# SUNCUN

**2015 Q3 REVIEW**November 12, 2015

Creating a planet run by the sun

## Safe Harbor & Forward Looking Statements

This presentation contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, which statements involve substantial risks and uncertainties. Forward-looking statements in this presentation include, but are not limited to, statements regarding our future financial and operating guidance, including megawatt installations and bookings and revenue and operating expenses, operational and financial results such as estimates of nominal contracted payments remaining, estimated retained value, average system size, project value, estimated creation costs and NPV, and the assumptions related to the calculation of the foregoing metrics and expectations regarding customers, renewals, growth of the industry and macroeconomic trends.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions. The risks and uncertainties that could cause our results to differ materially and adversely from those expressed or implied by such forward-looking statements include: the availability of additional financing on acceptable terms; changes in the retail prices of traditional utility generated electricity; changes in policies and regulations including net metering and interconnection limits or caps; the availability of rebates, tax credits and other incentives; the availability of solar panels and other raw materials; our limited operating history, particularly as a new public company; our ability to attract and retain our relationships with third parties, including our solar partners; our ability to meet the covenants, representations and warranties in our investment funds and debt facilities; and such other risks and uncertainties identified in the registration statements and reports that we have filed with the U.S. Securities and Exchange Commission, or SEC, from time to time. You should not rely on 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, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. All forward-looking statements in this presentation are based on information available to us as of the date hereof, and we assume no obligation to update publicly these forward-looking statements for any reason, except as required by law.

## NPV growth and rapid cost declines

#### 94.5 MW Booked

115% year-over-year growth

#### 55.7 MW Deployed

85% year-over-year organic growth

## 528.2 Cumulative MW Deployed

**48%** increase year-over-year **2**<sup>nd</sup> largest residential fleet

## \$4.70 Project Value Per Watt

Compared to \$5.00 in Q2 2015

#### \$3.75 Creation Cost Per Watt

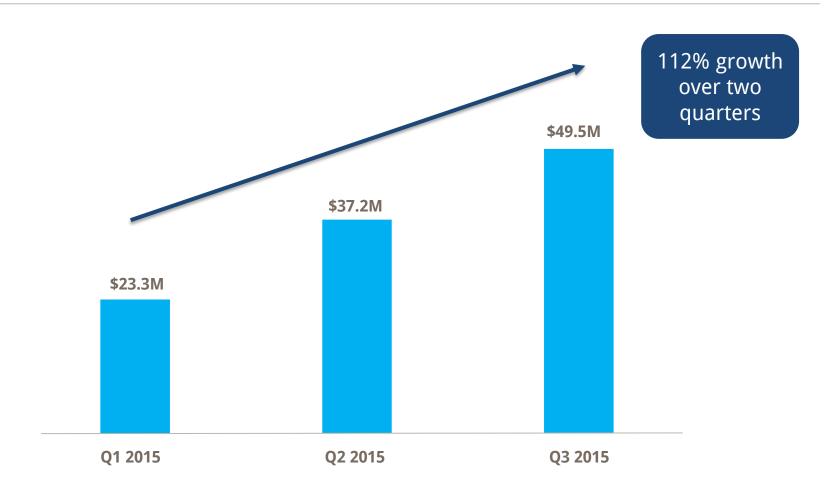
**\$0.61** or **14%** decrease from Q1 2015

#### \$49.5M NPV Generated

**112%** growth over Q1 2015



## Strong growth in NPV creation



## Differentiated approach, high quality results: 100,000 customers strong



**Disciplined market selection** 



**Technology-enabled customer targeting** 



**Differentiated customer experience** 



ATTRACTIVE UNIT ECONOMICS

## Sunrun's strategy drives durable competitive advantage

## Project Value & NPV Maximization

- History of focus on high revenue markets and customers, premium service
- Smart customer targeting
- Residential-only focus



#### **Cost Structure**

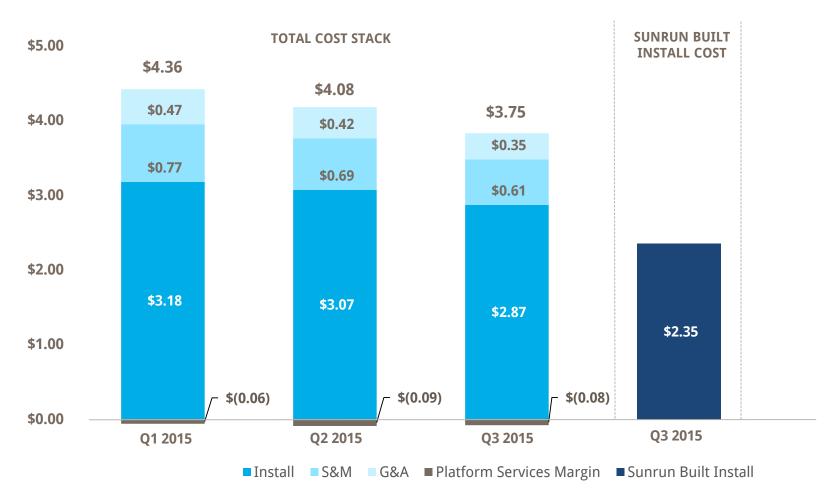
- Cost advantages from scale
- Unique advantage from monetizing platform services
- Broad multi-channel distribution leads to lower customer acquisition cost



#### **Flexibility**

- No recourse debt outside working capital line, due 2018
- Blend of fixed and variable costs
- Panel agnostic with no heavy capex / manufacturing exposure

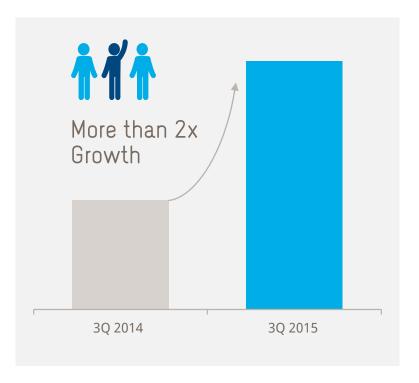
## Realizing rapid cost improvements Sunrun Built installations at \$2.35 / watt



# Increased year-over-year growth rates with greater cost improvements

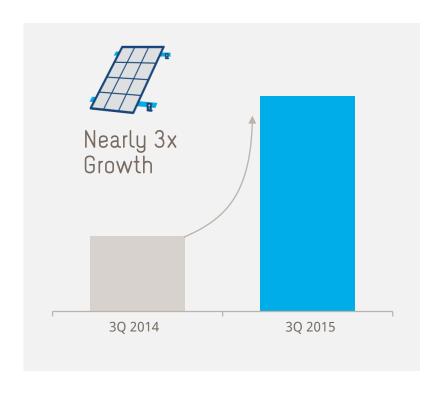
Direct to Consumer

#### **Growth in MW Booked**

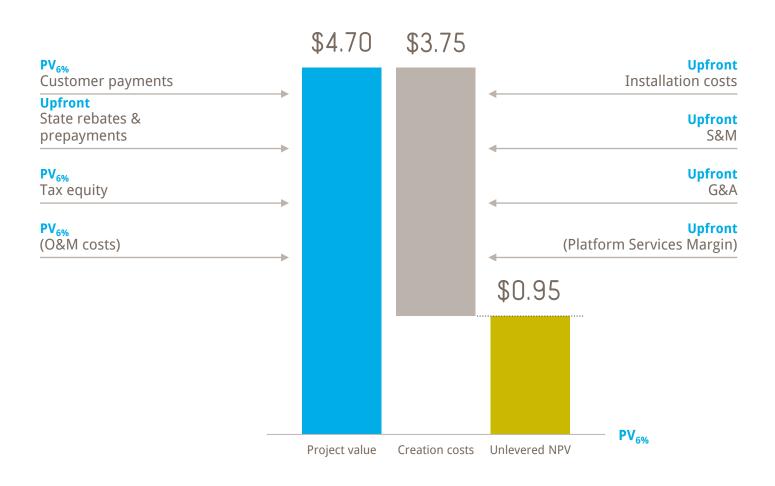


#### **Built by Sunrun**

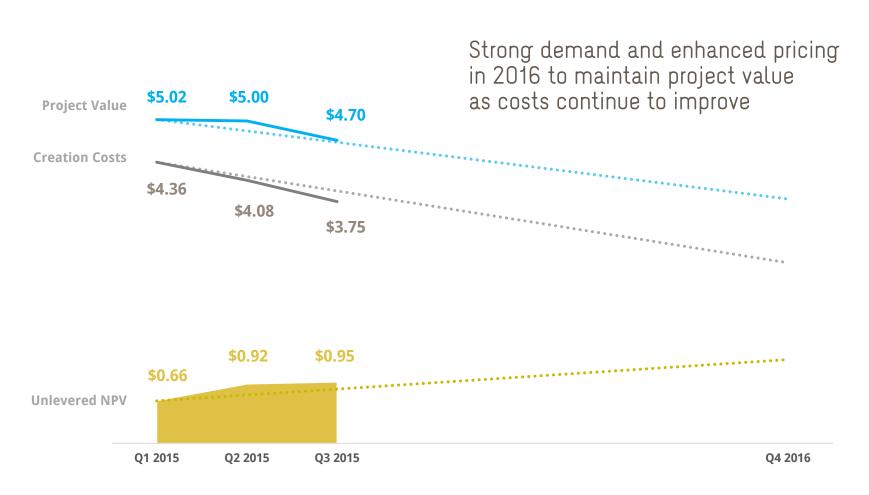
#### **Growth in MW Installed**



### Unlevered NPV at \$0.95 per watt



## Cost improvements and project value on track to achieve 2016 NPV above \$1 per watt



### \$1.4B in retained value and \$1.0B in net retained value

oss Retained Value (6%) as of September 30, 2015	\$1,368	°-\$2.3
- Long-term debt	(\$336)	per watt
- Lease pass-through financing	(\$127)	
- Line of credit	(\$133)	
+ Cash and cash equivalents	\$271	
et Retained Value	\$1,043	

# Project value assumptions have up to ~\$1 per watt in upside

Reported project value	\$4.70
+ 35-year, rather than 30-year, project life for 50% of customers	\$0.10
+ PV of Uncontracted SRECs (1)	\$0.09
+ Inverter replacement <sup>(2)</sup> and O&M <sup>(3)</sup> savings	\$0.12
+ Renewal at 10% discount to expected utility prices rather than Sunrun prices (4)	\$0.50
+ Leverage assumption at today's rates (5)	\$0.12
Possible upside case for project value	\$5.63

<sup>(1)</sup> Forward curves provided by SREC brokers

<sup>(2)</sup> Assumes 20% cost reduction

<sup>(3)</sup> O&M savings lead to an estimated cost of \$18.0/kw-yr for Low Upfront customers and \$10.0/kw-yr for Prepaid customers with a 2.0% annual escalator

Assumes 3% utility price escalation from today

<sup>(5)</sup> Assumes 4.5% cost of debt and a 70% advance rate

### Retained value discount rate

When discounting at a 6% unlevered discount rate and borrowing at 4.5%, contracted net retained value is being discounted at ~10%.(1)

- Gross retained value is the value of cash flows after expected tax equity dividends.
- Net retained value is Gross retained value less the <u>face value</u> of debt.
- Because market debt carries an interest rate of below 6%, the actual cost of debt service, discounted at 6%, is meaningfully less than the face value of debt.
- For back-leveraged funds, using a 6% unlevered discount rate and deducting the face value of debt results in net contracted retained value being discounted at ~10%. (1)

Capital Stack Component	Pre-Tax Cost	% of Capital	Pre-Tax Weighted Cost
Debt	4.5%	70%	3.2%
Equity	9.5%	30%	2.9%
Unlevered Discount Rate			6.0%

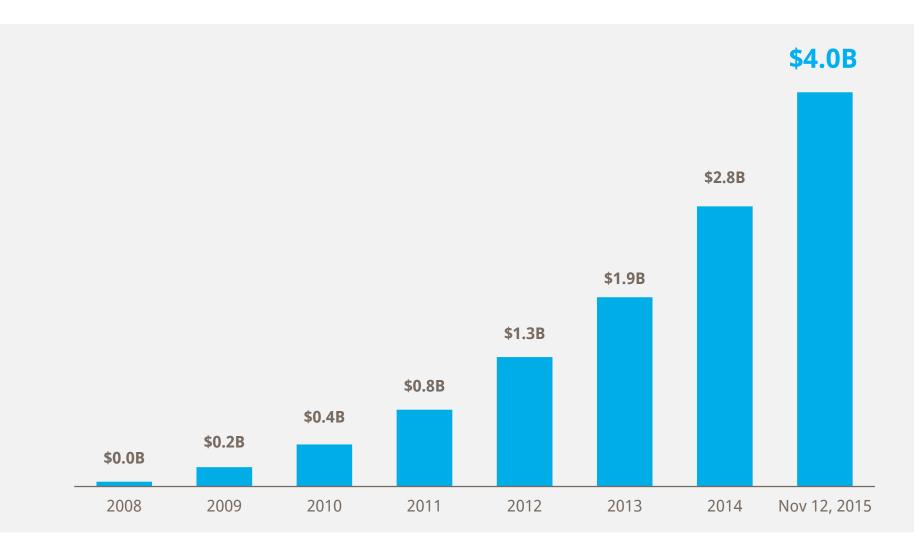
## Expected impact of changes in long-term interest rates is limited

The expectation of increased interest rates was largely priced into long-term rates at June 30, 2015. Even 11 years in the future, long-term rates are expected to climb less than 100 bps.

Interest Rates <sup>(1)</sup>	Actual 6/30/15	Forward 9/30/16	Forward 9/30/27	Headwind (6-15 to 9-16)
7-Year Swap (for debt costs)	2.15%	2.22%	3.06%	0.08%
Average of 10 & 30-Year Treasury (for retained value calculation)	2.74%	2.88%	3.57%	0.14%

NPV/Watt Headwind from 6/15/15 to 9/30/16 of ~\$0.04/watt

### Closed new tax equity financing for \$900 million in solar system value



### Guidance

#### 2015

#### **MW INSTALLATION**

Approximately 205 MW





## **APPENDIX: Key Operating Metrics**

#### **Three Months Ended** Sept. 30, 2015 June 30, 2015 Sept. 30, 2014 MW Booked 61.2 94.5 44.0 MW Deployed 55.7 42.4 33.5 (1) 528.2 472.5 Cumulative MW Deployed 356.2 Estimated Nominal Contracted Payments Remaining (in millions) \$2,219 \$1,917 \$1,423 Estimated Retained Value (in millions) \$1,368 \$1,223 \$897 Estimated retained value under energy contract (in millions) \$921 \$808 \$567 Estimated retained value of purchase (in millions) \$447 \$330 \$415 Estimated retained value per watt \$2.40 \$2.30 \$2.39

	Three Months Ended	
	Sept. 30, 2015	June 30, 2015
Project Value (per watt)	\$4.70	\$5.00 <sup>(1)</sup>
Creation Costs (2) (per watt)	\$3.75	\$4.08
Unlevered NPV (per watt)	\$0.95	\$0.92
NPV (in millions)	\$49.5	\$37.2

<sup>(1)</sup> Excludes materially all SREC value.

<sup>(1)</sup> Includes 3.4 MWs associated with purchase of asset portfolio in the second quarter of 2014.

<sup>(2)</sup> Excludes IDC costs paid prior to deployments and excludes non-cash items such as amortization of intangible assets and stock-based compensation, and contingent consideration related to an acquisition

### **APPENDIX: Glossary**

**MW Booked** represents the aggregate megawatt production capacity of our solar energy systems sold to customers or subject to an executed customer agreement, net of cancellations.

**MW Deployed** represents the aggregate megawatt production capacity of our solar energy systems, whether sold directly to customers or subject to customer agreements, for which we have (i) confirmation that the systems are installed on the roof, 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.

**Customers** refers to residential customers with solar energy systems that are installed or under contract to install, net of cancellations. Estimated Nominal Contracted Payments Remaining equals the sum of the remaining cash payments that customers are expected to pay over the initial terms of their agreements (not including the value of any renewal or system purchase at the end of the initial agreement term), including estimated uncollected prepayments, for systems contracted as of the measurement date.

**Estimated Retained Value** represents the cash flows (discounted at 6%) we expect to receive pursuant to customer agreements during the initial agreement term, excluding substantially all value from SRECs prior to July 1, 2015. It also includes a discounted estimate of the value of the purchase or renewal of the agreement at the end of the initial term. Estimated retained value excludes estimated distributions to investors in consolidated joint ventures and estimated operating, maintenance and administrative expenses for systems contracted as of the measurement date. We do not deduct amounts we are obligated to pass through to investors in lease pass-throughs. Estimated retained value under energy contract represents the net cash flows during the initial 20-year term of our customer agreements. Estimated retained value of purchase is the forecasted net present value we would receive upon or following the expiration of the initial contract term.

Project Value represents the value of upfront and future payments by customers, the benefits received from utility and state incentives, as well as the present value of net proceeds derived through investment funds. Project value is calculated as the sum of the following items (all measured on a per-watt basis with respect to megawatts deployed under customer agreements during the period): (i) estimated retained value, (ii) utility or upfront state incentives, (iii) upfront payments from customers for deposits and partial or full prepayments of amounts otherwise due under customer agreements and which are not already included in estimated retained value and (iv) finance proceeds from tax equity investors. Project value includes contracted SRECS. Project value does not include cash true-up payments or the value of asset contributions in lieu of cash true-up payments made to investment fund investors, the cumulative impact of which is expected to be immaterial in 2015.

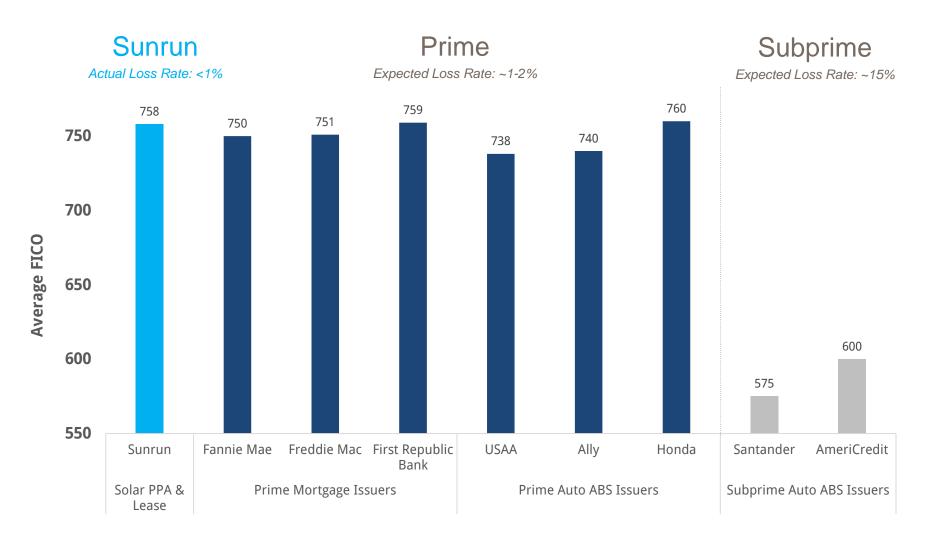
**Creation Costs** includes (i) certain installation and general and administrative costs after subtracting the gross margin on solar energy systems and product sales divided by watts deployed and (ii) certain sales and marketing expenses under new customer agreements, net of cancellations during the period divided by the related watts booked.

**Unlevered NPV** equals the difference between project value and estimated creation costs.

**Sunrun Built Install Cost** is the portion of installation cost per watt related to systems managed directly by Sunrun.

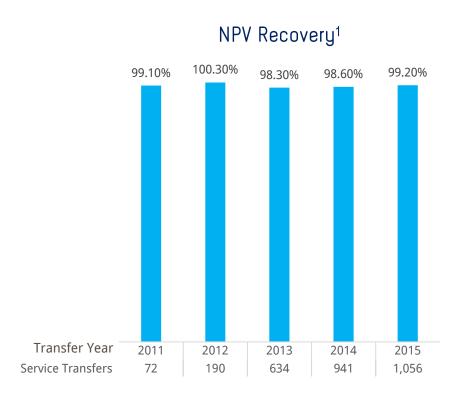
### **Customer Credit Risk**

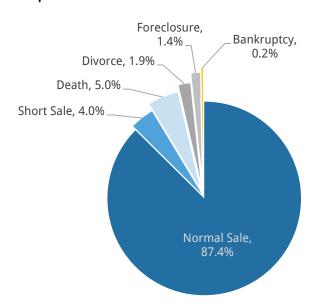
#### Sunrun customers are prime credit risks



### Service Transfer Performance

When customers move or their service is otherwise transferred to a new homeowner, Sunrun has maintained 99% of expected contract value





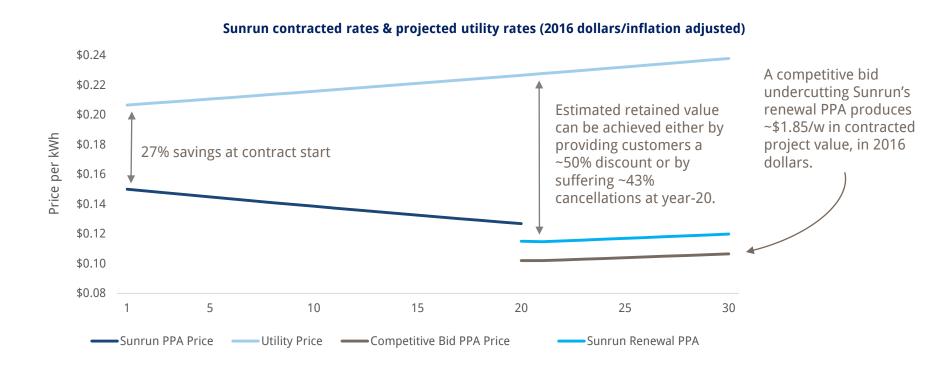
Transfer Reason	Transfers	NPV Recovery <sup>1</sup>
Normal Sale	2,543	99.40%
Short Sale	115	94.70%
Death	146	98.20%
Divorce	56	99.30%
Foreclosure	42	85.40%
Bankruptcy	7	67.20%
Total	2,909	98.8%

<sup>(1)</sup> Recovery percentage is equal to (i) remaining customer agreement cash flows after the service transfer discounted at 6%, divided by (ii) the sum of (a) remaining customer agreement cash flows before the service transfer discounted at 6% and (b) prepayments received in connection with the service transfer.

Data as of September 30, 2015 for Sunrun host customer agreements with monthly payments only. The sum of the percentage columns and the balance columns may not equal 100.0% or the total, as applicable, due to rounding. Excludes new home transfers and prepaid contracts. Since inception, Sunrun has repossessed 25 systems. Reasons for repossession have included bankruptcy, dislike of solar panels, unsuccessful transfer, and a customer self-removing a system.

## Estimated retained value can be achieved with either a ~57% renewal rate or full renewals at a ~50% discount to utility prices

- Sunrun PPAs contractually auto-renew at a 10% discount to prevailing utility kWh rates
- Estimated retained value assumes only a 10% discount to Sunrun's Year-20 kWh rate



Assumptions: Long term inflation modeled at 2.5%. Competitive bid undercuts Sunrun by 20%, offset by higher efficiency factor panels, to justify switching costs and escalates at same 3% per year. Utility rates assumed to escalate at 3%. NPV Discount rate applied to renewal at 6.0%. Competitive Project Value calculation assumes no tax credit upon renewal in 2036.

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