

CI Consulting

**S&P Global**

Commodity Insights

# Solar Market Monitor H1 2024

November 25, 2024

Prepared for



# Contents

**Executive summary**

Clean power capacity and pipeline

Clean power project economics

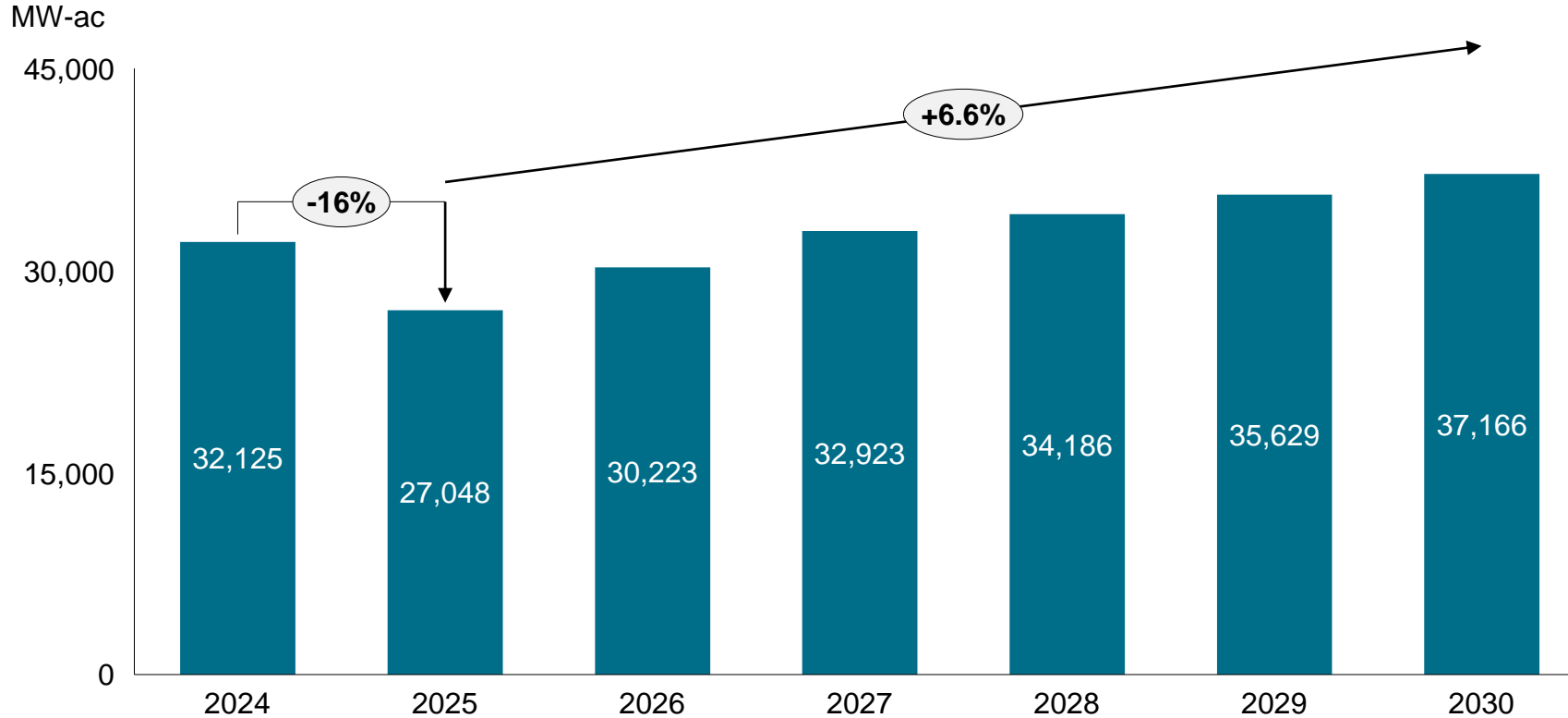
Industry trends and policies

Power market outlooks



# Installations are expected to hit a record high in 2024, bolstered by a rush to install modules imported during the anti-circumvention tariff moratorium by December 2024

## Annual utility-scale solar installations in the US



- After record high solar installations in 2023, **2024 will be another record-breaking year** with over **32 GW** of utility-scale installations
- **Uniquely high installations in 2024** are due to the requirement that modules imported during the anti-circumvention tariff moratorium be in service by December 2024
- Installations in 2025 are expected to be **16% lower than in 2024** but the market will recover
- Despite short term headwinds, the **picture remains optimistic<sup>1</sup>** with an expected **CAGR of 6.6%**
- The incoming administration and new Congress could attempt to change or remove certain portions of the IRA and accompanying guidance, but **the IRA is unlikely to be completely undone**

IRA = Inflation Reduction Act.

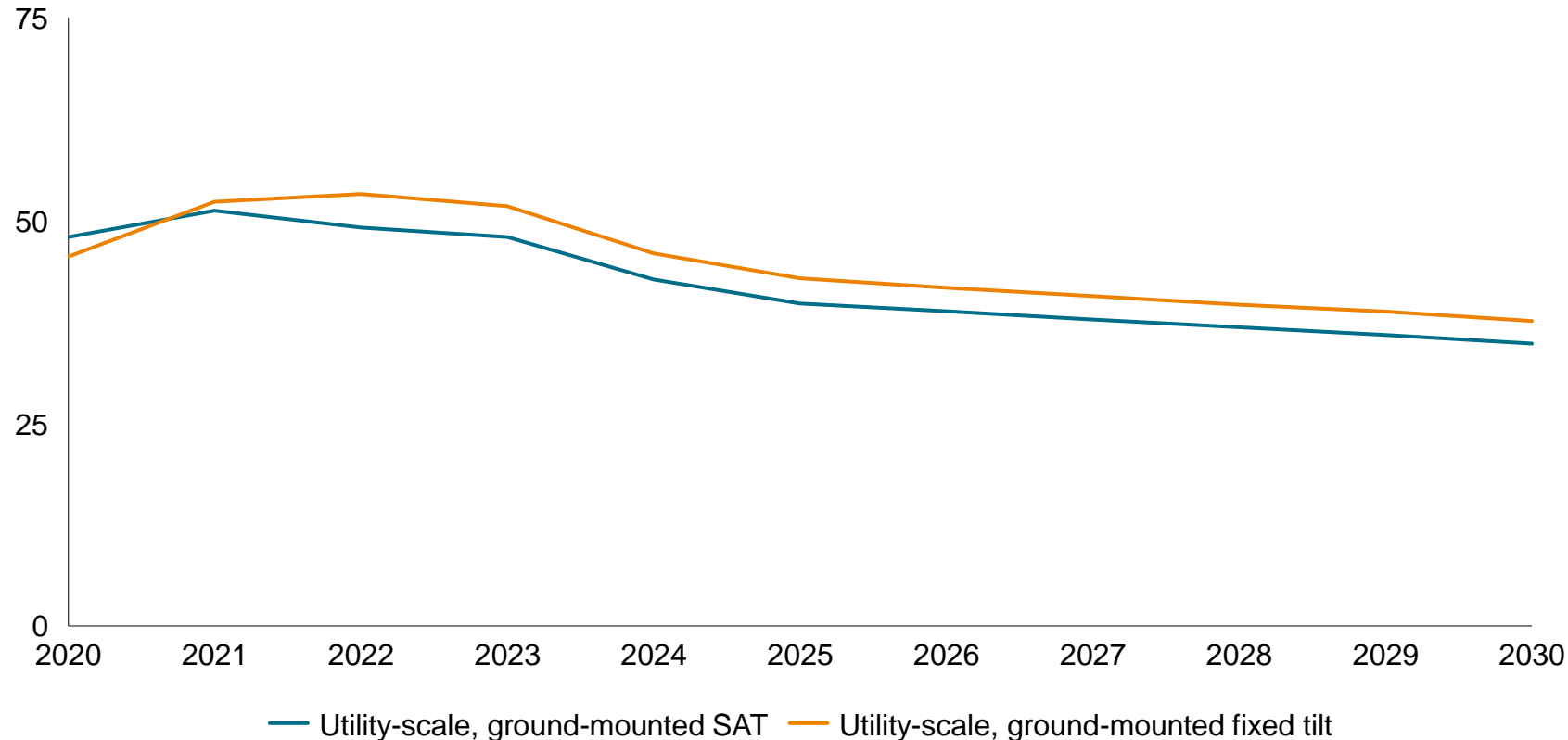
1. For example, nearly a quarter of ERCOT's power generation will be from utility-scale solar in 2030, surpassed only by California's 32% solar saturation.

Source: S&P Global

# Utility-scale solar LCOE is expected to decline, but significant regional variation across the US remains, driven by soft costs like wages and land prices

## Solar LCOE by online year, system type without tax credits

Real 2022 \$/MWh



- In 2024, the US average utility-scale solar LCOE is \$46/MW. LCOE is expected to decrease to \$38/MWh by 2030
- Regional variations come from **differences in soft costs**, including wage rates, land prices and permitting
- The recent **decline in polysilicon prices** has improved the short term LCOE outlook, but there is risk that new tariffs may increase capital costs and drive up the LCOE
- In the long term, LCOE is expected to continue declining as **capital costs fall and capacity factors rise**
- Under the new Trump Administration, **political uncertainty remains**, especially concerning tariffs and alterations to the IRA

LCOE = Levelized Cost of Energy.  
Source: S&P Global

# Disclaimer

S&P Global Commodity Insights is a business division of S&P Global Inc. ("SPGCI"). The reports, data, and information referenced in this document ("Deliverables") are the copyrighted property of SPGCI and represent data, research, opinions, or viewpoints of SPGCI. SPGCI prepared the Deliverables using reasonable skill and care in accordance with normal industry practice. The Deliverables speak to the original publication date of the Deliverables. The information and opinions expressed in the Deliverables are subject to change without notice and SPGCI has no duty or responsibility to update the Deliverables (unless SPGCI has expressly agreed to update the Deliverables). Forecasts are inherently uncertain because of events or combinations of events that cannot reasonably be foreseen including the actions of government, individuals, third parties and competitors. The Deliverables are from sources considered by SPGCI (in its professional opinion) to be reliable, but SPGCI does not assume responsibility for the accuracy or completeness thereof, nor is their accuracy or completeness or the opinions and analyses based upon them warranted.

To the extent permitted by law, SPGCI shall not be liable for any errors or omissions or any loss, damage, or expense incurred by reliance on the Deliverables or any statement contained therein, or resulting from any omission. THE DELIVERABLES ARE PROVIDED "AS IS" AND TO THE MAXIMUM EXTENT ALLOWED BY LAW, NEITHER SPGCI, ITS AFFILIATES NOR ANY THIRD-PARTY PROVIDERS MAKES ANY REPRESENTATION, WARRANTY, CONDITION, OR UNDERTAKING, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, RELATING TO THE DELIVERABLES OR THE RESULTS OBTAINED IN USING THEM; INCLUDING: A) THEIR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE; OR B) THEIR CONTINUITY, ACCURACY, TIMELINESS OR COMPLETENESS. The Deliverables are supplied without obligation and on the understanding that any recipient who acts upon the Deliverables or otherwise changes its position in reliance thereon does so entirely at its own risk.

The Deliverables should not be construed as financial, investment, legal, or tax advice or any advice regarding any recipient's corporate or legal structure, assets or liabilities, financial capital or debt structure, current or potential credit rating or advice directed at improving any recipient's creditworthiness nor should they be regarded as an offer, recommendation, or as a solicitation of an offer to buy, sell or otherwise deal in any investment or securities or make any other investment decisions. The Deliverables should not be relied on in making any investment or other decision and should not in any way serve as a substitute for other enquiries or procedures which may be appropriate. Nothing in the Deliverables constitutes a solicitation by SPGCI or its Affiliates of the purchase or sale of any loans, securities or investments. The Deliverables do not constitute legal advice and SPGCI did not act in the capacity of lawyers under any jurisdiction in the preparation of Deliverables. SPGCI is not a registered lobbyist and cannot advocate on anyone's behalf to government officials regarding specific policies.

S&P Global Inc. also has the following divisions: S&P Dow Jones Indices, S&P Global Market Intelligence, S&P Global Mobility, and S&P Global Ratings, each of which provides different products and services. S&P Global keeps the activities of its business divisions separate from each other in order to preserve the independence and objectivity of their activities. SPGCI publishes commodity information, including price assessments and indices and maintains clear structural and operational separation between SPGCI's price assessment activities and the other activities carried out by SPGCI and the other business divisions of S&P Global Inc. to safeguard the quality, independence and integrity of its price assessments and indices and ensure they are free from any actual or perceived conflicts of interest. The Deliverables should not be construed or regarded as a recommendation of any specific price assessment or benchmark.

No portion of the Deliverables may be modified, reproduced, reused, or otherwise distributed in any form without the prior written consent of SPGCI (to be granted or withheld in SPGCI's absolute discretion).

Unless SPGCI has expressly agreed otherwise, the Deliverables are not works-made-for-hire and SPGCI shall own all right, title, and interest in and to the Deliverables, including all intellectual property rights which subsist in the Deliverables. Use of the Deliverables is subject to any licence terms and restrictions agreed between SPGCI and the commissioning Client. The SPGCI name(s) and logo(s) and other trademarks appearing in the Deliverables are the property of S&P Global Inc., or their respective owners.

CI Consulting

---

**S&P Global**

Commodity Insights