pay expenses (including fees to us), make master lease rent payments and pay preferred return distributions to the fund investor. The owner

partnership distributes cash to us and the tenant partnership. As the tenant partnership is an investor in the owner partnership, this allows the fund investors to receive a portion of the accelerated tax depreciation and operating losses associated with the ownership of the assets. In this format, in part owing to the allocation of depreciation benefits to the investor, the investor's pre-tax return is much lower than the investor's after-tax return. Under our existing JV inverted lease structure, a substantial portion of the value generated by the solar energy systems is provided to the fund investor for a specified period of time, which is generally based upon the period of time corresponding to the expiry of the recapture period associated with the ITCs. After that point in time, we receive substantially all of the value attributable to the long-term recurring customer payments and the other incentives. Generally, under the terms of each agreement, the investors' contributions include the value of ITCs earned or grants to be received by the fund investor. Any other proceeds are allocated on a pro rata basis to the fund investor and us in accordance with their ownership percentages.

We also have one JV inverted lease fund whereby we have a pro rata interest in the entity and we account for the noncontrolling interest's share of income on a pro rata basis. Accordingly, the noncontrolling interest of this fund is carried on our balance sheet at the cumulative amount of capital contributions, reduced by cumulative distributions paid to the investor, as well as the pro rata share of their income. Under our JV inverted lease structure, we have determined that we control each VIE, and accordingly we consolidate the entity and record investor's interest as a noncontrolling interest or redeemable noncontrolling interest.

For all of our partnership flips and JV inverted leases, the redeemable noncontrolling interest is carried on our balance sheet at the greater of the redemption value or the amount calculated under the HLBV method. The HLBV method estimates the amount that, if the fund's assets were hypothetically sold at their book value, the investor would be entitled to receive according to the liquidation waterfall in the partnership agreement. For further information, see the section entitled "Components of Statements of Operations — Net Income (Loss) Attributable to Common Stockholders."

Key Operating Metrics

We regularly review a number of metrics, including the following key operating metrics, to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions. Some of our key operating metrics are estimates that are based on our management's beliefs and assumptions and on information currently available to management. Although we believe that we have a reasonable basis for each of these estimates, we caution you that these estimates are based on a combination of assumptions that may prove to be inaccurate over time. Any inaccuracies could be material to our actual results when compared to our calculations. Please see the section titled "Risk Factors" in this Annual Report on Form 10-K for more information. Furthermore, other companies may calculate these metrics differently than we do now or in the future, which would reduce their usefulness as a comparative measure.

- *Megawatts Booked* represents the aggregate megawatt production capacity of our solar energy systems, whether sold directly to customers or subject to an executed Customer Agreement, for which we have confirmation that the systems have reached Notice to Proceed, net of cancellations.
- *Megawatts Deployed* represents the aggregate megawatt production capacity of our solar energy systems, whether sold directly to customers or subject to executed Customer Agreements, for which we have (i) confirmation that the systems are installed, subject to final inspection or (ii) in the case of certain system installations by our partners, accrued at least 80% of the expected project cost.
- *Gross Earning Assets* represents the net cash flows (discounted at 6%) we expect to receive during the initial 20-year term of our Customer Agreements for systems that have been deployed as of the measurement date, plus a discounted estimate of the value of the Customer Agreement renewal term or solar energy system purchase at the end of the initial term. Consistent with industry standards, we use a discount rate of 6%. We consider a discount rate of 6% to be appropriate and consistent with recent market transactions that demonstrate that a portfolio of residential solar homeowner contracts is an asset class that can be securitized successfully on a long-term basis, with a coupon of less than 5%. We calculate the Gross Earning Assets value of the purchase or renewal amount at the expiration of the initial contract term assuming a 10-year renewal at a contract rate equal to 90% of the customer's contractual rate in effect at the end of the initial contract term. After the initial (typically 20-year) contract term, our Customer Agreements provide customers the option to renew their contracts for the remaining life of the solar energy system typically at a 10% discount to then-prevailing power prices.

Gross Earning Assets excludes estimated cash distributions to investors in consolidated joint ventures and estimated operating, maintenance and administrative expenses for systems deployed as of the measurement date. In calculating Gross Earning Assets, we deduct estimated cash distributions to our cash equity financing providers. In calculating Gross Earning Assets, we do not deduct customer payments we are obligated to pass through to investors in lease pass-throughs as these amounts are reflected on our balance sheet as long-term and short-term lease pass-through obligations, similar to the way that debt obligations are presented. In determining our finance strategy, we use lease pass-throughs and long-term debt in an equivalent fashion as the schedule of payments of distributions to lease pass-through investors is more similar to the payment of interest to lenders than the internal rates of return (IRRs) paid to investors in other tax equity structures.

- *Gross Earning Assets Under Energy Contract* represents the net cash flows during the initial (typically 20-year) term of our Customer Agreements (less substantially all value from SRECs prior to July 1, 2015), for systems deployed as of the measurement date.
- *Gross Earning Assets Value of Purchase or Renewal* is the forecasted net present value we would receive upon or following the expiration of the initial Customer Agreement term (either in the form of cash payments during any applicable renewal period or a system purchase at the end of the initial term), for systems deployed as of the measurement date.

Gross Earning Assets is forecasted as of a specific date. It is forward-looking, and we use judgment in developing the assumptions used to calculate it. Factors that could impact Gross Earning Assets include, but are not limited to, customer payment defaults, or declines in utility rates or early termination of a contract in certain circumstances, including prior to installation.

	For the Year Ended December 31,	
	2017	2016
MW Booked (during the period) ⁽¹⁾	337	285
MW Deployed (during the period).....	323	282

(1) MW Booked in 2016 excludes 6.5 MW due to Nevada exit.

	As of December 31,	
	2017	2016
Cumulative Megawatts Deployed (end of period).....	1,202	879

	As of December 31,	
	2017	2016
<i>(in thousands)</i>		
Gross Earning Assets Under Energy Contract ⁽²⁾	\$ 1,458,983	\$ 1,199,882
Gross Earning Assets Value of Purchase or Renewal.....	753,673	609,129
Gross Earning Assets ⁽²⁾	\$ 2,212,656	\$ 1,809,011

(2) In the fourth quarter of 2017, Gross Earnings Assets under Energy Contract and Total Gross Earning Assets were reduced by \$13 million to reflect changes related to modifications to the Federal Tax Code for assets deployed through December 31, 2017, including a reduction held as a reserve pending final tax regulation guidance based on the company's best estimate of the potential effect.

The tables below provide a range of Gross Earning Asset amounts if different default, discount and purchase and renewal assumptions were used.

Gross Earning Assets Under Energy Contract:

<u>Default rate</u>	As of December 31, 2017				
	Discount rate				
	4%	5%	6%	7%	8%
	<i>(in thousands)</i>				
5%.....	\$ 1,677,499	\$ 1,543,449	\$ 1,424,473	\$ 1,318,570	\$ 1,224,039
0%.....	\$ 1,720,049	\$ 1,581,711	\$ 1,458,983	\$ 1,349,788	\$ 1,252,360

Gross Earning Assets Value of Purchase or Renewal:

<u>Purchase or Renewal rate</u>	As of December 31, 2017				
	Discount rate				
	4%	5%	6%	7%	8%
	<i>(in thousands)</i>				
80%.....	\$ 999,679	\$ 809,400	\$ 657,532	\$ 535,911	\$ 438,190
90%.....	\$ 1,145,723	\$ 927,698	\$ 753,673	\$ 614,301	\$ 502,311
100%.....	\$ 1,291,767	\$ 1,045,996	\$ 849,815	\$ 692,691	\$ 566,431

Total Gross Earning Assets:

<u>Purchase or Renewal rate</u>	As of December 31, 2017				
	Discount rate				
	4%	5%	6%	7%	8%
	<i>(in thousands)</i>				
80%.....	\$ 2,719,728	\$ 2,391,111	\$ 2,116,514	\$ 1,885,699	\$ 1,690,551
90%.....	\$ 2,865,772	\$ 2,509,409	\$ 2,212,656	\$ 1,964,089	\$ 1,754,671
100%.....	\$ 3,011,816	\$ 2,627,707	\$ 2,308,798	\$ 2,042,479	\$ 1,818,791

Components of Statements of Operations

Revenue

We generate revenue from (1) operating leases and incentives and (2) solar energy systems and product sales. Product sales also include lead generation sales commencing in 2015 as a result of the acquisition of Clean Energy Experts, LLC or “CEE acquisition”.

Operating Leases and Incentives

Operating leases and incentives revenue is primarily comprised of revenue from our Customer Agreements, solar energy system rebate incentives and sales of SRECs generated by our solar energy systems to third parties, as well as revenue associated with ITCs assigned to investment funds that are classified as lease pass-through arrangements.

We classify and account for our Customer Agreements as operating leases. We recognize revenue from these agreements either on a straight-line basis over the term of the agreements (in the case of leases) or as we generate and sell energy to customers (in the case of PPAs). The term of these agreements is typically 20 years.

We consider the proceeds from solar energy system rebate incentives to be minimum lease payments under our Customer Agreements and recognize such payments as revenue over the contract term on a straight-line basis.

We also apply for and receive SRECs and sell them to third parties in certain jurisdictions for energy generated by our solar energy systems. We recognize revenue related to the sale of SRECs to the extent the cumulative value of delivered SRECs per contract exceeds any possible liquidated damages for non-delivery, if any.

Finally, under our investment funds that are classified as lease pass-through arrangements, we allocate a portion of the cash consideration received from the investors to the estimated fair value of the ITCs assigned to such investment funds. The ITCs are subject to recapture under the Internal Revenue Code ("Code") if the underlying solar energy system either ceases to be a qualifying property or undergoes a change in ownership within five years of its placed-in-service date. The recapture amount decreases on the anniversary of the permission to operate ("PTO") date. We recognize ITC revenue as the recapture provisions lapse, with one-fifth of the estimated fair value of the assigned ITC recognized on each anniversary of the solar energy systems' PTO date over the following five years.

Our quarterly operating leases and incentives revenue has been impacted by seasonality. Energy production is greater in the second and third quarters than in the first and fourth quarters, causing variability in revenue recognized under PPAs. There are also seasonal fluctuations in sales and installations, particularly in the fourth quarter, resulting from decreased sales through the holiday season and weather-related installation delays. In addition, as described above, ITC revenue associated with lease pass-through arrangements is recognized once annually on the anniversary of the PTO date and a high percentage of our existing ITCs have PTO dates that occur in the fourth quarter.

Pursuant to our adoption of ASC 842, *Leases* ("ASC 842") our Customer Agreements will no longer meet the criteria for lease accounting. Instead, we will account for our Customer Agreements pursuant to ASU No. 2014-09 Revenue from Contracts with Customers ("Topic 606"). Upon adoption of Topic 606, the following significant changes to revenue recognition policy will be implemented with respect to revenue currently accounted for under operating leases and incentives:

- Revenue related to PPAs, including price escalators, will be recognized throughout the term of the Customer Agreement.
- Certain upfront payments related to Customer Agreements and SRECs will be deemed to have a financing component, as defined under Topic 606, and will therefore increase both revenue and interest expense by the same amount over the term of the related agreement. The additional revenue will be included in the total transaction price to be recorded over the term of the agreement and will be recognized based on the timing of the delivery. The interest expense will be recognized based upon an amortization schedule which typically decreases throughout the term of the related agreement.
- SREC revenue will be estimated net of any variable consideration related to possible liquidated damages, and recognized upon delivery of SRECs to the counterparty.
- ITC revenue will be recognized in full upon PTO because the Company has not historically recorded a material recapture of ITCs, and does not expect to record a material recapture of ITCs in the future.

Due to the long-term nature of our Customer Agreements and other operations, the cumulative impact of adoption of ASC 842 and Topic 606 relates to the accounting for several years, and in many cases, since inception of our business. We estimate that the impact of the adoption of ASC 842 and Topic 606 to both total revenues and total operating expenses on the consolidated statement of operations for 2017 would be immaterial if adopted on a full retrospective basis.

Solar Energy Systems and Product Sales

Solar energy systems sales are comprised of revenue from the sale of solar energy systems directly to homeowners. We generally recognize revenue from solar energy systems sold to homeowners when we install the solar energy system and it passes inspection by the authority having jurisdiction, provided all other revenue recognition criteria have been met.

Product sales revenue consists of revenue from the sale of solar panels, inverters, racking systems, other solar-related equipment to resellers and customer leads to third parties, including our partners and other solar providers. Product sales revenue is recognized at the time title is transferred, generally upon shipment. Customer lead revenue is recognized at the time the lead is delivered.

Our quarterly solar energy systems and product sales revenue has and will continue to fluctuate due to a variety of factors, including timing of installation and seasonal factors described above, as well as other factors that may cause homeowners to opt to purchase solar energy systems rather than leasing them.

Operating Expenses

Operating expenses are classified by the related activity and assigned department of our personnel. Personnel costs include salaries, bonuses, benefits and stock-based compensation. Corporate overhead costs include information technology and facilities costs that are allocated based upon the estimated use by personnel in the related classification below.

Cost of Operating Leases and Incentives

Operating leases and incentives cost of revenue is primarily comprised of depreciation of solar energy systems, as reduced by amortization of U.S. Treasury grants and state tax credits, amortization of initial direct costs (“IDCs”), and lease operations, monitoring and maintenance costs including associated personnel costs. Other costs include allocated corporate overhead costs, which mainly includes personnel costs associated with supply chain, logistics, operations management, safety and quality control, and vehicle depreciation costs.

Upon adoption of Topic 606, we will no longer capitalize IDCs. Instead, we will capitalize costs to obtain a contract which meet the “incremental” criteria defined in Topic 606. These costs will be reflected in other assets on the consolidated balance sheets, and amortized over the term of the Customer Agreements to sales and marketing expense on the consolidated statements of operations.

Cost of Solar Energy Systems and Product Sales

Solar energy systems cost of revenue and non-lead generation product sales cost of revenue primarily consists of direct and indirect material and personnel costs for solar energy systems installations and product sales. Other costs include engineering and design costs, estimated warranty costs, freight costs, allocated corporate overhead costs, which mainly includes personnel costs associated with supply chain, logistics, operations management, safety and quality control, and vehicle depreciation costs. Cost of revenue for lead generations consists of costs related to direct-response advertising activities associated with generating customer leads.

Sales and Marketing

Sales and marketing expenses include personnel costs as well as advertising, promotional and other marketing related expenses. Sales and marketing expenses also include lead generation costs and retail fees paid to strategic partners, allocated corporate overhead costs, travel and professional services.

Upon adoption of Topic 606, we will capitalize costs to obtain a contract which meet the “incremental” criteria defined in Topic 606, and amortize the balance over the term of the Customer Agreements which will be recorded to sales and marketing expense on the consolidated statements of operations.

Research and Development

Research and development expenses include personnel costs, allocated corporate overhead costs, and other costs related to our proprietary technology.

General and Administrative

General and administrative expenses include personnel costs related to accounting, finance, legal, human resources and executive staff. General and administrative expenses also include professional services and allocated corporate overhead costs.

Amortization of Intangible Assets

We acquired intangible assets in connection with the acquisition of MEC and CEE. Such intangible assets are being amortized over their estimated useful lives, which range from five to ten years.

Non-operating Expenses

Interest Expense, net

Interest expense, net primarily consists of the interest charges associated with long term borrowing and lease pass-through financing obligations. Our lines of credit, syndicated term loans, bank loans and certain bank term loans are subject to variable interest rates, some of which are hedged using interest rate swaps. Our notes payable, bank term loan due in April 2022 and our solar asset-backed notes bear fixed interest rates. The interest charge on our lease pass-through financing obligations is imputed at the inception of the related transaction based on the effective interest rate in the arrangement giving rise to the obligation and updated prospectively as appropriate. Interest expense also includes the amortization of deferred financing costs associated with such borrowings, partially offset by a nominal amount of interest income generated from our cash holdings in interest-bearing accounts. In the future we may incur additional indebtedness to fund our operations, and our interest expense would correspondingly increase.

Upon adoption of Topic 606, interest expense will include interest expense related to significant financing components as discussed above.

Other Expenses (Income), Net

During 2017, other expenses (income), net primarily consisted of a loss on early extinguishment of certain non-recourse debt. During 2016, other income primarily consisted of a gain due to the change in fair value of warrant derivatives which were issued to former Series D and E preferred stockholders as an inducement to convert their shares of convertible preferred stock into shares of common stock immediately prior to the closing of our initial public offering. In 2015, other expenses primarily consisted of our portion of the net loss in an entity which was accounted for under the equity method of accounting as well as a loss on early extinguishment of debt.

Income Tax Expense

We are subject to taxation in the United States, where all of our business is conducted. Our effective tax rates differ from the statutory rate primarily due to noncontrolling and redeemable noncontrolling interest adjustments and the change in the federal tax rate. In 2016, the major differences included the noncontrolling and redeemable noncontrolling interest and prepaid tax expense on intercompany gains.

The majority of our tax expense relates to an increase in our deferred tax liabilities related to partnerships. Given our net operating loss carryforwards as of December 31, 2017, we do not expect to pay income tax, including in connection with our 2017 income tax provision, until our net operating losses are fully utilized. As of December 31, 2017, we had approximately \$699.6 million of federal and \$634.7 million of state net operating loss carryforwards ("NOLs"), available to offset future taxable income, if any, which expire in varying amounts beginning in 2028 and 2024 for federal and state purposes, respectively, if unused. It is possible that we will not generate taxable income in time to use these NOLs before their expiration.

On December 22, 2017, the US government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the US tax code including but not limited to, (1) reducing the US federal corporate tax rate from 35% to 21%; (2) immediate expensing of certain tangible personal property; (3) creating a new limitation on deductible interest expense; (4) enacting special rules for taxable year of inclusion for certain revenues; and (5) changing rules related to the uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under ASC 740, Income taxes. In accordance with SAB 118 a company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete but it is able to determine a reasonable estimate, it must

record a provisional estimate in the financial statements. At this time we have estimated the impact of the change of the Tax Act. Any subsequent adjustment to these amounts will be recorded to current tax expense in the quarter of 2018 when the analysis is complete.

We have accounted for the provisional adjustments but we have not completed our accounting for income tax effects for certain elements of the Tax Act. The Company has recognized the provisional tax impacts related to the revaluation of deferred tax assets and liabilities and included these amounts in our consolidated financial statements for the year ended December 31, 2017. The Company will continue to refine the calculations as additional analysis is completed.

In addition, the Company continues to evaluate their performance-based compensation plans within the new definitions under IRC Section 162(m) of the Internal Revenue Code. The preliminary assessment is that we believe that performance based compensation provided prior to November 2, 2017 was provided pursuant to a written binding agreement and will be deductible. No further adjustment has been made at this time. The accounting for this item is incomplete and may change as our interpretation of the provisions of the Act evolve, additional information becomes available or interpretive guidance is issued by the U.S. Treasury. The final determination will be completed no later than one year from the enactment date.

Some of the relevant areas of the Tax Act, which may impact the 2017 and beyond financial statements include but are not limited to:

Reduction of US federal corporate tax rate - The Tax Act reduces the corporate tax rate to 21% effective January 1, 2018. Consequently, we have accounted for the reduction of an estimated \$31.9 million of net deferred tax liabilities in the consolidated balance sheet for the year ended December 31, 2017.

Limit on Employee Remuneration - The Tax Act capped the deduction a company may take for compensation paid to covered employees to \$1million by eliminating the "performance-based" exception under Section 162(m). The provisions generally apply to taxable years beginning after December 31, 2017 but provides transition rules for compensation paid pursuant to a written binding contract that is in effect on November 2, 2017. We do not expect these limitations to have any impact on us for 2017 and 2018, but we could become subject to limitations starting in 2019.

Repeal of Corporate Alternative Minimum Tax - The corporate alternative minimum tax was repealed. We have an immaterial amount of tax credits carrying over and will consider reclassification of the credits to a refund as these amounts are expected to be refunded in future periods and will be fully refundable if not utilized by 2022.

Interest Expense Limitations - For years beginning after December 31, 2017, the new Tax Act limits the deduction for net interest expense that exceeds 30% of the taxpayer's adjusted taxable income for that year. The adjusted taxable income is initially computed excluding depreciation, amortization, interest and taxes and beginning in 2022 only excluding interest and taxes. Going forward companies with interest that is limited under the new law will have to assess the realizability on any resulting deferred tax assets for interest carried forward. We are still assessing the future impact.

Certain special rules for taxable year of inclusion - For years beginning after December 31, 2017, the Tax Act requires an accrual method taxpayer to apply the all events test under section 451 and recognize such income at the earlier of earned or received. We are evaluating the applicability of this provision to our prepaid customer contracts.

Net Income (Loss) Attributable to Common Stockholders

As discussed above under "—Investment Funds," 22 of our 27 active investment funds are consolidated joint ventures. We determine the net income (loss) attributable to common stockholders by deducting from net loss, the net loss attributable to noncontrolling interests and redeemable noncontrolling interests in these funds. The net loss attributable to noncontrolling interests and redeemable noncontrolling interests represents the fund investors' allocable share in the results of operations of these investment funds. For these funds, we have determined that the provisions in the contractual arrangements represent substantive profit sharing arrangements, where the allocations to the partners sometimes differ from the stated ownership percentages. We have further determined that, for these arrangements, the appropriate methodology for attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests each period is a balance sheet approach using the HLBV method.

Under the HLBV method, the amounts of income and loss attributed to the noncontrolling interests and redeemable noncontrolling interests in the consolidated statements of operations reflect changes in the amounts the fund investors would hypothetically receive at each balance sheet date under the liquidation provisions of the contractual provisions of these funds, assuming the net assets of the respective investment funds were liquidated at the carrying value determined in accordance with generally accepted accounting principles in the United States (“GAAP”). The fund investors’ interest in the results of operations of these investment funds is initially determined by calculating the difference in the noncontrolling interests and redeemable noncontrolling interests’ claim under the HLBV method at the start and end of each reporting period, after taking into account any contributions and distributions between the fund and the fund investors and subject to the redemption provisions in certain funds. The redeemable noncontrolling interests balance is the greater of the carrying value calculated under the HLBV method or the redemption value. Because the investor contributes cash into the fund to purchase solar energy systems at fair market value which exceeds their carrying value, the noncontrolling interest balance is reduced upon application of the HLBV method. As such, the HLBV method generally allocates more loss to the noncontrolling interest in the first several years after fund formation. After the solar systems have been purchased by the fund, the noncontrolling interest’s contributions decrease substantially. As ongoing distributions are received by the noncontrolling interest, their losses under the HLBV method tend to reverse. While the application of HLBV is performed consistently, the results of that application and its impact on the income or loss allocated between us and the noncontrolling interests and redeemable noncontrolling interests depend on the respective funds’ specific contractual liquidation provisions. The HLBV results are generally affected by the tax attributes allocated to the fund investors including accelerated and bonus tax depreciation and ITCs or U.S. Treasury grants in lieu of the ITCs, the amount of preferred returns that have been paid to the fund investors by the investment funds, and the allocation of tax income or losses in a liquidation scenario.

The contractual liquidation provisions of our consolidated joint ventures (which include our partnership flips and JV inverted leases) provide that the allocation percentages between us and the investor change, or “flip,” under certain circumstances, such as upon the achievement of the fund investor’s targeted rate of return, the passage of time, or the expiration of the recapture period associated with ITCs. Prior to the point at which the allocation percentage flips, the investor is entitled to receive a majority of the value generated by the solar energy systems. At the flip point, we become entitled to receive most of the value. The difference between our current partnership flip structures and JV inverted lease structures that drives a significant impact on our results from the application of the HLBV method is how the flip point is determined.

For investment funds that have a partnership flip structure, the flip point is tied to the achievement of the fund investor’s targeted rate of return. The receipt of tax benefits by the fund investor count towards the achievement of such target, which reduces the amount distributable to the fund investor in a hypothetical liquidation under these funds’ contractual liquidation provisions. This results in a net loss attributable to the fund investor over the periods in which these tax benefits are received as a result of our application of the HLBV method.

For investment funds that have a JV inverted lease structure, the flip point is typically tied to the expiration of the recapture period associated with ITCs. An investor in a fund with a JV inverted lease fund structure will receive tax benefits similar to an investor in a fund that has adopted a partnership structure. However, unlike the partnership flip structure, the receipt of tax benefits by the fund investor does not impact the amount distributable to the fund investor in a hypothetical liquidation under these funds’ contractual liquidation provisions. At the flip point, the fund investor’s claims on the net assets of the investment fund generally decreases. This results in a net loss attributable to the fund investor in the period when the flip occurs as a result of our application of the HLBV method. As discussed above under “—Investment Funds,” we also have one JV inverted lease whereby we have a pro rata interest in the entity, and we account for the noncontrolling interest’s share of income on a pro rata basis.

These differences are a result of the specific contractual provisions for each of our existing funds and are not necessarily indicative of terms for our future partnership flip or JV inverted lease structures. Future investment funds may contain different features than those that we currently employ, and as a result, the application of the HLBV method and resulting allocation of net income or loss may be different from our existing funds.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our financial statements, which have been prepared in accordance with GAAP. GAAP requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. In many instances, we could have reasonably used different accounting estimates, and in other instances, changes in the accounting estimates are reasonably likely to occur from period-to-period. Actual results could differ significantly from our estimates. Our future financial statements will be affected to the extent that our actual results materially differ from these estimates. For further information on all of our significant accounting policies, see Note 2, *Summary of Significant Accounting Policies*, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

We believe that assumptions and estimates associated with our principles of consolidation, revenue recognition, impairment of long-lived assets, goodwill impairment analysis, provision for income taxes and valuation of noncontrolling interests and redeemable noncontrolling interests have the greatest impact on our consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates.

Principles of Consolidation

Our consolidated financial statements include our accounts and those of our subsidiaries in which we have a controlling financial interest. The typical condition for a controlling financial interest is holding a majority of the voting interests of an entity. However, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling financial interests. We consolidate any VIE of which we are the primary beneficiary, which is defined as the party that has (1) the power to direct the activities of a VIE that most significantly impact the VIE's economic performance and (2) the obligation to absorb losses or receive benefits of the VIE that could potentially be significant to the VIE. We evaluate our relationships with our VIEs on an ongoing basis to determine whether we continue to be the primary beneficiary. Our financial statements reflect the assets and liabilities of VIEs that we consolidate. All intercompany transactions and balances have been eliminated in consolidation. For further information regarding consolidation of our investment funds, see “—Investment Funds” above.

Revenue Recognition

We provide solar energy systems that produce electricity through Customer Agreements. We also derive a portion of our revenue from solar energy system rebate incentives, sales of SRECs generated from our solar energy systems and ITCs assigned to investment funds that are classified as lease pass-through arrangements.

We also sell solar energy systems to homeowners, as well as related products, such as solar panels, inverters, racking systems and other solar-related equipment to resellers. Following the acquisition of CEE in April 2015, we began selling customer leads to third parties, including our partners and other solar providers.

We recognize revenue when (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred or services have been rendered, (iii) the sales price is fixed and determinable, and (iv) collection of the related receivable is reasonably assured.

Operating Leases and Incentives Revenue. Operating leases and incentives revenue represent both ongoing and advance payments received under the terms of the Customer Agreements, which typically have an initial term of 20 years. Revenue from advance payments including prepayment options is deferred and begins to be recognized when PTO is given by the local utility company or on the date daily operation commences if utility approval is not required, provided all other revenue criteria are met.

We have determined that our Customer Agreements should be accounted for as operating leases after evaluating the following lease classification criteria: (i) whether there is a transfer of ownership or bargain purchase option at the end of the lease, (ii) whether the lease term is greater than 75% of the estimated economic life, or (iii) whether the present value of minimum lease payments exceeds 90% of the fair value at lease inception.

In the majority of our Customer Agreements, we charge a fixed fee per kilowatt hour based on the amount of electricity the solar energy system is expected to produce, with an annual fixed percentage price escalation to address the impact of inflation and utility rate increases over the period of the contract. In these cases, we consider the customer payments to be contingent lease payments which are excluded from minimum lease payments used for purposes of assessing the lease classification criteria above. Accordingly, we recognize these electricity payments as earned, provided all other revenue recognition criteria discussed above are met.

We also offer Customer Agreements whereby the customers' monthly payment is a pre-determined amount calculated based on the expected solar energy generation and includes an annual fixed percentage price escalation to address the impact of inflation and utility rate increases over the period of the contracts, which are typically 20 years. We record operating lease revenue from minimum lease payments on a straight-line basis over the life of the lease term, provided all other revenue recognition criteria are met.

We also apply for and receive upfront rebates and incentives offered by certain state and local governments and local utility companies on behalf of our customers for solar facilities installed on certain of our customers' premises. We consider these rebates to be minimum lease payments which are generally recognized on a straight-line basis over the life of the lease term. The difference between the payments received and the revenue recognized is recorded as deferred revenue on the consolidated balance sheet.

SREC revenue arises from the sale of environmental credits generated by solar energy systems. When we enter into Customer Agreements, if the solar energy systems do not generate the amount of electricity required to earn SRECs sold forward or if for any reason the electricity generated does not produce SRECs for a particular state, depending on the terms of the contract, we may be required to make up the shortfall of SRECs through purchases on the open market or make payments of liquidated damages. We recognize revenue related to the sale of SRECs to the extent the cumulative value of delivered SRECs per contract exceeds any possible liquidated damages for non-delivery, if any.

For lease pass-through structures, we monetize the ITCs associated with the systems subject to Customer Agreements by assigning them to the investor together with the future associated customer payments. A portion of the cash consideration received from the investor is allocated to the estimated fair value of the assigned ITCs. The estimated fair value of the ITCs is determined by applying the expected internal rate of return to the investor to the gross amount of the ITCs that may be claimed by the investor.

The ITCs are subject to recapture under the Code if the underlying solar energy system either ceases to be a qualifying property or undergoes a change in ownership within five years of its placed in service date. The recapture amount decreases by one-fifth on the anniversary of the placed in service date, which begins upon PTO. As we have an obligation to ensure the solar energy system is in service and operational for a term of five years to avoid any recapture of the ITCs, we recognize revenue as the recapture provisions lapse provided the other revenue recognition criteria have been met. The monetized ITCs are initially recorded as deferred revenue on the consolidated balance sheet, and subsequently, one-fifth of the monetized ITCs will be recognized as operating leases and incentives revenue in the consolidated statements of operations on each anniversary of the solar energy system's PTO date over the following five years.

As discussed under "Components of Statements of Operations -Operating Leases and Incentives" above, on January 1, 2018, we adopted ASC 842 and Topic 606 which will change our revenue recognition policies.

Solar Energy Systems and Product Sales. For solar energy systems sold to customers, we recognize revenue, net of any applicable governmental sales taxes, when we install the solar facilities and it passes inspection by the responsible city department, provided all other revenue recognition criteria are met. The installation projects of our solar energy systems are typically completed in a short period of time.

Product sales revenue is recognized at the time the goods are shipped or when title is transferred. Shipping and handling fees charged to customers are included in net sales. Shipping and handling costs incurred are included in cost of solar energy systems and product sales. Taxes assessed by government authorities that are directly imposed on revenue producing transactions are excluded from product sales revenue. Customer lead revenue, included in product sales, is recognized at the time the lead is delivered.

Impairment of Long-Lived Assets

The carrying amounts of our long-lived assets, including solar energy systems and definite-lived intangible assets, are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful life is shorter than originally estimated. Factors that we consider in deciding when to perform an impairment review would include significant negative industry or economic trends, and significant changes or planned changes in our use of the assets. Recoverability of these assets is measured by comparison of the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate over its remaining life. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. If the useful life is shorter than originally estimated, we amortize the remaining carrying value over the new shorter useful life.

Goodwill Impairment Analysis

Goodwill represents the excess of the purchase price of an acquired business over the fair value of the net tangible and identifiable intangible assets acquired. Our goodwill balance is a result of the acquisition of the residential sales and installation business of Mainstream Energy Corporation, its fulfillment business AEE Solar and its racking business SnapNrack (collectively, "MEC") in February 2014 and CEE in April 2015. We have determined that we operate as one reporting unit, and our goodwill is recorded at the enterprise level. We perform our annual impairment test of goodwill on October 1 of each year or whenever events or circumstances change or occur that would indicate that goodwill might be impaired. When assessing goodwill for impairment, we use qualitative and, if necessary, quantitative methods. We also consider our enterprise value and, if necessary, our discounted cash flow model, which involves assumptions and estimates, including our future financial performance, weighted-average cost of capital and interpretation of currently enacted tax laws. Circumstances that could indicate impairment and require us to perform an impairment test include a significant decline in our financial results, a significant decline in our enterprise value relative to our net book value, an unanticipated change in competition or our market share and a significant change in our strategic plans.

As of October 1, 2017, we performed step one of the impairment test. As of October 1, 2017, we concluded that the estimated fair value of the Company exceeded its carrying value.

We also performed the step one test for potential impairment as of December 31, 2017. As of December 31, 2017, total stockholders' equity exceeded our market capitalization. We estimated the fair value of the Company using a combination of the market capitalization, a market approach and an income approach, giving 50% weighting to the market capitalization and 25% weighting to each other method. Under the market approach, we utilized publicly traded comparable company information to determine revenue multiples to value our Company. Under the income approach, we determined the fair value based on our estimated future cash flows discounted by an estimated weighted average cost of capital, reflecting the overall level of inherent risk and the rate of return an outside investor would expect to earn. The cash flow forecast and related assumptions were derived from the most recent annual financial forecast for which the planning process commenced in the fourth quarter of 2017. Based on the fair value analysis as of December 31, 2017, we had an estimated fair value that exceeded its carrying value by approximately 4%. Therefore, no impairment of goodwill has been recorded for the year ended December 31, 2017. However, if factors exist that could indicate an impairment in the future, including the increase in retained earnings upon the adoption of ASC 842 and Topic 606, or a sustained decrease in our stock price, we may deem that our goodwill is impaired.

Provision for Income Taxes

We account for income taxes under an asset and liability approach. Deferred income taxes reflect the impact of temporary differences between assets and liabilities recognized for financial reporting purposes and the amounts recognized for income tax reporting purposes, net operating loss carryforwards and other tax credits measured by applying currently enacted tax laws. A valuation allowance is provided when necessary to reduce deferred tax assets to an amount that is more likely than not to be realized. As of December 31, 2017, we have recorded a valuation allowance of \$4.7 million for state deferred tax assets.

We sell solar energy systems to the investment funds. As the investment funds are consolidated by us, the gain on the sale of the solar energy systems is not recognized in the consolidated financial statements. However, this gain is recognized for tax reporting purposes. Since these transactions are intercompany sales for book purposes, before January 1, 2017, any tax expense incurred related to these intercompany sales was deferred and recorded as a prepaid tax asset and there was no recognition of a deferred tax asset related to our increased tax basis in the partnership as a result of such sales. The prepaid tax asset was amortized over the estimated useful life of the underlying solar energy systems which has been estimated to be 35 years. With the adoption of ASU 2016-16 on January 1, 2017 we eliminated the prepaid tax asset and recorded the deferred tax effects of previous transactions. Beginning on January 1, 2017, we began recording the current tax effects of the gain on intercompany sales as well as the related deferred tax effects.

We determine whether a tax position is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. We use a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained upon tax authority examination, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement.

Our policy is to include interest and penalties related to unrecognized tax benefits, if any, within the provision for taxes in the consolidated statements of operations.

Noncontrolling Interests and Redeemable Noncontrolling Interests

Our noncontrolling interests and redeemable noncontrolling interests represent fund investors' interests in the net assets of certain investment funds, which we consolidate, that we have entered into in order to finance the costs of solar energy facilities under operating leases. We have determined that the provisions in the contractual arrangements of the investment funds represent substantive profit-sharing arrangements, which gives rise to the noncontrolling interests and redeemable noncontrolling interests. We have further determined that for all but one of these arrangements, the appropriate methodology for attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests each period is a balance sheet approach using the HLBV method.

Attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests under the HLBV method requires the use of significant assumptions to calculate the amounts that fund investors would receive upon a hypothetical liquidation. Changes in these assumptions, including change in tax rates, can have a significant impact on the amount that fund investors would receive upon a hypothetical liquidation. As a result of the passing of the Tax Act, the impact of the change in the federal tax rate from 35% to 21%, which is effective January 1, 2018, on the noncontrolling interest and redeemable noncontrolling interests as of January 1, 2018 is an estimated decrease of \$18.9 million.

We classify certain noncontrolling interests with redemption features that are not solely within our control outside of permanent equity on our consolidated balance sheets. Redeemable noncontrolling interests are reported using the greater of their carrying value at each reporting date as determined by the HLBV method or their estimated redemption value in each reporting period. Estimating the redemption value of the redeemable noncontrolling interests requires the use of significant assumptions and estimates such as projected future cash flows at the time the redemption feature can be exercised.

Results of Operations

The results of operations presented below should be reviewed in conjunction with the consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K.

	Year Ended December 31,		
	2017	2016	2015
	<i>(in thousands, except per share amounts)</i>		
Revenue:			
Operating leases and incentives.....	\$ 231,433	\$ 168,417	\$ 118,004
Solar energy systems and product sales	298,266	285,481	186,602
Total revenue	<u>529,699</u>	<u>453,898</u>	<u>304,606</u>
Operating expenses:			
Cost of operating leases and incentives	193,954	159,858	111,784
Cost of solar energy systems and product sales	254,131	239,381	168,751
Sales and marketing	137,115	162,781	145,477
Research and development	15,079	10,199	9,657
General and administrative	107,420	92,377	84,442
Amortization of intangible assets	4,204	4,206	3,695
Total operating expenses	<u>711,903</u>	<u>668,802</u>	<u>523,806</u>
Loss from operations.....	(182,204)	(214,904)	(219,200)
Interest expense, net.....	70,518	53,244	33,236
Other expenses (income), net	1,874	(840)	1,769
Loss before income taxes.....	(254,596)	(267,308)	(254,205)
Income tax expense (benefit)	32,138	35,993	(5,299)
Net loss.....	<u>(286,734)</u>	<u>(303,301)</u>	<u>(248,906)</u>
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	(411,259)	(394,988)	(220,660)
Net income (loss) attributable to common stockholders	<u>\$ 124,525</u>	<u>\$ 91,687</u>	<u>\$ (28,246)</u>
Less: Deemed dividend to convertible preferred stockholders.....	—	—	(24,890)
Net income (loss) available to common stockholders.....	<u>\$ 124,525</u>	<u>\$ 91,687</u>	<u>\$ (53,136)</u>
Net income (loss) per share available to common shareholders			
Basic	<u>\$ 1.18</u>	<u>\$ 0.90</u>	<u>\$ (0.96)</u>
Diluted	<u>\$ 1.15</u>	<u>\$ 0.87</u>	<u>\$ (0.96)</u>
Weighted average shares used to compute net income (loss) per share attributable to common stockholders			
Basic	<u>105,432</u>	<u>102,367</u>	<u>55,091</u>
Diluted	<u>108,206</u>	<u>104,964</u>	<u>55,091</u>

Comparison of the Years Ended December 31, 2017 and 2016

Revenue

	Year Ended December 31,		Change	
	2017	2016	\$	%
	<i>(in thousands)</i>			
Operating leases	\$ 174,664	\$ 125,197	\$ 49,467	40 %
Incentives	56,769	43,220	13,549	31 %
Operating leases and incentives.....	231,433	168,417	63,016	37 %
Solar energy systems.....	113,953	127,727	(13,774)	(11)%
Products	184,313	157,754	26,559	17 %
Solar energy systems and product sales	298,266	285,481	12,785	4 %
Total revenue	<u>\$ 529,699</u>	<u>\$ 453,898</u>	<u>\$ 75,801</u>	<u>17 %</u>

Operating Leases and Incentives. The \$49.5 million increase in revenue from operating leases was primarily due to both an increase in solar energy systems under Customer Agreements being placed in service in 2017 and a full year of revenue recognized in 2017 for systems placed in service in 2016 versus only a portion recognized in 2016. Revenue from incentives increased by \$13.5 million primarily due to an increase in SREC revenue as a result of the sales under contracts whereby the revenue recognition had previously been deferred until minimum levels of deliveries were met. Additionally, the increase in revenue from incentives was due to an increase in ITC revenue, which relates to solar energy systems in lease pass-through funds being placed in service in the prior year as we recognize revenue from the monetization of these ITCs annually over five years on each anniversary of a solar energy system's permission to operate date.

Solar Energy Systems and Product Sales. Revenue from solar energy systems sales decreased by \$13.8 million compared to the prior year due to softer customer demand in our retail sales channel following increased sales and marketing efforts in 2016. Product sales increased by \$26.6 million compared to the prior year period primarily due to an increase in volume of wholesale products sold, offset by industry-wide price decreases and a decrease in customer lead sales.

Operating Expenses

	Year Ended December 31,		Change	
	2017	2016	\$	%
	<i>(in thousands)</i>			
Cost of operating lease and incentives	\$ 193,954	\$ 159,858	\$ 34,096	21 %
Cost of solar energy systems and product sales	254,131	239,381	14,750	6 %
Sales and marketing	137,115	162,781	(25,666)	(16)%
Research and development.....	15,079	10,199	4,880	48 %
General and administrative expense.....	107,420	92,377	15,043	16 %
Amortization of intangible assets	4,204	4,206	(2)	— %
Total operating expenses	<u>\$ 711,903</u>	<u>\$ 668,802</u>	<u>\$ 43,101</u>	<u>6 %</u>

Cost of Operating Leases and Incentives. The \$34.1 million increase in cost of operating leases and incentives was primarily due to the increase in depreciation expense related to the increase in solar energy systems placed in service in 2017, plus a full year of costs recognized for systems placed in service in 2016 versus only a partial year of such expenses related to the period in which the assets were in service in 2016.

The cost of operating leases and incentives decreased to 84% of operating lease and incentives revenue during the year ended December 31, 2017, from 95% during the year ended December 31, 2016. This reduction of cost compared to revenue is due to a reduction in the proportion of leased systems installed by us as opposed to

third parties compared to the prior year. Systems installed by us bear an allocation of costs, such as warehouse rent and utilities, information technology, administrative and product planning costs, that are expensed during the construction and installation phase as these costs do not meet the criteria for capitalization under ASC 360 *Property, Plant, and Equipment*. These costs can fluctuate depending on the volume of megawatts installed directly by us for systems under an operating lease, and are not necessarily proportional to the increase in revenue generated by our entire fleet of leased systems. As such, the cost of operating leases and incentives as a percentage of operating lease and incentives revenue can vary from period to period.

Cost of Solar Energy Systems and Product Sales. The \$14.8 million increase in cost of solar energy systems and product sales was due to an increase in the product sales discussed above.

Sales and Marketing Expense. The \$25.7 million decrease in sales and marketing expense was primarily attributable to the decrease in our use of certain third party lead generation and direct mailer provider services as we continue to generate more leads internally as well as a decrease in personnel primarily in canvassing.

Research and Development Expense. The \$4.9 million increase in research and development was primarily attributable to hiring of personnel to support the growth of our business.

General and Administrative Expense. The \$15.0 million increase in general and administrative expenses primarily relates to hiring of personnel to support the growth of our business as well as an increase in professional services.

Non-Operating Expenses

	Year Ended December 31,		Change	
	2017	2016	\$	%
	<i>(in thousands)</i>			
Interest expense, net.....	\$ 70,518	\$ 53,244	\$ 17,274	32 %
Other expenses (income), net	1,874	(840)	2,714	(323)%
Total interest and other expenses, net.....	<u>\$ 72,392</u>	<u>\$ 52,404</u>	<u>\$ 19,988</u>	<u>38 %</u>

Interest expense, net. The increase in interest expense, net of \$17.3 million was related to additional borrowings entered into in 2017.

Other expenses (income), net. The increase in other expenses (income), net of \$2.7 million was primarily due to a loss from the early extinguishment of certain non-recourse debt in 2017.

Income Tax Expense

	Year Ended December 31,		Change	
	2017	2016	\$	%
	<i>(in thousands)</i>			
Income tax expense	\$ 32,138	\$ 35,993	\$ (3,855)	(11)%

The tax expense at the statutory rate of 34.0% for the year ended December 31, 2017 was reduced by the allocation of the losses to noncontrolling interests and redeemable noncontrolling interests of 54.9% and increased by other miscellaneous items of 4.2%. The decrease was offset by the impact of the change in the federal income tax rate of 12.5%. The statutory rate tax of 34.0% for the year ended December 31, 2016 was reduced by the allocation of losses to noncontrolling interests and redeemable noncontrolling interests of 50.2% and by other miscellaneous items of 2.8%. The decrease was offset by the tax impact of intercompany transactions of 5.6%.

The decrease in income tax expense relates to a decrease in the federal tax rate from tax reform and is offset by an increase in our deferred tax liabilities related to partnerships, depreciation expense and capitalized indirect costs. Given our net operating loss carryforwards as of December 31, 2017, we do not expect to pay

income tax, including in connection with our 2017 income tax provision, until our net operating losses are fully utilized. As of the year ended December 31, 2017, our federal and state net operating loss carryforwards were \$699.6 million and \$634.7 million, respectively. If not utilized, the federal net operating loss will begin to expire in the year 2028 and the state net operating losses will begin to expire in the year 2024.

Net Loss Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

	Year Ended December 31,		Change	
	2017	2016	\$	%
	<i>(in thousands)</i>			
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	\$ (411,259)	\$ (394,988)	\$ (16,271)	4%

The increase in net loss attributable to noncontrolling interests and redeemable noncontrolling interests was primarily a result of the addition of six investment funds since December 31, 2016, which use the HLBV method to determine the amount of net income or loss attributable to noncontrolling interests and redeemable noncontrolling interests, which generally allocates more loss to the noncontrolling interest in the first several years after fund formation.

Comparison of the Years Ended December 31, 2016 and 2015

Revenue

	Year Ended December 31,		Change	
	2016	2015	\$	%
	<i>(in thousands)</i>			
Operating leases	\$ 125,197	\$ 86,332	\$ 38,865	45%
Incentives	43,220	31,672	11,548	36%
Operating leases and incentives.....	168,417	118,004	50,413	43%
Solar energy systems.....	127,727	50,191	77,536	154%
Products	157,754	136,411	21,343	16%
Solar energy systems and product sales	285,481	186,602	98,879	53%
Total revenue	\$ 453,898	\$ 304,606	\$ 149,292	49%

Operating Leases and Incentives. The \$38.9 million increase in revenue from operating leases was primarily due to both an increase in solar energy systems under Customer Agreements being placed in service in 2016 and a full year of revenue recognized in 2016 for systems placed in service in 2015 versus only a portion recognized in 2015. Revenue per megawatt production capacity remained consistent between 2015 and 2016. Revenue from incentives increased by \$11.5 million primarily due to an increase in ITC revenue, which relates to solar energy systems in lease pass-through funds being placed in service in the prior year as we recognize revenue from the monetization of these ITCs annually over five years on each anniversary of a solar energy system's permission to operate date.

Solar Energy Systems and Product Sales. Revenue from solar energy systems sales increased by \$77.5 million compared to the prior year period due to increased sales and marketing efforts primarily with strategic partners. Product sales increased by \$21.3 million compared to the prior year period due to an increase in volume of all products sold, including a \$4.6 million increase in customer lead sales subsequent to the acquisition of CEE in April 2015.

Operating Expenses

	Year Ended December 31,		Change	
	2016	2015	\$	%
	<i>(in thousands)</i>			
Cost of operating lease and incentives	\$ 159,858	\$ 111,784	\$ 48,074	43%
Cost of solar energy systems and product sales	239,381	168,751	70,630	42%
Sales and marketing	162,781	145,477	17,304	12%
Research and development.....	10,199	9,657	542	6%
General and administrative expense.....	92,377	84,442	7,935	9%
Amortization of intangible assets	4,206	3,695	511	14%
Total operating expenses	<u>\$ 668,802</u>	<u>\$ 523,806</u>	<u>\$ 144,996</u>	<u>28%</u>

Cost of Operating Leases and Incentives. The \$48.1 million increase in cost of operating leases and incentives was primarily due to the increase in solar energy systems placed in service in the period from December 31, 2015 through December 31, 2016, plus a full year of costs recognized for systems placed in service in 2015 versus only a partial year of such expenses related to the period in which the assets were in service in 2015. This resulted in a \$22.4 million increase in depreciation and amortization of solar energy system equipment costs and initial direct costs, as well as an increase of \$25.6 million in non-capitalizable costs, associated with the increase in megawatt production.

The cost of operating leases and incentives was 95% of operating lease and incentives revenue during the years ended December 31, 2016 and 2015. Leased systems installed by us bear an allocation of costs, such as warehouse rent and utilities, information technology, administrative and product planning costs, that are expensed during the construction and installation phase as these costs do not meet the criteria for capitalization under ASC 360 *Property, Plant, and Equipment*. These costs can fluctuate depending on the volume of megawatts installed directly by us for systems under an operating lease, and are not necessarily proportional to the increase in revenue generated by our entire fleet of leased systems. As such, the cost of operating leases and incentives as a percentage of operating lease and incentives revenue can vary from period to period.

Cost of Solar Energy Systems and Product Sales. The \$70.6 million increase in cost of solar energy systems and product sales was due to an increase in the sales of solar energy systems which have a lower cost of sales, compared to products.

Sales and Marketing Expense. The \$17.3 million increase in sales and marketing expense was primarily attributable to the expansion of our direct-to-consumer channel, which resulted in increased hiring of sales and marketing personnel.

General and Administrative Expense. The \$7.9 million increase in general and administrative expenses primarily relates to an increase in legal and professional services and hiring of personnel to support the growth of our business and ability to operate as a public company.

Amortization of Intangible Assets. The \$0.5 million increase in amortization expense resulted from the amortization of intangible assets acquired from the CEE acquisition in April 2015.

Non-Operating Expenses

	Year Ended December 31,		Change	
	2016	2015	\$	%
	<i>(in thousands)</i>			
Interest expense, net.....	\$ 53,244	\$ 33,236	\$ 20,008	60 %
Other expenses (income), net	(840)	1,769	(2,609)	(147)%
Total interest and other expenses, net.....	\$ 52,404	\$ 35,005	\$ 17,399	50 %

Interest Expense, net. The increase in interest expense, net of \$20.0 million was related to additional borrowings entered into in late 2015 and in 2016.

Other Expenses. The decrease in other expenses of \$2.6 million primarily relates to losses incurred related to an entity which was recorded on an equity method basis of accounting in 2015 that was consolidated in 2016, offset by a \$0.6 million gain due to the change in fair value of warrant derivatives which were issued to former Series D and E preferred stockholders as an inducement to convert their shares of convertible preferred stock into shares of common stock immediately prior to the closing of our initial public offering. Additionally, there was a \$0.4 million loss on early extinguishment of debt in 2015 which did not occur in 2016.

Income Tax Expense (Benefit)

	Year Ended December 31,		Change	
	2016	2015	\$	%
	<i>(in thousands)</i>			
Income tax expense (benefit)	\$ 35,993	\$ (5,299)	\$ 41,292	779%

The tax expense at the statutory rate of 34.0% for the year ended December 31, 2016 was reduced by the allocation of the losses to noncontrolling interests and redeemable noncontrolling interests of 50.2% and increased by other miscellaneous items of 2.8%. The decrease was offset by the tax impact of intercompany transactions of 5.6%. The statutory rate tax of 34.0% for the year ended December 31, 2015 was reduced by the allocation of losses to noncontrolling interests and redeemable noncontrolling interests of 29.5% and by other miscellaneous items of 2.4%.

The majority of our tax expense relates to an increase in our deferred tax liabilities related to partnerships, depreciation expense and capitalized indirect costs. Given our net operating loss carryforwards as of December 31, 2016, we do not expect to pay income tax, including in connection with our 2016 income tax provision, until our net operating losses are fully utilized. As of the year ended December 31, 2016, our federal and state net operating loss carryforwards were \$571.3 million and \$524.9 million, respectively. If not utilized, the federal net operating loss will begin to expire in the year 2028 and the state net operating losses will begin to expire in the year 2024.

Net Loss Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

	Year Ended December 31,		Change	
	2016	2015	\$	%
	<i>(in thousands)</i>			
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	\$ (394,988)	\$ (220,660)	\$ (174,328)	79%

The increase in net loss attributable to noncontrolling interests and redeemable noncontrolling interests was primarily a result of the addition of three investment funds since December 31, 2015, as well as the HLBV method used in determining the amount of net income or loss attributable to noncontrolling interests and redeemable noncontrolling interests, which generally allocates more loss to the noncontrolling interest in the first several years after fund formation.

Quarterly Results of Operations

The following table represents our unaudited consolidated statements of operations for each of the quarters indicated. Our consolidated statements of operations for each of these quarters have been prepared on a basis consistent within our audited financial statements included elsewhere in this Annual Report on Form 10-K and, in the opinion of management, include all adjustments necessary for the fair presentation of our consolidated results of operations for these quarters. You should read this information together with our annual consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K. Our quarterly results of operations are not necessarily indicative of our results for any future period.

	Three Months Ended							
	December 31, 2017	September 30, 2017	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016
Revenue:								
Operating leases and incentives	\$ 59,536	\$ 58,462	\$ 65,337	\$ 48,098	\$ 45,333	\$ 43,150	\$ 45,394	\$ 34,540
Solar energy systems and product sales	86,907	82,829	72,511	56,019	75,251	68,883	77,144	64,203
Total revenue	146,443	141,291	137,848	104,117	120,584	112,033	122,538	98,743
Operating expenses:								
Cost of operating leases and incentives	53,272	49,232	47,114	44,336	42,380	40,770	38,608	38,100
Cost of solar energy systems and product sales	74,174	69,588	60,938	49,431	63,005	57,264	61,600	57,512
Sales and marketing	35,357	37,298	32,784	31,676	35,685	40,192	43,716	43,188
Research and development	4,437	3,936	3,710	2,996	2,905	2,458	2,373	2,463
General and administrative	29,644	27,925	25,230	24,621	24,184	21,331	23,614	23,248
Amortization of intangible assets	1,050	1,052	1,051	1,051	1,052	1,051	1,051	1,052
Total operating expenses	197,934	189,031	170,827	154,111	169,211	163,066	170,962	165,563
Loss from operations	(51,491)	(47,740)	(32,979)	(49,994)	(48,627)	(51,033)	(48,424)	(66,820)
Interest expense, net	20,932	17,707	16,602	15,277	14,709	13,957	13,063	11,515
Other expenses (income), net	1,285	(94)	208	475	(380)	42	30	(532)
Loss before income taxes	(73,708)	(65,353)	(49,789)	(65,746)	(62,956)	(65,032)	(61,517)	(77,803)
Income tax expense (benefit)	(5,487)	14,834	15,453	7,338	22,847	9,936	3,210	—
Net loss	(68,221)	(80,187)	(65,242)	(73,084)	(85,803)	(74,968)	(64,727)	(77,803)
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	(127,115)	(107,969)	(90,364)	(85,811)	(114,835)	(91,846)	(97,370)	(90,937)
Net income attributable to common stockholders	\$ 58,894	\$ 27,782	\$ 25,122	\$ 12,727	\$ 29,032	\$ 16,878	\$ 32,643	\$ 13,134
Net income per share available to common shareholders								
Basic	\$ 0.55	\$ 0.26	\$ 0.24	\$ 0.12	\$ 0.28	\$ 0.16	\$ —	\$ 0.13
Diluted	\$ 0.54	\$ 0.25	\$ 0.23	\$ 0.12	\$ 0.27	\$ 0.16	\$ —	\$ 0.13
Weighted average shares used to compute net income per share available to common stockholders								
Basic	106,538	105,783	105,093	104,038	103,504	102,707	101,969	101,273
Diluted	109,135	109,598	107,347	106,469	105,761	105,092	104,768	104,219

Liquidity and Capital Resources

As of December 31, 2017, we had cash of \$202.5 million, which consisted of cash held in checking and savings accounts with financial institutions. We finance our operations mainly through a variety of financing fund arrangements that we have formed with fund investors, borrowings, cash generated from our sources of revenue and proceeds from secured, long-term non-recourse loan arrangements for up to \$705.0 million. Our principal uses of cash are funding our business, including the costs of acquisition and installation of solar energy systems, satisfaction of our obligations under our debt instruments and other working capital requirements. As of December 31, 2017, we have outstanding borrowings of \$247.0 million on our \$250.0 million corporate bank line of credit. In February 2018, we extended the maturity date of our \$250.0 million corporate bank line of credit to April 1, 2020 from its current maturity date of April 1, 2018. Our business model requires substantial outside financing arrangements to grow the business and facilitate the deployment of additional solar energy systems. The solar energy systems that are operational are expected to generate a positive return rate over the term of the Customer Agreement, typically 20 years. However, in order to grow, we will continue to be dependent on financing from

outside parties. If financing is not available to us on acceptable terms if and when needed, we may be required to reduce planned spending, which could have a material adverse effect on our operations. While there can be no assurances, we anticipate raising additional required capital from new and existing investors. We believe our cash, investment fund commitments and available borrowings as further described below will be sufficient to meet our anticipated cash needs for at least the next 12 months. The following table summarizes our cash flows for the periods indicated:

	Year Ended December 31,		
	2017	2016	2015
	<i>(in thousands)</i>		
Consolidated cash flow data:			
Net cash used in operating activities.....	\$ (61,011)	\$ (150,580)	\$ (105,266)
Net cash used in investing activities	(812,327)	(745,112)	(627,489)
Net cash provided by issuance of common stock related to initial public offering (offering costs paid) and preferred stock, net	—	(437)	222,078
Net cash provided by other financing activities	869,499	898,629	562,387
Net increase (decrease) in cash	<u>\$ (3,839)</u>	<u>\$ 2,500</u>	<u>\$ 51,710</u>

Operating Activities

During 2017, we used \$61.0 million in net cash in operating activities. The primary driver of our operating cash inflow consists of payments received from customers. The driver of our operating cash outflow consists primarily of cost of goods sold and other operating expenses. During 2017, our operating cash outflows were \$71.8 million from our net loss excluding non-cash and non-operating items. The \$71.8 million includes a final cash payment of \$8.8 million related to the Clean Energy Experts, LLC ("CEE") acquisition as discussed in Note 3, *Acquisition* to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K. Changes in working capital resulted in a net cash inflow of \$10.7 million, primarily driven by accounts payable which in turn was offset by an increase in inventory due to additional module purchases ahead of the tariff effective in February 2018.

During 2016, we used \$150.5 million in net cash in operating activities. During 2016, we had an increase in deferred revenue of approximately \$10.3 million relating to upfront lease payments received from customers and solar energy system incentive rebate payments received from various state and local utilities. This increase was offset by our operating cash outflows of \$132.2 million from our net loss excluding non-cash and non-operating items. Changes in accounts payable resulted in a cash outflow of \$40.3 million. Changes in working capital, other than deferred revenue and accounts payable, resulted in a cash inflow of \$11.7 million.

During 2015, we used \$105.3 million in net cash from operating activities. During 2015, we had an increase in deferred revenue of approximately \$47.7 million relating to upfront lease payments received from customers and solar energy system incentive rebate payments received from various state and local utilities. This increase was offset by our operating cash outflows of \$159.3 million from our net loss excluding non-cash and non-operating items. Net changes in working capital, other than deferred revenue, resulted in an inflow of cash of \$6.3 million.

Investing Activities

During 2017, we used \$812.3 million in cash in investing activities. Of this amount, we used \$804.4 million to acquire and install solar energy systems and components under our long-term Customer Agreements, and \$8.0 million for capitalized software projects and the acquisition of office equipment.

During 2016, we used \$745.1 million in cash in investing activities. Of this amount, we used \$727.6 million to acquire and install solar energy systems and components under our long-term Customer Agreements, \$12.5 million for the acquisition of office equipment, leasehold improvements and furniture and \$5.0 million for additional purchase consideration for the acquisition of CEE.

During 2015, we used \$627.5 million in cash in investing activities. Of this amount, we used \$594.9 million to acquire and install solar energy systems and components under our long-term Customer Agreements. We used \$19.6 million to acquire the CEE business. We used \$13 million for the acquisition of vehicles, office equipment, leasehold improvements and furniture.

Financing Activities

During 2017, we generated \$869.5 million from financing activities. This was primarily driven by \$546.6 million in net proceeds from fund investors, \$371.7 million in proceeds from non-recourse debt, net of repayments, \$3.0 million in proceeds from recourse debt, net of repayments, and \$13.8 million from state tax credits, net of recapture, offset by \$35.4 million in payments for acquisitions of noncontrolling interests and a transfer of \$21.4 million to restricted cash.

During 2016, we generated \$898.2 million from financing activities. This was primarily driven by \$550.0 million in net proceeds from fund investors, \$312.6 million in proceeds from non-recourse debt, net of repayments, \$47.0 million in proceeds from recourse debt, net of repayments, and \$9.1 million from state tax credits, net of recapture.

During 2015, we generated \$784.5 million from financing activities. This was primarily driven by \$287.2 million in net proceeds from fund investors, \$147.8 million in proceeds from recourse debt, net of repayments, \$147.6 million in proceeds from non-recourse debt, net of repayments and \$222.1 million in proceeds from our initial public offering, net of offering costs.

Debt, Equity, and Financing Fund Commitments

Debt Instruments

For a discussion of the terms and conditions of debt instruments and changes thereof in the period, refer to Note 11, *Cash Equity Financing* and Note 12, *Indebtedness*, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Equity Instruments

Conversion of preferred stock and issuance of additional shares and warrants. In July 2015, we entered into a letter of intent to issue 1,250,764 warrants to purchase common stock subject to contingencies being met to the former Series D and E preferred stockholders as an inducement to convert their shares of convertible preferred stock into shares of common stock immediately prior to the closing of our initial public offering and waive any potential anti-dilution adjustments resulting from the issuance of shares of common stock in our initial public offering. The warrants were issued on September 30, 2015. The warrants are exercisable for three years from the date of grant and have an exercise price of \$22.50 per share. The warrants are recorded at fair value as derivative liabilities and reported in other liabilities in the Company's consolidated balance sheet.

Immediately prior to closing of our initial public offering, all 54,840,767 shares of our outstanding preferred stock were automatically converted into shares of common stock.

Initial public offering. On August 10, 2015, we closed our initial public offering in which 17,900,000 shares of common stock were sold at a public offering price of \$14.00 per share, resulting in net proceeds of approximately \$220.9 million, after deducting underwriting discounts and commissions and \$7.9 million in offering expenses payable by us, and excluding the proceeds received by the selling stockholders who sold an aggregate of 417,732 shares of the total 17,900,000 shares sold in the initial public offering.

Warrant. In August 2017, the Company entered into an agreement with an affiliate ("Contractor") of Comcast Corporation ("Comcast") whereby Contractor will receive lead or sales fees for new customers it brings to the Company over a 40-month term. Comcast may also earn a warrant to purchase up to 11,793,355 shares of the Company's outstanding common stock, at an exercise price of \$0.01 per warrant share. The warrant initially vests 50.05% when both (i) Contractor has earned a lead or sales fee with respect to 30,000 of installed solar energy systems, and (ii) Contractor or its affiliates have spent at least \$10.0 million in marketing and sales in connection with the agreement. Thereafter, the warrant will vest in five additional increments for each additional 6,000 installed solar energy systems.

Investment Fund Commitments

As of December 31, 2017, we had undrawn committed capital of approximately \$233.3 million which may only be used to purchase and install solar energy systems. We intend to establish new investment funds in the future, and we may also use debt, equity or other financing strategies to finance our business.

For a discussion of our cash equity financing, refer to Note 11, *Cash Equity Financing*, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Contractual Obligations and Other Commitments

The following table summarizes our contractual obligations as of December 31, 2017:

	Payments Due by Period				Total
	Less Than 1 Year	1 to 3 Years	3 to 5 Years	More Than 5 Years	
	<i>(in thousands)</i>				
Contractual Obligations:					
Debt obligations (including future interest) ⁽¹⁾	\$ 84,028	\$ 538,589	\$ 431,011	\$ 521,916	\$ 1,575,544
Purchase commitments ⁽²⁾	145,616	134,956	—	—	280,572
Distributions payable to noncontrolling interests and redeemable noncontrolling interests ⁽³⁾	13,583	—	—	—	13,583
Capital lease obligations (including accrued interest)	7,919	5,786	328	18	14,051
Operating lease obligations	9,360	10,918	5,250	1,580	27,108
Total contractual obligations	<u>\$ 260,506</u>	<u>\$ 690,249</u>	<u>\$ 436,589</u>	<u>\$ 523,514</u>	<u>\$ 1,910,858</u>

⁽¹⁾ The foregoing table reflects that, in February 2018, we amended our corporate bank line of credit facility to extend the maturity date of our \$250.0 million corporate bank line of credit to April 1, 2020 from its current maturity date of April 1, 2018.

⁽²⁾ Amounts may vary as final details of tariff imposition are implemented by our suppliers.

⁽³⁾ The foregoing table does not include the amounts we could be required to expend under our redemption obligations discussed above.

Off Balance Sheet Arrangements

We include in our consolidated financial statements all assets and liabilities and results of operations of investment fund arrangements that we have entered into. We do not have any off-balance sheet arrangements.

Recent Accounting Pronouncements

See Note 2, *Summary of Significant Accounting Policies*, to our consolidated financial statement included elsewhere in this Annual Report on Form 10-K.

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

We are exposed to certain market risks in the ordinary course of our business. Our primary exposure includes changes in interest rates because certain borrowings bear interest at floating rates based on LIBOR plus a specified margin. We sometimes manage our interest rate exposure on floating-rate debt by entering into derivative instruments to hedge all or a portion of our interest rate exposure in certain debt facilities. We do not enter into any derivative instruments for trading or speculative purposes. Changes in economic conditions could result in higher interest rates, thereby increasing our interest expense and operating expenses and reducing funds available for capital investments, operations and other purposes. A hypothetical 10% increase in our interest rates on our variable rate debt facilities would have increased our interest expense by \$2.6 million and \$1.5 million for the year ended December 31, 2017 and 2016, respectively.

Item 8. Financial Statements and Supplementary Data.

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Report of Ernst & Young LLP, Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Sunrun Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Sunrun Inc. (the Company) as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income (loss), redeemable noncontrolling interests and stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

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

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

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

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2010.

San Francisco, California
March 6, 2018

Sunrun Inc.
Consolidated Balance Sheets
(In Thousands, Except Share Par Values)

	As of December 31,	
	2017	2016
Assets		
Current assets:		
Cash.....	\$ 202,525	\$ 206,364
Restricted cash.....	39,265	11,882
Accounts receivable (net of allowances for doubtful accounts of \$1,665 and \$1,166 as of December 31, 2017 and 2016, respectively).....	76,198	60,258
State tax credits receivable.....	11,085	13,713
Inventories.....	94,427	67,326
Prepaid expenses and other current assets.....	9,202	9,802
Total current assets	432,702	369,345
Restricted cash.....	—	6,117
Solar energy systems, net.....	3,319,708	2,629,366
Property and equipment, net.....	36,402	48,471
Intangible assets, net.....	14,294	18,499
Goodwill.....	87,543	87,543
Prepaid tax asset.....	—	378,541
Other assets.....	37,225	34,936
Total assets ⁽¹⁾	\$ 3,927,874	\$ 3,572,818
Liabilities and total equity		
Current liabilities:		
Accounts payable.....	\$ 115,193	\$ 66,018
Distributions payable to noncontrolling interests and redeemable noncontrolling interests.....	13,583	10,654
Accrued expenses and other liabilities.....	85,639	59,261
Deferred revenue, current portion.....	77,310	70,849
Deferred grants, current portion.....	8,269	8,011
Capital lease obligations, current portion.....	7,421	10,015
Non-recourse debt, current portion.....	21,529	14,153
Lease pass-through financing obligation, current portion.....	6,087	5,823
Total current liabilities	335,031	244,784
Deferred revenue, net of current portion.....	584,427	583,401
Deferred grants, net of current portion.....	228,603	226,893
Capital lease obligations, net of current portion.....	5,811	12,965
Recourse debt, net of current portion.....	247,000	244,000
Non-recourse debt, net of current portion.....	1,026,416	639,870
Lease pass-through financing obligation, net of current portion.....	138,124	137,958
Other liabilities.....	13,520	5,457
Deferred tax liabilities.....	59,131	415,397
Total liabilities ⁽¹⁾	2,638,063	2,510,725
Commitments and contingencies (Note 21).....		
Redeemable noncontrolling interests.....	123,737	137,907
Stockholders' equity:		
Preferred stock, \$0.0001 par value—authorized, 200,000 shares as of December 31, 2017 and 2016; no shares issued and outstanding as of December 31, 2017 and 2016.....	—	—
Common stock, \$0.0001 par value—authorized, 2,000,000 shares as of December 31, 2017 and 2016; issued and outstanding, 107,350 and 104,321 shares as of December 31, 2017 and 2016, respectively.....	11	10
Additional paid-in capital.....	684,141	668,076
Accumulated other comprehensive income (loss).....	(4,113)	437
Retained earnings.....	131,959	4,438
Total stockholders' equity	811,998	672,961
Noncontrolling interests.....	354,076	251,225
Total equity	1,166,074	924,186
Total liabilities, redeemable noncontrolling interests and total equity	\$ 3,927,874	\$ 3,572,818

- (1) The Company's consolidated assets as of December 31, 2017 and 2016 include \$2,541,176 and \$2,065,232, respectively, in assets of variable interest entities, or "VIEs", that can only be used to settle obligations of the VIEs. Solar energy systems, net, as of December 31, 2017 and 2016 were \$2,385,329 and \$1,920,330, respectively; cash as of December 31, 2017 and 2016 were \$118,352 and \$120,728, respectively; restricted cash as of December 31, 2017 and 2016 were \$2,699 and \$1,680, respectively; accounts receivable, net as of December 31, 2017 and 2016 were \$30,200 and \$20,771, respectively; prepaid expenses and other current assets as of December 31, 2017 and 2016 were \$917 and \$242, respectively and other assets as of December 31, 2017 and 2016 were \$3,679 and \$1,481, respectively. The Company's consolidated liabilities as of December 31, 2017 and 2016 include \$674,564 and \$617,011, respectively, in liabilities of VIEs whose creditors have no recourse to the Company. These liabilities include accounts payable as of December 31, 2017 and 2016 of \$15,929 and \$14,873, respectively; distributions payable to noncontrolling interests and redeemable noncontrolling interests as of December 31, 2017 and 2016 of \$13,526 and \$10,654, respectively; accrued expenses and other liabilities as of December 31, 2017 and 2016 of \$4,896 and \$782, respectively; deferred revenue as of December 31, 2017 and 2016 of \$408,523 and \$422,685, respectively; deferred grants as of December 31, 2017 and 2016 of \$30,406 and \$109,034, respectively; and non-recourse debt as of December 31, 2017 and 2016 of \$201,284 and \$58,983, respectively.

The accompanying notes are an integral part of these consolidated financial statements.

Sunrun Inc.
Consolidated Statements of Operations
(In Thousands, Except Per Share Amounts)

	Year Ended December 31,		
	2017	2016	2015
Revenue:			
Operating leases and incentives.....	\$ 231,433	\$ 168,417	\$ 118,004
Solar energy systems and product sales	298,266	285,481	186,602
Total revenue	529,699	453,898	304,606
Operating expenses:			
Cost of operating leases and incentives	193,954	159,858	111,784
Cost of solar energy systems and product sales.....	254,131	239,381	168,751
Sales and marketing	137,115	162,781	145,477
Research and development	15,079	10,199	9,657
General and administrative	107,420	92,377	84,442
Amortization of intangible assets	4,204	4,206	3,695
Total operating expenses	711,903	668,802	523,806
Loss from operations.....	(182,204)	(214,904)	(219,200)
Interest expense, net.....	70,518	53,244	33,236
Other expenses (income), net	1,874	(840)	1,769
Loss before income taxes.....	(254,596)	(267,308)	(254,205)
Income tax expense (benefit)	32,138	35,993	(5,299)
Net loss.....	(286,734)	(303,301)	(248,906)
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	(411,259)	(394,988)	(220,660)
Net income (loss) attributable to common stockholders	\$ 124,525	\$ 91,687	\$ (28,246)
Less: Deemed dividend to convertible preferred stockholders.....	—	—	(24,890)
Net income (loss) available to common stockholders	\$ 124,525	\$ 91,687	\$ (53,136)
Net income (loss) per share available to common stockholders			
Basic	\$ 1.18	\$ 0.90	\$ (0.96)
Diluted	\$ 1.15	\$ 0.87	\$ (0.96)
Weighted average shares used to compute net income (loss) per share available to common stockholders			
Basic	105,432	102,367	55,091
Diluted	108,206	104,964	55,091

The accompanying notes are an integral part of these consolidated financial statements.

Sunrun Inc.
Consolidated Statements of Comprehensive Income (Loss)
(In Thousands)

	Year Ended December 31,		
	2017	2016	2015
Net income (loss) attributable to common stockholders	\$ 124,525	\$ 91,687	\$ (28,246)
Other comprehensive income (loss):			
Unrealized gain (loss) on derivatives, net of income taxes	(5,694)	335	(2,442)
Interest expense on derivatives recognized into earnings, net of income taxes	1,144	1,023	1,521
Comprehensive income (loss)	\$ 119,975	\$ 93,045	\$ (29,167)

The accompanying notes are an integral part of these consolidated financial statements.

Sunrun Inc.

Consolidated Statements of Redeemable Noncontrolling Interests and Stockholders' Equity
(In Thousands)

	Redeemable Noncontrolling Interests	Preferred Stock Shares	Amount	Common Stock Shares	Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Accumulated Deficit)	Total Shareholders' Equity	Noncontrolling Interests	Total Equity
Balance - January 1, 2015	\$ 135,948	54,841	\$ 5	24,249	\$ 2	\$ 383,860	\$ —	\$ (59,003)	\$ 324,864	\$ 91,755	\$ 416,619
Exercise of stock options	—	—	—	1,210	—	3,548	—	—	3,548	—	3,548
Issuance of restricted stock units, net of tax withholdings	—	—	—	182	—	(103)	—	—	(103)	—	(103)
Stock-based compensation	—	—	—	—	—	16,002	—	—	16,002	—	16,002
Contributions from noncontrolling interests and redeemable noncontrolling interests	128,466	—	—	—	—	—	—	—	—	147,238	147,238
Distributions to noncontrolling interests and redeemable noncontrolling interests	(12,924)	—	—	—	—	—	—	—	—	(17,193)	(17,193)
Issuance of shares due to business acquisition	—	—	—	1,660	—	19,148	—	—	19,148	—	19,148
Inducement shares issued to Series D and E preferred stockholders	—	—	—	1,668	1	23,348	—	—	23,349	—	23,349
Deemed dividend to Series D and E convertible preferred stockholders	—	—	—	—	—	(24,890)	—	—	(24,890)	—	(24,890)
Conversion of convertible preferred stock to common stock	—	(54,841)	(5)	54,841	5	—	—	—	—	—	—
Issuance of common stock in connection with underwritten public offering, net of issuance costs	—	—	—	17,482	2	221,316	—	—	221,318	—	221,318
Net loss	(104,351)	—	—	—	—	—	(921)	(28,246)	(28,246)	(116,309)	(144,555)
Other comprehensive loss, net of taxes	—	—	—	—	—	—	—	—	—	—	(921)
Balance - December 31, 2015	\$ 147,139	—	\$ —	101,282	\$ 10	\$ 642,229	\$ (921)	\$ (87,249)	\$ 554,069	\$ 105,491	\$ 659,560
Exercise of stock options	—	—	—	1,852	—	5,416	—	—	5,416	—	5,416
Issuance of restricted stock units, net of tax withholdings	—	—	—	422	—	(381)	—	—	(381)	—	(381)
Shares issued in connection with the Employee Stock Purchase Plan	—	—	—	515	—	2,432	—	—	2,432	—	2,432
Stock-based compensation	—	—	—	—	—	18,817	—	—	18,817	—	18,817
Contributions from noncontrolling interests and redeemable noncontrolling interests	123,023	—	—	—	—	—	—	—	—	450,519	450,519
Distributions to noncontrolling interests and redeemable noncontrolling interests	(13,605)	—	—	—	—	—	—	—	—	(28,447)	(28,447)
Offering costs in connection with underwritten public offering	—	—	—	—	—	(437)	—	—	(437)	—	(437)
Issuance of shares due to business acquisition in 2015	—	—	—	250	—	—	—	—	—	—	—
Net income (loss)	(118,650)	—	—	—	—	—	—	91,687	91,687	(276,338)	(184,651)
Other comprehensive income, net of taxes	—	—	—	—	—	—	1,358	—	1,358	—	1,358
Balance - December 31, 2016	\$ 137,907	—	\$ —	104,321	\$ 10	\$ 688,076	\$ 437	\$ 4,438	\$ 672,961	\$ 251,225	\$ 924,186
Cumulative effect of adoption of new ASUs	—	—	—	—	—	—	—	2,996	2,996	—	2,996
Exercise of stock options	—	—	—	686	—	1,984	—	—	1,984	—	1,984
Issuance of restricted stock units, net of tax withholdings	—	—	—	1,115	—	(3,569)	—	—	(3,569)	—	(3,569)
Shares issued in connection with the Employee Stock Purchase Plan	—	—	—	628	1	2,619	—	—	2,620	—	2,620
Stock-based compensation	—	—	—	—	—	22,088	—	—	22,088	—	22,088
Acquisition and deacquisition of noncontrolling interests, net of taxes	(37,919)	—	—	—	—	(7,057)	—	—	(7,057)	(2,351)	(9,408)
Contributions from noncontrolling interests and redeemable noncontrolling interests	128,052	—	—	—	—	—	—	—	—	469,617	469,617
Distributions to noncontrolling interests and redeemable noncontrolling interests	(14,769)	—	—	—	—	—	—	—	—	(42,690)	(42,690)
Issuance of shares due to business acquisition in 2015	—	—	—	600	—	—	—	—	—	—	—
Net income (loss)	(89,534)	—	—	—	—	—	(4,550)	124,525	124,525	(321,725)	(197,200)
Other comprehensive loss, net of taxes	—	—	—	—	—	—	—	—	(4,550)	—	(4,550)
Balance - December 31, 2017	\$ 123,737	—	\$ —	107,350	\$ 11	\$ 684,141	\$ (4,113)	\$ 131,959	\$ 811,998	\$ 354,076	\$ 1,166,074

The accompanying notes are an integral part of these consolidated financial statements

Sunrun Inc.
Consolidated Statements of Cash Flows
(In Thousands)

	Year Ended December 31,		
	2017	2016	2015
Operating activities:			
Net loss.....	\$ (286,734)	\$ (303,301)	\$ (248,906)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization, net of amortization of deferred grants.....	136,361	104,105	71,373
Deferred income taxes.....	32,138	35,993	(5,299)
Stock-based compensation expense.....	22,042	18,723	15,823
Noncash interest expense.....	17,150	13,441	6,997
Interest on lease pass-through financing obligations.....	11,973	12,081	11,959
Reduction in lease pass-through financing obligations.....	(18,230)	(18,551)	(16,780)
Other noncash losses and expenses.....	13,546	5,235	5,514
Changes in operating assets and liabilities:			
Accounts receivable.....	(17,870)	674	(15,517)
Inventories.....	(27,101)	4,042	(47,344)
Prepaid and other assets.....	(3,478)	(4,799)	(884)
Accounts payable.....	47,837	(40,336)	50,946
Accrued expenses and other liabilities.....	2,573	11,819	19,168
Deferred revenue.....	8,782	10,294	47,684
Net cash used in operating activities.....	(61,011)	(150,580)	(105,266)
Investing activities:			
Payments for the costs of solar energy systems, leased and to be leased.....	(804,371)	(727,568)	(594,887)
Purchases of property and equipment.....	(7,956)	(12,544)	(13,027)
Business acquisition, net of cash acquired.....	—	(5,000)	(19,575)
Net cash used in investing activities.....	(812,327)	(745,112)	(627,489)
Financing activities:			
Proceeds from state tax credits, net of recapture.....	13,773	9,081	4,685
Proceeds from issuance of recourse debt.....	170,400	458,400	495,985
Repayment of recourse debt.....	(167,400)	(411,400)	(348,224)
Proceeds from issuance of non-recourse debt.....	748,806	335,666	159,400
Repayment of non-recourse debt.....	(362,763)	(23,076)	(11,774)
Payment of debt fees.....	(14,392)	(13,741)	(14,798)
Proceeds from lease pass-through financing obligations.....	6,221	16,047	129,121
Repayment of lease pass-through financing obligations.....	—	—	(88,918)
Contributions received from noncontrolling interests and redeemable noncontrolling interests.....	594,921	573,542	275,704
Distributions paid to noncontrolling interests and redeemable noncontrolling interests.....	(54,530)	(39,542)	(28,737)
Acquisition of noncontrolling interests.....	(35,386)	—	—
Proceeds from exercises of stock options, net of withholding taxes on restricted stock units and issuance of shares in connection with the Employee Stock Purchase Plan.....	1,035	7,364	3,548
Proceeds received, net and (offering costs paid) related to initial public offering.....	—	(437)	222,078
Payment of capital lease obligations.....	(9,836)	(12,759)	(4,854)
Change in restricted cash.....	(21,350)	(953)	(8,751)
Net cash provided by financing activities.....	869,499	898,192	784,465
Net change in cash.....	(3,839)	2,500	51,710
Cash, beginning of period.....	206,364	203,864	152,154
Cash, end of period.....	\$ 202,525	\$ 206,364	\$ 203,864
Supplemental disclosures of cash flow information			
Cash paid for interest.....	\$ 42,194	\$ 26,191	\$ 11,954
Cash paid for taxes.....	\$ —	\$ —	\$ —
Supplemental disclosures of noncash investing and financing activities			
Purchases of solar energy systems and property and equipment included in accounts payable and accrued expense.....	\$ 19,625	\$ 18,547	\$ 15,850
Purchases of solar energy systems included in non-recourse debt.....	\$ 12,873	\$ —	\$ —
Distributions payable to noncontrolling interests and redeemable noncontrolling interest.....	\$ 13,583	\$ 10,654	\$ 8,144
Vehicles acquired under capital lease.....	\$ 650	\$ 12,961	\$ 21,556
Noncash purchase consideration on acquisition of business.....	\$ —	\$ —	\$ 18,718
Deemed dividend on Series D and E preferred shares.....	\$ —	\$ —	\$ 24,890
Offering costs prepaid in prior year.....	\$ —	\$ —	\$ 760

The accompanying notes are an integral part of these consolidated financial statements.

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

Note 1. Organization

Sunrun Inc. (“Sunrun” or the “Company”) was originally formed in 2007 as a California limited liability company, and was converted into a Delaware corporation in 2008. The Company is engaged in the design, development, installation, sale, ownership and maintenance of residential solar energy systems (“Projects”) in the United States.

Sunrun acquires customers directly and through relationships with various solar and strategic partners (“Partners”). The Projects are constructed either by Sunrun or by Sunrun’s Partners and are owned by the Company. Sunrun’s customers enter into a power purchase agreement (“PPA”) or a lease (each, a “Customer Agreement”) which typically has a term of 20 years. Sunrun monitors, maintains and insures the Projects. The Company also sells solar energy systems and products, such as panels and racking and solar leads generated to customers.

The Company has formed various subsidiaries (“Funds”) to finance the development of Projects. These Funds, structured as limited liability companies, obtain financing from outside investors and purchase or lease Projects from Sunrun under master purchase or master lease agreements. The Company currently utilizes three legal structures in its investment Funds, which are referred to as: (i) lease pass-throughs, (ii) partnership-flips and (iii) joint venture (“JV”) inverted leases.

Sunrun acquired Clean Energy Experts, LLC (“CEE”), a consumer demand and solar lead generation company, in April 2015, to support the growth of the business, including reducing costs of obtaining customer leads externally. As a result of the acquisition, the Company also sells a portion of solar leads generated to customers.

The Company completed its initial public offering in August 2015 and its common stock is listed on the NASDAQ Global Select Market under the symbol “RUN”.

Note 2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) and reflect the accounts and operations of the Company and those of its subsidiaries, including Funds, in which the Company has a controlling financial interest. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity. However, a controlling financial interest may also exist in entities, such as variable interest entities (“VIEs”), through arrangements that do not involve controlling voting interests. In accordance with the provisions of Financial Accounting Standards Board (“FASB”) Accounting Standards Codification Topic 810 (“ASC 810”) *Consolidation*, the Company consolidates any VIE of which it is the primary beneficiary. The primary beneficiary, as defined in ASC 810, is the party that has (1) the power to direct the activities of a VIE that most significantly impact the VIE’s economic performance and (2) the obligation to absorb the losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. The Company evaluates its relationships with its VIEs on an ongoing basis to determine whether it continues to be the primary beneficiary. The consolidated financial statements reflect the assets and liabilities of VIEs that are consolidated. All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates

The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. The Company regularly makes significant estimates and assumptions, including, but not limited to, the estimates that affect the collectability of accounts receivable, the valuation of inventories, the useful lives of solar energy systems, the useful lives of property and equipment, the valuation and useful lives of intangible assets, the fair value of assets acquired and liabilities assumed in business combinations, the effective interest rate used to amortize lease pass-through financing obligations, the fair value used to value solar energy systems, the valuation of stock-based compensation, the determination of valuation allowances associated with deferred tax assets, the fair value of debt instruments disclosed and the redemption value of redeemable noncontrolling interests. The

Notes to Consolidated Financial Statements — Continued

Company bases its estimates on historical experience and on various other assumptions believed to be reasonable. Actual results may differ from such estimates.

Segment Information

The Company has one operating segment with one business activity, providing solar energy services and products to customers. The Company's chief operating decision maker ("CODM") is its Chief Executive Officer, who manages operations on a consolidated basis for purposes of allocating resources. When evaluating performance and allocating resources, the CODM reviews financial information presented on a consolidated basis.

Revenues from external customers (including, but not limited to homeowners) for each group of similar products and services are as follows (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Operating leases	\$ 174,664	\$ 125,197	\$ 86,332
Incentives.....	56,769	43,220	31,672
Operating leases and incentives.....	231,433	168,417	118,004
Solar energy systems.....	113,953	127,727	50,191
Products.....	184,313	157,754	136,411
Solar energy systems and product sales	298,266	285,481	186,602
Total revenue	<u>\$ 529,699</u>	<u>\$ 453,898</u>	<u>\$ 304,606</u>

Cash

Cash consists of bank deposits held in checking and savings accounts. The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. The Company has exposure to credit risk to the extent cash balances exceed amounts covered by federal deposit insurance. The Company believes that its credit risk is not significant.

Restricted Cash

Restricted cash represents amounts related to replacement of solar energy system components and obligations under certain financing transactions.

Accounts Receivable

Accounts receivable consist of amounts due from customers as well as state and utility rebates due from government agencies and utility companies. Under arrangements with customers, the customers typically assign incentive rebates to the Company.

Accounts receivable are recorded at net realizable value. The Company maintains allowances for the applicable portion of receivables when collection becomes doubtful. The Company estimates anticipated losses from doubtful accounts based upon the expected collectability of all accounts receivables, which takes into account the number of days past due, collection history, identification of specific customer exposure, and current economic trends. Once a receivable is deemed to be uncollectible, it is written off. In 2017, 2016 and 2015, the Company recorded provision for bad debt expense of \$2.1 million, \$1.4 million and \$2.0 million, respectively, and wrote-off uncollectible receivables of \$1.6 million, \$1.8 million and \$1.1 million, respectively.

Notes to Consolidated Financial Statements — Continued

Accounts receivable, net consists of the following (in thousands):

	December 31,	
	2017	2016
Customer receivables.....	\$ 68,243	\$ 50,811
Customer deposits	7,427	5,793
Other receivables	751	856
Rebates receivable.....	1,442	3,964
Allowance for doubtful accounts	(1,665)	(1,166)
Total.....	<u>\$ 76,198</u>	<u>\$ 60,258</u>

State Tax Credits Receivable

State tax credits receivable are recognized upon submission of the state income tax return.

Inventories

Inventories are stated at the lower of cost or net realizable value on a first-in, first-out basis. Inventories consist of raw materials such as photovoltaic panels, inverters and mounting hardware as well as miscellaneous electrical components that are sold as-is by the distribution operations and used in installations and work-in-process. Work-in-process primarily relates to solar energy systems that will be sold to customers, which are partially installed and have yet to pass inspection by the responsible city or utility department. For solar energy systems where the Company performs the installation, the Company commences transferring component parts from inventories to construction-in-progress, a component of solar energy systems, once a lease contract with a lease customer has been executed and the component parts have been assigned to a specific project. Additional costs incurred including labor and overhead are recorded within construction in progress.

The Company periodically reviews inventories for unusable and obsolete items based on assumptions about future demand and market conditions. Based on this evaluation, provisions are made to write inventories down to their market value.

Solar Energy Systems, net

The Company records solar energy systems leased to customers and solar energy systems that are under installation as solar energy systems, net on its consolidated balance sheet. Solar energy systems, net is comprised of system equipment costs and initial direct costs related to solar energy systems, less accumulated depreciation and amortization. Depreciation on solar energy systems is calculated on a straight-line basis over the estimated useful lives of the systems of 35 years. Prior to the fourth quarter of 2016, the Company calculated depreciation on solar energy systems on a straight-line basis to their estimated residual values over the estimated useful lives of systems, which was expected to be 20 years. The Company revised the estimated useful life of solar energy systems in the fourth quarter of 2016, as the Company reviewed its assumptions and concluded that customers are more likely to renew their lease rather than purchase the solar energy system at the end of the lease term. The impact of the change in estimate was immaterial for 2016 and future periods. The Company periodically reviews its estimated useful life and recognizes changes in estimates by prospectively adjusting depreciation expense. Inverters and batteries are depreciated over their estimated useful life of 10 years.

Solar energy systems under construction will be depreciated as solar energy systems leased to customers when the respective systems are completed and interconnected.

Initial direct costs from the origination of Customer Agreements are capitalized and amortized over the initial term of the related Customer Agreement and are included within solar energy systems, net in the consolidated balance sheets. Amortization of these costs is recorded in cost of operating leases and incentives in the accompanying consolidated statements of operations.

On January 1, 2018, we will no longer classify and account for our Customer Agreements as operating leases. Instead, we will account for our Customer Agreements pursuant to ASU No. 2014-09 *Revenue from Contracts with Customers* ("Topic 606"). Upon adoption of Topic 606, we will no longer record IDCs. Instead, we

Notes to Consolidated Financial Statements — Continued

will record costs to obtain a contract in other assets on the consolidated balance sheets, and amortize the balance over the term of the Customer Agreements which will be recorded in future periods to sales and marketing expense on the consolidated statements of operations. The difference in the cumulative amount as of January 1, 2018 is not expected to be material.

Property and Equipment, net

Property and equipment, net consists of leasehold improvements, furniture, computer hardware and software, machinery and equipment and automobiles. All property and equipment are stated at historical cost net of accumulated depreciation. Repairs and maintenance are expensed as incurred.

Property and equipment is depreciated on a straight-line basis over the following periods:

Leasehold improvements.....	Lesser of 6 years or lease term
Furniture	5 years
Computer hardware and software....	3 years
Machinery and equipment	5 years or lease term
Automobiles	Lease term

Capitalization of Software Costs

For costs incurred in the development of internal use software, the Company capitalizes costs incurred during the application development stage. Costs related to preliminary project activities and post implementation activities are expensed as incurred. Internal use software is amortized on a straight-line basis over its estimated useful life. We capitalized additional costs of \$6.1 million, \$4.9 million and \$8.3 million in 2017, 2016 and 2015, respectively.

Intangible Assets, net

Finite-lived intangible assets are initially recorded at fair value and presented net of accumulated amortization. Intangible assets are amortized on a straight-line basis over their estimated useful lives as follows:

Customer relationships.....	6-10 years
Developed technology	5 years
Trade names.....	5-8 years

Impairment of Long-Lived Assets

The carrying amounts of the Company's long-lived assets, including solar energy systems and intangible assets subject to depreciation and amortization, are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful life is shorter than originally estimated. Factors that are considered in deciding when to perform an impairment review would include significant negative industry or economic trends and significant changes or planned changes in the use of the assets. Recoverability of these assets is measured by comparison of the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate over its remaining life. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. If the useful life is shorter than originally estimated, the Company amortizes the remaining carrying value over the new shorter useful life. No impairment of long-lived assets has been recorded for the years ended December 31, 2017, 2016 and 2015.

Notes to Consolidated Financial Statements — Continued

Business Combinations

Acquisitions of entities that meet the definition of a business are accounted for as business combinations in accordance with ASC 805, *Business Combinations*. The Company records assets acquired and liabilities assumed based on their estimated fair values at the acquisition date. The excess of the purchase price over those fair values is recorded as goodwill. Acquisition-related expenses are expensed as incurred.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of assets acquired and liabilities assumed. Goodwill is reviewed for impairment at least annually or whenever events or changes in circumstances indicate that the carrying amount may be impaired. The Company has determined that it operates as one reporting unit and the Company's goodwill is recorded at the enterprise level. The Company performs its annual impairment test of goodwill on October 1 of each fiscal year or whenever events or circumstances change or occur that would indicate that goodwill might be impaired. When assessing goodwill for impairment, the Company uses qualitative and if necessary, quantitative methods in accordance with FASB ASC Topic 350, *Goodwill*. The Company also considers its enterprise value and if necessary, discounted cash flow model, which involves assumptions and estimates, including the Company's future financial performance, weighted average cost of capital and interpretation of currently enacted tax laws.

Circumstances that could indicate impairment and require the Company to perform a quantitative impairment test include a significant decline in the Company's financial results, a significant decline in the Company's enterprise value relative to its net book value, an unanticipated change in competition or the Company's market share and a significant change in the Company's strategic plans.

Deferred Revenue

Deferred revenue consists of amounts for which the criteria for revenue recognition have not yet been met and includes a) amounts that are collected from customers, including upfront deposits and lease prepayments; b) rebates and incentives received and receivables from utility companies and various local and state government agencies; c) amounts related to investment tax credits ("ITC") that the Company monetized in connection with its lease-pass through financing obligations; and d) amounts received related to the sales of solar renewable energy credits ("SRECs").

Deferred revenue consists of the following (in thousands):

	December 31,	
	2017	2016
Customer payments	\$ 436,859	\$ 400,233
Rebates and incentives	108,823	110,576
ITCs	85,602	121,004
SRECs	30,453	22,437
Total	<u>\$ 661,737</u>	<u>\$ 654,250</u>

Deferred Grants

Deferred grants consist of U.S. Treasury grants and state tax credits. The Company applied for a renewable energy technologies income tax credit offered by one of the states in the form of a cash payment and deferred the tax credit as a grant on the consolidated balance sheets. The Company records the grants as deferred grants and recognizes the benefit on a straight-line basis over the estimated depreciable life of the associated assets as a reduction in cost of operating leases and incentives. As described in the Solar Energy Systems, net section above, the estimated depreciable life of the associated assets was revised from 20 to 35 years in 2016.

Notes to Consolidated Financial Statements — Continued**Warranty Accrual**

The Company accrues warranty costs when revenue is recognized for solar energy systems sales, based on the estimated future costs of meeting its warranty obligations. Warranty costs primarily consist of replacement costs for supplies and labor costs for service personnel since warranties for equipment and materials are covered by the original manufacturer's warranty (other than a small deductible in certain cases). As such, the warranty reserve is immaterial in all periods presented. The Company makes and revises these estimates based on the number of solar energy systems under warranty, the Company's historical experience with warranty claims, assumptions on warranty claims to occur over a systems' warranty period and the Company's estimated replacement costs.

Solar Energy Performance Guarantees

The Company guarantees to customers certain specified minimum solar energy production output for solar facilities over the initial term of the Customer Agreements. The Company monitors the solar energy systems to determine whether these specified minimum outputs are being achieved. If the Company determines that the guaranteed minimum energy output is not achieved, it records a liability for the estimated amounts payable. The liability, which is included as accrued expenses and other liabilities in the consolidated balance sheets is immaterial in all periods presented.

Derivative Financial Instruments

The Company recognizes all derivative instruments on the balance sheet at their fair value. Changes in the fair value of derivatives are recorded each period in current earnings or other comprehensive loss if a derivative is designated as part of a hedge transaction. The ineffective portion of the hedge, if any, is immediately recognized in earnings and are included in other expenses (income), net in the consolidated statements of operations.

Beginning in 2015, the Company uses derivative financial instruments, primarily interest rate swaps, to manage its exposure to interest rate risks on its syndicated term loans, which are recognized on the balance sheet at their fair values. On the date that the Company enters into a derivative contract, the Company formally documents all relationships between the hedging instruments and the hedged items, as well as its risk management objective and strategy for undertaking each hedge transaction. Derivative instruments designated in a hedge relationship to mitigate exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges. Cash flow hedges are accounted for by recording the fair value of the derivative instrument on the balance sheet as either a freestanding asset or liability. Changes in the fair value of a derivative that is designated and qualifies as an effective cash flow hedge are recorded in accumulated other comprehensive loss, net of tax, until earnings are affected by the variability of cash flows of the hedged item. Any derivative gains and losses that are not effective in hedging the variability of expected cash flows of the hedged item or that do not qualify for hedge accounting treatment are recognized directly into income. At the hedge's inception and at least quarterly thereafter, a formal assessment is performed to determine whether changes in cash flows of the derivative instrument have been highly effective in offsetting changes in the cash flows of the hedged items and whether they are expected to be highly effective in the future. The Company discontinues hedge accounting prospectively when (i) it determines that the derivative is no longer effective in offsetting changes in the cash flows of a hedged item; (ii) the derivative expires or is sold, terminated, or exercised; or (iii) management determines that designating the derivative as a hedging instrument is no longer appropriate. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, the derivative instrument is carried at its fair market value on the balance sheet with the changes in fair value recognized in current period earnings. The remaining balance in accumulated other comprehensive loss associated with the derivative that has been discontinued is not recognized in the income statement unless it is probable that the forecasted transaction will not occur. Such amounts are recognized in earnings when earnings are affected by the hedged transaction.

The Company recognized warrants with former preferred stockholders as an inducement to convert their shares of convertible preferred stock into shares of common stock immediately prior to the Company's initial public offering as derivative liabilities. Such liabilities were valued when the financial instruments were initially issued, with the change in their respective fair values recorded as a gain or loss on revaluation within other expenses (income), net in the Company's statement of operations. The Company determines the fair value of its warrant derivative liabilities using the Black-Scholes option-pricing model.

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

Fair Value of Financial Instruments

The Company defines fair value as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Company uses valuation approaches to measure fair value that maximize the use of observable inputs and minimize the use of unobservable inputs. The FASB establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

- Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;
- Level 2—Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and
- Level 3—Inputs that are unobservable, significant to the measurement of the fair value of the assets or liabilities and are supported by little or no market data.

The Company's financial instruments include cash, receivables, accounts payable, accrued expenses, distributions payable to noncontrolling interests, derivatives, and recourse and non-recourse debt.

Revenue Recognition

The Company recognizes revenue when (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred or services have been rendered, (iii) the sales price is fixed and determinable, and (iv) collection of the related receivable is reasonably assured.

Operating leases and incentives

Operating leases and incentives revenue is primarily comprised of revenue from Customer Agreements, revenue from solar energy system rebate incentives, revenue associated with ITCs assigned to investment funds that are classified as lease pass-through arrangements and revenue from the sales of SRECs generated by the Company's solar energy systems to third parties.

The Company begins to recognize revenue on Customer Agreements when permission to operate ("PTO") is given by the local utility company or on the date daily operation commences if utility approval is not required. The Company recognizes revenue on a straight-line basis over the initial term of the Customer Agreements (typically 20 years) that have minimum lease payments, or as earned when the customers are billed based on the actual electricity generated at a specific rate under the terms of the Customer Agreements.

The Company considers upfront rebate incentives received from states and utilities for solar energy systems subject to Customer Agreements to be minimum lease payments. Rebate revenue is recognized on a straight-line basis over the life of the initial contract term of the Customer Agreement beginning when a PTO letter is issued by the local utility company or on the date daily operation commences if utility approval is not required.

The Company monetizes the ITCs associated with the leased systems on its lease pass-through financing obligations by assigning them to the investor together with the future customer lease payments. A portion of the cash consideration received from the investors is allocated to the estimated fair value of the assigned ITCs upon the PTO dates of the leased systems, as discussed below. The estimated fair value of the ITCs is determined by applying the expected internal rate of return to the investor on this structure to the gross amount of the ITCs that may be claimed by the investor.

The ITCs are subject to recapture under the Code if the underlying solar energy system either ceases to be a qualifying property or undergoes a change in ownership within five years of its placed in service date. The recapture amount decreases by 20% on each anniversary of the PTO date. As the Company has an obligation to ensure the solar energy systems is in service and operational for a term of five years to avoid any recapture of the ITCs, the Company recognizes revenue as the recapture provisions lapse assuming the other aforementioned revenue recognition criteria have been met. The portion of monetized ITCs are reclassified to deferred revenue from lease

Notes to Consolidated Financial Statements — Continued

pass-through financing obligation on the consolidated balance sheets when the leased systems are granted PTO. Subsequently, one-fifth of the monetized ITCs are recognized as revenue in the consolidated statements of operations on each anniversary of the solar energy systems' PTO date over the following five years.

SREC revenue arises from the sale of environmental credits generated by solar energy systems. SREC revenue is recorded in operating leases and incentives revenue. We recognize revenue related to the sale of SRECs to the extent the cumulative value of delivered SRECs per contract exceeds any possible liquidated damages for non-delivery, if any.

The Company has determined that Customer Agreements are operating leases as opposed to capital leases pursuant to ASC 840, *Leases*. The initial lease term of Customer Agreements is 20 years. Since the estimated economic life of solar energy systems is estimated to be at least 35 years, the lease term is less than 75% of its estimated economic life. Additionally, the Company evaluated the following lease classification criteria: (i) whether there is a transfer of ownership or bargain purchase option at the end of the lease and (ii) whether the present value of minimum lease payments exceeds 90% of the fair value at lease inception and determined that these criteria were not met.

Pursuant to our early adoption of ASC 842, *Leases* ("ASC 842"), our Customer Agreements will no longer meet the criteria for lease accounting. Instead, we will account for our Customer Agreements pursuant to Topic 606. See discussion under "Recently Issued and Adopted Accounting Standards" below.

Solar energy systems and product sales

For solar energy systems sold to customers, the Company recognizes revenue when the solar energy system passes inspection by the authority having jurisdiction, provided all other revenue recognition criteria have been met. The Company's installation projects are typically completed in a short period of time.

Product sales consist of solar panels, racking systems, inverters, other solar energy products sold to resellers and customer leads. Product sales revenue is recognized at the time when title is transferred, generally upon shipment. Shipping and handling fees charged to customers are included in net sales. Total shipping and handling fees charged to customers was \$3.7 million for the year ended December 31, 2017 and \$2.6 million for the years ended December 31, 2016 and 2015. Volume discounts given to customers are recorded as a reduction of revenue, since the Company does not receive goods or services in exchange for the discounts offered. Customer lead revenue, included in product sales, is recognized at the time the lead is delivered.

Taxes assessed by government authorities that are directly imposed on revenue producing transactions are excluded from product revenue.

Cost of Revenue**Operating leases and incentives**

Cost of revenue for operating leases and incentives is primarily comprised of the (1) depreciation of the cost of the solar energy systems, as reduced by amortization of deferred grants, (2) amortization of initial direct costs, (3) lease operations, monitoring and maintenance costs including associated personnel costs, and (4) allocated corporate overhead costs.

Solar energy systems and product sales

Cost of revenue for solar energy systems and non-lead generation product sales consist of direct and indirect material and labor costs for solar energy systems installations and product sales. Also included are engineering and design costs, estimated warranty costs, freight costs, allocated corporate overhead costs, vehicle depreciation costs and personnel costs associated with supply chain, logistics, operations management, safety and quality control. Cost of revenue for lead generations consists of costs related to direct-response advertising activities associated with generating customer leads.

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

Research and Development Expense

Research and development expenses include personnel costs, allocated overhead costs, and other costs related to the development of our proprietary technology.

Advertising Costs

Advertising costs are expensed as incurred in the consolidated statements of operations. The Company incurred advertising costs of \$18.6 million, \$30.2 million and \$34.8 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Stock-Based Compensation

The Company grants stock options and restricted stock units (“RSUs”) for its equity incentive plan and employee stock purchase plan. Stock-based compensation to employees is measured based on the grant date fair value of the awards and recognized over the period during which the employee is required to perform services in exchange for the award (generally the vesting period of the award). The Company estimates the fair value of stock options and employee stock purchase plans awards granted using the Black-Scholes option-valuation model. Compensation cost is recognized over the vesting period of the applicable award using the straight-line method for those options expected to vest.

The Company also grants RSUs to non-employees that vest upon the satisfaction of both performance and service conditions. For RSUs granted to non-employees that vest upon the satisfaction of a performance condition, the Company starts recognizing expense on the RSUs when the performance condition is met.

Noncontrolling Interests and Redeemable Noncontrolling Interests

Noncontrolling interests represent investors’ interests in the net assets of the Funds that the Company has created to finance the cost of its solar energy systems subject to the Company’s Customer Agreements. The Company has determined that the contractual provisions in the funding arrangements represent substantive profit sharing arrangements. The Company has further determined that the appropriate methodology for attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests each period is a balance sheet approach referred to as the hypothetical liquidation at book value (“HLBV”) method.

Under the HLBV method, the amounts of income and loss attributed to the noncontrolling interests and redeemable noncontrolling interests in the consolidated statements of operations reflect changes in the amounts the investors would hypothetically receive at each balance sheet date under the liquidation provisions of the contractual agreements of these arrangements, assuming the net assets of these funding structures were liquidated at recorded amounts. The Company’s initial calculation of the investor’s noncontrolling interest in the results of operations of these funding arrangements is determined as the difference in the noncontrolling interests’ claim under the HLBV method at the start and end of each reporting period, after taking into account any capital transactions, such as contributions or distributions, between the Fund and the investors.

The Company classifies certain noncontrolling interests with redemption features that are not solely within the control of the Company outside of permanent equity on its consolidated balance sheets. Redeemable noncontrolling interests are reported using the greater of their carrying value as determined by the HLBV method or their estimated redemption value at each reporting date.

Income Taxes

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements and tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are provided against deferred tax assets to the extent that it is more likely than not that the deferred tax asset will not be realized. The Company is subject to the provisions of ASC 740, *Income Taxes*, which establishes consistent thresholds as it relates to accounting for income taxes. It defines the threshold for recognizing the benefits of tax return positions in the financial statements as “more likely than not” to be

Notes to Consolidated Financial Statements — Continued

sustained by the taxing authority and requires measurement of a tax position meeting the more-likely-than-not criterion, based on the largest benefit that is more than 50% likely to be realized. Management has analyzed the Company's inventory of tax positions with respect to all applicable income tax issues for all open tax years (in each respective jurisdiction).

The Company sells solar energy systems to the Funds. As the Funds are consolidated by the Company, the gain on the sale of the solar energy systems is not recognized in the consolidated financial statements. However, this gain is recognized for tax reporting purposes. Since these transactions are intercompany sales, prior to January 1, 2017, any tax expense incurred related to these intercompany sales is deferred and recorded as a prepaid tax asset and amortized over the depreciable life of the underlying solar energy systems which has been estimated to be 35 years in accordance with ASC Topic 810. With the adoption of ASU 2016-16 on January 1, 2017, we eliminated the prepaid tax asset and recorded the deferred tax effects of previous transactions. Beginning on January 1, 2017, we began recording the current tax effects of the gain on intercompany sales as well as the related deferred tax effects.

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal, state and local jurisdictions, where applicable. The statute of limitations for the tax returns varies by jurisdiction.

Concentrations of Risk

Financial instruments which potentially subject the Company to concentrations of credit risk consist primarily of cash and accounts receivable, which includes rebates receivable. The associated risk of concentration for cash is mitigated by banking with institutions with high credit ratings. At certain times, amounts on deposit exceed Federal Deposit Insurance Corporation insurance limits. The Company does not require collateral or other security to support accounts receivable. To reduce credit risk, management performs periodic credit evaluations and ongoing evaluations of its customers' financial condition. Rebates receivable are due from various states and local governments as well as various utility companies. The Company considers the collectability risk of such amounts to be low. The Company is not dependent on any single customer. The Company's customers under Customer Agreements are primarily located in California, Arizona, New Jersey, Hawaii, New York and Massachusetts. The loss of a customer would not adversely impact the Company's operating results or financial position. The Company depends on a limited number of suppliers of solar panels and other system components. During the years ended December 31, 2017 and 2016, the solar materials purchases from the top five suppliers were approximately \$188.8 million and \$184.9 million, respectively.

Recently Issued and Adopted Accounting Standards

In May 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-09 *Revenue from Contracts with Customers* (Topic 606). The standard establishes a single revenue recognition model for all contracts with customers, eliminates industry specific requirements, and expands disclosure requirements. This ASU is effective for the Company for annual reporting periods beginning after December 15, 2017 including the interim reporting periods within that fiscal year. Adoption of this ASU is either retrospective to each prior period presented or retrospective with a cumulative adjustment to retained earnings or accumulated deficit as of the adoption date. The Company plans to adopt this ASU using the modified retrospective method with a cumulative adjustment to retained earnings as of January 1, 2018 unless it is unable to adopt ASC 842 based on the proposed amendments to the new leases guidance as discussed below.

In February 2016, the FASB issued ASU No. 2016-02 to replace existing lease guidance with ASC 842. ASC 842 changes how the definition of a lease is applied and judgment may be required in applying the definition of a lease to certain arrangements. The new standard will result in certain contracts no longer being leases. For lessees, the standard requires all leases with an initial term greater than one year be recorded on the balance sheet as an asset and a lease liability. This ASU is effective for fiscal years beginning after December 15, 2018 and interim periods within those fiscal years. Early adoption is permitted. The FASB proposed amendments to the new leases guidance to allow entities to elect a simplified transition approach which allows adoption without adjusting the comparative periods presented. The Company's decision to early adopt is pending finalization of the proposed amendments.

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

Upon the adoption of ASC 842, our Customer Agreements will be accounted for under Topic 606 due to changes in the definition of a lease under ASC 842.

Under Topic 606, total consideration for Customer Agreements, including price escalators and performance guarantees, will be estimated and recognized over the term of the Customer Agreement. Customer Agreements and SRECs with a prepaid element will be deemed to include a significant financing component, as defined under Topic 606, which will increase both revenue and interest expense. For lease pass-through funds which report ITC revenue, the ITC revenue will be recognized in full at PTO. SREC revenues will be estimated net of any variable consideration related to possible liquidated damages, and recognized upon delivery of SRECs to the counterparty. Therefore, for some revenue recognized in recent periods, or not yet recognized, the recognition timing will move to periods preceding the reported periods and be reflected in retained earnings upon adoption of Topic 606. The accounting is not expected to materially differ for revenue currently recognized as "Solar energy systems and product sales."

The Company is continuing to assess the specific dollar impact of such changes to periods prior to 2018.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation – Stock Compensation*. The new guidance requires all income tax effects of awards to be recognized in the income statement when the awards vest or are settled. It also requires the Company to make an accounting policy election to either estimate the number of awards that are expected to vest or account for forfeitures as they occur. The Company adopted the new ASU effective January 1, 2017. The Company elected to continue to estimate the number of awards that are expected to vest. Upon the adoption, deferred tax liabilities decreased by \$3.3 million, and retained earnings increased by \$3.3 million as of January 1, 2017.

In June 2016, the FASB issued ASU No. 2016-13, *Measurement of Credit Losses on Financial Instruments*, which replaces the current incurred loss impairment methodology with a current expected credit losses model. The amendment applies to entities which hold financial assets and net investment in leases that are not accounted for at fair value through net income as well as loans, debt securities, trade receivables, net investments in leases, off-balance sheet credit exposures, reinsurance receivables and any other financial assets not excluded from the scope that have the contractual right to receive cash. This ASU is effective for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years. Early adoption is permitted. Adoption of this ASU is applied using a modified retrospective approach, with certain aspects requiring a prospective approach. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements.

In October 2016, the FASB issued ASU 2016-16, *Intra-Entity Transfers of Assets Other Than Inventory*, which requires entities to recognize income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. As a result, a reporting entity will recognize the tax expense from the sale of assets in the seller's tax jurisdiction when the transfer occurs, even though the pre-tax effects of the transaction are eliminated in the consolidated financial statements. Any deferred tax asset that arises in the buyer's jurisdiction will also be recognized at the time of the transfer. The Company adopted the standard effective January 1, 2017. As the Company sells solar energy systems to Funds, the Company will record the current tax effects of the gain on such sales as well as a deferred tax asset related to the Company's increased tax basis in the partnership as a result of such sales. As a result of the adoption, the Company reversed net prepaid tax assets of \$378.5 million, recognized gross deferred tax assets of \$378.2 million and recorded a cumulative adjustment decreasing retained earnings by \$0.3 million as of January 1, 2017.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230), Restricted Cash*, which requires a statement of cash flows to present the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash and restricted cash equivalents. This ASU is effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years. Early adoption is permitted. Adoption of this ASU is applied using a retrospective approach. As a result, the Company will no longer present transfers between cash and restricted cash in the consolidated cash flow statements upon adoption in the first quarter of 2018.

In January 2017, the FASB issued ASU 2017-01, *Business Combinations (Topic 805), Clarifying the Definition of a Business*, to clarify the definition of a business with the objective of adding guidance to assist entities with

Notes to Consolidated Financial Statements — Continued

evaluating whether transactions should be accounted for as acquisitions of assets or businesses. The amendments in this update provide a screen to determine when a set of operations is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. This screen reduces the number of transactions that need to be further evaluated. The Company early adopted the new ASU effective January 1, 2017 on a prospective basis.

In January 2017, the FASB issued ASU 2017-04, *Intangibles – Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment*, which eliminates Step 2 from the goodwill impairment test. Instead, under this amendment, an entity shall perform its annual, or interim, goodwill impairment test by comparing the fair value of the reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. The ASU is effective for annual or any interim goodwill impairment tests beginning in fiscal years after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company has adopted the new ASU, and the adoption of this standard would only have an effect on the Company's consolidated financial statements if it failed Step 1 of the goodwill impairment test, which did not occur in 2017.

In May 2017, the FASB issued ASU 2017-09, *Compensation – Stock Compensation, Scope of Modification Accounting*, which requires entities to apply modification accounting guidance when there are changes in the terms or conditions of a share-based payment award unless all of the following conditions are met: (i) the fair value of the modified award is the same as the fair value of the original award immediately before modification, (ii) the vesting conditions of the modified award are the same as the original award immediately before modification, and (iii) the classification of the modified award is the same as the original award immediately before modification. The Company early adopted the new ASU effective April 1, 2017, on a prospective basis.

In August 2017, the FASB issued 2017-12, *Derivatives and Hedging, Targeted Improvements to Accounting for Hedging Activities*, which expands an entity's ability to hedge nonfinancial and financial risk components, eliminates the requirement to separately measure and report hedge ineffectiveness, and aligned the recognition and presentation of the effects of hedging instruments in the financial statements. The ASU is effective for fiscal years beginning after December 15, 2018 and interim periods within those fiscal years. Early adoption is permitted. Adoption of this ASU is applied using a modified retrospective approach. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements.

Note 3. Acquisition**Clean Energy Experts, LLC**

In April 2015, the Company acquired Clean Energy Experts, LLC, a consumer demand and solar lead generation company, for \$25.0 million in cash and 1.9 million shares of common stock valued at \$19.1 million, net of settlement of a preexisting payable to CEE. Of this amount, \$15.0 million in cash was paid and 1.4 million shares were issued in April 2015. The remaining \$10.0 million in cash and 500,000 shares were paid and issued as follows: \$5.0 million was paid and 250,000 shares were issued in October 2015 and \$5.0 million was paid and 250,000 shares were issued in April 2016. An additional \$8.8 million in cash and 599,999 shares of common stock were issued on April 1, 2017 due to the achievement of certain sales targets as well as continued employment of certain key employees acquired in the transaction, which was recorded as compensation expense. The acquisition is expected to enhance the Company's efficient and consistent access to high-quality leads in existing and new markets.

The Company has included the results of operations of the acquired business in the consolidated statements of operations from the acquisition date. The assets acquired and liabilities assumed in the CEE acquisition have been recorded based on their fair value at the acquisition date. Goodwill represents the excess of the purchase price over the net tangible and intangible assets acquired and is not deductible for tax purposes. Goodwill recorded is primarily attributable to the acquired assembled workforce and the synergies expected to arise after the CEE acquisition. Transaction costs related to the acquisition were expensed as incurred.

For the year ending December 31, 2015, the contribution of the acquired business to the Company's total revenues was \$16.9 million, as measured from the date of the acquisition. The portion of total expenses and net

Notes to Consolidated Financial Statements — Continued

income associated with the acquired business was not separately identifiable due to the integration with the Company's operations.

Note 4. Fair Value Measurement

At December 31, 2017 and 2016, the carrying value of receivables, accounts payable, accrued expenses and distributions payable to noncontrolling interests approximates fair value due to their short-term nature. The carrying values and fair values of debt instruments are as follows (in thousands):

	December 31, 2017		December 31, 2016	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Bank line of credit.....	\$ 247,000	\$ 247,000	\$ 244,000	\$ 244,000
Senior debt.....	808,455	807,698	442,420	441,657
Subordinated debt.....	111,488	111,095	42,985	42,986
Securitization debt.....	95,821	96,999	101,298	102,869
Note Payable	—	—	36,232	35,396
SREC Loans	32,181	32,183	31,088	31,088
Total.....	<u>\$ 1,294,945</u>	<u>\$ 1,294,975</u>	<u>\$ 898,023</u>	<u>\$ 897,996</u>

At December 31, 2017 and 2016, the fair value of the Company's lines of credit, and certain senior, subordinated, and SREC loans approximate their carrying values because their interest rates are variable rates that approximate rates currently available to the Company. At December 31, 2017 and 2016, the fair value of the Company's other debt instruments are based on rates currently offered for debt with similar maturities and terms. The Company's fair value of the debt instruments fell under the Level 3 hierarchy. These valuation approaches involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market.

The Company determines the fair value of its interest rate swaps using a discounted cash flow model which incorporates an assessment of the risk of non-performance by the interest rate swap counterparty and an evaluation of the Company's credit risk in valuing derivative instruments. The valuation model uses various inputs including contractual terms, interest rate curves, credit spreads and measures of volatility.

At December 31, 2017 and 2016, financial instruments measured at fair value on a recurring basis, based upon the fair value hierarchy are as follows (in thousands):

	December 31, 2017			
	Level 1	Level 2	Level 3	Total
Derivative assets:				
Interest rate swaps.....	—	1,917	—	\$ 1,917
Total.....	<u>\$ —</u>	<u>\$ 1,917</u>	<u>\$ —</u>	<u>\$ 1,917</u>
Derivative liabilities:				
Interest rate swaps.....	—	8,568	—	\$ 8,568
Total.....	<u>\$ —</u>	<u>\$ 8,568</u>	<u>\$ —</u>	<u>\$ 8,568</u>

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

	December 31, 2016			
	Level 1	Level 2	Level 3	Total
Derivative assets:				
Interest rate swaps	—	1,632	—	\$ 1,632
Total	\$ —	\$ 1,632	\$ —	\$ 1,632
Derivative liabilities:				
Warrants	—	—	20	\$ 20
Total	\$ —	\$ —	\$ 20	\$ 20

Note 5. Inventories

Inventories consist of the following (in thousands):

	December 31,	
	2017	2016
Raw materials	\$ 87,927	\$ 62,037
Work-in-process	6,500	5,289
Total	\$ 94,427	\$ 67,326

Note 6. Solar Energy Systems, net

Solar energy systems, net consists of the following (in thousands):

	December 31,	
	2017	2016
Solar energy system equipment costs	\$ 3,150,147	\$ 2,459,856
Inverters	319,309	260,011
Initial direct costs	152,549	117,587
Total solar energy systems	3,622,005	2,837,454
Less: accumulated depreciation and amortization	(421,350)	(303,305)
Add: construction-in-progress	119,053	95,217
Total solar energy systems, net	\$ 3,319,708	\$ 2,629,366

All solar energy systems, construction-in-progress and inverters are subject to signed Customer Agreements with customers. The Company recorded depreciation expense related to solar energy systems of \$120.4 million, \$93.4 million and \$70.7 million for the years ended December 31, 2017, 2016 and 2015, respectively. The depreciation expense was reduced by the amortization of deferred grants of \$7.7 million, \$13.1 million and \$14.2 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Notes to Consolidated Financial Statements — Continued

Note 7. Property and Equipment, net

Property and equipment, net consists of the following (in thousands):

	December 31,	
	2017	2016
Machinery and equipment	\$ 4,126	\$ 3,491
Leasehold improvements, furniture, and computer hardware	13,709	13,407
Vehicles	43,413	44,788
Computer software	30,483	24,552
Total property and equipment	91,731	86,238
Less: Accumulated depreciation and amortization.....	(55,329)	(37,767)
Total property and equipment, net	<u>\$ 36,402</u>	<u>\$ 48,471</u>

Depreciation and amortization expense was \$19.5 million, \$18.8 million and \$11.2 million for the years ended December 31, 2017, 2016 and 2015, respectively.

The gross amount of assets under capital leases, primarily vehicles, was \$44.8 million and \$46.2 million as of December 31, 2017 and 2016. Accumulated depreciation related to these assets was \$26.1 million and \$16.3 million as of December 31, 2017 and 2016, respectively. Depreciation expense related to these assets was \$10.9 million, \$10.8 million and \$4.9 million as of December 31, 2017, 2016 and 2015, respectively.

Note 8. Goodwill and Intangible Assets, net

The goodwill and intangible assets were acquired as part of the acquisition of MEC and CEE acquisitions referred to in Note 1, *Organization*.

The Company performs its annual impairment test of goodwill on October 1 of each fiscal year or whenever events or circumstances change or occur that would indicate that goodwill might be impaired. The Company has determined that it has one reporting unit.

As of October 1, 2017, the Company performed step one of the impairment test. As of October 1, 2017, the Company concluded that the fair value of the Company exceeded its carrying value.

The Company also performed the step one test for potential impairment as of December 31, 2017. As of December 31, 2017, total stockholders' equity exceeded the Company's market capitalization. The estimated fair value of the Company was estimated using a combination of the market capitalization, a market approach and an income approach, giving 50% weighting to the market capitalization and 25% weighting to each other method. Under the market approach, the Company utilizes publicly traded comparable company information to determine revenue multiples that are used to value the Company. Under the income approach, the Company determines fair value based on estimated future cash flows of the Company discounted by an estimated weighted average cost of capital, reflecting the overall level of inherent risk of the Company and the rate of return a market participant would expect to earn. The forecast and related assumptions were derived from the most recent annual financial forecast for which the planning process commenced in the fourth quarter of 2017. Based on the fair value analysis as of December 31, 2017, the Company had an estimated fair value which exceeded its carrying value by approximately 4%. Therefore, no impairment of goodwill has been recorded for the year ended December 31, 2017.

Intangible assets, net as of December 31, 2017 consist of the following (in thousands, except weighted average remaining life):

	Cost	Accumulated amortization	Carrying value	Weighted average remaining life (in years)
Customer relationships.....	\$ 14,660	\$ (6,017)	\$ 8,643	5.5
Developed technology.....	6,820	(3,963)	2,857	2.2
Trade names.....	6,990	(4,196)	2,794	4.0
Total.....	<u>\$ 28,470</u>	<u>\$ (14,176)</u>	<u>\$ 14,294</u>	

Intangible assets, net as of December 31, 2016 consist of the following (in thousands, except weighted average remaining life):

	Cost	Accumulated amortization	Carrying value	Weighted average remaining life (in years)
Customer relationships.....	\$ 14,660	\$ (4,317)	\$ 10,343	6.4
Developed technology.....	6,820	(2,600)	4,220	3.1
Trade names.....	6,990	(3,054)	3,936	4.6
Total.....	<u>\$ 28,470</u>	<u>\$ (9,971)</u>	<u>\$ 18,499</u>	

The Company recorded amortization of intangible assets expense of \$4.2 million, \$4.2 million and \$3.7 million for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017, expected amortization of intangible assets for each of the five succeeding fiscal years and thereafter is as follows (in thousands):

2018.....	\$ 4,205
2019.....	3,335
2020.....	2,143
2021.....	1,750
2022.....	1,743
Thereafter.....	1,118
Total.....	<u>\$ 14,294</u>

Note 9. Prepaid Expense and Other Current Assets

Prepaid expenses and other current assets consist of the following (in thousands):

	December 31,	
	2017	2016
Prepaid expenses.....	\$ 8,854	\$ 6,285
Reimbursement receivable.....	—	3,160
State tax receivable.....	348	347
Other current assets.....	—	10
Total.....	<u>\$ 9,202</u>	<u>\$ 9,802</u>

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

Note 10. Accrued Expenses and Other Liabilities

Accrued expenses and other liabilities consist of the following (in thousands):

	December 31,	
	2017	2016
Accrued employee compensation	\$ 28,698	\$ 22,758
CEE compensation expense	—	7,948
Accrued professional fees	5,837	4,073
Accrued taxes	2,872	2,699
Other accrued expenses	48,232	21,783
Total	\$ 85,639	\$ 59,261

Note 11. Cash Equity Financing

In December 2016, the Company pooled and transferred its interests in certain financing funds into a special purpose entity (“SPE”) with a new investor. The Company has determined that the SPE is a variable interest entity and that the Company is the primary beneficiary of the SPE by reference to the power and benefits criterion under ASC 810, *Consolidation*. Accordingly, the Company consolidates the SPE in its consolidated financial statements and accounts for the investor’s equity interest in the SPE as a noncontrolling interest (see Note 15, *VIE Arrangements*). The Company did not recognize a gain or loss on the transfer of its interests in the financing funds and continues to consolidate the financing funds. The SPE’s assets and cash flows are not available to the other creditors of the Company, and the investor has no recourse to the Company’s other assets.

Note 12. Indebtedness

As of December 31, 2017, debt consisted of the following (in thousands, except percentages):

	Carrying Values, net of debt discount			Unused Borrowing Capacity	Interest Rate ⁽¹⁾	Maturity Date
	Current	Long Term	Total			
Recourse debt:						
Bank line of credit	\$ —	\$ 247,000	\$ 247,000	\$ 406	4.58% - 4.87%	April 2018 ⁽²⁾
Total recourse debt	\$ —	\$ 247,000	\$ 247,000	\$ 406		
Non-recourse debt:						
Senior	3,561	804,894	808,455	12,758	3.63% - 4.69%	September 2020 - October 2024
Subordinated	4,301	107,187	111,488	27	6.36% - 7.13%	September 2020 - October 2024
Securitization Class A	3,534	82,203	85,737	—	4.40%	July 2024
Securitization Class B	440	9,644	10,084	—	5.38%	July 2024
SREC Loans	9,693	22,488	32,181	—	7.28%	July 2021
Total non-recourse debt	21,529	1,026,416	1,047,945	12,785		
Total debt	\$ 21,529	\$ 1,273,416	\$ 1,294,945	\$ 13,191		

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

As of December 31, 2016, debt consisted of the following (in thousands, except percentages):

	Carrying Values, net of debt discount			Unused Borrowing Capacity	Interest Rate ⁽¹⁾	Maturity Date
	Current	Long Term	Total			
Recourse debt:						
Bank line of credit.....	\$ —	\$ 244,000	\$ 244,000	\$ 3,406	3.96% - 5.75%	April 2018
Total recourse debt	\$ —	\$ 244,000	\$ 244,000	\$ 3,406		
Non-recourse debt:						
Senior.....	3,020	439,400	442,420	14,300	2.86% - 4.50%	December 2020 - September 2022
Subordinated	116	42,869	42,985	—	6.00%	December 2020 - December 2021
Note Payable	—	36,232	36,232	—	12.00%	December 2018
Securitization Class A	3,315	87,483	90,798	—	4.40%	July 2024
Securitization Class B	416	10,084	10,500	—	5.38%	July 2024
SREC Loans.....	7,286	23,802	31,088	1,032	6.88%	July 2021
Total non-recourse debt.....	14,153	639,870	654,023	15,332		
Total debt.....	\$ 14,153	\$ 883,870	\$ 898,023	\$ 18,738		

(1) Reflects contractual, unhedged rates. See Note 13, *Derivatives* for hedge rates.

(1) In February 2018, the maturity date of the Company's corporate bank line of credit was extended to April 2020 from its current maturity date of April 2018.

Bank Line of Credit

The Company has outstanding borrowings under a syndicated working capital facility with banks for a total commitment of up to \$250.0 million. The working capital facility is secured by substantially all of the unencumbered assets of the Company, as well as ownership interests in certain subsidiaries of the Company. Loans under the facility bear interest at LIBOR +3.25% per annum or the Base Rate +2.25% per annum. The Base Rate is the highest of the Federal Funds Rate +0.50%, the Prime Rate, or LIBOR +1.00%.

Under the terms of the working capital facility, the Company is required to meet various restrictive covenants, such as the completion and presentation of audited consolidated financial statements, maintaining a minimum unencumbered liquidity of at least \$25.0 million in the aggregate as of the last day of each calendar month and maintaining a modified interest coverage ratio of 2.00 or greater, measured quarterly as of the last day of each quarter. The Company was in compliance with all debt covenants as of December 31, 2017. As of December 31, 2017, the balance under this facility was \$247.0 million with a maturity date in April 2018.

In February 2018, the Company and the lenders executed Amendment No. 5 (the "Amendment") to the Company's \$250.0 million syndicated working capital facility dated as of April 1, 2015, as amended from time to time ("Credit Facility"). The Amendment extends the maturity date of the Credit Facility to April 1, 2020 from its current maturity date of April 1, 2018. Other terms of the Credit Facility remain substantially the same, except the Amendment (i) increases the minimum interest coverage ratio from 2.0:1.0 to 3.0:1.0 and (ii) requires the Company to maintain an unencumbered cash balance of \$30.0 million at the end of each calendar quarter starting on March 31, 2018.

Syndicated Credit Facilities

Each of the Company's syndicated credit facilities contain customary covenants including the requirement to maintain certain financial measurements and provide lender reporting. Each of the syndicated credit facilities also contain certain provisions in the event of default which entitle lenders to take certain actions including acceleration of amounts due under the facilities and acquisition of membership interests and assets that are pledged to the lenders under the terms of the credit facilities. The facilities are non-recourse to the Company and are secured by net cash flows from Customer Agreements less certain operating, maintenance and other expenses which are available to the borrower after distributions to tax equity investors. The Company was in compliance with all debt covenants as of December 31, 2017.

Notes to Consolidated Financial Statements — Continued

As of December 31, 2017, certain subsidiaries of the Company have an outstanding balance of \$280.8 million on secured credit facilities that were syndicated with various lenders due in October 2024. The credit facilities totaled \$303.0 million and consisted of \$293.0 million in term loans, and a \$10.0 million revolving debt service reserve letter of credit facility. Term Loan A ("TLA") is a senior delayed draw term loan that bears interest at LIBOR +2.75% per annum for LIBOR loans or the Base Rate +1.75% per annum on Base Rate loans. Term Loan B ("TLB") is subordinated debt and consists of a Class A portion which accrues interest at a fixed interest rate of 7.03% per annum and a Class B portion which accrues interest at LIBOR +5.00% per annum or the Base Rate +4.00% per annum. The Base Rate is the highest of the Federal Funds Rate +0.50%, the Prime Rate, or LIBOR +1.00%. Under TLA, prepayments are permitted with no penalties. Under TLB, prepayments are permitted with associated penalties ranging from 0% - 5% depending on the timing of prepayments.

As of December 31, 2017, certain subsidiaries of the Company have an outstanding balance of \$157.0 million on senior secured credit facilities that were syndicated with various lenders due in April 2024. These facilities are subject to the National Grid cash equity transaction. The credit facilities totaled \$202.0 million and consisted of a \$195.0 million senior delayed draw term loan facility and a \$7.0 million revolving debt service reserve letter of credit facility. Loans under the facility bear interest at LIBOR +2.75% per annum for the initial four-year period for LIBOR loans or the Base Rate +1.75% per annum for Base Rate Loans. The Base Rate is the highest of the Federal Funds Rate +0.50%, the Prime Rate, or LIBOR +1.00%. The facilities are non-recourse to the Company and are secured by net cash flows from Customer Agreements and SRECs, less certain operating, maintenance and other expenses which are available to the borrower after distributions to tax equity investors. Prepayments are permitted under the delayed draw term loan facility.

As of December 31, 2017, certain subsidiaries of the Company have an outstanding balance of \$150.7 million on secured credit facilities agreements, as amended, with a syndicate of banks due in December 2020. The facilities totaled \$340.0 million and consisted of a revolving aggregation facility ("Aggregation Facility"), a term loan ("Term Loan") and a revolving debt service reserve letter of credit facility. Senior loans under the Aggregation Facility bear interest at LIBOR +2.50% per annum for the initial three-year revolving availability period, stepping up to LIBOR +2.75% per annum in the following two-year period. The subordinated Term Loan bears interest at LIBOR +5.00% per annum for the first three-year period, stepping up to LIBOR +6.50% per annum thereafter. Term Loan prepayment penalties range from 0% - 1% depending on the timing of prepayments.

As of December 31, 2017, certain subsidiaries of the Company have an outstanding balance of \$163.7 million on secured credit facilities agreements with a syndicate of banks due in December 2021. The facilities totaled \$195.4 million and consisted of a senior term loan ("Term Loan A"), a working capital revolver commitment and a revolving debt service reserve letter of credit facility which draws are solely for the purpose of satisfying the required debt service reserve amount if necessary. Loans under Term Loan A bear interest at LIBOR +2.75% per annum, stepping up to LIBOR +3.00% per annum on the fourth anniversary. The facilities also include a subordinated term loan ("Term Loan B") which bears interest at LIBOR +5.00% per annum. Prepayments are permitted under Term Loan A and Term Loan B at par without premium or penalty.

Senior Debt

As of December 31, 2017, a subsidiary of the Company has an outstanding balance of \$111.4 million on a revolving loan facility due in September 2020. The facility is secured by the assets and related net cash flow of this subsidiary and is non-recourse to the Company's other assets. Loans under the facility bear interest at LIBOR +2.75% per annum for the senior secured loan, and LIBOR +5.50% per annum for the subordinated loan. The Company was in compliance with all debt covenants as of December 31, 2017.

As of December 31, 2017, a subsidiary of the Company has an outstanding balance of \$24.5 million on a term loan due in April 2022. The loan is secured by the assets and related net cash flow of this subsidiary and is non-recourse to the Company's other assets. The Company was in compliance with all debt covenants as of December 31, 2017.

As of December 31, 2017, a subsidiary of the Company has an outstanding balance of \$12.3 million on a non-recourse loan due in September 2022. The loan is secured by substantially all of the assets of the subsidiary including this subsidiary's membership interests and assets in its investment funds. The loan contains certain provisions in the event of default which entitles the lender to take certain actions including acceleration of amounts due under the loan.

Notes to Consolidated Financial Statements — Continued

Loans under this facility bear interest at LIBOR +3.00% per annum. The Company was in compliance with all debt covenants as of December 31, 2017.

As of December 31, 2017, a subsidiary of the Company has an outstanding balance of \$19.7 million on a secured, non-recourse loan agreement due in September 2022. The loan will be repaid through cash flows from a lease pass-through arrangement previously entered into by the Company. The loan agreement contains customary covenants including the requirement to maintain certain financial measurements and provide lender reporting. The loan also contains certain provisions in the event of default which entitles the lender to take certain actions including acceleration of amounts due under the loan. Loans under this facility bear interest at LIBOR +2.25% per annum. The Company was in compliance with all debt covenants as of December 31, 2017.

Securitization Loans

As of December 31, 2017, a subsidiary of the Company has an outstanding balance of \$95.8 million on solar asset-backed notes ("Notes") secured by associated customer contracts ("Solar Assets") held by a special purpose entity ("Issuer"). As of December 31, 2017 and December 31, 2016, these Solar Assets had a carrying value of \$172.8 million and \$181.8 million, respectively, and are included under solar energy systems, net, in the consolidated balance sheets. The Notes were issued at a discount of 0.08%. The Company was in compliance with all debt covenants as of December 31, 2017.

In connection with the transaction, the Company modified two lease pass-through arrangements with an investor. The modified lease-pass through arrangements require the majority of the cash flows generated by the Solar Assets to be passed on to the Issuer through monthly lease payments from the Fund investor. Those cash flows are used to service the monthly principal of the Notes and interest payments and satisfy the Issuer's expenses, and any residual cash flows are retained by the Fund investor and recorded as a reduction in the remaining financing obligation. The Company recognizes revenue earned from the associated Customer Agreements in accordance with the Company's revenue recognition policy. The assets and cash flows generated by the Solar Assets are not available to the other creditors of the Company, and the creditors of the Issuer, including the Note holders, have no recourse to the Company's other assets. The Company was in compliance with all debt covenants as of December 31, 2017.

SREC Loans

As of December 31, 2017, a subsidiary of the Company has an outstanding balance of \$32.2 million on a secured credit agreement with a weighted average interest rate of 7.28% and 6.88% as of December 31, 2017 and 2016, respectively. The facility is non-recourse to the Company and is secured by substantially all of the assets of such subsidiary, including its rights in and the net cash flows from the generation of contracted and uncontracted SRECs by certain subsidiaries of the Company. Loans under the facility bear interest at LIBOR +5.50% per annum for contracted SRECs and LIBOR +9.00% per annum for uncontracted SRECs. The facility contains customary covenants including the requirement to provide lender reporting. The Company guarantees the delivery of SRECs on the subsidiary's underlying contracts in the event of a delivery shortfall pursuant to the SREC contracts with counterparties. The Company does not guarantee payments of principal or interest on the loan. The credit facility also contains certain provisions in the event of default which entitles the lender to take certain actions including acceleration of amounts due under the facilities. The Company was in compliance with all debt covenants as of December 31, 2017.

Notes Payable

In December 2017, the Company paid off the notes for \$40.9 million which included payment for accrued interest, PIK, and a prepayment penalty. The Company recognized \$0.6 million loss on the early debt extinguishment related to the prepayment premiums and write off of unamortized debt issuance costs.

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

The scheduled maturities of debt, excluding debt discount, as of December 31, 2017 are as follows (in thousands):

2018.....	\$	24,476
2019.....		36,585
2020.....		394,850
2021.....		313,852
2022.....		59,379
Thereafter		486,586
Subtotal		<u>1,315,728</u>
Less: Debt discount.....		<u>(20,783)</u>
Total.....	\$	<u>1,294,945</u>

Note 13. Derivatives

Interest Rate Swaps

The Company uses interest rate swaps to hedge variable interest payments due on certain of its term loans and aggregation facility. These swaps allow the Company to incur fixed interest rates on these loans and receive payments based on variable interest rates with the swap counterparty based on the one or three month LIBOR on the notional amounts over the life of the swaps.

The interest rate swaps have been designated as cash flow hedges. The credit risk adjustment associated with these swaps is the risk of non-performance by the counterparties to the contracts. In the twelve months ended December 31, 2017, the hedge relationships on the Company's interest rate swaps have been assessed as highly effective as the critical terms of the interest rate swaps match the critical terms of the underlying forecasted hedged transactions. Accordingly, changes in the fair value of these derivatives are recorded as a component of accumulated other comprehensive income, net of income taxes. Changes in the fair value of these derivatives are subsequently reclassified into earnings, and are included in interest expense, net in the Company's statements of operations, in the period that the hedged forecasted transactions affects earnings.

The Company recorded an unrealized loss of \$5.7 million and an unrealized gain of \$0.3 million for the years ended December 31, 2017 and 2016, respectively, net of applicable tax benefit of \$3.6 million and \$0.2 million, respectively. The Company recognized interest expense on derivatives into earnings of \$1.1 million and \$1.0 million for the years ended December 31, 2017 and 2016, respectively, net of tax expense of \$0.7 million and \$0.6 million, respectively. During the next twelve months, the Company estimates that an additional \$2.0 million will be reclassified as an increase to interest expense.

At December 31, 2017, the Company had designated derivative instruments classified as derivative assets as reported in other assets of \$1.9 million and derivative liabilities as reported in other liabilities of \$8.6 million in the Company's balance sheet. At December 31, 2017 the Company had the following derivative instruments (in thousands, other than quantity and interest rates):

Type	Quantity	Effective Dates	Maturity Dates	Hedge Interest Rates	Notional Amount	Adjusted Fair Market Value
Interest rate swaps	2	4/29/2016 - 12/30/2016	8/31/2022 - 9/30/2022	1.27%- 2.37%	\$ 27,954	\$ 333
Interest rate swaps	10	7/31/2017 - 1/31/2019	4/30/2024 - 10/31/2024	2.16%- 2.69%	\$ 311,825	\$ (1,368)
Interest rate swaps	4	4/30/2015	10/31/2028	2.17%-2.18%	\$ 124,776	\$ 1,184
Interest rate swap	1	9/20/2020	6/20/2030	2.57%	\$ 67,013	\$ (534)
Interest rate swap	1	9/30/2022	9/30/2031	3.23%	\$ 9,905	\$ (276)
Interest rate swap	1	9/20/2020	4/20/2032	2.60%	\$ 33,409	\$ (346)
Interest rate swaps	5	1/31/2019 - 10/31/2024	7/31/2034	2.48% - 3.04%	\$ 144,379	\$ (1,465)
Interest rate swaps	5	7/31/2017 - 4/30/2024	7/31/2035	2.56% - 2.95%	\$ 143,490	\$ (1,848)
Interest rate swaps	5	1/31/2018 - 10/18/2024	10/31/2036	2.62% - 2.95%	\$ 182,267	\$ (2,331)

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

Warrants

In July 2015, the Company entered into a letter of intent to issue warrants to purchase up to 1,250,764 shares of the Company's common stock to the former Series D and E preferred stockholders as an inducement to convert their shares of convertible preferred stock into shares of common stock immediately prior to the closing of the Company's initial public offering and waive any potential anti-dilution adjustments resulting from the issuance of shares of the Company's common stock in the Company's initial public offering. The warrants were issued on September 30, 2015. The warrants are exercisable for three years from the date of grant and have an exercise price of \$22.50 per share. The warrant derivatives are recorded at fair value as derivative liabilities as reported in other liabilities in the Company's consolidated balance sheet. The fair market value of the warrants on the commitment date was \$1.5 million. The warrants are remeasured at each reporting period with the changes in the fair value presented in other expenses (income), net in the Company's statement of operations. At December 31, 2017 and 2016, the fair market value of the warrants was de minimis.

Note 14. Lease Pass-Through Financing Obligations

The Company has five ongoing transactions referred to as "lease pass-through arrangements." Under lease pass-through arrangements, the Company leases solar energy systems to Fund investors under a master lease agreement, and these investors in turn are assigned the leases with customers. The Company receives all of the value attributable to the accelerated tax depreciation and some or all of the value attributable to the other incentives. The Company assigns to the Fund investors the value attributable to the investment tax credit ("ITC") and, for the duration of the master lease term, the long-term recurring customer payments. Given the assignment of the operating cash flows, these arrangements are accounted for as financing obligations. In addition, in one of the lease pass-through structures, the Company sold, as well as leased, solar energy systems to a Fund investor under a master purchase agreement. As the substantial risks and rewards in the underlying solar energy systems were retained by the Company, this arrangement was also accounted for as a financing obligation.

Under these lease pass-through arrangements, wholly owned subsidiaries of the Company finance the cost of solar energy systems with investors for an initial term of 20 – 25 years. The solar energy systems are subject to Customer Agreements with an initial term not exceeding 20 years. These solar energy systems are reported under the line item solar energy systems, net in the consolidated balance sheets. As of December 31, 2017 and 2016, the cost of the solar energy systems placed in service under the lease pass-through arrangements was \$491.9 million and \$494.9 million, respectively. The accumulated depreciation related to these assets as of December 31, 2017 and 2016 was \$68.5 million and \$50.8 million, respectively.

The investors make a series of large up-front payments and in certain cases subsequent smaller quarterly payments (lease payments) to the subsidiaries of the Company. The Company accounts for the payments received from the investors under the arrangements as borrowings by recording the proceeds received as lease pass-through financing obligations. These financing obligations are reduced over a period of approximately 20 years by customer payments under the Customer Agreements, U.S. Treasury grants (where applicable), incentive rebates (where applicable), the fair value of the ITCs monetized (where applicable) and proceeds from the contracted resale of SRECs as they are received by the investor. Under this approach, the Company continues to account for the arrangement with the customers in its consolidated financial statements as if it is the lessor in the arrangement with the customer and accounts for the customer lease and any related U.S. Treasury grants or incentive rebates as well as the resale of SRECs consistent with the Company's revenue recognition accounting policies and the monetization of investment tax credits as described in Note 2, *Summary of Significant Accounting Policies*.

Interest is calculated on the lease pass-through financing obligations using the effective interest rate method. The effective interest rate, which is adjusted on a prospective basis, is the interest rate that equates the present value of the estimated cash amounts, including ITCs, to be received by the investor over the lease term with the present value of the cash amounts paid by the investor to the Company, adjusted for amounts received by the investor. The lease pass-through financing obligations are nonrecourse once the associated assets have been placed in service and all the contractual arrangements have been assigned to the investor.

Under four of the lease pass-through arrangements, the investor has a right to extend its right to receive cash flows from the customers beyond the initial term in certain circumstances. The Company has the option to

Notes to Consolidated Financial Statements — Continued

settle the outstanding financing obligation on the ninth anniversary for two of the lease pass-through obligations and on the eleventh anniversary for two of the lease pass-through financing obligations at a price equal to the higher of (a) the fair value of future remaining cash flows or (b) the amount that would result in the investor earning their targeted return. In three of these lease pass-through arrangements, the investor has an option to require repayment of the entire outstanding balance of the financing obligation on the tenth anniversary at a price equal to the fair value of the future remaining cash flows. In the fourth lease pass through arrangement, the investor has an option to require repayment of the entire outstanding balance of the financing obligation three business days prior to the 7th anniversary in certain circumstances and on the 10th anniversary at a price equal to the fair value of the future remaining cash flows.

In the fifth lease pass-through arrangement, the investor has a right, on June 30, 2019, to purchase all of the systems leased at a price equal to the higher of (a) the sum of the present value of the expected remaining lease payments due by the investor, discounted at 5%, and the fair market value of the Company's residual interest in the systems as determined through independent valuation or (b) a set value per kilowatt applied to the aggregate size of all leased systems.

Under all lease pass-through arrangements, the Company is responsible for services such as warranty support, accounting, lease servicing and performance reporting to the host customers. As part of the warranty and performance guarantee with the host customers, the Company guarantees certain specified minimum annual solar energy production output for the solar energy systems leased to the customers, which the Company accounts for as disclosed in Note 2, *Summary of Significant Accounting Policies*.

As discussed in Note 12, *Indebtedness*, in connection with the pooling of assets related to the securitization transaction entered into in 2015, an aggregate amount of \$88.9 million of the lease pass-through financing obligation was repaid.

In 2015, the Company entered into a lease pass-through arrangement and in connection with this arrangement, the Company agreed to defer a portion (up to 25%) of the amounts required to be paid upfront under the arrangement through a loan between an indirect wholly owned subsidiary of the Company and a subsidiary of the Fund investor. The loan is collateralized by the related cash flows assigned to the Fund investor. There is a legal right to offset the loan if an event of default has occurred. Therefore, the lease pass-through financing obligation related to this arrangement is recorded net of the loan. As of December 31, 2017 and 2016 the loan amount was \$20.5 million and \$23.2 million, respectively.

At December 31, 2017, future minimum lease payments expected to be made by the investor under the lease pass-through fund arrangement for each of the next five years and thereafter are as follows (in thousands):

2018.....	\$	522
2019.....		522
2020.....		522
2021.....		522
2022.....		522
Thereafter		2,458
Total.....	\$	<u>5,068</u>

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

Note 15. VIE Arrangements

The Company consolidated various VIEs at December 31, 2017 and 2016. The carrying amounts and classification of the VIEs' assets and liabilities included in the consolidated balance sheets are as follows (in thousands):

	December 31,	
	2017	2016
Assets		
Current assets		
Cash	\$ 118,352	\$ 120,728
Restricted cash	2,699	1,680
Accounts receivable, net	30,200	20,771
Prepaid expenses and other current assets	917	242
Total current assets	152,168	143,421
Solar energy systems, net	2,385,329	1,920,330
Other assets	3,679	1,481
Total assets	\$ 2,541,176	\$ 2,065,232
Liabilities		
Current liabilities		
Accounts payable	\$ 15,929	\$ 14,873
Distributions payable to noncontrolling interests and redeemable noncontrolling interests	13,526	10,654
Accrued expenses and other liabilities	3,048	782
Deferred revenue, current portion	28,240	25,827
Deferred grants, current portion	1,021	3,644
Non-recourse debt, current portion	11,178	8,616
Total current liabilities	72,942	64,396
Deferred revenue, net of current portion	380,283	396,858
Deferred grants, net of current portion	29,385	105,390
Non-recourse debt, net of current portion	190,106	50,367
Other liabilities	1,848	—
Total liabilities	\$ 674,564	\$ 617,011

The Company holds a variable interest in an entity that provides the noncontrolling interest with a right to terminate the leasehold interests in all of the leased projects on the tenth anniversary of the effective date of the master lease. In this circumstance, the Company would be required to pay the noncontrolling interest an amount equal to the fair market value, as defined in the governing agreement of all leased projects as of that date.

The Company holds certain variable interests in nonconsolidated VIEs established as a result of five lease pass-through Fund arrangements as further explained in Note 14, *Lease Pass-Through Financing Obligations*. The Company does not have material exposure to losses as a result of its involvement with the VIEs in excess of the amount of the financing liability recorded in the Company's consolidated financial statements. The Company is not considered the primary beneficiary of the VIEs.

In December 2017, the Company acquired investors' interests in certain consolidated VIEs for a total cash consideration of \$35.4 million. In one of these entities, the Company was contractually required to make payments to the investor so that the investor achieved a specified minimum internal rate of return upon occurrence of certain events. Upon purchase of the investors' stakes in these entities, all obligations were satisfied. Additionally, in December 2017, the Company entered into an agreement to acquire an investor's interest in another consolidated VIE, which resulted in the Company derecognizing the noncontrolling interest, and recording the agreed upon purchase price as a liability in Accrued expenses and other liabilities on the consolidated balance sheet. These transactions decreased the Company's additional paid-in-capital, net of the related tax impact, by \$7.1 million.

Notes to Consolidated Financial Statements — Continued

Note 16. Redeemable Noncontrolling Interests

During certain specified periods of time (the “Early Exit Periods”), noncontrolling interests in certain funding arrangements have the right to put all of their membership interests to the Company (the “Put Provisions”). During a specific period of time (the “Call Periods”), the Company has the right to call all membership units of the related redeemable noncontrolling interests.

The carrying value of redeemable noncontrolling interests was greater than the redemption value except for six and four Funds at December 31, 2017 and 2016, respectively, where the carrying value has been adjusted to the redemption value.

Note 17. Stockholders’ Equity

On August 10, 2015, the Company closed its initial public offering in which 17,900,000 shares of common stock were sold at a public offering price of \$14.00 per share, resulting in net proceeds of approximately \$220.9 million, after deducting underwriting discounts and commissions and \$7.9 million in offering expenses paid by the Company, and excluding the proceeds received by the selling stockholders who sold an aggregate of 417,732 shares of the total 17,900,000 shares sold in the initial public offering.

Convertible Preferred Stock

Immediately prior to closing of the Company’s initial public offering, all 54,840,767 shares of the Company’s outstanding preferred stock were automatically converted into shares of the Company’s common stock. In addition, the Company issued 1,667,683 shares of common stock and executed a letter of intent to issue 1,250,764 warrants subject to contingencies being met to purchase the Company’s common stock to the former Series D and E preferred stockholders as an inducement to convert their shares of convertible preferred stock into shares of common stock immediately prior to the closing of the Company’s initial public offering and to waive any potential anti-dilution adjustments resulting from the issuance of shares in the Company’s common stock in the Company’s initial public offering. The additional shares and warrants resulted in a beneficial conversion feature as a result of the inducement for Series D and E preferred stock and the Company recognized a \$24.9 million deemed dividend to Series D and E preferred stockholders at the conversion date. This non-cash charge impacts net loss attributable to our common stockholders and basic and diluted net loss per share applicable to common stockholders. The warrants were issued on September 30, 2015 and are considered freestanding derivatives as disclosed in Note 13, *Derivatives*.

The Company did not have any convertible preferred stock issued and outstanding as of December 31, 2017 and 2016.

The Company has not declared or paid any dividends in 2017, 2016 or 2015 other than the \$24.9 million deemed dividend to Series D and E preferred stockholders in August 2015.

Common Stock

The Company has reserved sufficient shares of common stock for issuance upon the exercise of stock options and the exercise of warrants. Common stockholders are entitled to dividends if and when declared by the board of directors, subject to the prior rights of the preferred stockholders. As of December 31, 2017, no common stock dividends had been declared by the board of directors.

Notes to Consolidated Financial Statements — Continued

The Company has reserved shares of common stock for issuance as follows (in thousands):

	December 31,	
	2017	2016
Stock plans		
Shares available for grant		
2015 Equity Incentive Plan	8,857	11,081
2015 Employee Stock Purchase Plan	3,970	2,511
Options outstanding	16,268	12,897
Restricted stock units outstanding	5,330	4,106
Total	34,425	30,595

Note 18. Stock-Based Compensation

MEC 2009 Stock Plan

In connection with the MEC acquisition in February 2014, the Company assumed nonstatutory stock options granted under the Mainstream Energy Corporation 2009 Stock Plan (the “MEC Plan”) held by MEC employees who continued employment with the Company after the closing and converted them into options to purchase shares of the Company’s common stock. The MEC Plan was terminated on the closing of the acquisition but the outstanding awards under the MEC Plan that the Company assumed in the acquisition will continue to be governed by their existing terms. As of December 31, 2017, options to purchase 516,386 shares of the Company’s common stock remained outstanding under the MEC Plan.

2013 Equity Incentive Plan

In July 2013, the Board of Directors approved the 2013 Plan. In March 2015, the Board of Directors authorized an additional 3,000,000 shares reserved for issuance under the 2013 Plan. An aggregate of 4,500,000 shares of common stock are reserved for issuance under the 2013 Plan plus (i) any shares that were reserved but not issued under the plan that was previously in place, and (ii) any shares subject to stock options or similar awards granted under the plan that was previously in place that expire or otherwise terminate without having been exercised in full and shares issued that are forfeited to or repurchased by the Company, with the maximum number of shares to be added to the 2013 Plan pursuant to clauses (i) and (ii) equal to 8,044,829 shares. Stock options granted to employees generally have a maximum term of ten-years and vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest monthly over the remaining three years. The options may include provisions permitting exercise of the option prior to full vesting. Any unvested shares shall be subject to repurchase by the Company at the original exercise price of the option in the event of a termination of an optionee’s employment prior to vesting. All the remaining shares that were available for future grants under the 2013 Plan were transferred to the 2015 Equity Incentive Plan (“2015 Plan”) at the inception of the 2015 Plan. As of December 31, 2017, the Company had not granted restricted stock or other equity awards (other than options) under the 2013 Plan.

2014 Equity Incentive Plan

In August 2014, the Board approved the 2014 Equity Incentive Plan (“2014 Plan”). An aggregate of 947,342 shares of common stock are reserved for issuance under the 2014 Plan. The 2014 Plan was adopted to accommodate a broader transaction with a sales entity and to allow for similar transactions in the future. In July 2015, the Board approved an increase in the number of shares of common stock reserved to 1,197,342. As of July 2015, the Company granted all 1,197,342 restricted stock units (“RSUs”) available under the 2014 Plan.

2015 Equity Incentive Plan

In July 2015, the Board approved the 2015 Plan. An aggregate of 11,400,000 shares of common stock are reserved for issuance under the 2015 Plan plus (i) any shares that were reserved but not issued under the 2013 Plan at the inception of the 2015 Plan, and (ii) any shares subject to stock options or similar awards granted under

Notes to Consolidated Financial Statements — Continued

the 2008 Plan, 2013 Plan and 2014 Plan that expire or otherwise terminate without having been exercised in full and shares issued that are forfeited to or repurchased by the Company, with the maximum number of shares to be added to the 2015 Plan pursuant to clauses (i) and (ii) equal to 15,439,334 shares. The 2015 Plan provides for annual automatic increases on January 1 to the shares reserved for issuance. The automatic increase of the number of shares available for issuance under the 2015 Plan is equal to the least of 10 million shares, 4% of the outstanding shares of common stock as of the last day of our immediately preceding fiscal year or such other amount as the Board of Directors may determine. In 2017 and 2016, the Board of Directors authorized an additional 4,172,883 and 4,051,282 shares reserved for issuance under the 2015 Plan, respectively. Stock options granted to employees generally have a maximum term of ten-years and vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest monthly over the remaining three years. The options may include provisions permitting exercise of the option prior to full vesting. Any unvested shares shall be subject to repurchase by the Company at the original exercise price of the option in the event of a termination of an optionee's employment prior to vesting. RSUs granted to employees generally vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest quarterly over the remaining three years.

Stock Options

The following table summarizes the activity for all stock options under all of the Company's equity incentive plans for the years ended December 31, 2017 and 2016 (shares and aggregate intrinsic value in thousands):

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding at December 31, 2015	12,795	\$ 5.89	7.82	\$ 75,797
Granted.....	3,674	5.73		
Exercised.....	(1,852)	2.94		
Cancelled.....	(1,720)	8.37		
Outstanding at December 31, 2016	12,897	5.94	7.49	\$ 9,625
Granted.....	5,266	5.17		
Exercised.....	(687)	2.96		
Cancelled.....	(1,208)	7.62		
Outstanding at December 31, 2017	16,268	\$ 5.70	7.41	\$ 14,832
Options vested and exercisable at December 31, 2017.....	8,169	\$ 5.56	6.05	\$ 9,987
Options vested and expected to vest at December 31, 2017.....	14,833	\$ 5.68	7.02	\$ 13,971

As of December 31, 2017, 80,000 outstanding stock options had a performance feature that is required to be satisfied before the option is vested and exercisable. There were 276,660 unvested exercisable shares as of the years ended December 31, 2017 and 2016, which are subject to a repurchase option held by the Company at the original exercise price. These exercisable but unvested shares have a weighted average remaining vesting period of 1.2 years. There was no exercise of unvested options in the year ended December 31, 2017 and 2016.

The weighted-average grant-date fair value of stock options granted during the year ended December 31, 2017, 2016 and 2015 were \$2.57, \$2.26 and \$4.56 per share, respectively. The total intrinsic value of the options exercised during the year ended December 31, 2017, 2016 and 2015 was \$2.3 million, \$6.3 million and \$8.1 million, respectively. The aggregate intrinsic value is the difference of the current fair value of the stock and the exercise price for in-the-money stock options. The total fair value of options vested during the year ended December 31, 2017, 2016 and 2015 was \$7.5 million, \$9.8 million and \$9.1 million, respectively.

The Company estimates the fair value of stock-based awards on their grant date using the Black-Scholes option-pricing model. The Company estimates the fair value using a single-option approach and amortizes the fair value on a straight-line basis for options expected to vest. All options are amortized over the requisite service periods of the awards, which are generally the vesting periods.

Notes to Consolidated Financial Statements — Continued

The Company estimated the fair value of stock options with the following assumptions:

	Year Ended December 31,		
	2017	2016	2015
Risk-free interest rate	1.88% - 2.22%	1.18% - 2.23%	1.55% - 1.95%
Volatility.....	45.95% - 50.52%	36.00% - 49.64%	36.30% - 39.63%
Expected term (in years)	5.94 - 6.08	5.00 - 6.26	5.50 - 6.23
Expected dividend yield.....	0.00%	0.00%	0.00%

The expected term assumptions were determined based on the average vesting terms and contractual lives of the options. The risk-free interest rate is based on the rate for a U.S. Treasury zero-coupon issue with a term that approximates the expected life of the option grant. For stock options granted in the year ended December 31, 2017, 2016 and 2015, the Company considered the volatility data of a group of publicly traded peer companies in its industry. Forfeiture rates are estimated using the Company's expectations of forfeiture rates for the Company's employees and are adjusted when estimates change. The estimation of stock awards that will ultimately vest requires judgment, and to the extent actual results or updated estimates differ from the Company's current estimates, such amounts will be recorded as a cumulative adjustment in the period the estimates are revised. The Company considers many factors when estimating expected forfeitures, including historical forfeiture pattern, the types of awards and employee class. Actual results, and future changes in estimates, may differ substantially from management's current estimates.

Restricted Stock Units

In 2014, the Company granted a total of 947,342 RSUs subject to certain performance targets to a third party partner. As of December 31, 2017, 350,000 outstanding RSUs had a performance feature that is required to be satisfied before the option is vested. In March 2018, the Company amended the terms of all of these RSUs, such that the RSUs are deemed earned subject to a clawback provision that requires the holder of the RSUs to either forfeit all the RSUs or pay the Company repayment value for all RSUs that are not forfeited if the third party breaches the exclusivity provision of the parties' commercial agreement. The exclusivity clawback provision for all of the RSUs expires in September 2019.

The performance-based provision is considered substantive. As a result, the Company recognizes expense once the performance targets are met. The first performance target was met in 2015. The Company recognized \$0.8 million and \$1.2 million compensation expense in the years ended December 31, 2017 and 2016 upon certain performance targets being met.

The following table summarizes the activity for all RSUs under all of the Company's equity incentive plans for the years ended December 31, 2017 and 2016 (shares in thousands):

	Shares	Weighted Average Grant Date Fair Value
Unvested balance at December 31, 2015	1,506	\$ 10.44
Granted.....	3,363	5.82
Issued	(422)	9.55
Cancelled / forfeited	(341)	6.80
Unvested balance at December 31, 2016	4,106	6.87
Granted.....	3,540	5.30
Issued	(1,115)	7.36
Cancelled / forfeited	(1,201)	5.81
Unvested balance at December 31, 2017	5,330	\$ 5.82

Notes to Consolidated Financial Statements — Continued

Employee Stock Purchase Plan

Under the Company's 2015 Employee Stock Purchase Plan ("ESPP") (as amended in May 2017), eligible employees are offered shares bi-annually through a 24 month offering period which encompasses four six month purchase periods. Each purchase period begins on the first trading day on or after May 15 and November 15 of each year. Employees may purchase a limited number of shares of the Company's common stock via regular payroll deductions at a discount of 15% of the lower of the fair market value of the Company's common stock on the first trading date of each offering period or on the exercise date. Employees may deduct up to 15% of payroll, with a cap of \$25,000 of fair market value of shares in any calendar year and 10,000 shares per employee per purchase period. Under the ESPP, 1,000,000 shares of the Company's common stock have been reserved for issuance to eligible employees. The ESPP provides for an automatic increase of the number of shares available for issuance under the ESPP on the first day of each fiscal year beginning on January 1, 2016, equal to the least of 5 million shares, 2% of the outstanding shares of our common stock on the last day of the immediately preceding fiscal year, or such other amount as may be determined by the Board of Directors. In 2017 and 2016, the Board of Directors authorized an additional 2,086,416 and 2,025,641 shares, respectively, reserved for issuance under the ESPP.

Stock-Based Compensation Expense

The Company recognized stock-based compensation expense, including the compensation expense resulting from the sales of common stock by employees and former employees in 2015 to existing investors and ESPP expenses, in the consolidated statements of operations as follows (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Cost of operating leases and incentives.....	\$ 2,299	\$ 2,039	\$ 1,649
Cost of solar energy systems and product sales	609	409	236
Sales and marketing.....	5,196	7,831	5,242
Research and development.....	836	515	205
General and administration.....	13,102	7,929	8,491
Total.....	<u>\$ 22,042</u>	<u>\$ 18,723</u>	<u>\$ 15,823</u>

As of December 31, 2017 and 2016, total unrecognized compensation cost related to outstanding stock options and RSUs was \$34.8 million and \$29.4 million, respectively, which is expected to be recognized over a weighted-average period of 2.8 years and 2.6 years, respectively.

In August 2017, the Company entered into an agreement with an affiliate ("Contractor") of Comcast Corporation ("Comcast") whereby Contractor will receive lead or sales fees for new customers it brings to the Company over a 40-month term. Comcast may also earn a warrant to purchase up to 11,793,355 shares of the Company's outstanding common stock, at an exercise price of \$0.01 per warrant share. The warrant initially vests 50.05% when both (i) Contractor has earned a lead or sales fee with respect to 30,000 of installed solar energy systems, and (ii) Contractor or its affiliates have spent at least \$10.0 million in marketing and sales in connection with the agreement. Thereafter, the warrant will vest in five additional increments for each additional 6,000 installed solar energy systems.

Note 19. Operating Revenues under Customer Agreements

Customer Agreements representing PPAs require customers to make payments to Sunrun based on the electricity production of the related Project, whereas Customer Agreements representing leases require fixed monthly payments from customers.

Total revenue from customers' contingent payments under PPAs recognized in the years ended December 31, 2017, 2016 and 2015 was \$109.8 million, \$86.2 million and \$59.8 million, respectively.

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

Future minimum lease payments to be received from customers whose Customer Agreements represent non-cancelable leases are as follows (in thousands):

2018.....	\$	49,994
2019.....		50,839
2020.....		51,695
2021.....		52,576
2022.....		53,481
Thereafter		826,687
Total.....	<u>\$</u>	<u>1,085,272</u>

Note 20. Income Taxes

The following table presents the (income) loss before income taxes for the periods presented (in thousands):

	For the Year Ended December 31,		
	2017	2016	2015
(Income) loss attributable to common stockholders.....	\$ (156,663)	\$ (127,680)	\$ 33,545
Loss attributable to noncontrolling interest and redeemable noncontrolling interests	411,259	394,988	220,660
Loss before income taxes.....	<u>\$ 254,596</u>	<u>\$ 267,308</u>	<u>\$ 254,205</u>

The income tax provision (benefit) consists of the following (in thousands):

	For the Year Ended December 31,		
	2017	2016	2015
Current			
Federal	\$ —	\$ —	\$ —
State	—	—	—
Total current expense.....	—	—	—
Deferred			
Federal	21,258	30,197	(7,516)
State	10,880	5,796	2,217
Total deferred provision.....	<u>32,138</u>	<u>35,993</u>	<u>(5,299)</u>
Total	<u>\$ 32,138</u>	<u>\$ 35,993</u>	<u>\$ (5,299)</u>

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

The following table represents a reconciliation of the statutory federal rate and the Company's effective tax rate for the periods presented:

	For the Year Ended December 31,		
	2017	2016	2015
Tax provision (benefit) at federal statutory rate.....	(34.00)%	(34.00)%	(34.00)%
State income taxes, net of federal benefit	2.42	1.92	0.87
Effect of noncontrolling and redeemable noncontrolling interests	54.92	50.23	29.53
Stock-based compensation	0.75	0.68	1.06
Effect of prepaid tax asset	—	(5.57)	0.04
Tax credits.....	(1.36)	(1.61)	(0.43)
Effect of federal rate change.....	(12.53)	—	—
Effect of valuation allowance	1.86	0.25	—
Other.....	0.56	1.56	0.85
Total.....	<u>12.62 %</u>	<u>13.46 %</u>	<u>(2.08)%</u>

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The following table represents significant components of the Company's deferred tax assets and liabilities for the periods presented (in thousands):

	December 31,	
	2017	2016
Deferred tax assets		
Accruals and prepaids.....	\$ 14,390	\$ 18,010
Deferred revenue	32,502	23,559
Net operating loss carryforwards	186,863	218,719
Stock-based compensation	4,994	6,908
Investment tax and other credits.....	24,580	18,454
Total deferred tax assets	<u>263,329</u>	<u>285,650</u>
Less: Valuation allowance	(5,386)	(663)
Gross deferred tax assets	<u>257,943</u>	<u>284,987</u>
Deferred tax liabilities		
Capitalized initial direct costs.....	38,752	45,030
Fixed asset depreciation	173,175	206,754
Deferred tax on investment in partnerships.....	105,147	448,600
Gross deferred tax liabilities	<u>317,074</u>	<u>700,384</u>
Net deferred tax liabilities.....	<u>\$ (59,131)</u>	<u>\$ (415,397)</u>

As of December 31, 2017, the Company had net operating loss carryforwards for federal, California and other state income tax purposes of approximately \$699.6 million, \$387.2 million and \$247.5 million, respectively, which will begin to expire in the year 2028, 2028 and 2024, respectively, if not utilized. As of December 31, 2016, the Company had net operating loss carryforwards for federal, California and other state income tax purposes of approximately \$571.3 million, \$348.2 million and \$176.7 million, respectively, which will begin to expire in the year 2028, 2028 and 2024, respectively, if not utilized.

As of December 31, 2017, the Company has an investment tax credit carryforward of approximately \$11.9 million which begins to expire in the year 2028, if not utilized and no California enterprise zone credits. As of December 31, 2016, the Company has an investment tax credit carryforward of approximately \$9.3 million and California enterprise zone credits of approximately \$1.0 million.

Notes to Consolidated Financial Statements — Continued

Generally, utilization of the net operating loss carryforwards and credits may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code (IRC) of 1986, as amended and similar state provisions. The Company performed an analysis to determine whether an ownership change under Section 382 of the Code had occurred and determined that no ownership changes were identified as of December 31, 2017.

Valuation allowances are provided against deferred tax assets to the extent that it is more likely than not that the deferred tax asset will not be realized. The Company's management considers all available positive and negative evidence including its history of operating income or losses, future reversals of existing taxable temporary difference, taxable income in carryback years and tax-planning strategies. The Company has concluded that it is more likely than not that the benefit from certain state net operating loss carryforwards and state tax credits will not be realized. In recognition of this risk, the Company has provided a valuation allowance of \$5.4 million on the deferred tax assets relating to these state net operating loss carryforwards and state tax credits which is an increase of \$4.7 million in 2017.

The Company sells solar energy systems to investment Funds. As the investment Funds are consolidated by the Company, the gain on the sale of the assets has been eliminated in the consolidated financial statements. These transactions are treated as intercompany sales and any tax expense incurred related to these sales prior to fiscal year 2017 was deferred. As described in Note 2, *Summary of Significant Accounting Policies – Recently Issued Accounting Standards*, ASU 2016-16, *Intra-Entity Transfers of Assets Other Than Inventory*, requires entities to recognize income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. As a result, a reporting entity would recognize the tax expense from the sale of assets in the seller's tax jurisdiction when the transfer occurs, even though the pre-tax effects of the transaction are eliminated in the consolidated financial statements. Any deferred tax asset that arises in the buyer's jurisdiction would also be recognized at the time of the transfer. As the Company sells solar energy systems to Funds, the Company will record the current tax effect of the gain on the sale as well as a deferred tax asset related to the Company's increased tax basis in the partnership as a result of the sale. As a result of the adoption of ASU 2016-16, the Company recognized in retained earnings the reversal of the net prepaid tax assets of \$378.5 million previously recorded for the tax deferral, and recognized gross a deferred tax asset of \$378.2 million at January 1, 2017.

The Company adopted ASU 2016-09, *Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, on January 1, 2017. As a result of the adoption, the Company has increased its federal and state deferred tax assets by \$3.3 million for the cumulative unrecognized federal and state gross windfall net operating loss carryover at December 31, 2016 of \$8.6 million and \$6.8 million, respectively, with an offsetting adjustment to retained earnings of \$3.3 million.

Tax Reform

On December 22, 2017, the US government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the US tax code including but not limited to, (1) reducing the US federal corporate tax rate from 35% to 21%; (2) immediate expensing of certain tangible personal property (3) creating a new limitation on deductible interest expense; (4) enacting special rules for taxable year of inclusion for certain revenues and (5) changing rules related to the uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under ASC 740, Income taxes. In accordance with SAB 118 a company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete but it is able to determine a reasonable estimate, it must record a provisional estimate in the financial statements. Additional work is necessary for a more detailed analysis of our deferred tax assets and liabilities. Any subsequent adjustment to these amounts will be recorded to current tax expense in the quarter of 2018 when the analysis is complete.

We have accounted for the provisional adjustments but we have not completed our accounting for income tax effects for certain elements of the Tax Act. The Company has recognized the provisional tax impacts related to the

Notes to Consolidated Financial Statements — Continued

revaluation of deferred tax assets and liabilities and included these amounts in its consolidated financial statements for the year ended December 31, 2017. The Company will continue to refine the calculations as additional analysis is completed.

In addition, the Company continues to evaluate their performance-based compensation plans within the new definitions under IRC Section 162(m) of the Internal Revenue Code. The preliminary assessment is that we believe that performance based compensation provided prior to November 2, 2017 was provided pursuant to a written binding agreement and will be deductible. No further adjustment has been made at this time. The accounting for this item is incomplete and may change as our interpretation of the provisions of the Act evolve, additional information becomes available or interpretive guidance is issued by the U.S. Treasury. The final determination will be completed no later than one year from the enactment date.

Uncertain Tax Positions

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal, state and local jurisdictions, where applicable. The statute of limitations for the tax returns varies by jurisdictions.

We determine whether a tax position is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. We use a two-step approach to recognize and measure uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained upon tax authority examination, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement. We have analyzed the Company's inventory of tax positions with respect to all applicable income tax issues for all open tax years (in each respective jurisdiction).

Our policy is to include interest and penalties related to unrecognized tax benefits, if any, within the provision for taxes in the consolidated statements of operations.

As of December 31, 2017 and 2016, the Company had \$1.5 million of unrecognized tax benefits related to an acquisition in 2015. In addition, there was \$0.4 million and \$0.3 million of interest and penalties for uncertain tax positions as of December 31, 2017 and 2016, respectively. Due to the expiration of federal and California statute of limitations, the Company expects the total amount of gross unrecognized tax benefits will decrease by \$1.1 million within 12 months of December 31, 2017.

One of our investment funds has recently been selected for audit by the Internal Revenue Service (the "IRS"). In addition, two of our investors are currently being audited by the IRS, and these investor audits involve a review of the fair market value determination of our solar energy systems. If these investor audits result in an adverse finding, we would be subject to an indemnity obligation to these investors. The Company is subject to taxation and files income tax returns in the U.S., and various state and local jurisdictions. Due to the Company's net losses, substantially all of its federal, state and local income tax returns since inception are still subject to audit.

The following table summarizes the tax years that remain open and subject to examination by the tax authorities in the most significant jurisdictions in which the Company operates:

	<u>Tax Years</u>
U.S. Federal.....	2014 - 2017
State	2013 - 2017

Notes to Consolidated Financial Statements — Continued

Net Operating Loss Carryforwards

As a result of the Company's net operating loss carryforwards as of December 31, 2017, the Company does not expect to pay income tax, including in connection with its income tax provision for the year ended December 31, 2017 until the Company's net operating losses are fully utilized. As of December 31, 2017, the Company's federal and state net operating loss carryforwards were \$699.6 million and \$634.7 million, respectively. If not utilized, the federal net operating loss will begin to expire in the year 2028 and the state net operating losses will begin to expire in the year 2024.

Note 21. Commitments and Contingencies**Letters of Credit**

As of December 31, 2017 and 2016, the Company had \$16.4 million and \$6.2 million, respectively, of unused letters of credit outstanding, which carry fees of 2.50 - 3.25% per annum and 2.75% per annum, respectively.

Non-cancellable Operating Leases

The Company leases facilities and equipment under non-cancellable operating leases. Total operating lease expenses were \$12.5 million, \$12.4 million and \$7.0 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Certain operating leases contain rent escalation clauses, which are recorded on a straight-line basis over the initial term of the lease with the difference between the rent paid and the straight-line rent recorded as a deferred rent liability. Lease incentives received from landlords are recorded as deferred rent liabilities and are amortized on a straight-line basis over the lease term as a reduction to rent expense. Deferred rent liabilities were \$2.5 million and \$2.9 million as of December 31, 2017 and 2016, respectively.

Future minimum lease payments expected to be made under non-cancelable operating lease agreements as of December 31, 2017 for each of the years ending December 31, are as follows (in thousands):

2018.....	\$	9,360
2019.....		6,453
2020.....		4,465
2021.....		2,851
2022.....		2,399
Thereafter		1,580
Total.....	\$	<u>27,108</u>

Capital Lease Obligations

As of December 31, 2017 and 2016, capital lease obligations were \$13.2 million and \$23.0 million, respectively. The capital lease obligations bear interest at rates up to 5.16% per annum and 10% per annum, respectively.

Sunrun Inc.
Notes to Consolidated Financial Statements — Continued

The following is a schedule of future lease payments as of December 31, 2017 (in thousands):

2018.....	\$	7,919
2019.....		4,810
2020.....		976
2021.....		266
2022.....		62
Thereafter		18
Total future lease payments.....		<u>14,051</u>
Less: Amount representing estimated executory costs included in future lease payments		326
Net minimum future lease payments.....		<u>13,725</u>
Less: Amount representing interest.....		493
Present value of future payments		<u>13,232</u>
Less: Current portion.....		7,421
Long term portion.....	\$	<u>5,811</u>

Purchase Commitment

In 2017, the Company entered into purchase commitments with multiple suppliers to purchase \$280.6 million of photovoltaic modules and inverters over the next 24 months with the first modules delivered in January 2018. There is some variability to the commitment amount as the final details of tariff imposition are implemented by our suppliers.

Warranty Accrual

The Company accrues warranty costs when revenue is recognized for solar energy systems sales, based on the estimated future costs of meeting its warranty obligations. Warranty costs primarily consist of replacement costs for supplies and labor costs for service personnel since warranties for equipment and materials are covered by the original manufacturer's warranty (other than a small deductible in certain cases). As such, the warranty reserve is immaterial in all periods presented. The Company makes and revises these estimates based on the number of solar energy systems under warranty, the Company's historical experience with warranty claims, assumptions on warranty claims to occur over a systems' warranty period and the Company's estimated replacement costs.

Guarantees

In December 2017, the Company acquired the investor's interest in the consolidated VIE for which the Company guaranteed an internal rate of return. Upon purchase of the investor's stake in this Fund, these obligations were satisfied as described in Note 15, *VIE Arrangements*. The Company guaranteed one of its investors in one of its Funds an internal rate of return, calculated on an after-tax basis, in the event that it purchases the investor's interest or the investor sells its interest to the Company.

ITC and Cash Grant Indemnification

The Company is contractually committed to compensate certain investors for any losses that they may suffer in certain limited circumstances resulting from reductions in ITCs or U.S. Treasury grants. Generally, such obligations would arise as a result of reductions to the value of the underlying solar energy systems as assessed by the Internal Revenue Service (the "IRS") or U.S. Treasury Department. At each balance sheet date, the Company assesses and recognizes, when applicable, the potential exposure from this obligation based on all the information available at that time, including any audits undertaken by the IRS. The Company believes that this obligation is not probable based on the facts known as of the filing date of this Annual Report on Form 10-K. The maximum potential future payments that the Company could have to make under this obligation would depend on the difference between the fair values of the solar energy systems sold or transferred to the Funds as determined by the Company and the values the IRS would determine as the fair value for the systems for purposes of claiming ITCs. ITCs are claimed based on the statutory regulations from the IRS. The Company uses fair values determined with the assistance of an independent third-party appraisal as the basis for determining the ITCs that are passed-through to

Notes to Consolidated Financial Statements — Continued

and claimed by the Fund investors. Since the Company cannot determine how the IRS will evaluate system values used in claiming ITCs, the Company is unable to reliably estimate the maximum potential future payments that it could have to make under this obligation as of each balance sheet date.

Litigation

The Company is subject to certain legal proceedings, claims, investigations and administrative proceedings in the ordinary course of its business. The Company records a provision for a liability when it is both probable that the liability has been incurred and the amount of the liability can be reasonably estimated. These provisions, if any, are reviewed at least quarterly and adjusted to reflect the impacts of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular case. Depending on the nature and timing of any such proceedings that may arise, an unfavorable resolution of a matter could materially affect the Company's future consolidated results of operations, cash flows or financial position in a particular period.

In July 2012, the U.S. Treasury Department and the Department of Justice (together, the "Government") opened a civil investigation into the participation by residential solar developers in the Section 1603 grant program. The Government served subpoenas on several developers, including Sunrun, along with their investors and valuation firms. The focus of the investigation is the claimed fair market value of the solar systems the developers submitted to the Government in their grant applications. The Company has cooperated fully with the Government and plans to continue to do so. No claims have been brought against the Company. The Company is not able to estimate the ultimate outcome or a range of possible loss at this point in time.

On November 20, 2015, a putative class action captioned *Slovin et al. v. Sunrun Inc. and Clean Energy Experts, LLC*, Case No. 4:15-cv-05340, was filed in the United States District Court, Northern District of California. The complaint generally alleged violations of the Telephone Consumer Protection Act (the "TCPA") on behalf of an individual and putative classes of persons alleged to be similarly situated. Plaintiffs filed a First Amended Complaint on December 2, 2015, and a Second Amended Complaint on March 25, 2016, also asserting individual and putative class claims under the TCPA. By Order entered on April 28, 2016, the Court granted the Company's motion to strike the class allegations set forth in the Second Amended Complaint, and granted leave to amend. Plaintiffs filed a Third Amended Complaint on July 12, 2016 asserting individual and putative class claims under the TCPA. On October 12, 2016, the Court denied the Company's motion to again strike the class allegations set forth in the Third Amended Complaint. On October 3, 2017, plaintiffs filed a motion for leave to file a Fourth Amended Complaint, seeking to, among other things, revise the definitions of the classes that plaintiffs seek to represent. The Company has opposed that motion, which remains pending before the Court. In each iteration of their complaint, plaintiffs seek statutory damages, equitable and injunctive relief, and attorneys' fees and costs, on behalf of themselves and the absent classes. Plaintiffs' deadline to file their motion for class certification is currently April 13, 2018.

Most, if not all, of the claims asserted in the lawsuit relate to activities allegedly engaged in by third-party vendors, for which the Company denies any responsibility. The vendors are contractually obligated to indemnify the Company for losses related to the conduct alleged. The Company believes that the claims are without merit and intends to defend itself vigorously.

On April 13, 2016, a purported shareholder class action captioned *Pytel v. Sunrun Inc., et al.*, Case No. CIV 538215, was filed in the Superior Court of California, County of San Mateo, against the Company, certain of the Company's directors and officers, the underwriters of the Company's initial public offering and certain other defendants. The complaint generally alleges that the defendants violated Sections 11, 12 and 15 of the Securities Act of 1933 by making false or misleading statements in connection with the Company's August 5, 2015 initial public offering regarding the continuation of net metering programs. The plaintiffs seek to represent a class of persons who acquired the Company's common stock pursuant or traceable to the initial public offering. Plaintiffs seek compensatory damages, including interest, rescission or rescissory damages, an award of reasonable costs and attorneys' fees, and any equitable or injunctive relief deemed appropriate by the court. On April 29, 2016, a purported shareholder class action captioned *Baker et al. v. Sunrun Inc., et al.*, Case No. CIV 538419, was filed in the Superior Court of California, County of San Mateo. On May 10, 2016, a purported shareholder class action captioned *Nunez v. Sunrun Inc., et al.*, Case No. CIV 538593, was filed in the Superior Court of California, County of San Mateo. The *Baker* and *Nunez* complaints are substantially similar to the *Pytel* complaint, and seek similar relief against similar defendants on behalf of the same purported class.

Notes to Consolidated Financial Statements — Continued

On April 21, 2016, a purported shareholder class action captioned *Cohen, et al. v. Sunrun Inc., et al.*, Case No. CIV 538304, was filed in the Superior Court of California, County of San Mateo, against the Company, certain of the Company's directors and officers, and the underwriters of the Company's initial public offering. The complaint generally alleges that the defendants violated Sections 11, 12 and 15 of the Securities Act of 1933 by making false or misleading statements in connection with an August 5, 2015 initial public offering regarding the Company's business practices and its dependence on complex financial instruments. The *Cohen* plaintiffs seek to represent the same class and seek similar relief as the plaintiffs in the *Pytel*, *Nunez*, and *Baker* actions. On September 26, 2016, the *Baker*, *Cohen*, *Nunez*, and *Pytel* actions were consolidated. On December 27, 2017, the court granted Plaintiffs' motion for class certification. The Company believes that the claims are without merit and intends to defend itself vigorously.

On May 3, 2017, a purported shareholder class action captioned *Fink, et al. v. Sunrun Inc., et al.*, Case No. 3:17-cv-02537, was filed in the United States District Court, Northern District of California, against the Company and certain of the Company's directors and officers. The complaint generally alleges that the defendants violated Sections 10(b) and 20(a) of the Exchange Act of 1934, and Securities and Exchange Commission Rule 10b-5, by making false or misleading statements in connection with public filings made between September 15, 2015 and March 8, 2017 regarding the number of customers who canceled contracts after signing up for the Company's home-solar energy system. The plaintiff seeks compensatory damages, including interest, attorney's fees, and costs, on behalf of all persons other than the defendants who purchased the Company's securities between September 16, 2015 and May 2, 2017. On May 4, 2017, a purported shareholder class action captioned *Hall, et al. v. Sunrun Inc., et al.*, Case No. 3:17-cv-02571, was filed in the United States District Court, Northern District of California. On May 18, 2017, a purported shareholder class action captioned *Sanogo, et al. v. Sunrun Inc., et al.*, Case No. 3:17-cv-02865, was filed in the United States District Court, Northern California District of California. The *Hall* and *Sanogo* complaints are substantially similar to the *Fink* complaint, and seeks similar relief against similar defendants on behalf of a substantially similar class. On August 23, 2017, the *Fink*, *Hall*, and *Sanogo* actions were consolidated, and on September 25, 2017, plaintiffs filed a consolidated amended complaint which alleges the same underlying violations as the original *Fink*, *Hall* and *Sanogo* complaints. The Company believes that the claims are without merit and intends to defend itself vigorously.

On June 29, 2017, a shareholder derivative complaint captioned *Barbara Sue Sklar Living Trust v. Sunrun Inc. et al.*, was filed in the United States District Court, Northern District of California, against the Company and certain of the Company's directors and officers. The complaint generally alleges that the defendants violated Section 14(a) of the Exchange Act of 1934 by making false or misleading statements in connection with public filings, including proxy statements, made between September 10, 2015 and May 3, 2017 regarding the number of customers who cancelled contracts after signing up for the Company's home solar energy system. The Plaintiff seeks, among other things, damages in favor of the Company, certain corporate actions to purportedly improve the Company's corporate governance, and an award of costs and expenses to the putative plaintiff stockholder, including attorneys' fees. The Company believes that the claims are without merit and intends to defend itself vigorously.

Note 22. Net Income (Loss) Per Share

Prior to the initial public offering, the Company calculated net income (loss) per share (EPS) available to common stockholders using the two-class method, which allocates net income that otherwise would have been available to common shareholders to holders of participating securities. In connection with the Company's initial public offering, the Company recognized a deemed dividend of \$24.9 million to Series D and E convertible preferred shareholders, as further discussed in Note 17, *Stockholders' Equity*.

Basic net income (loss) per share is computed by dividing net income (loss) available to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by dividing net income (loss) available to common stockholders by the weighted-average number of common shares outstanding during the period adjusted to include the effect of potentially dilutive securities. Potentially dilutive securities are excluded from the computation of dilutive EPS in periods in which the effect would be antidilutive.

Sunrun Inc.

Notes to Consolidated Financial Statements — Continued

The computation of the Company's basic and diluted net income per share are as follows (in thousands, except per share amounts):

	Years Ended December 31,		
	2017	2016	2015
Numerator:			
Net income (loss) attributable to common stockholders	\$ 124,525	\$ 91,687	\$ (28,246)
Less: Deemed dividend to convertible preferred stockholders....	—	—	(24,890)
Net Income (loss) available to common stockholders	<u>\$ 124,525</u>	<u>\$ 91,687</u>	<u>\$ (53,136)</u>
Denominator:			
Weighted average shares used to compute net income (loss) per share attributable to common stockholders, basic	105,432	102,367	55,091
Weighted average effect of potentially dilutive shares to purchase common stock	2,774	2,597	—
Weighted average shares used to compute net income (loss) per share attributable to common stockholders, diluted	<u>108,206</u>	<u>104,964</u>	<u>55,091</u>
Net income (loss) per share attributable to common stockholders			
Basic	\$ 1.18	\$ 0.90	\$ (0.96)
Diluted	<u>\$ 1.15</u>	<u>\$ 0.87</u>	<u>\$ (0.96)</u>

The following shares were excluded from the computation of diluted net income per share as the impact of including those shares would be anti-dilutive (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Warrants	1,251	1,251	1,251
Outstanding stock options	13,803	8,981	12,631
Unvested restricted stock units	1,451	1,564	599
ESPP	—	—	79
Total	<u>16,505</u>	<u>11,796</u>	<u>14,560</u>

Note 23. Related Party Transactions

An individual who previously served as one of the Company's directors until March 2017 has direct and indirect ownership interests in Enphase Energy, Inc. ("Enphase"). For the years ended December 31, 2017, 2016 and 2015, the Company recorded \$9.1 million, \$19.9 million and \$11.9 million, respectively, in purchases from Enphase and had outstanding payables to Enphase of \$2.0 million and \$0.4 million as of December 31, 2017 and 2016, respectively.

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

Not applicable.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of our “disclosure controls and procedures” as of the end of the period covered by this Annual Report on Form 10-K, pursuant to Rules 13a-15(e) and 15d-15(e) under the Exchange Act.

In connection with that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective and designed to provide reasonable assurance that the information required to be disclosed is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms as of December 31, 2017. The term “disclosure controls and procedures,” as defined in Rules 13a-15I and 15d-15I under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management’s Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Our management used the Committee of Sponsoring Organizations of the Treadway Commission Internal Control - Integrated Framework (2013), or the COSO framework, to evaluate the effectiveness of internal control over financial reporting. Management believes that the COSO framework is a suitable framework for its evaluation of financial reporting because it is free from bias, permits reasonably consistent qualitative and quantitative measurements of our internal control over financial reporting, is sufficiently complete so that those relevant factors that would alter a conclusion about the effectiveness of our internal control over financial reporting are not omitted and is relevant to an evaluation of internal control over financial reporting.

Management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2017 and has concluded that such internal control over financial reporting is effective.

Attestation Report of the Registered Public Accounting Firm on Internal Control over Financial Reporting

This Annual Report does not include an attestation report of our independent registered public accounting firm on our internal control over financial reporting due to a transition period established by the rules of the SEC for newly public companies and due to exemptions available to us as an “emerging growth company,” as defined by the JOBS Act.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by this Item 10 of Form 10-K will be set forth in our proxy statement to be filed with the SEC in connection with the solicitation of proxies for our 2018 Annual Meeting of Stockholders ("Proxy Statement") and is incorporated herein by reference. The Proxy Statement will be filed with the SEC within 120 days after the year-end of the fiscal year which this report relates.

Item 11. Executive Compensation.

The information required by this Item 11 will be set forth in the Proxy Statement and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this Item 12 will be set forth in the Proxy Statement and is incorporated herein by reference.

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

The information required by this Item 13 will be set forth in the Proxy Statement and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

The information required by this Item 14 will be set forth in the Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

Documents filed as part of this report are as follows:

(1) Consolidated Financial Statements

Our Consolidated Financial Statements are listed in the “Index to Consolidated Financial Statements” under Item 8 of Part II of this Annual Report.

(2) Financial Statement Schedules

The required information is included elsewhere in this Annual Report, not applicable, or not material.

(3) Exhibits

The exhibits listed in the accompanying “Exhibit Index” are filed or incorporated by reference as part of this Annual Report.

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Form	Incorporated by Reference		
			File No.	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation of the Registrant	10-Q	001-37511	3.1	9/15/2015
3.2	Amended and Restated Bylaws of the Registrant	10-Q	001-37511	3.2	9/15/2015
4.1	Form of common stock certificate of the Registrant	S-1	333-205217	4.1	6/25/2015
4.2	Form of Warrant	8-K	001-37511	4.1	10/2/2015
4.3	Tenth Amended and Restated Investors' Rights Agreement among the Registrant and certain holders of its capital stock, dated as of March 31, 2015	S-1	333-205217	4.2	6/25/2015
4.4	Shareholders Agreement among the Registrant and certain holders of its capital stock, dated as of April 1, 2015	S-1	333-205217	4.3	6/25/2015
4.5	Form of Stock Issuance Agreement	S- ⁴ / ₁ A	333-205217	4.5	7/22/2015
4.6	Warrant to Purchase Shares of Common Stock of Sunrun Inc.	8-K	001-37511	4.1	8/24/2017
4.7	Registration Rights Agreement between the Company and Comcast Corporation, dated August 23, 2017	8-K	001-37511	4.2	8/24/2017
4.8	Form of Indenture, between the Registrant and one or more trustees to be named	S-3	333-222099	4.5	12/15/2017
4.9	Form of Common Stock Warrant Agreement and Warrant Certificate	S-3	333-222099	4.8	12/15/2017
4.10	Form of Preferred Stock Warrant Agreement and Warrant Certificate	S-3	333-222099	4.9	12/15/2017
4.11	Form of Debt Securities Warrant Agreement and Warrant Certificate	S-3	333-222099	4.10	12/15/2017
10.1+	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers	S-1	333-205217	10.1	6/25/2015
10.2+	Sunrun Inc. 2015 Equity Incentive Plan and related form agreements	S- ⁴ / ₁ A	333-205217	10.2	7/22/2015
10.3+	Sunrun Inc. 2015 Employee Stock Purchase Plan and related form agreements	10-Q	001-37511	10.1	8/7/2017
10.4+	Sunrun Inc. 2014 Equity Incentive Plan	S-1	333-205217	10.4	6/25/2015
10.5+	Sunrun Inc. 2013 Equity Incentive Plan and related form agreements	S-1	333-205217	10.5	6/25/2015
10.6+	Sunrun Inc. 2008 Equity Incentive Plan and related form agreements	S-1	333-205217	10.6	6/25/2015
10.7+	Mainstream Energy Corporation 2009 Stock Plan	S-1	333-205217	10.7	6/25/2015
10.8+	Sunrun Inc. Executive Incentive Compensation Plan	S-1	333-205217	10.8	6/25/2015
10.9+	Key Employee Change in Control and Severance Plan and Summary Plan Description	S-1	333-205217	10.9	6/25/2015
10.10+	Employment Letter between the Registrant and Lynn Jurich, dated as of May 8, 2015	S-1	333-205217	10.10	6/25/2015
10.11+	Employment Letter between the Registrant and Edward Fenster, dated as of May 8, 2015	S-1	333-205217	10.11	6/25/2015
10.12+	Employment Letter between the Registrant and Bob Komin, dated as of May 8, 2015	S-1	333-205217	10.12	6/25/2015
10.13+	Employment Letter between the Registrant and Thomas Holland, dated as of May 8, 2015	S-1	333-205217	10.13	6/25/2015
10.14+	Employment Letter between the Registrant and Paul Winnowski, dated as of May 8, 2015	S-1	333-205217	10.14	6/25/2015
10.15+	Board Services Agreement between the Registrant and Gerald Risk, dated as of February 1, 2014	S-1	333-205217	10.15	6/25/2015

Exhibit Number	Exhibit Description	Form	Incorporated by Reference		
			File No.	Exhibit	Filing Date
10.16	Agreement of Sublease between the Registrant and Visa U.S.A. Inc., dated as of April 1, 2013, as amended on April 29, 2013	S-1	333-205217	10.16	6/25/2015
10.17	Credit Agreement among the Registrant, Credit Suisse Securities (USA) LLC and the other parties thereto, dated as of April 1, 2015	S-1	333-205217	10.17	6/25/2015
10.18	Credit Agreement among Sunrun Aurora Portfolio 2014-A, LLC, Investec Bank PLC, Keybank National Association and the Lenders from time to time as party thereto, dated December 31, 2014	S-1	333-205217	10.18	6/25/2015
10.19	Transition, Separation and General Release Agreement, dated December 7, 2015 between Tom Holland and Sunrun Inc	8-K	001-37511	10.1	12/8/2015
10.20	Amended and Restated Credit Agreement among Sunrun Hera Portfolio 2015-A, LLC, Investec Bank PLC (as Administrative Agent), Investec Bank PLC (as Issuing Bank) and the Lenders from time to time as party thereto, dated January 15, 2016 and amended and restated as of June 23, 2017	10-Q/A	001-37511	10.2	12/29/2017
10.21	Amendment No. 2 to Credit Agreement among the Company, AEE Solar, Inc., Sunrun South LLC, Sunrun Installation Services Inc., Clean Energy Experts, LLC, each of the lenders identified on the signature pages thereto, Credit Suisse AG and Silicon Valley Bank, dated as of June 15, 2016	10-Q	001-37511	10.1	8/11/2016
10.22	Incremental Facility Agreement among the Company, AEE Solar, Inc., Sunrun South LLC, Sunrun Installation Services Inc., Clean Energy Experts, LLC, Credit Suisse AG and Comerica Bank, dated as of July 21, 2016	10-Q	001-37511	10.2	8/11/2016
10.23	First Amendment to Credit Agreement and Collateral Agency Agreement among Sunrun Hera Portfolio 2015-A, LLC, Investec Bank PLC (as administrative agent, issuing bank and as lender), each of the additional lenders identified on the signature pages thereto and Deutsche Bank Trust Company Americas, dated as of May 12, 2016	10-Q	001-37511	10.3	8/11/2016
10.24	Consent and Second Amendment to Credit Agreement among Sunrun Hera Portfolio 2015-A, LLC, Investec Bank PLC (as administrative agent, issuing bank and as lender) and each of the additional lenders identified on the signature pages thereto, dated of as June 29, 2016	10-Q	001-37511	10.4	8/11/2016
10.25	Amendment No. 3 to Credit Agreement among the Company, AEE Solar, Inc., Sunrun South LLC, Sunrun Installation Services Inc., Clean Energy Experts, LLC, each of the lenders identified on the signature pages thereto, Credit Suisse AG and Silicon Valley Bank, dated as of December 2, 2016	10-K	001-37511	10.25	3/8/2017
10.26	Consent and Third Amendment to Credit Agreement and First Amendment to Cash Diversion and Commitment Fee Guaranty among the Company, Sunrun Hera Portfolio 2015-A, LLC, Investec Bank Plc (as administrative agent, issuing bank and as lender) and each of the additional lenders identified on the signature pages thereto, dated as of November 30, 2016	10-K	001-37511	10.26	3/8/2017

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
10.27¥	Consent and Fourth Amendment to Credit Agreement and First Amendment to Guaranty and Security Agreement among Sunrun Hera Portfolio 2015-A, LLC, Sunrun [*] Manager [*], LLC, Sunrun [*] Manager [*], LLC, Sunrun [*] Manager [*], LLC, Sunrun [*] Manager [*], LLC, Sunrun [*] Manager [*], LLC, Sunrun [*] Manager [*], LLC, Investec Bank Plc (as administrative agent, issuing bank and as lender), Deutsche Bank Trust Company Americas, and each of the additional lenders identified on the signature pages thereto, dated as of January 31, 2017	10-K	001-37511	10.27	3/8/2017
10.28¥	Credit Agreement among Sunrun Neptune Portfolio 2016-A, LLC, as Borrower, Suntrust Bank as Administrative Agent, ING Capital LLC as LC Issuer, and The Lenders from Time to Time Party Hereto dated as of May 9, 2017 and Exhibits	10-Q/A	001-37511	10.3	12/29/2017
10.29¥	Consent and first amendment to amended and restated credit agreement and first amendment to amended and restated cash diversion and commitment fee guaranty, dated as of December 28, 2017				
10.30¥	Credit Agreement among Sunrun Scorpio Portfolio 2017-A, LLC, as Borrower, Keybank National Association, as Administrative Agent, Keybank National Association, as LC Issuer, and The Lenders from Time to Time Party Hereto dated as of October 20, 2017 and Exhibits				
10.31+	Transition, Separation and General Release Agreement with Paul Winnowski, effective 12/6/2017	8-K	001-37511	10.2	12/6/2017
21.1	List of subsidiaries of the Registrant	S-1	333-205217	21.1	6/25/2015
23.1	Consent of Independent Registered Public Accounting Firm				
31.1	Certification of Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				
31.2	Certification of Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				
32.1†	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				
101.INS	XBRL Instance Document				
101.SCH	XBRL Taxonomy Schema Linkbase Document				
101.CAL	XBRL Taxonomy Definition Linkbase Document				
101.DEF	XBRL Taxonomy Calculation Linkbase Document				
101.LAB	XBRL Taxonomy Labels Linkbase Document				
101.PRE	XBRL Taxonomy Presentation Linkbase Document				
†	The certifications attached as Exhibit 32.1 that accompany this Annual Report on Form 10-K, are deemed furnished and not filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Sunrun Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.				
+	Indicates management contract or compensatory plan.				
¥	Confidential treatment has been requested as to certain portions of this exhibit, which portions have been omitted and submitted separately to the Securities and Exchange Commission.				

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sunrun.com

595 Market Street
San Francisco, CA 94105

SUNRUN®