

May 2025

Statistical data on the German Solar Power (Photovoltaic) Market

This data sheet gives an overview of the German photovoltaic (PV) market at the end of 2024.

Free film and photo material and press releases (in English):

www.solarwirtschaft.de/en/press/

Current press releases on German solar market in 2024 (in German):

<https://www.solarwirtschaft.de/presse/pressemeldungen/>

Suggested citation

Unless stated otherwise, please use the following suggested citation: German Solar Association (BSW-Solar) (May 2025): "Statistical data on the German Solar Power (Photovoltaic) Market", Berlin.

Photovoltaic Market in Germany	at the end of 2024
New PV capacity installed in 2024 ¹	Approx. 17.5 GWp
Number of new PV systems installed in 2024 ¹	> 1,070,000
of which were registered plug-in solar devices ("balcony solar") ¹	> 435,000
Cumulative PV capacity installed at the end of 2024 ¹	Approx. 100 GWp
Cumulative number of PV systems installed at the end of 2024 ¹	> 4.80 million
Gross electricity generation by PV systems in Germany in 2024 ²	Approx. 74.1 TWh
Share of PV in German gross electricity consumption in 2024 ³	Approx. 14 %
Greenhouse gas emissions avoided in 2024 in CO ₂ equivalents ²	Approx. 51.1 million metric tons

¹ BSW-Solar, own estimate including estimations of late registrations based on the Marktstammdatenregister of the Federal Network Agency (as of April 23rd 2025), see <https://www.marktstammdatenregister.de/MaStR/Einheit/Einheiten/ErweiterteOeffentlicheEinheiteneubersicht>

² Umweltbundesamt (2025): „Erneuerbare Energien in Deutschland - Daten zur Entwicklung im Jahr 2024“, Dessau-Roßlau, siehe https://www.umweltbundesamt.de/sites/default/files/medien/479/publikationen/hgp_erneuerbareenergien_2024.pdf

³ BDEW (2024), preliminary estimate, see https://www.bdew.de/media/documents/EE_Sch%C3%A4tzung_Jahr2024.pdf