

ENERGYSAGE'S
Solar Marketplace

INTEL REPORT

H2 2018
H1 2019



energysage 



Vikram Aggarwal

CEO & Founder
EnergySage

Thoughts from the CEO & Founder

We are excited to share with you our ninth semiannual *Solar Marketplace Intel Report™* for the twelve months from July 2018 through June 2019. The solar market has experienced a number of changes since we began tracking pricing, equipment and consumer preference trends five years ago, and our reports have evolved as well to reflect these changes.

Here are some of our top findings from our ninth *Intel Report™*:

Average solar prices are now below \$3/W nationally

On the EnergySage Marketplace, the average quoted cost of solar fell to \$2.99 per Watt nationally for the first time as of H1 2019. Consumers are paying 23 percent less for solar today than they were five years ago.

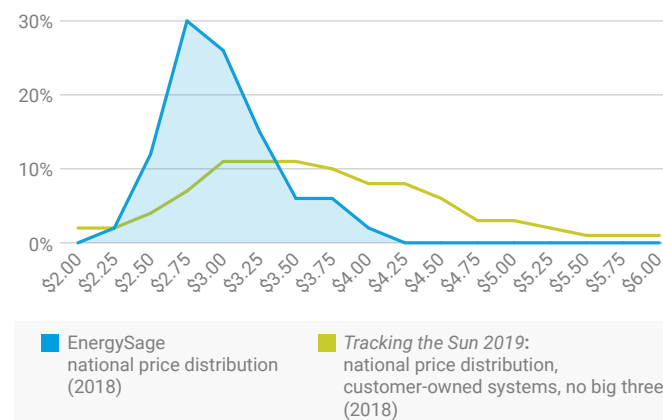
Competition continues to contribute to lower solar prices

In this report, we leverage the latest data from *Tracking the Sun 2019* in order to compare national pricing and solar equipment trends to those observed on the EnergySage Marketplace. The competitive nature of the EnergySage Marketplace continues to help consumers pay lower prices than offered outside of the platform.

EnergySage shoppers select competitively priced, high quality equipment

Consumers are very interested in high quality equipment, which is increasingly competitively priced with other equipment. Over 70 percent of EnergySage shoppers opt to install "Excellent" rated solar panels, the highest panel rating available on the Marketplace.

Comparison of National Pricing Distribution on vs. off of EnergySage



There are many more insights contained within the data in this report. We invite you to start a conversation with us about your key takeaways, as well as for any ideas for future reports.

Sincerely,

Vikram Aggarwal

Vikram Aggarwal | CEO & Founder
EnergySage

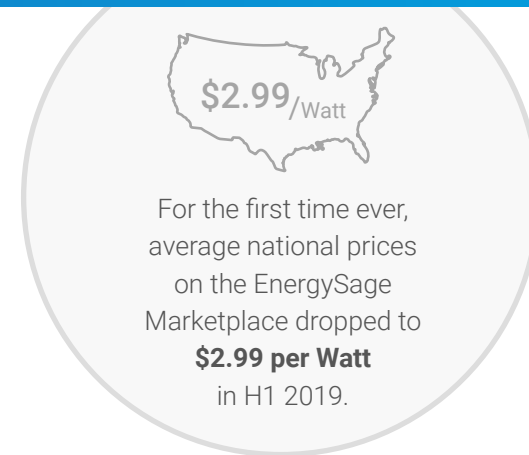
NOTE: *Tracking the Sun 2019* is produced by Lawrence Berkeley National Laboratory. The report and public dataset are available at trackingthesun.lbl.gov.

National Summary

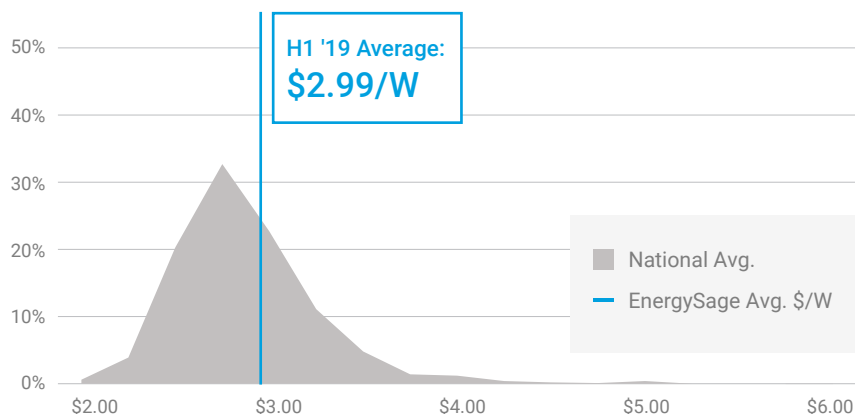
EnergySage is the leading online comparison-shopping marketplace for solar, facilitating and serving custom solar quotes to shoppers from local, vetted solar companies in 36 states and Washington DC. EnergySage analyzed quotes submitted by solar companies to shoppers in the Marketplace during H2 2018 and H1 2019. Average quoted prices in the Marketplace continued to decline, following a year of stagnation, with the majority of quotes now offered at prices of less than \$3.00 per Watt.

Quoted systems steady amidst declining solar costs

Overall, the average quoted solar costs on the EnergySage Marketplace declined by more than 4 percent over the last twelve months. While system sizes and the percent of a customer's electric needs met by solar increased through 2018, both of these system characteristic metrics remained steady between the end of the year and the first half of 2019. As described in greater detail later, quoted prices remain lower and system sizes larger within the EnergySage Marketplace than observed across the rest of the country's solar industry.



EnergySage Marketplace National Price Distribution, H1 2019



Gross Cost Per Watt, by Half Year



	Payback Period	Size of Quoted System	Average Usage Offset (%)
H2 '18	7.8 years	9.6 kW	94.3 %
H1 '19	8.0 years	9.4 kW	94.3 %

NOTE: Data have been revised to remove outliers in user-provided data.

Market Comparison: National Pricing Trends

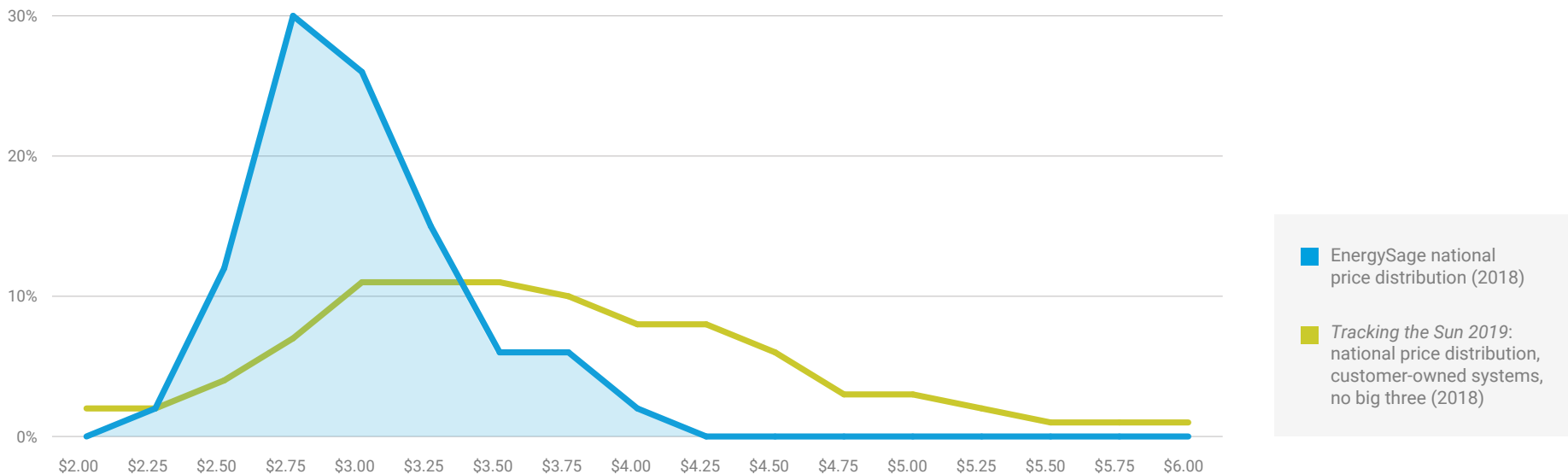
In order to contextualize what EnergySage consumers pay for solar compared to the rest of the solar market, in this report, we leverage the publicly available *Tracking the Sun 2019* (TTS) dataset. Published annually by Lawrence Berkeley National Laboratory (LBNL), and now on its twelfth edition, TTS is the premier source of data on installed solar systems in the industry.

Installed costs of solar exhibit a wide, flat distribution nationally

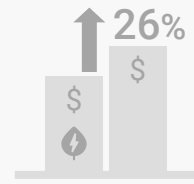
Installed costs at a national level exhibit a longer tail of pricing than quoted costs on EnergySage. As a result, in 2018, the average installed cost of solar nationally was \$3.90 per Watt, according to TTS data, compared to the average quoted price of \$3.09 per Watt in 2018 on the EnergySage Marketplace. Given the time lag between receiving quotes and installing systems, EnergySage data may be a leading indicator of where installed costs will head in 2019.

Analyzing the TTS data reveals separate pricing trends for solar energy systems installed by the three largest national solar companies as compared to the installed cost of solar for other, customer-owned systems. In line with LBNL's approach, we have removed pricing data from the three largest solar companies from our analysis.

2018 Solar Pricing Distribution: EnergySage Marketplace Quotes vs. *Tracking The Sun* Customer Owned Systems



NOTE: Data have been revised to remove outliers in user-provided data.
National pricing distributions from *Tracking the Sun 2019* public datasets.



In 2018, the installed cost of solar off of EnergySage was **26% higher** than the average quoted price on the Marketplace.

Price Distribution in Select States

To provide a sense of market dynamics in different states and regions, EnergySage analyzed Marketplace quote data from H2 2018 through H1 2019 for the top 10 states for residential solar in 2018, according to the Solar Energy Industries Association (SEIA). Many factors impact state-specific pricing trends, from the level of competition to local electricity rates, to local solar incentives and rebates.

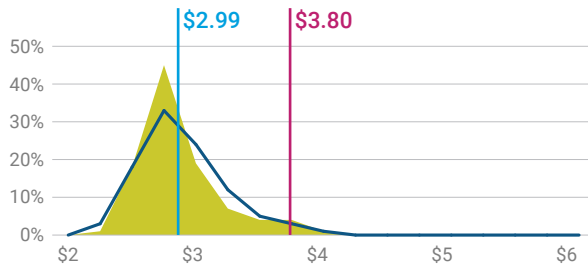
States 1-5: Wide variation in price distributions

In three of the top five states for residential solar, more than half of quotes came in below \$3.00 per Watt, helping to drive the national average price distribution lower. All states other than Arizona experienced one clear pricing peak, a left-leaning distribution, and a relatively long tail of higher priced quotes.

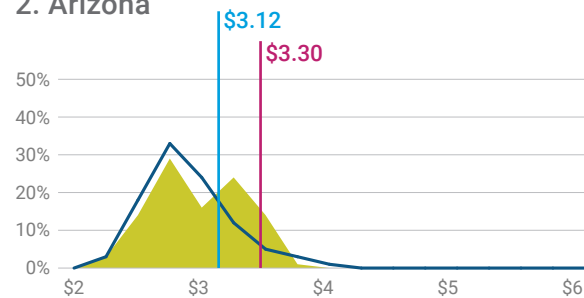


In the top 5 solar states, the majority of solar quotes fall below the national average price.

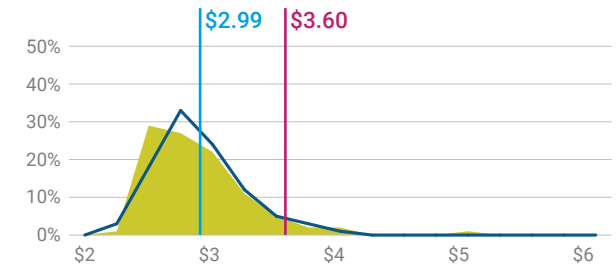
1. California



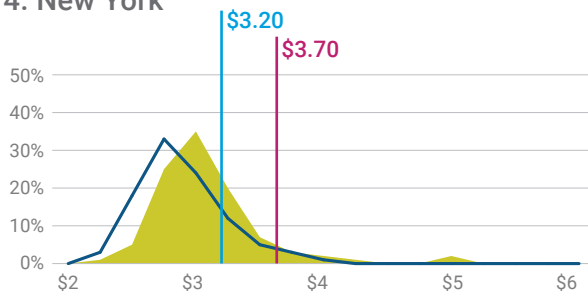
2. Arizona



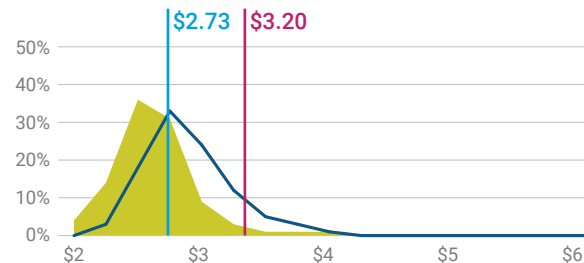
3. New Jersey



4. New York



5. Florida



- EnergySage state pricing distribution
- EnergySage national pricing distribution
- EnergySage state average, \$/W
- Tracking the Sun state median, \$/W

NOTE: Data have been revised to remove outliers in user-provided data.
Market average prices made available via *Tracking the Sun* 2019.

Price Distribution in Select States

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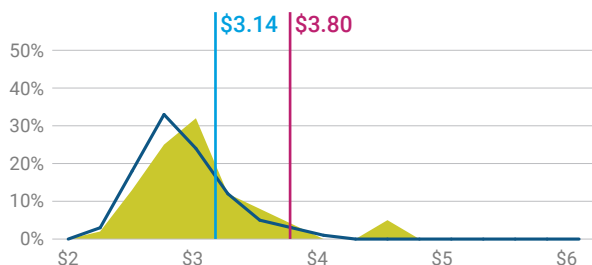
States 6-10: Higher prices, but successful solar industries nonetheless

Price distributions for the bottom half of SEIA's top 10 residential solar states are generally more expensive than both the national average and than those of the top 5 states. In fact, only one of these states—Maryland—saw a majority of quotes below \$3 per Watt between H2 2018 and H1 2019. Nevertheless, in 2018, these states installed more residential solar than all but five other states.

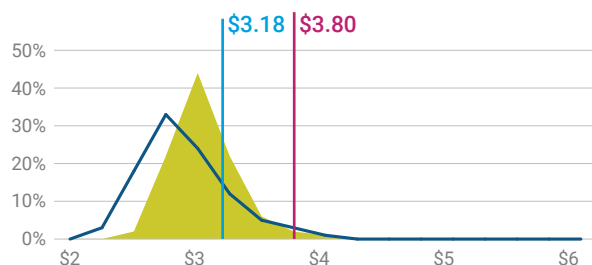


The sixth through tenth biggest residential markets have higher prices than the top 5 states but remain successful states for the industry.

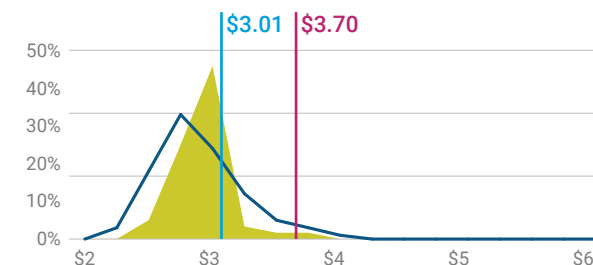
6. Utah



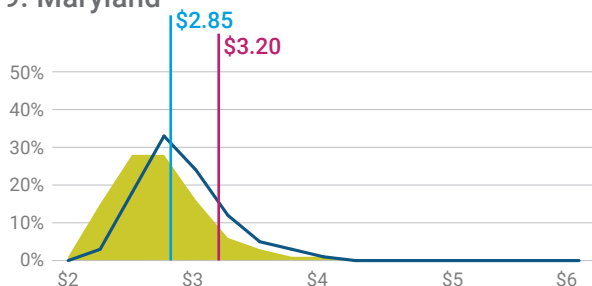
7. Massachusetts



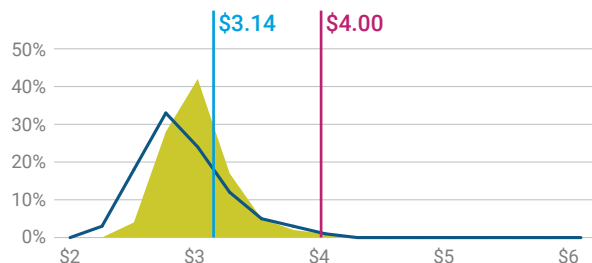
8. Nevada



9. Maryland



10. Colorado



- EnergySage state pricing distribution
- EnergySage national pricing distribution
- EnergySage state average, \$/W
- Tracking the Sun state median, \$/W

NOTE: Data have been revised to remove outliers in user-provided data.
Market average prices made available via *Tracking the Sun* 2019.

Solar Economics in Select States

The cost of solar has declined steadily at the national level over time; however, local market, utility and policy dynamics have created much more volatility for state-level cost trends. In fact, although solar costs decreased in eight out of the top 10 states for residential solar, solar payback periods decreased in only four of those top 10 states, indicating the cost of solar is not the primary driver of state-level solar economics.

Payback period moves independent of average cost

Similar to the results of our previous *Intel Report™*, the payback period for solar (in years) shifted by less than six months in the majority of states analyzed. Interestingly, shifts in payback period between H2 2018 and H1 2019 occur independently of changes in the average cost of solar at the state level. Rather, payback period is most closely tied to solar policies and incentives, as well as local electric rates. For instance, although the cost of solar was identical in New Jersey and Nevada, higher electric rates and better incentives led to a quicker payback period in New Jersey.



State-level solar policies and the local electricity rates are more important than the cost of solar in influencing solar economics.

State Solar Economics: Gross Cost Per Watt and Payback Period (Years)

STATES	RESIDENTIAL RANK	H2 2018		H1 2019		Delta		AVERAGE ELECTRIC RATE (C/KWH)
		\$/W	PAYBACK PERIOD	\$/W	PAYBACK PERIOD	\$/W	PAYBACK PERIOD	
California	SEIA #1	\$3.03	5.9	\$2.96	5.9	↓	—	20.87
Arizona	SEIA #2	\$3.22	7.9	\$3.06	7.7	↓	↓	12.84
New Jersey	SEIA #3	\$3.00	5.5	\$2.97	5.5	↓	—	15.97
New York	SEIA #4	\$3.19	8.5	\$3.21	7.9	↑	↓	18.56
Florida	SEIA #5	\$2.73	9.3	\$2.72	9.8	↓	↑	12.02
Utah	SEIA #6	\$3.28	9.8	\$3.06	9.0	↓	↓	10.74
Massachusetts	SEIA #7	\$3.19	5.8	\$3.16	5.9	↓	↑	21.43
Nevada	SEIA #8	\$3.03	8.7	\$2.97	8.9	↓	↑	11.80
Maryland	SEIA #9	\$2.97	8.9	\$2.77	8.9	↓	—	13.26
Colorado	SEIA #10	\$3.11	9.8	\$3.15	10.6	↑	↑	12.84

Average state electricity pricing data from the EIA Electric Power Monthly.

NOTE: Data have been revised to remove outliers in user-provided data.

Inputs to EnergySage's payback period calculation (such as electricity rates) are occasionally updated, resulting in minor differences between reports.

State Costs: Difference from EnergySage National Average

Solar costs vary widely from state to state on EnergySage. In H1 2019, average quoted solar costs ranged from \$2.72 per Watt in Florida to \$3.41 per Watt in New Mexico. These results resemble the findings of *Tracking the Sun 2019*, which found median prices to range from \$2.8/W to \$4.4/W across state lines for residential systems installed in 2018.

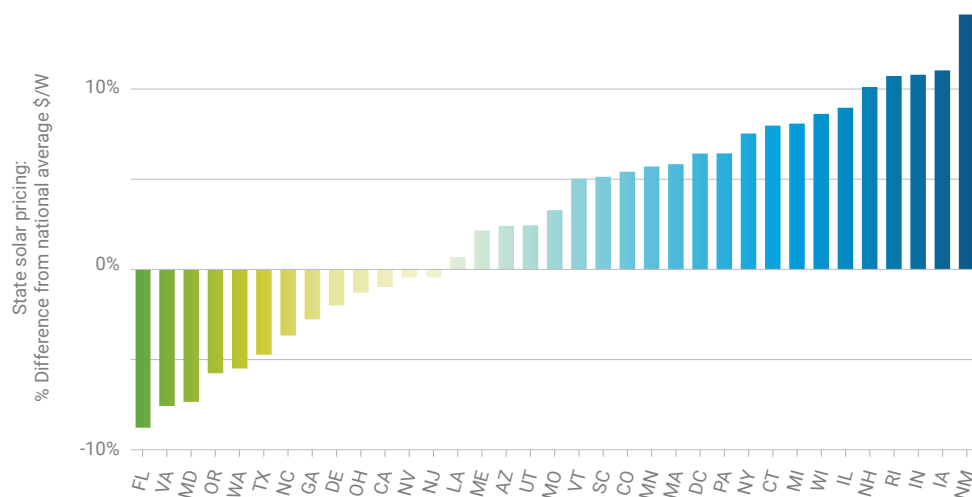
Solar cost variations are generally clustered regionally

In all but five states studied, the quoted cost of solar varied by less than 10 percent from the national average price in H1 2019. Interestingly, differences from national average pricing were heavily clustered in specific regions, with a few notable exceptions. In general, the West and the Southeast witnessed lower quoted prices than observed in Great Lakes states and the Northeast.



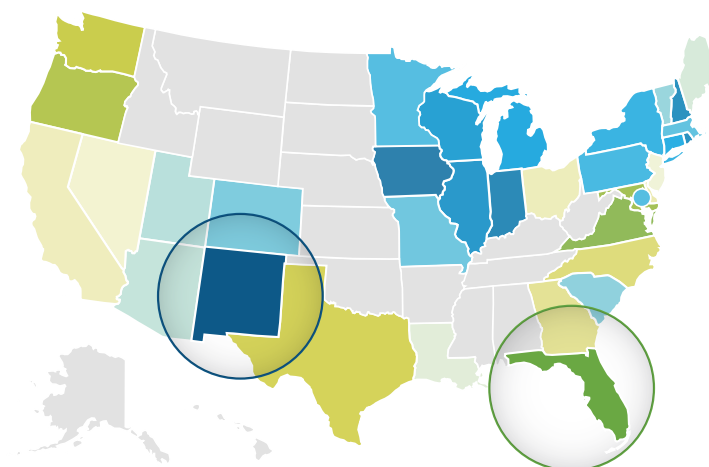
Solar cost variations are generally clustered by geographic region, with the lowest-price quotes in the West and Southeast.

State Pricing Difference from EnergySage National Average



\$2.99 per Watt

ENERGYSAGE NATIONAL AVG.



\$3.41 per Watt

HIGHEST PRICE

\$2.72 per Watt

LOWEST PRICE

NOTE: Data have been revised to remove outliers in user-provided data.

Solar System Characteristics in Select States

Solar panel system characteristics vary from state to state. Nevertheless, in 7 of the top 10 residential solar states, the average system is designed to offset over 95 percent of a shopper's electricity bill. State-by-state system size variations appear more representative of designing systems to meet consumption needs than a result of state solar price differentials.

Offset percentages remain high, even where system sizes decrease

Across SEIA's Top 10 states for residential solar, average system sizes quoted on EnergySage are generally within a 2 kilowatt range of 8.4 kW to 10.4 kW. At the same time, solar shoppers in all but one state—Maryland—received solar quotes estimated to cover more than 90 percent of their monthly electricity usage. Offset percentage can increase while system sizes decrease as a result of a number of different potential factors, including, for instance, a higher volume of solar shoppers with lower electric bills.



In leading solar states, solar companies design systems to offset over 95% of a customer's electricity usage.

State System Characteristics: Quoted System Size (kW) and Usage Offset (%)

STATES	System Size		% offset	Delta	AVERAGE MONTHLY CONSUMPTION (kWH)
	H2 2018	H1 2019	H1 2019	System Size	
California	7.8	7.6	102	↓	470
Arizona	10.5	10.3	95	↓	836
New Jersey	11.2	10.9	96	↓	518
New York	9.7	10.4	93	↑	469
Florida	12.5	12.3	94	↓	1107
Utah	9.7	8.4	100	↓	562
Massachusetts	9.1	9.1	96	—	462
Nevada	10.7	10.2	95	↓	684
Maryland	11.3	11.9	84	↑	757
Colorado	8.3	8.4	97	↑	575

Average state monthly consumption data from EIA.

NOTE: Data have been revised to remove outliers in user-provided data.

State System Sizes: Difference from EnergySage National Average

Across the country, average quoted system sizes ranged from 7.6 kW in California to 12.8 kW in Missouri. *Tracking the Sun 2019* finds a range of similar magnitude of installed system sizes from state to state in 2018.

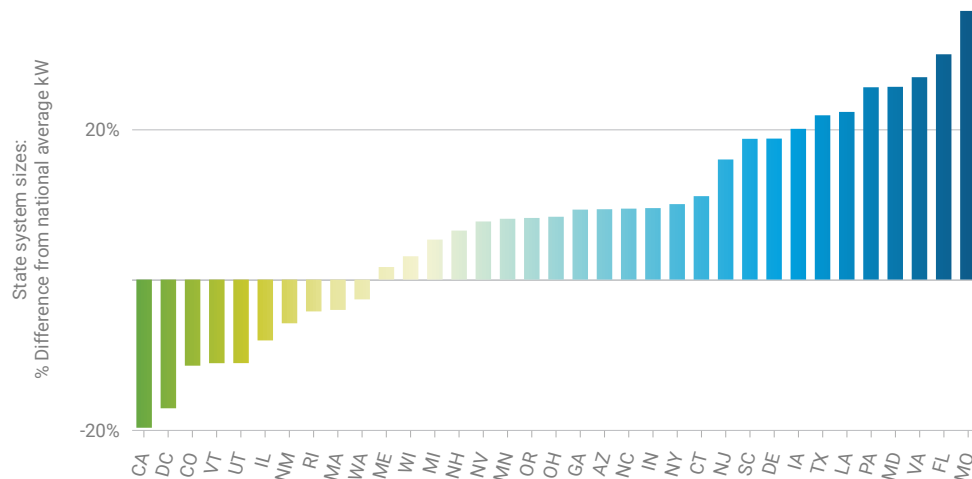
System sizes are loosely correlated with average monthly consumption

At a high level, variation in system size seems to correlate less with a state's location than with the average monthly residential electricity usage in a state or region. Regions of the country with lower average monthly electricity consumption, such as New England (487 kWh/mo), the North Central (588 kWh/mo) and Pacific states (542 kWh/mo), tend to see smaller system sizes quoted than regions with higher usage, such as the South Central (950 kWh/mo) and Southeast (998 kWh/mo), indicating state-specific system customization from installers.



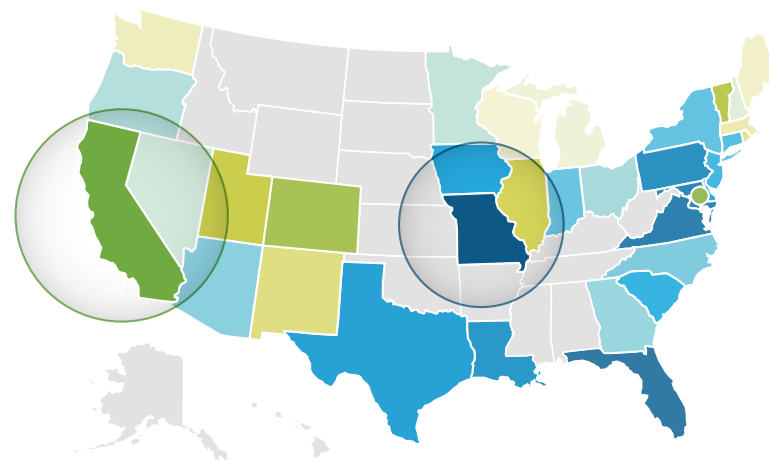
Quoted system sizes tend to vary based upon a state's average residential electricity consumption, rather than location or price differences.

State System Size Difference from EnergySage National Average



9.4 kW

ENERGYSAGE NATIONAL AVG.



7.6 kW

SMALLEST SYSTEMS

12.8 kW

LARGEST SYSTEMS

Average state monthly consumption data from EIA.

NOTE: Data have been revised to remove outliers in user-provided data.

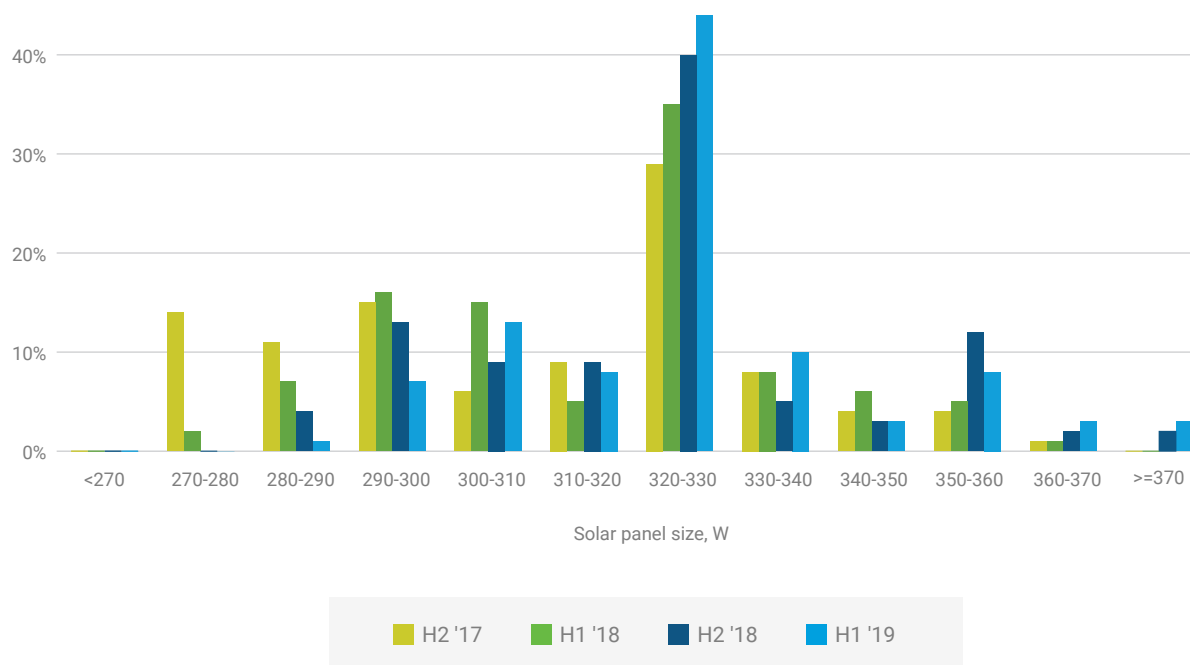
Solar Equipment Characteristics

EnergySage analyzed the quoted cost per Watt by system size and module efficiency, as well as the wattage of panels quoted. In H1 2019, over 70 percent of all quotes on EnergySage included panels with a rated power of 320 Watts or higher. Meanwhile, pricing by system size and module efficiency in 2018 reveal clear trends for both economies of scale with larger installations and higher costs for high quality equipment.

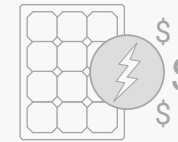
Solar companies harness economies of scale quoting larger systems

Comparing average quoted costs and quoted system sizes reveals a clear, logical decrease in cost due to economies of scale. As described in greater detail in *Tracking the Sun 2019*, however, there's a limit to these economies of scale, with the costs decreasing rapidly at first before leveling off. Only systems larger than 11 kW cost less than \$3/W on average on EnergySage, indicating a high volume of large quoted system sizes to bring the national average quoted price below \$3/W on EnergySage.

Percent of Quotes by Panel Size

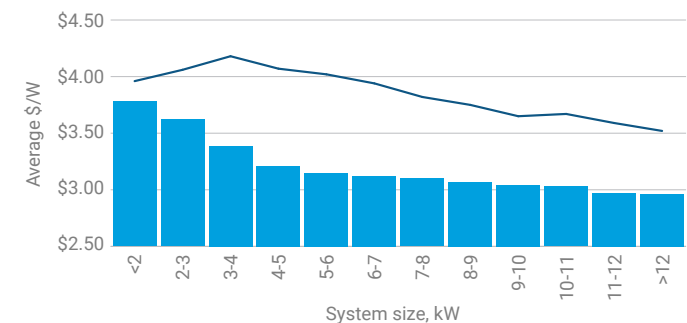


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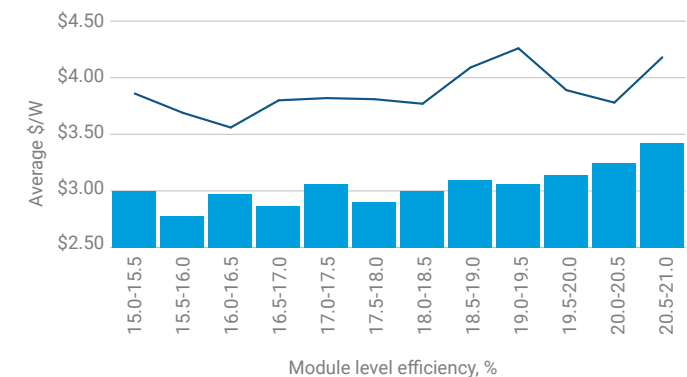


Higher efficiency modules are more expensive, while larger installations are less expensive.

Solar Cost vs. System Size, \$/W by kW



Solar Cost vs. Efficiency, \$/W by %



EnergySage data (2018)

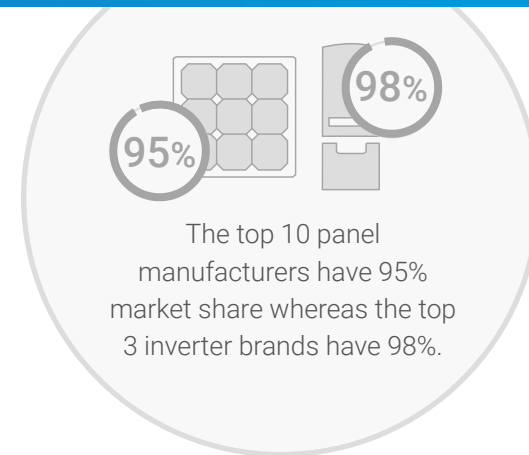
Tracking the Sun data (2018)

Market Share: Equipment

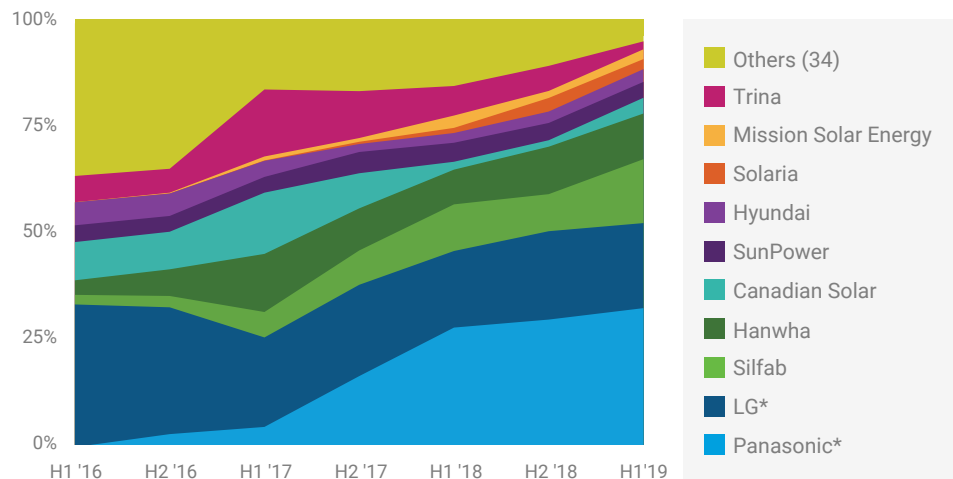
EnergySage Marketplace share is indicative of consumer preference and the resultant sales behavior of small-to-midsize solar installers. The trend towards consolidation of the inverter market continued, with SolarEdge and Enphase (+SunPower) claiming market share vacated by string inverter manufacturers. Meanwhile, high-quality solar panels continue to dominate quoted Marketplace share.

Consumers express strong preference for high quality equipment

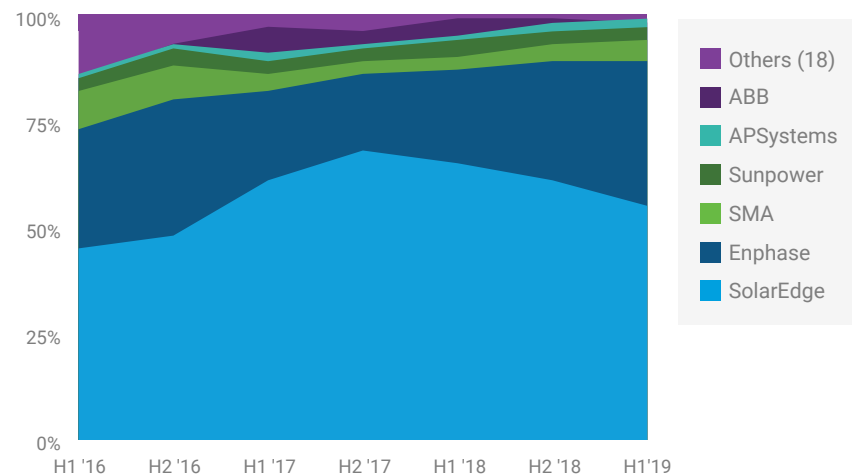
The two leading panel manufacturers by Marketplace share, LG and Panasonic, accounted for over 50 percent of all quotes on the EnergySage Marketplace over the twelve months analyzed. On the inverter side, quotes from manufacturers producing module-level power electronics (MLPEs) grew to 93 percent of all quotes during both H2 2018 and H1 2019. The trend towards high-quality equipment is validated by consumer choice on the Marketplace: over seventy percent of EnergySage shoppers selected the quote with the highest quality equipment.



Top Panel Brands



Top Inverter Brands



NOTE: Data have been revised to remove outliers in user-provided data.

*Rebate offered. All solar panel manufacturers are eligible to offer a rebate to consumers via the EnergySage Marketplace.

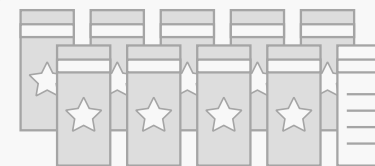
Market Comparison: Quality of Equipment

The publicly available *Tracking the Sun 2019* datasets contain a wealth of information about solar installations throughout the U.S. Combining these data with EnergySage's product quality ratings, which were recently updated in collaboration with the National Renewable Energy Laboratory, allows for a comparison of installed versus quoted equipment quality over time.

Consumers on EnergySage prefer "Excellent" equipment

Over the last five years, the quality of equipment installed nationally and quoted on EnergySage has improved markedly. In fact, *Tracking the Sun 2019* points out that the average module efficiency increased by a full percentage point in both 2017 and again in 2018 for installed systems. In the national solar market, a third of consumers installed "Excellent" solar panels in H2 2018. On EnergySage, however, six of ten of quotes and three-quarters of all installations included "Excellent" equipment.

One reason more shoppers choose high-quality equipment over other options on EnergySage may be a result of clearly displayed quality equipment rankings on EnergySage quotes: consumers outside of the platform may also prefer high-quality equipment, but don't always have insight into the quality of what they install.

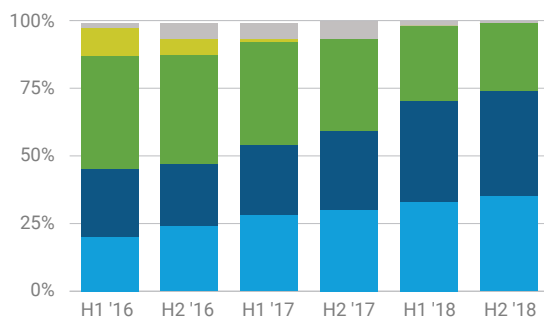


Nine out of ten solar quotes on EnergySage include high quality equipment, extending a trend seen nationally in *Tracking the Sun* data.

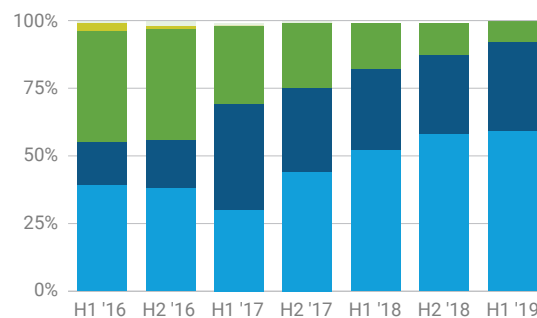


For more information on equipment quality and all of the solar panels rated under the revised system, see the newly released **EnergySage Buyer's Guide** at energysage.com/solar-panels.

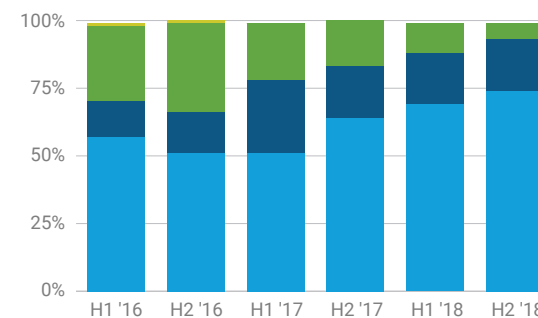
Installed Equipment Type, *Tracking the Sun 2019*



Quoted Equipment Type, EnergySage



Installed Equipment Type, EnergySage



Unknown Fair Good Very Good Excellent

NOTE: Data have been revised to remove outliers in user-provided data.

Installer Brand Loyalty - Inverters & Panels

In the previous *Intel Report™*, we introduced installer brand loyalty metrics to track the percentage of installers in our Marketplace offering a specific equipment brand over time. Tracking installer brand loyalty over time provides a glimpse into which manufacturers are able to maintain stickier relationships with their installer networks.

Marketplace expansion through existing vs. new networks

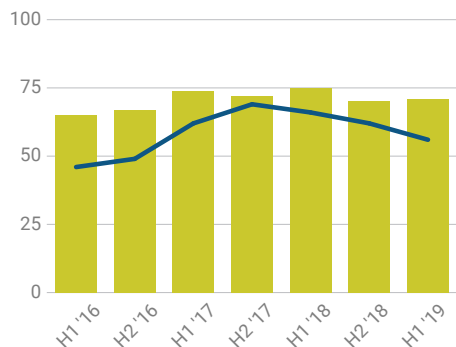
Simply, there are two ways a manufacturer can influence their market share from an installer perspective: by recruiting more solar companies to carry and quote their equipment, or by convincing their existing installer network to quote their brand more frequently. Both approaches have proved successful on EnergySage: Panasonic and Silfab increased their Marketplace share in conjunction with growing installer networks on EnergySage, while Enphase increased Marketplace share across a reasonably steady installer network within EnergySage.



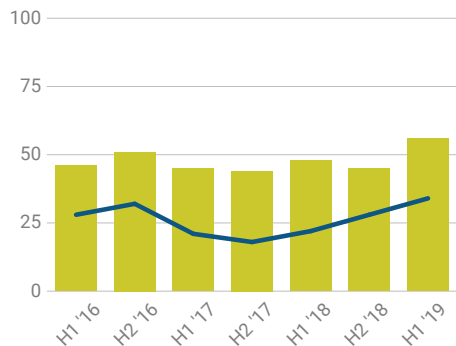
Equipment manufacturers can increase Marketplace share by building new networks or expanding existing networks, though one method alone may not suffice.

Inverters

SolarEdge

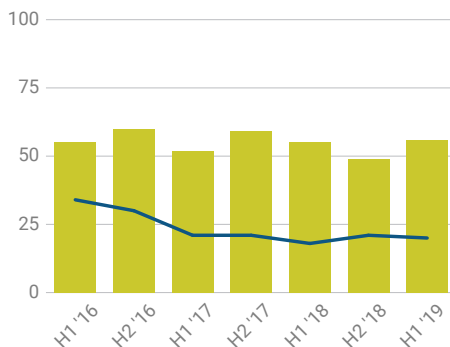


Enphase

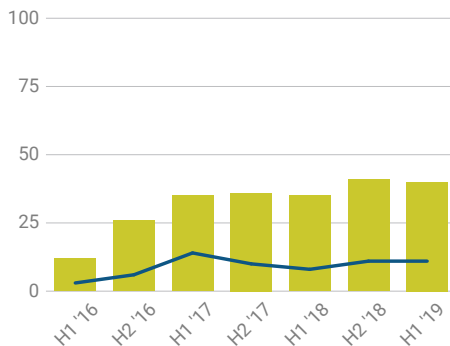


Panels

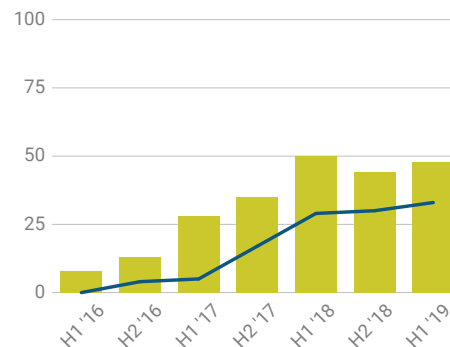
LG Solar



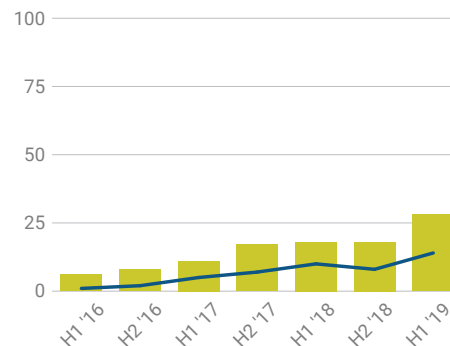
Hanwha Q CELLS



Panasonic



Silfab



■ % of installers offering equipment
— % of all quotes

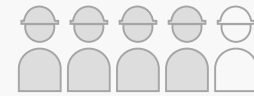
NOTE: Data have been revised to remove outliers in user-provided data.

Installer Equipment Offerings

Tracking installer equipment offerings over time provides a useful metric for analyzing both customer choice and installer brand loyalty. The quantity of equipment brands quoted by solar installation companies provides a piece of the puzzle for analyzing the fractured nature of solar panel and inverter markets.

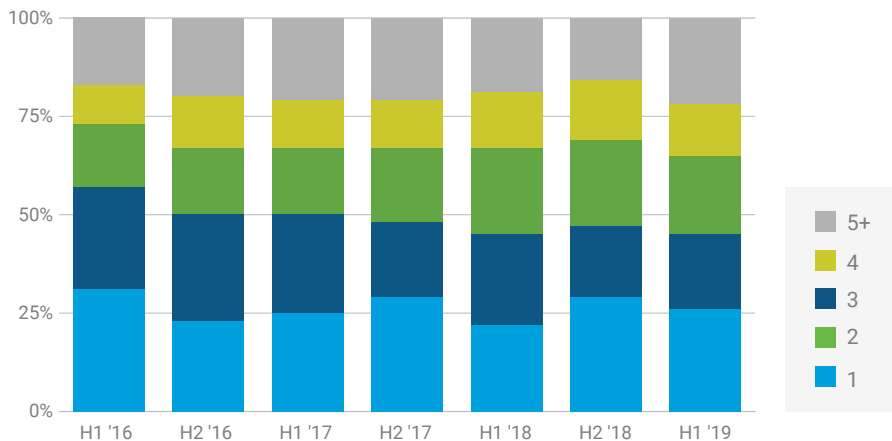
Installers are more loyal to inverter brands than solar panel brands

A quarter of installers quote only a single panel brand, while half of all installers quote only a single inverter brand. For the sixth half-year period in a row, more than half of installers quoted three or more different panel brands. In H1 2019, four out of five installers quoted inverters from either one or two manufacturers, down slightly from H2 2018 but consistent with the trend of the last few years. Interestingly, the percentage of companies quoting either three or four different inverter brands is at its highest level since H1 2017.

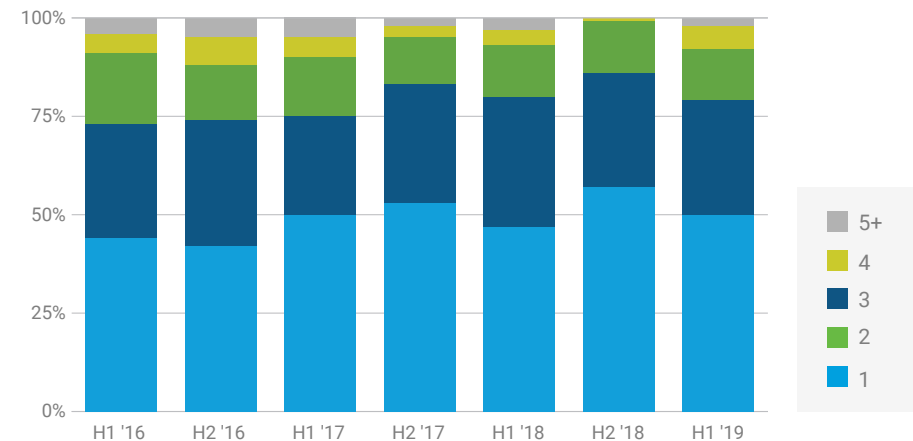


Four out of five installers quote either one or two inverter brands, while over half of installers quote three or more solar panel brands.

Number of Panel Brands Offered



Number of Inverter Brands Offered



NOTE: Data have been revised to remove outliers in user-provided data.

Installer Equipment Pairings & Price

EnergySage analyzed the comparative cost differences across the ten panel and inverter pairings quoted most frequently to Marketplace shoppers from H2 2018 through H1 2019. High-quality solar equipment continues to be priced at a premium; however, the differential between the highest quality and the next tier of equipment is closer than in years past.

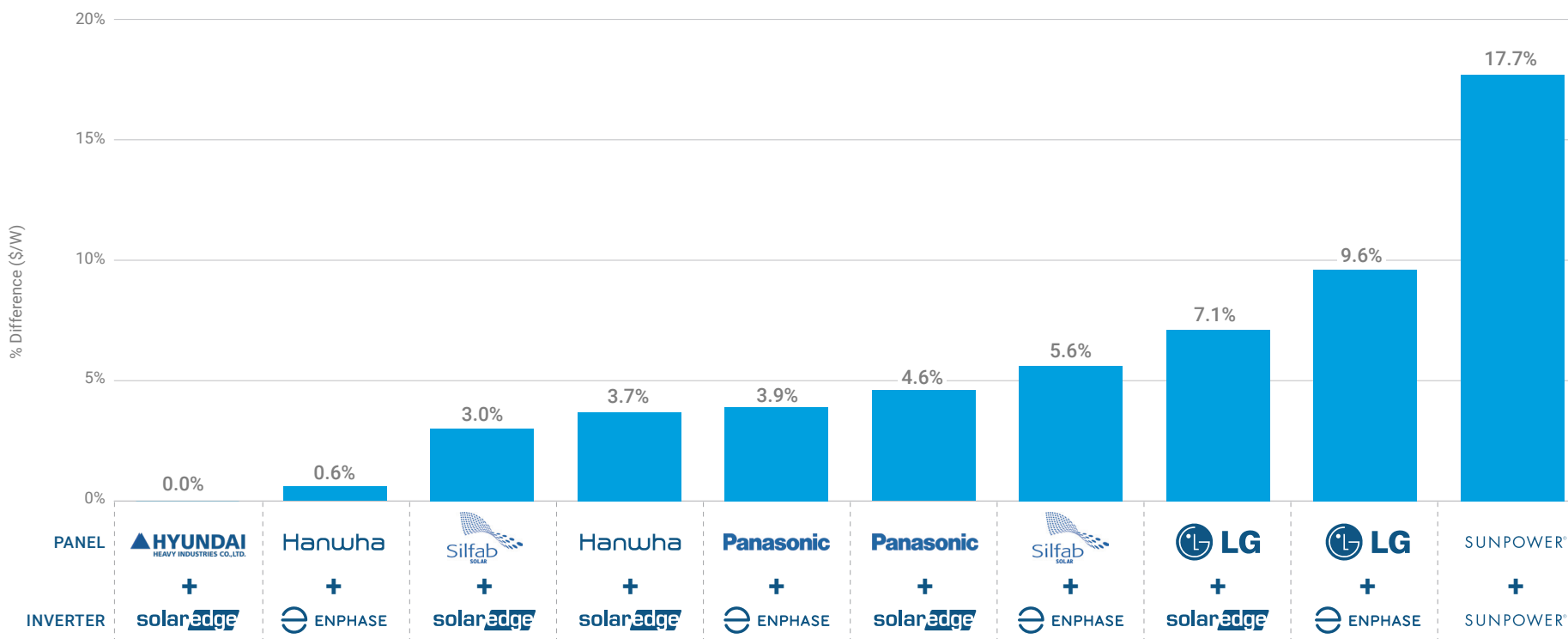
Highest quality solar equipment competitively priced on EnergySage

Across H2 2018 and H1 2019, high quality solar equipment pairings were priced competitively with the next tier of solar equipment, with pricing premiums in the 3 percent to 10 percent range from the least expensive, most often quoted equipment pairing. Interestingly, equipment pairings that include Panasonic panels experienced the narrowest range of average quoted prices at the state level, while pairings that include LG panels produced one of the widest ranges in state level pricing variation.



The highest quality solar equipment is currently cost-competitive with the subsequent tier of solar equipment.

Percent Difference from Least Expensive Equipment Pairing



NOTE: Data have been revised to remove outliers in user-provided data.

EnergySage Consumer Interests

EnergySage asks Marketplace shoppers to voluntarily list the solar-adjacent energy products and services they are interested in. Across two years of data, the results continue to remain remarkably consistent. Consumer interest percentages have remained largely unchanged, with only a slight increase of interest in EV charging and a steady-if minor-decrease of interest in smart home devices.



Three out of four solar shoppers express interest in energy storage when they register for the EnergySage Marketplace.

Case studies



Michigan | Energy Storage

For the second straight *Intel Report™*, the state with the highest consumer interest in storage hails from the North Central region of the country. Michigan leads all states with consumer interest in energy storage exceeding 80 percent, perhaps with a goal of improving household energy resilience during stormy winter months.



Connecticut | Energy efficiency and energy assessments

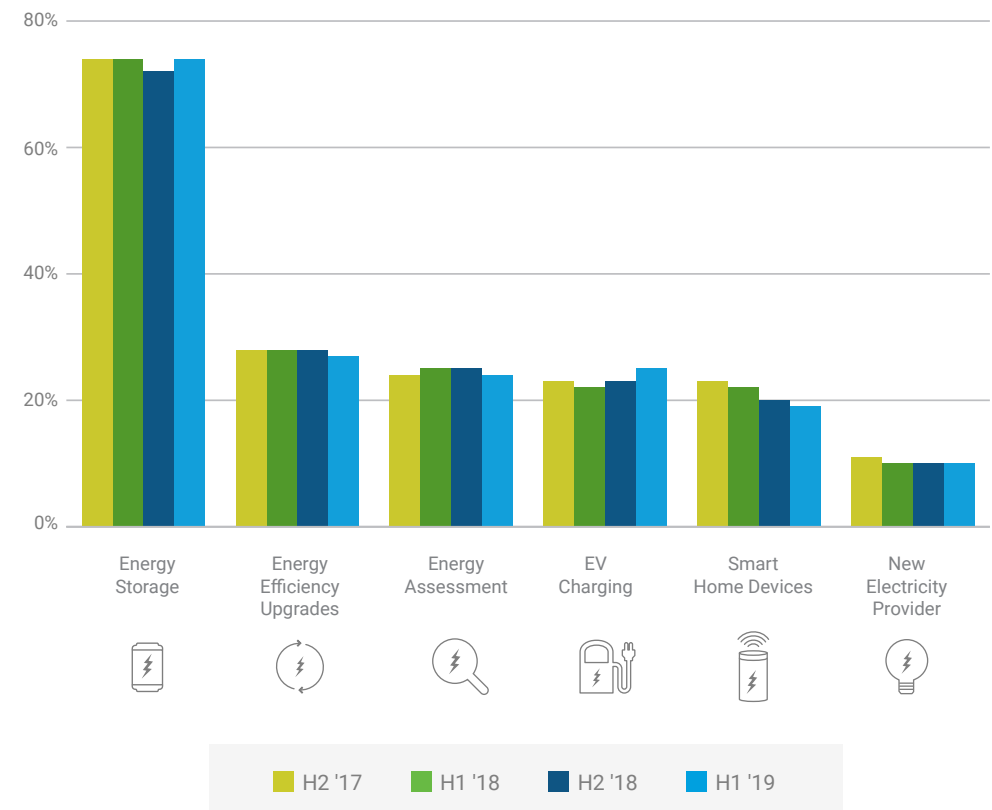
The highest interest in both energy efficiency upgrades and energy assessments is expressed by solar shoppers in the same state: Connecticut. Consistently ranked highly in the American Council for an Energy-Efficient Economy's state scorecard, Connecticut already boasts robust residential energy efficiency programs for interested consumers.



California | Electric vehicle charging options

Solar shoppers in California continue to express the most interest in electric vehicle charging options. This enduring interest in EV charging comes as no surprise given that the Golden State accounts for as many EV sales as the rest of the states combined.

Percent of Customers Interested



NOTE: Data have been revised to remove outliers in user-provided data.

EnergySage User Interests: System Preferences

EnergySage asks Marketplace shoppers to select which quality they most care about in solar equipment: most advanced technology, most attractive panels, maximum energy production, or the best value. In every state analyzed, the majority of shoppers initially indicate their preference for the best value equipment, though over 70 percent of those that move forward ultimately select a quote with the highest quality equipment.

★ 59% | 47% national avg.

Highest Interest in Value: Iowa

Three out of five solar shoppers in Iowa expressed their preference for maximizing the economic value of the energy produced by a solar panel system, relative to its cost. In general, lower interest in the best value equipment was offset by increased interest in maximum production.

⚙️ 31% | 21% national avg.

Highest Interest in Production: Maine

Higher quality solar equipment often comes with a higher cost. Nevertheless, nearly a third of shoppers in Maine indicated they preferred to maximize the amount of electricity produced by their solar energy systems, building large arrays or installing high efficiency panels.

🌐 18% | 12% national avg.

Highest Interest in Technology: New Jersey

Interest in the most advanced technology is the highest in New Jersey, closely followed by New York, California and Colorado. The fact that accessing the best technology is not the primary driver for many solar shoppers may indicate that the solar market has begun to move past early adopters and firmly into the mainstream.

💎 6% | 3% national avg.

Highest Interest in Aesthetics: Massachusetts

Overall, solar shopper interest in aesthetics was surprisingly low: in only one state, Massachusetts, did more than 5 percent of shoppers indicate that the most important type of equipment to them is the most attractive equipment.

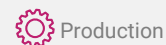
NOTE: Data have been revised to remove outliers in user-provided data.



The majority of solar shoppers initially indicate their preference for the **best value** solar equipment in every state on EnergySage.



Value



Production



Technology



Aesthetics

Financing Products

Solar loans continue to increase in popularity both on EnergySage and within the broader solar market. In fact, half of all active installers have offered at least one loan product during each of the last six half-year periods. Though the loan market is very fractured, installers tend to work with only one or two financing providers at a time.

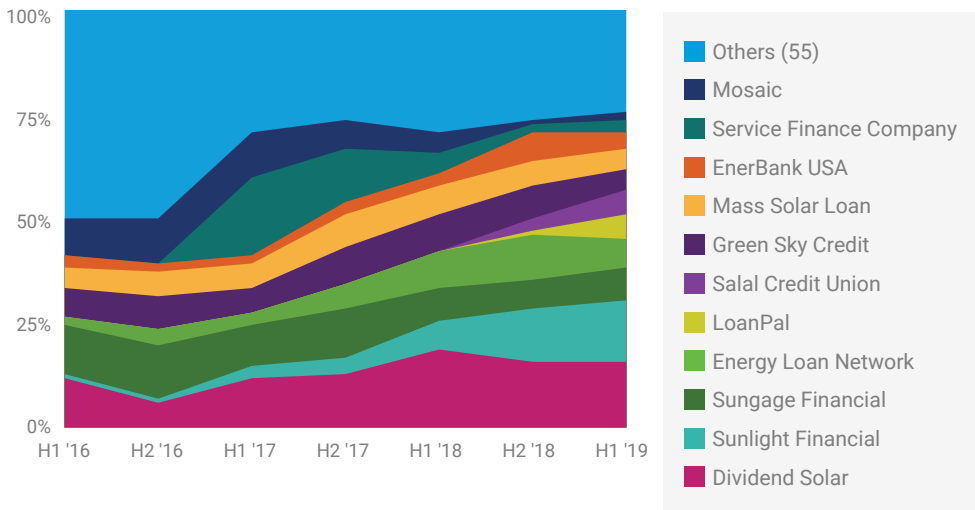
Installers rarely work with more than three financiers

Dating back to 2017, the portion of installers working with only one or two loan providers per half year has remained consistent at around two-thirds of active companies. The highly fractured nature of the financing provider Marketplace share on EnergySage indicates that, though installers may be loyal to financing providers, there is little consistency across installers of which providers they are loyal to.

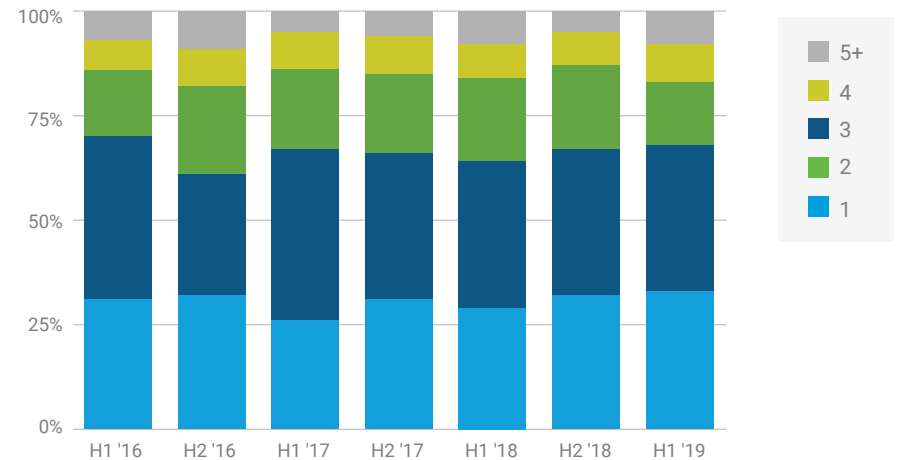


The financing product sphere remains splintered on EnergySage, with only **two providers** harnessing greater than a ten percent Marketplace share.

Financing Provider Market Share



Loan Products per Installer



NOTE: Data have been revised to remove outliers in user-provided data.

Price Dispersion for EnergySage Customers

Solar shoppers assess quotes on more than just price: from the quality of solar equipment to the ratings and reviews of the installer, there are a variety of metrics to consider when making a solar decision. Given this diversity of quoted solar energy systems, the average solar-interested customer on EnergySage can expect a range of quoted solar costs of 15 percent.

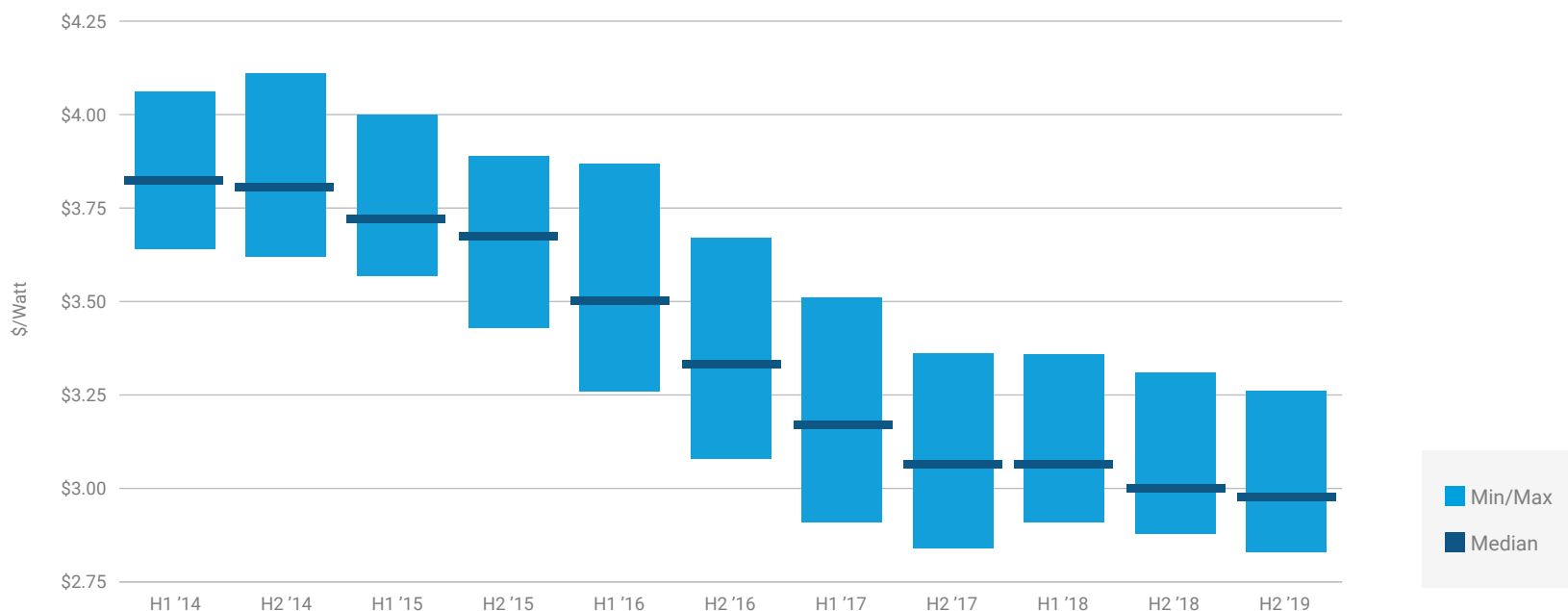
Range of quoted prices representative of equipment cost differences

In H1 2019, the average EnergySage solar shopper's maximum and minimum quotes ranged in price by 15 percent, or a \$4,000 range for the average EnergySage shopper. This \$0.4 per Watt spread for average maximum and minimum quotes is in line with the price premium that *Tracking the Sun 2019* finds for the installed prices of systems with module efficiencies above 20 percent. Interestingly, median quoted prices shifted towards average minimum quoted prices, indicating shoppers receive a higher proportion of low cost quotes.



The magnitude of price dispersion for each shopper on EnergySage remained consistent, but median prices decreased, implying a higher proportion of low cost quotes.

Customer Price Dispersion Over Time



NOTE: Data have been revised to remove outliers in user-provided data.

What Can EnergySage Data do for You?

EnergySage used aggregated quote and installation data from the EnergySage Solar Marketplace to conduct the market analyses featured in this report. EnergySage marketplace data can be used to better inform installers, utilities, equipment manufacturers, policymakers and solar businesses across the country.

EnergySage is also excited to collaborate with universities and research organizations and provides data on a cost neutral basis.

Contact

EnergySage Data Team
data@energysage.com

Report Title	Details	Scope & Pricing
Solar Market Trends	Market data and trends for a market territory. Sample data points included: - Quoted prices - Payback periods - Panel and inverter brands quoted - Financing options - System sizes - Consumer demographics	Basic Package (\$1,000): - Quarterly roll-up, trend over 4 quarters - Up to 4 counties - Up to 2 states Custom Package: Available upon request
Solar Equipment Trends	Market data and trends for solar panel or inverter brands. Sample data points included: - Market share of equipment - Quote prices by equipment - Likelihood of purchase by equipment - Panel-inverter pairing frequency - Production ratio - Electricity bill offset - Monitoring systems - System sizes - Mount location - Property types - Financing options - Consumer demographics	Basic Package (\$1,500): - Quarterly roll-up, trend over 4 quarters - Up to 12 counties - Up to 3 states Benchmarking Package (\$4,000): - Includes Basic Package, plus benchmark comparisons to 2 other equipment manufacturers Custom Package: Available upon request
Solar Market Trends, by Utility Territory	Market data & trends for solar activity within a utility territory. Sample data points included: - Customer interest in solar - Comparison to solar interest in other utility territories - Solar prices - Solar installers - Solar business climate (survey data) - Panel and inverter brands - System sizes - Financing options - Solar loan providers, terms, rates - Consumer demographics	Basic Package (\$4,000): - Quarterly roll-up, trend over 4 quarters - One utility territory - Up to 3 states - One written report and advisory call Custom Package: Available upon request
Custom Reports	Any combination of above-mentioned data and more. Contact us for details.	Custom Package: Available upon request



About EnergySage, Inc.

EnergySage is the leading online comparison-shopping marketplace for rooftop solar, energy storage, community solar, and financing. Supported by the U.S. Department of Energy, EnergySage is the trusted source of information for over 10 million consumers across 35+ states. As of early 2019, the company has sent over \$5 billion in solar installation requests to its network of more than 500 pre-screened solar installation companies, and serves as a high-quality lead source for solar financing companies and powerful distribution channel for solar equipment manufacturers.

EnergySage is unique in that it allows consumers to request and compare competing quotes online, unlike traditional lead-generation websites. For this reason, leading organizations like Environment America, Connecticut Green Bank, Duke University, National Grid, and Staples refer their audiences to EnergySage to empower them as they consider solar. The EnergySage formula of unbiased information, transparency and choice helps consumers go solar with confidence—at a higher rate of adoption, and lower cost.

For more information, please visit [EnergySage](#) and follow us: [Facebook](#), [Twitter](#), [YouTube](#), and [LinkedIn](#).

