US Solar Market Insight Q3 2026

Executive Summary

September 2026

About the report

US Solar Market Insight® is a quarterly publication of Wood Mackenzie and the Solar Energy Industries Association (SEIA)®. Each quarter, we collect granular data on the US solar market from nearly 200 utilities, state agencies, installers, and manufacturers. This data provides the backbone of this US Solar Market Insight® report, in which we identify and analyze trends in US solar demand, manufacturing and pricing by state and market segment over the next five to 10 years. All forecasts are from Wood Mackenzie, Limited; SEIA does not predict future pricing, bid terms, costs, deployment, or supply. The report includes all 50 states, Washington DC, and Puerto Rico. Detailed data and forecasts are contained within the full version of the report.

References and Contact

- References, data, charts, and analysis from this executive summary should be attributed to “SEIA/ Wood Mackenzie US Solar Market Insight®.”
- Media inquiries should be directed to Wood Mackenzie’s PR team (WoodmacPR@woodmac.com) and Rachel Skaar (rskaar@seia.org) at SEIA.
- All figures are sourced from Wood Mackenzie. For more detail on methodology and sources, access the full report at **www.woodmac.com/research/products/power-and-renewables/us-solar-market-insight/.**

Note on US Solar Market Insight report title: The report title is based on the quarter in which the report is released, not the most recent quarter of installation figures.

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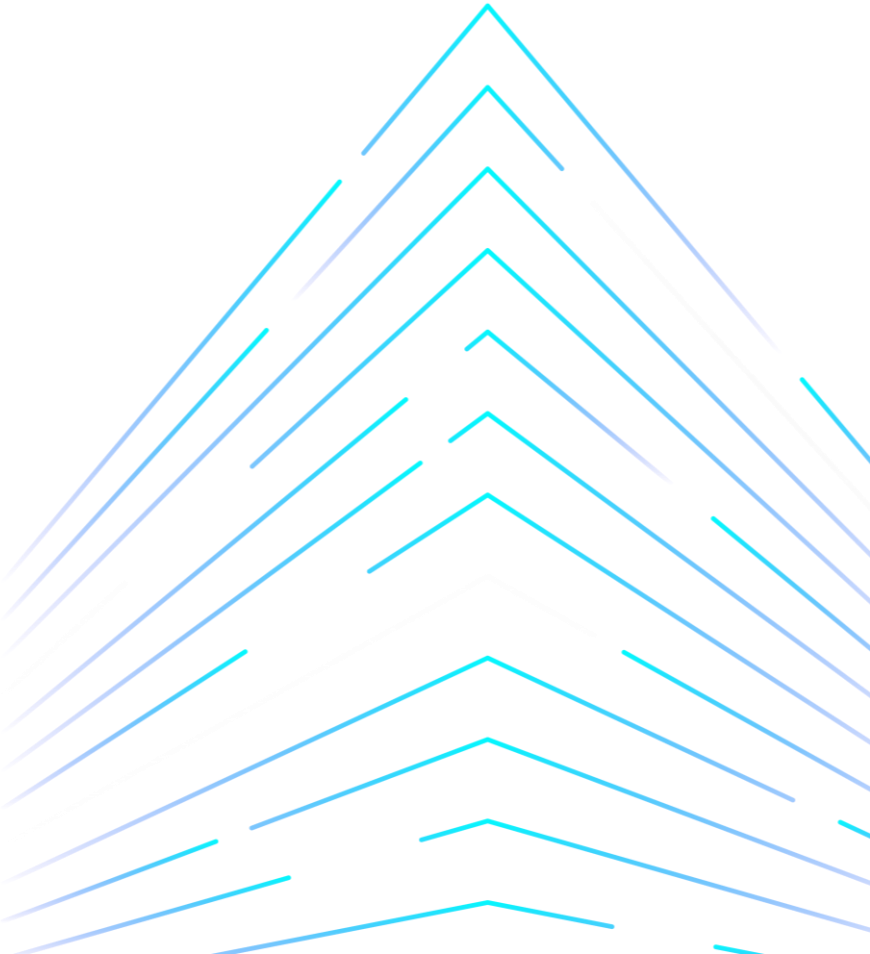


Key findings

- **The US solar industry installed 11.4 gigawatts direct current (GW_{dc}) of capacity in Q2 2026**, a 45% increase from Q2 2025 and a 43% increase compared with Q1 2026. After a seasonally weak Q1, installations rebounded sharply, driven almost entirely by utility-scale volumes.
  - The residential segment installed 995 MW_{dc} of solar capacity, declining 12% year-over-year and 10% quarter-over-quarter.
  - The commercial segment installed 638 MW_{dc}, increasing 11% year-over-year and 27% quarter-over-quarter.
  - The community solar segment installed 231 MW_{dc}, declining 14% year-over-year and 8% quarter-over-quarter.
  - The utility-scale segment installed 9.6 GW_{dc}, increasing 61% year-over-year and 56% quarter-over-quarter.
- **The quarter's strength was concentrated in utility-scale solar as developers built out safe-harbored pipelines ahead of tax credit deadlines.** Q2 is seasonally stronger than Q1, but the scale of the utility-scale increase reflects a race to place safe-harbored projects into service before the Section 48E/45Y window closes. In contrast, the distributed segments continued to soften year-over-year as the market adjusts to the expiration of the Section 25D residential credit at the end of 2025.
- **Solar and battery storage accounted for 70% of all new electricity-generating capacity added in the first half of the year**, reflecting the ability of these industries to consistently build new capacity – a vital advantage for the capacity-constrained US grid. Solar by itself accounted for 45% of all new capacity, a slight decline compared to last quarter, driven by an uptick in offshore wind installations.
- Domestic nameplate module manufacturing capacity stands at roughly 66 GW_{dc} after only about 1 GW_{dc} of new module capacity came online in Q2 2026. The August Section 232 action on polysilicon and the FCC's inverter action will now reshape the economics of a full domestic solar supply chain.
- **Our outlook for the US solar industry from 2026 to 2031 has changed minimally: an increase of 1.2%, mostly from the utility sector.** Our new outlook still reflects an approximate doubling of the US solar fleet over the next five years, but annual additions remain essentially flat compared with the three years it took for the last doubling of the US solar industry.

Source: Wood Mackenzie

Introduction

US solar capacity additions will remain steady from 2026 through 2031

Structural and policy challenges keep additions flat, even as safe-harbored pipelines drive a near-term utility-scale surge

The July 2026 safe harbor deadline has passed, cementing a 216-240 GW_{dc} pipeline, while guidance stays unresolved

- The July 4, 2026 begin-construction deadline has passed. The safe-harbored pipeline, which will keep tax-credit eligibility, totals up to 240 GW_{dc}, supporting installations through 2030, even after attrition. Developers that missed the July 2026 deadline now face the December 31, 2027, placed-in-service cliff.
- Foreign Entity of Concern (FEOC) and Prohibited Foreign Entity (PFE) guidance remains incomplete. Treasury's February 2026 interim guidance (Notice 2026-15) left the PFE definitions and effective-control questions unresolved. Treasury must publish additional safe-harbor tables by December 31, 2026, but further delays are possible. Uncertainty weighs most on battery storage and solar developers trying to begin construction before the FEOC material-assistance thresholds step up in 2027.

Newly finalized trade actions reshape US solar manufacturing economics

- On July 28, 2026, the FCC added foreign-produced power inverters to its Covered List, barring new authorizations for unapproved models. This impacts grid-connected inverters using either wired or wireless communications, but near-term disruption to existing contracts is limited. Additionally, on August 26, 2026, the White House issued an Executive Order restricting imports of power generation equipment from Covered Foreign Entities, which includes China. The final impact will depend on guidance released within 120 days. Further restrictions to foreign products may catalyze new domestic utility-scale solar and storage inverter manufacturing.
- Separately, on August 6, 2026, the administration signed a proclamation imposing a 15% tariff plus minimum import prices (MIPs) on polysilicon, ingots, wafers, cells, and modules; indicatively at $21/kg, $100/kg, $100/kg, $0.22/W, and $0.38/W, respectively. The structure widens the advantage for fully-integrated domestic suppliers and raises the financing bar for cell and wafer capacity. The proclamation also provides a tariff offset for companies building new factories in the United States. The proclamation is effective beginning December 4, 2026.

Robust pipelines sustain roughly 44 GW_{dc} of annual additions, but permitting and the post-tax-credit transition keep growth flat

- US solar additions stay flat for the next five years despite rising power demand. Permitting remains a headwind, as the industry awaits the appeal of Interior's July 2025 review memorandum. Additionally, in early August 2026, an Oregon court ordered the Department of Defense to resume national-security reviews. However, the injunction covers wind, leaving the status of solar projects unclear. We estimate permitting issues affect 30% of the early-stage pipeline.
- The post-2030 outlook remains uncertain. Market fundamentals sustain installations beyond the tax-credit cliff, but many developers have flagged how challenging project economics become without the ITC. Data-center moratoriums, interconnection delays, and supply-chain policy remain key swing factors we'll keep tracking.

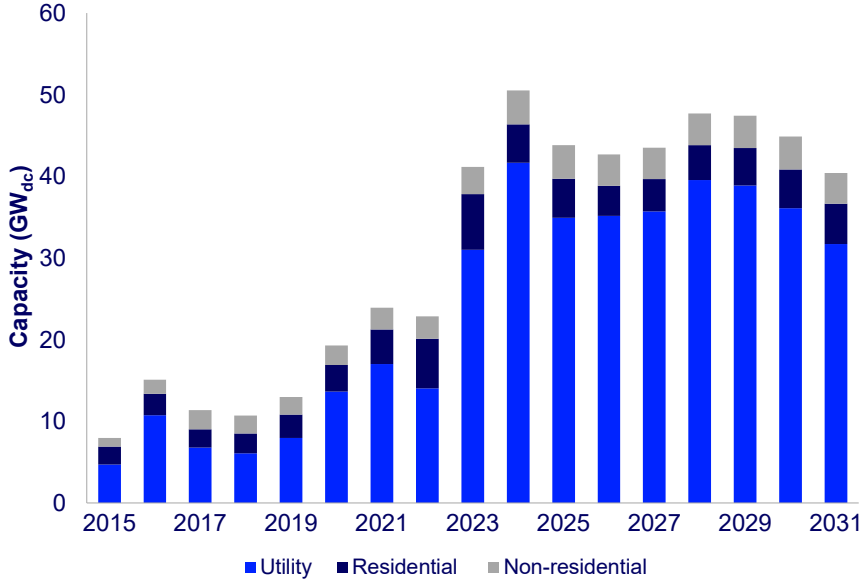
Source: Wood Mackenzie.

US solar PV forecasts

Permitting and interconnection bottlenecks constrain growth to around 44 GW annually, despite rising demand

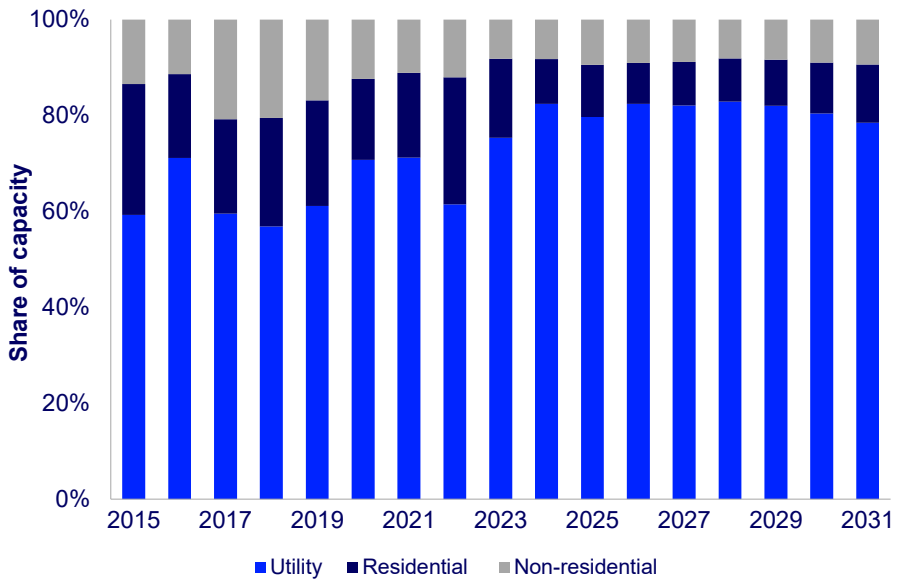
Residential and commercial solar drive an expected annual contraction in 2026, followed by market recovery ahead of the ITC placed-in-service deadlines

US solar PV installations and forecasts by segment



Source: Wood Mackenzie

US solar PV share of capacity, historical and forecast

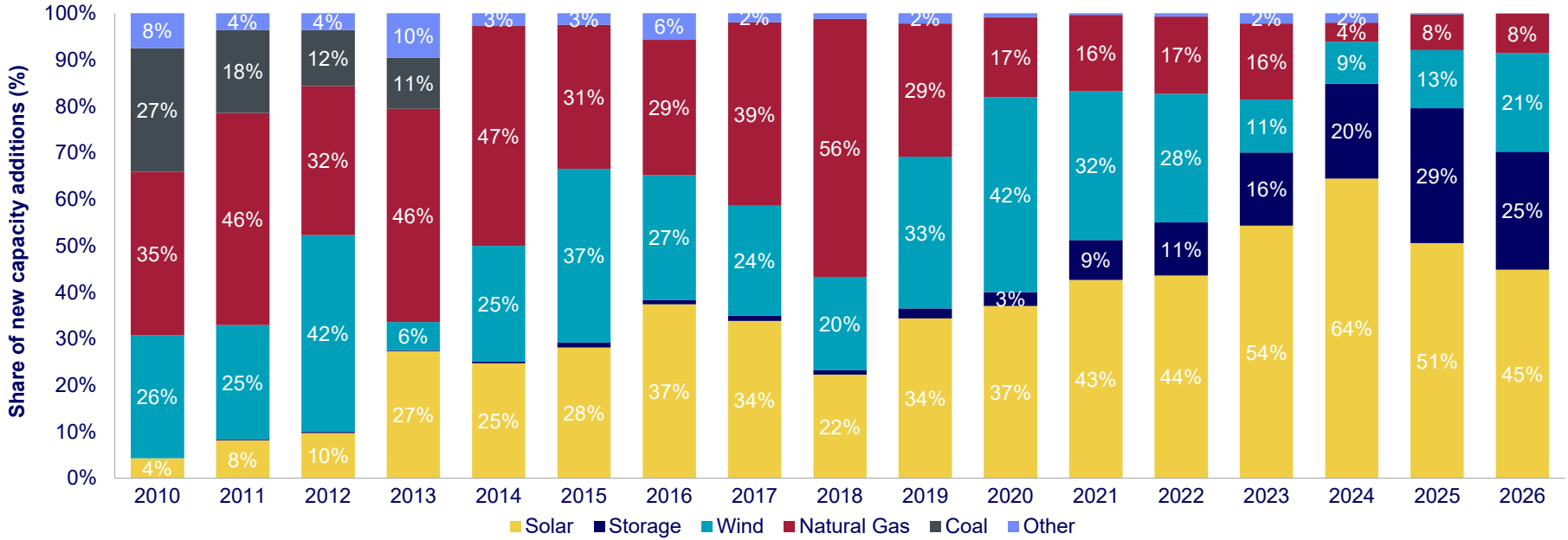


Source: Wood Mackenzie

Solar and storage made up 70% of all new generating capacity in 2026 so far

Solar accounted for 45% of new electricity-generating capacity additions in H1 2026

New US electricity-generating capacity additions, 2010 – H1 2026



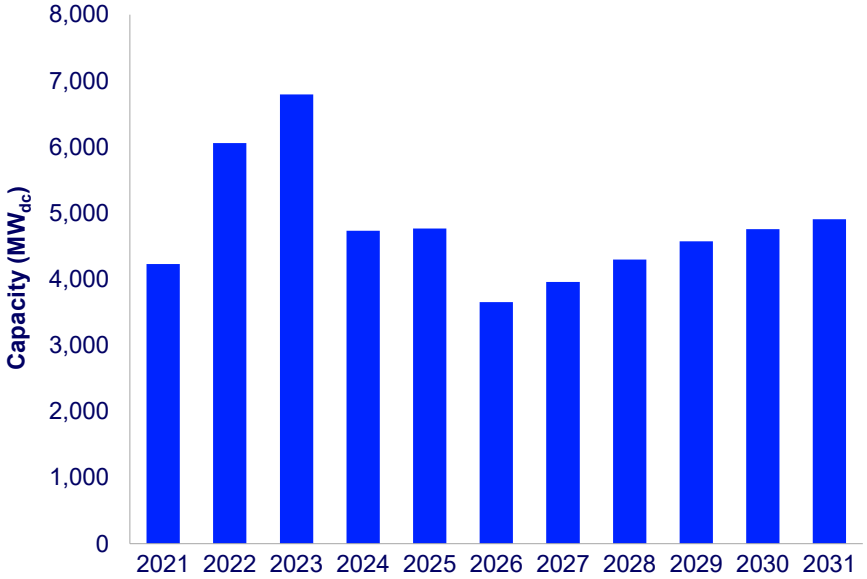
Source: Wood Mackenzie, Note: additions for the solar, wind, and storage technologies are sourced from Wood Mackenzie data while all other technologies are sourced from the US Energy Information Administration. Solar and storage data includes utility-scale and distributed (residential, commercial, and community) projects.

Residential PV

The shift to TPO financing models presents operational challenges for installers, compounded by consumer hesitancy

995 MW_{dc} installed in Q2 2026, down 12% from Q2 2025, down 10% from Q1 2026

Residential solar installations and forecast



Source: Wood Mackenzie

The residential solar market installed less than 1 GW_{dc} in Q2 2026, the segment's lowest quarter in five years

- Interconnection data now reflects the impact of the Section 25D tax credit elimination for customer-owned systems. Demand pull-forward had sustained a relatively strong Q1 but Q2 reflected a contraction in the customer-owned segment.
- Leading indicators suggest that interconnection data has yet to hit the trough. We expect 1.6 GW_{dc} of new interconnections in H2 2026 compared to 2.1 GW_{dc} in H1 2026.
- California and Illinois led the residential market in Q2 2026, supported by high third-party ownership (TPO) penetration and rising retail rates. However, while both states saw installed capacity rise year-over-year in H1 2026 (California is up 8%, Illinois jumped 38%), permits fell 25% and 20%, respectively, signaling a contraction ahead.

After a sizable contraction in 2026, the segment will recover and grow at an average annual rate of 6% between 2027 and 2031

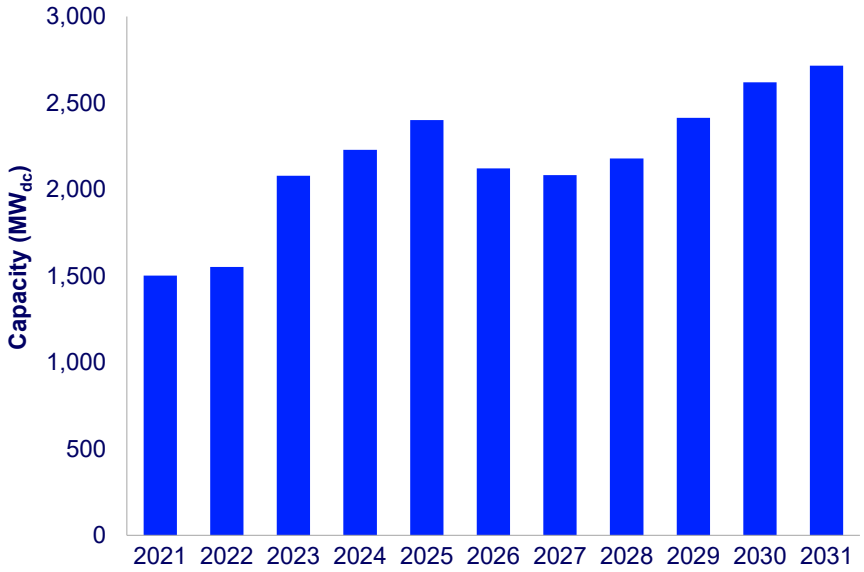
- We now expect a 23% contraction in 2026, steeper than the 21% decline in last quarter's outlook. Installers have had difficulty shifting operations from cash and loan sales to TPO, compounded by tax equity scarcity and the availability of prepaid products only in select states. Installers also report longer sales cycles and falling close rates as homeowners cite personal finances and broader economic uncertainty.
- Growth returns in 2027, fueled by greater availability of prepaid TPO offerings and continued TPO tax credit eligibility. By 2031, rising retail rates, resiliency concerns, and the industry's emerging push to position residential solar as a load-growth enabler (via virtual power plants) will help offset the loss of the tax credit.

Commercial PV

California's growth from the remaining NEM 2.0 pipeline powers a strong quarterly performance for the segment

638 MW_{dc} installed in Q2 2026, up 11% from Q2 2025, up 27% from Q1 2026

Commercial solar installations and forecast



Source: Wood Mackenzie

California leads commercial solar growth in Q2 2026, with New York and Ohio maintaining strong momentum

- California's installations totaled 256 MW_{dc} in Q2 2026, driven by the continued buildout of NEM 2.0 projects. Under the state's Net Billing Tariff (NBT), effective April 2026, commercial solar projects are now both smaller and fewer due to heavily reduced export compensation rates.
- Illinois, New York, Texas, and Ohio also had strong quarters in Q2 2026, comprising over 150 MW_{dc} of commercial solar installed. The Illinois Shines and Illinois Solar for All programs continue to attract consistently high demand for C&I solar in the state. Developers in Ohio and Texas are capitalizing on surging demand from onsite industrial users and the agricultural segment to drive new commercial solar capacity.
- Interconnection delays, permitting hurdles, and confusion over federal rules present key challenges for developers this year. Smooth origination and deal execution on the front-end requires off-takers to understand tax credit timelines, compliance risks, and FEOC rules.

After a 2026 and 2027 slowdown, safe-harbored projects and retail rate increases propel commercial solar market expansion through 2031

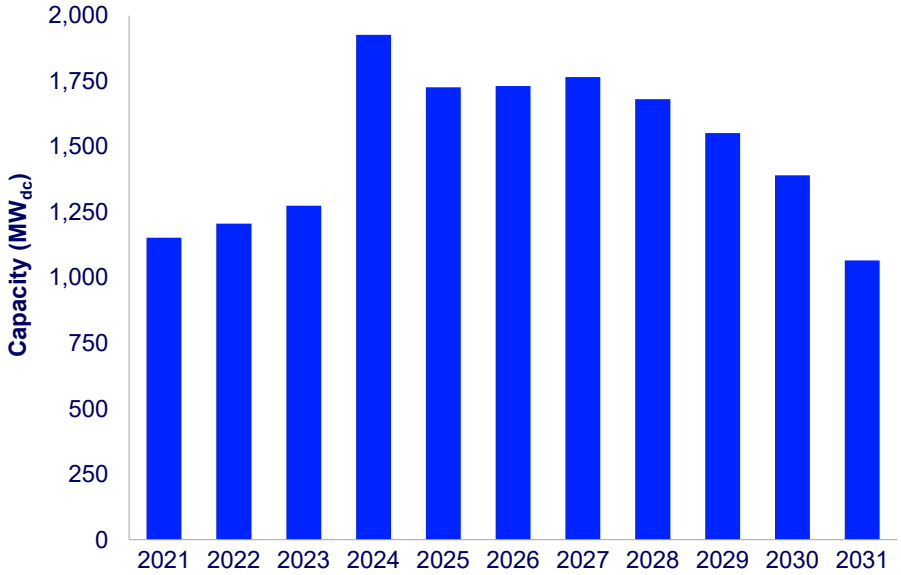
- The overall five-year market forecast remains largely unchanged. The commercial segment is expected to contract in the next two years on average by 7%, followed by accelerated growth from 2028 through 2030 as developers race to energize safe-harbored projects before their four-year window expires. By 2031, rising retail electricity rates will serve as the dominant driver of the commercial solar market.

Community solar PV

Declining volumes in New York limit 2026 installations, despite strong growth in Illinois and the Mid-Atlantic

231 MW_{dc} installed in Q2 2026, down 14% from Q2 2025, down 8% from Q1 2026

Community solar installations and forecast



Source: Wood Mackenzie

New York community solar volumes declined 70% YoY in H1 2026, dampening national growth

- New York historically makes up over 40% of total annual community solar capacity. However, poor site availability, high upgrade and interconnection costs, and weakening incentive levels are deterring new development.
- Despite lower contracting volumes in New York, we expect the national community solar market will remain flat this year, reaching approximately 1.7 GW_{dc}. Near-term growth is driven by other top markets and an 8.2 GW_{dc} safe-harbored pipeline.
  - Installed capacity in Illinois, New Jersey, Virginia, and Delaware will grow substantially this year, balancing declining volumes in New York. Illinois exceeded New York in Q2 2026 capacity, installing 112 MW_{dc}, the strongest Q2 on record for the state. The total project pipeline in Illinois now exceeds 2 GW.

National market growth will decline 12% on average annually beginning in 2028 in the absence of new or expanded programs

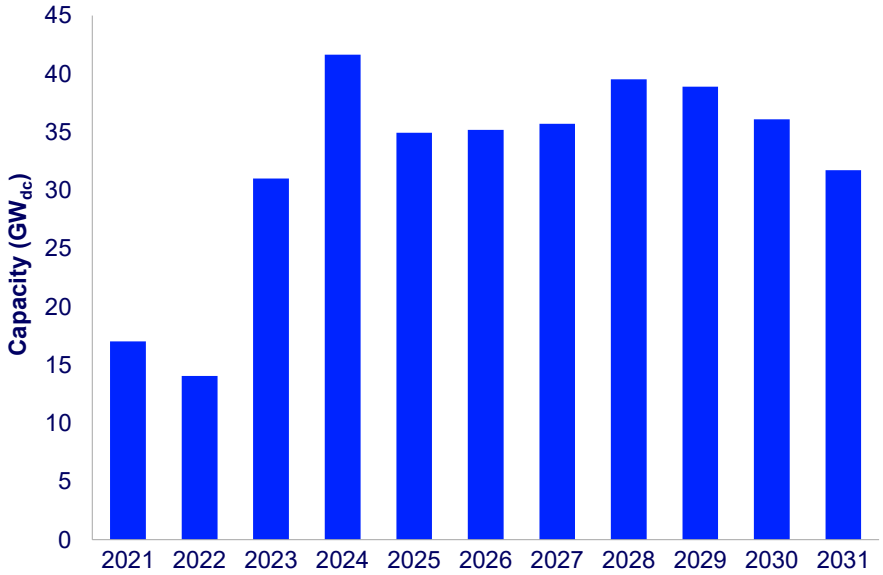
- Leading up to ITC place-in-service deadlines, developers are entirely focused on the execution of their existing project pipelines, deprioritizing new site acquisitions and development. As a result, we expect growth to decline sharply in 2031 as the market adjusts to post-tax credit project financing and development.
- In the absence of new traditional community solar programs, developers are broadening their business models to capture the emerging opportunities, including small utility-scale solar and standalone energy storage.

Utility solar PV

Q2 2026 installation activity recovered from a slow first quarter, and contracting volumes remain resilient

9.6 GW_{dc} installed in Q2 2026, up 61% from Q2 2025, 217 GW_{dc} of utility-scale solar will be added between 2026 and 2031

Utility solar installations and forecast



Source: Wood Mackenzie

Contracting activity signals continued utility-scale solar demand

- Q2 2026 installation activity was concentrated in Arizona (1.4 GW_{dc}), Texas (1.7 GW_{dc}), and Michigan (0.9 GW_{dc}), reflecting continued development in several of the largest utility-scale solar markets.
- Contracting activity remained relatively resilient with 4.9 GW_{dc} contracted in Q2 2026, down just 8% from Q2 2025. Activity was concentrated in Utah, Texas, Arkansas, Oklahoma, and Washington, with data and technology companies continuing to account for the majority of new offtake agreements.

We expect the utility-scale segment to add 217 GW_{dc} through 2031

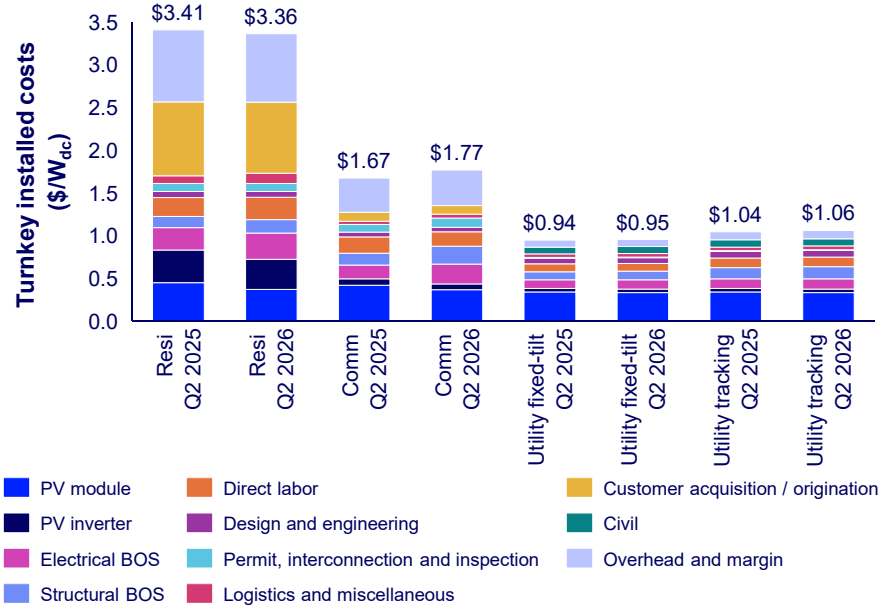
- We do not expect Section 232 tariffs to materially impact near-term deployments, as safe-harbored equipment supports a large share of forecasted installations. However, we continue to monitor project pipelines and contracting activity to assess potential longer-term impacts on project economics and development timelines.
- Permitting remains a constraint on near-term capacity additions, despite progress in project reviews at some state agencies and federal field offices. Uneven implementation across federal agencies continues to create uncertainty for the broader development pipeline, with permitting-related challenges affecting roughly 30% of early-stage solar projects.
- Improved visibility into safe harbor pipelines resulted in upward revisions of 7.5 GW_{dc} through our 2031 outlook. The increases are concentrated in Texas, Arizona, California, and Illinois, reflecting both aggressive safe harbor activity and growing developer incentives to accelerate projects into the pre-2030 period to preserve tax credit value.

National solar PV system pricing

System prices rose in all segments except residential as balance of system costs remain elevated

Note: We employ a bottoms-up modeling methodology to capture, track and report national average PV system pricing by segment. Prices are reflective of 'overnight' pricing incurred in the year in which the project is being contracted, and no procurement or construction lags are being factored into modelling assumptions. The methodology is based on the tracked wholesale pricing of major solar components and data collected from industry interviews. Wood Mackenzie's supply chain data and models are leveraged to enhance and bolster our pricing outlooks.

US national average system prices by market segment



Source: Wood Mackenzie

PV system prices rose across all segments except residential in Q2 2026

- Residential system pricing fell 1.4%, to \$3.36/W_{dc} year-over-year.
- Commercial system pricing rose 5.6% to \$1.77/W_{dc} year-over-year.
- Utility-scale system pricing is up 0.9% for fixed-tilt at \$0.95/W_{dc} and 2% for single-axis tracking at \$1.06/W_{dc} year-over-year.

Decline in module prices is offset by increasing balance of plant and logistics cost

- With International Emergency Economic Powers Act (IEEPA) tariffs invalidated at the start of 2026, module prices fell by an average of 16% year-over-year for the distributed segment, reaching \$0.37/W_{dc} in Q2 2026.
- The decline for the utility-segment was more muted as procurement shifted to domestic supply chain, which carries a significant premium over imported supply. Module prices declined by 2% year-over-year, averaging \$0.33/W_{dc} in Q2 2026.
- Logistics costs have increased by over 15% averaged across all segments. The increase is a result of rising oil and gas prices, which have increased by about 50% year-over-year since the start of the Middle East conflict.
- Section 232 tariffs on copper, steel and aluminum continue increasing electrical and structural balance of plant costs, affecting both imported and domestic equipment.

State solar PV installation rankings, H1 2026

	Ranking			Installations (MW_{dc})		
State	2024	2025	H1 2026	2024	2025	H1 2026
Texas	1	1	1	10,861	10,814	3,440
Arizona	6	6	2	1,816	1,947	1,762
Florida	3	4	3	4,867	2,253	1,611
Michigan	23	14	4			
Illinois	4	5	5			
California	2	2	6			
Indiana	10	3	7			
Ohio	5	7	8			
Missouri	19	13	9			
Utah	17	12	10			
Oregon	40	38	11			
Tennessee	50	31	12			
Oklahoma	30	20	13			
Arkansas	9	10	14			
Minnesota	22	21	15			
New Mexico	11	15	16			
Maryland	29	17	17			
Mississippi	14	23	18			
New York	7	8	19			
Louisiana	15	24	20			
New Jersey	28	27	21			
Virginia	13	16	22			
Kansas	47	32	23			
Idaho	36	33	24			
Washington	35	39	25			
Pennsylvania	20	18	26			

Underlying data available in the full report

State solar PV installation rankings, H1 2026

	Ranking			Installations (MW_{dc})		
State	2024	2025	H1 2026	2024	2025	H1 2026
Colorado	25	9	27			
Georgia	12	36	28			
Puerto Rico	27	30	29			
Alabama	43	35	30			
Massachusetts	26	28	31			
North Carolina	34	22	32			
Connecticut	32	25	33			
South Carolina	39	26	34			
Maine	18	37	35			
Delaware	46	44	36			
Wisconsin	16	19	37			
Nevada	8	29	38			
Hawaii	31	34	39			
Iowa	21	41	40			
Rhode Island	41	40	41			
Washington DC	44	43	42			
Montana	45	45	43			
New Hampshire	42	42	44			
West Virginia	38	46	45			
Kentucky	24	11	46			
Vermont	49	47	47			
Nebraska	48	48	48			
Wyoming	33	49	49			
Alaska	51	50	50			
South Dakota	37	51	51			
North Dakota	52	52	52			

Underlying data available in the full report

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