



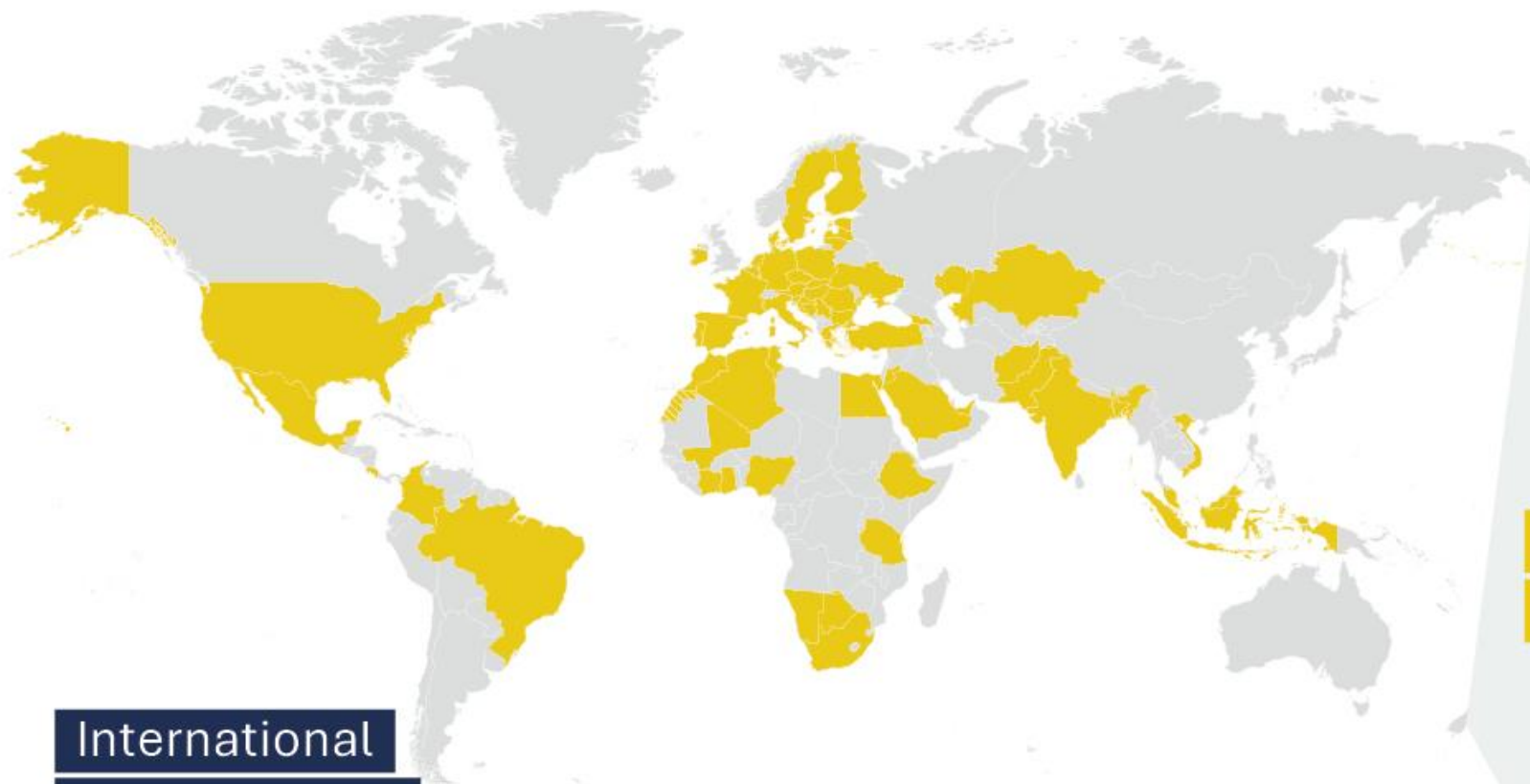
# **Solar Surge & Storage Strategy: Germany's Journey in PV & BESS**

German Solar Association (BSW-Solar)

David Wedepohl, Managing Director International Affairs

# German Solar Association

The Network of the Solar Energy and Storage Sectors



International  
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[www.solarwirtschaft.de](http://www.solarwirtschaft.de)

# German Solar Association



- TASK** .....• To represent the solar industry in Germany in the photovoltaic, thermal and storage sector
- VISION** .....• A sustainable global energy supply provided by solar (renewable) energy
- ACTIVITIES** .....• Lobbying, political advice, public relations, market observation, standardization
- EXPERIENCE** .....• Active in the solar energy sector for over four decades
- REPRESENTS** .....• More than 1000 solar producers, suppliers, wholesalers, installers and other companies active in the solar business from all over the world
- HEADQUARTER** .....• Berlin, Germany

EQUIPMENT

MATERIALS

SYSTEM  
COMPONENTS

WHOLESALE &  
DISTRIBUTION

PROJECT  
DEVELOPMENT

CONSTRUCTION

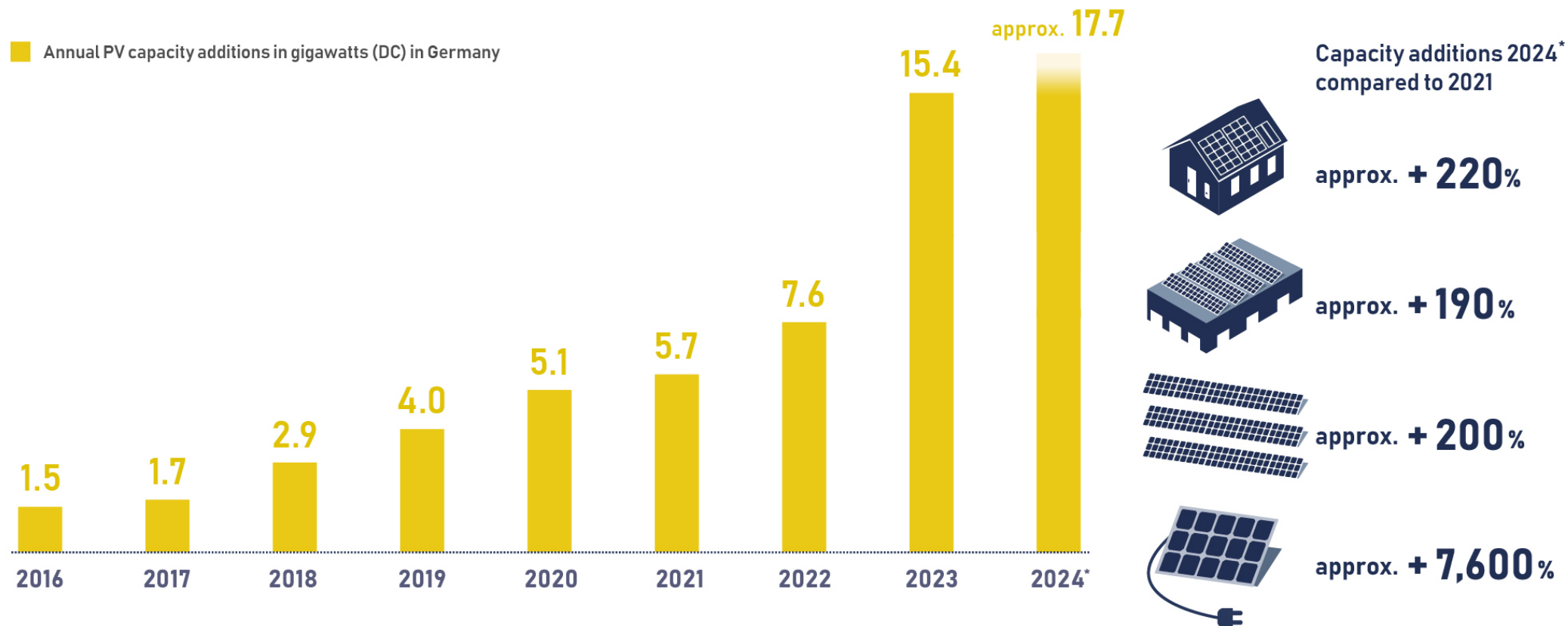
O&M

# Recent milestones in the German PV and storage market



- More than **100 GWp cumulative PV capacity installed** end of 2024 (currently approx. 112 GWp installed)
- **Over 25 GWp new rooftop PV capacity** installed in the years 2022 to 2024
- More than **1 GWp new ground-mounted PV capacity installed via EEG-tenders** in months of February and August 2025
- More than **5.5 million PV-systems** as of Q3/2025 - including more than **1 million plug-in solar devices** (registered)
- **25 GWh of battery storage** achievable by the end of 2025
- **Almost 2.3 million battery storage units** as of Q3/2025

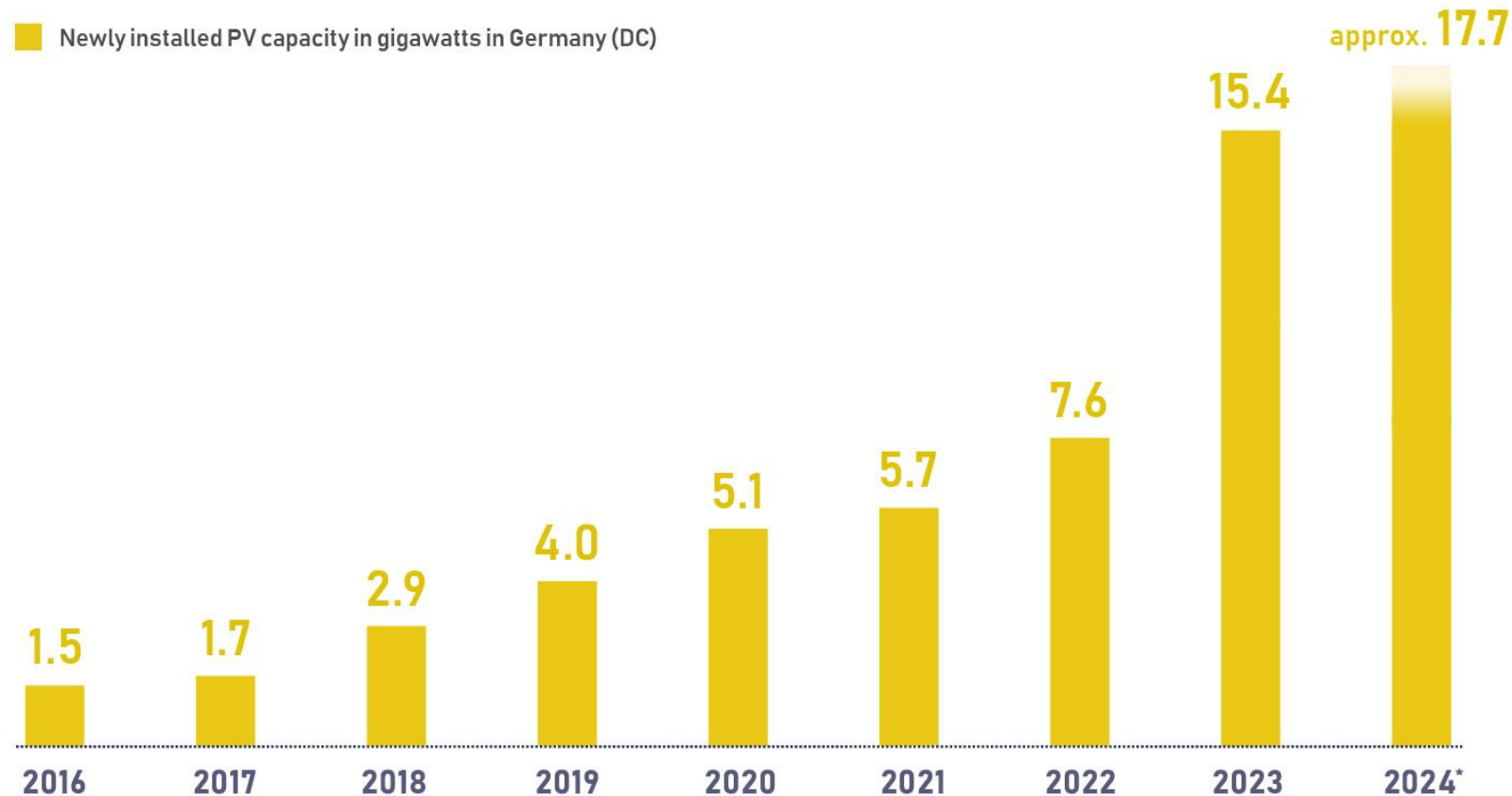
# Tripling within three years: Annual capacity additions of solar PV



\* Updated forecast for 2024 includes estimates of expected late registrations.  
BSW-Solar, based on Marktstammdatenregister (commissioning date of PV unit); as of 09/09/2025

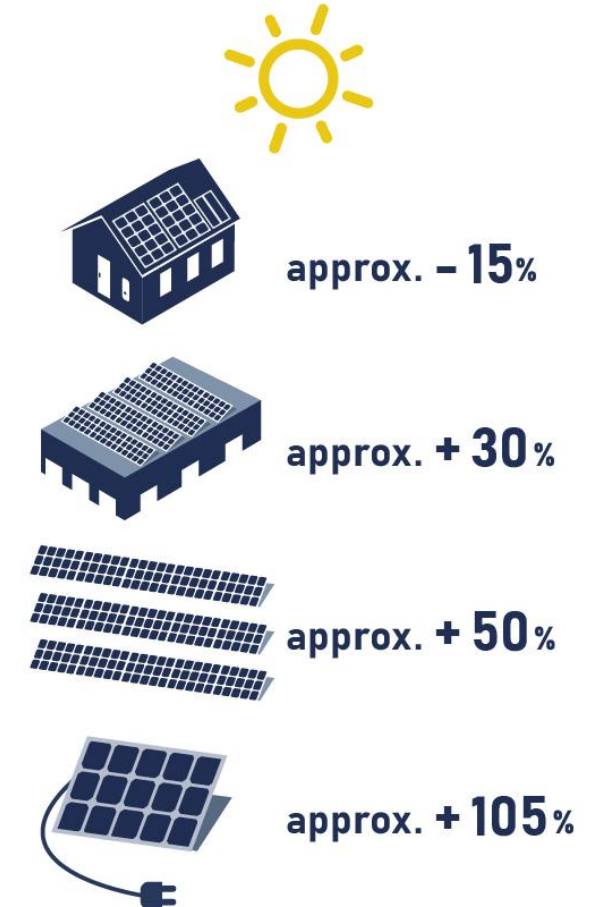
# German PV market continued to grow in 2024

## Diverging developments across market segments



\* Updated forecast for 2024 includes estimates of expected late registrations.

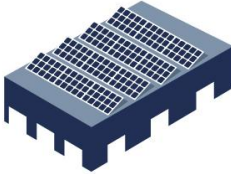
BSW-Solar, based on Marktstammdatenregister (commissioning date of PV unit); as of 09/09/2025



# Added PV capacity in Jan. to Sept. 2025 approx. +4%\*

Approx. 11.9 GWp in Jan. to Sept. 2025 compared to 11.5 GWp in previous year period\*



| New<br>PV installations                                              | <br><b>Residential rooftop PV</b><br>≤ 30 kWp | <br><b>C&amp;I rooftop PV</b><br>> 30 kWp | <br><b>Ground-mounted PV</b><br>(incl. other structures, floating<br>PV and agrivoltaics) | <br><b>Plug-in solar devices</b><br>("Balcony PV") |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Jan. to Sept. 2024</b><br><i>registered before<br/>10/27/2024</i> | approx. 4.7 GWp                                                                                                                | approx. 2.4 GWp                                                                                                              | approx. 4.1 GWp                                                                                                                                                              | approx. 0.4 GWp                                                                                                                       |
| <b>Jan. to Sept. 2025</b><br><i>registered before<br/>10/27/2025</i> | approx. 3.6 GWp<br><b>-23 %</b>                                                                                                | approx. 2.4 GWp<br><b>+/-0 %</b>                                                                                             | approx. 5.5 GWp<br><b>+35 %</b>                                                                                                                                              | approx. 0.5 GWp<br><b>+28 %</b>                                                                                                       |

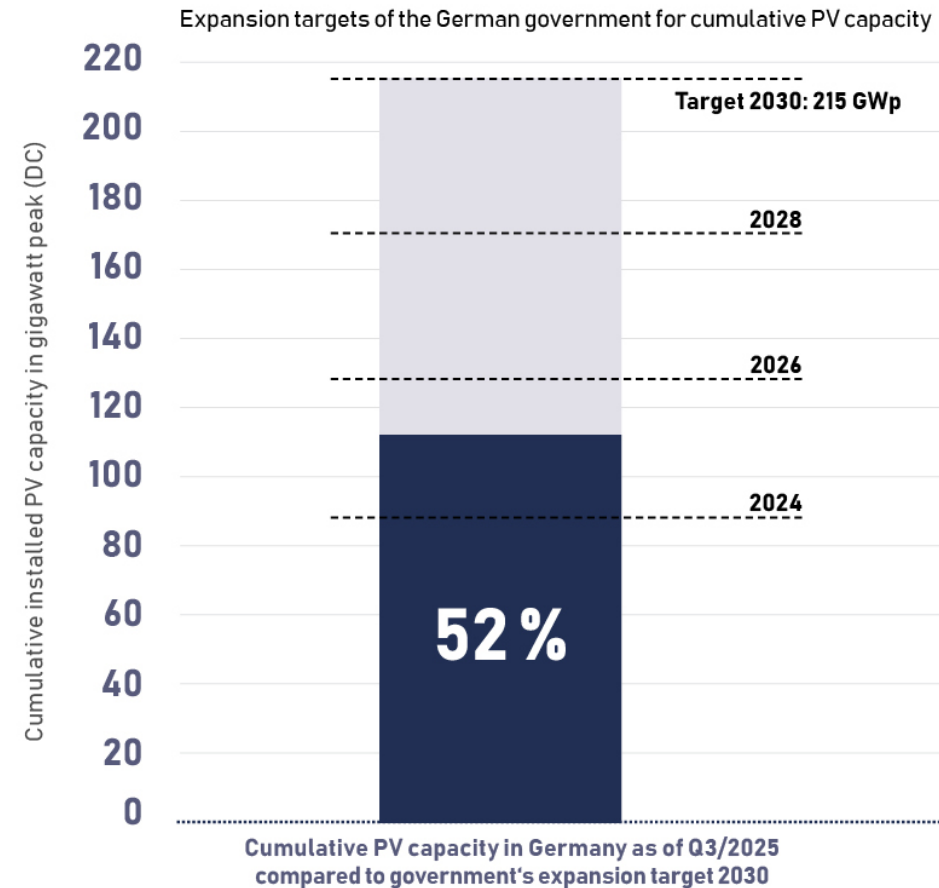
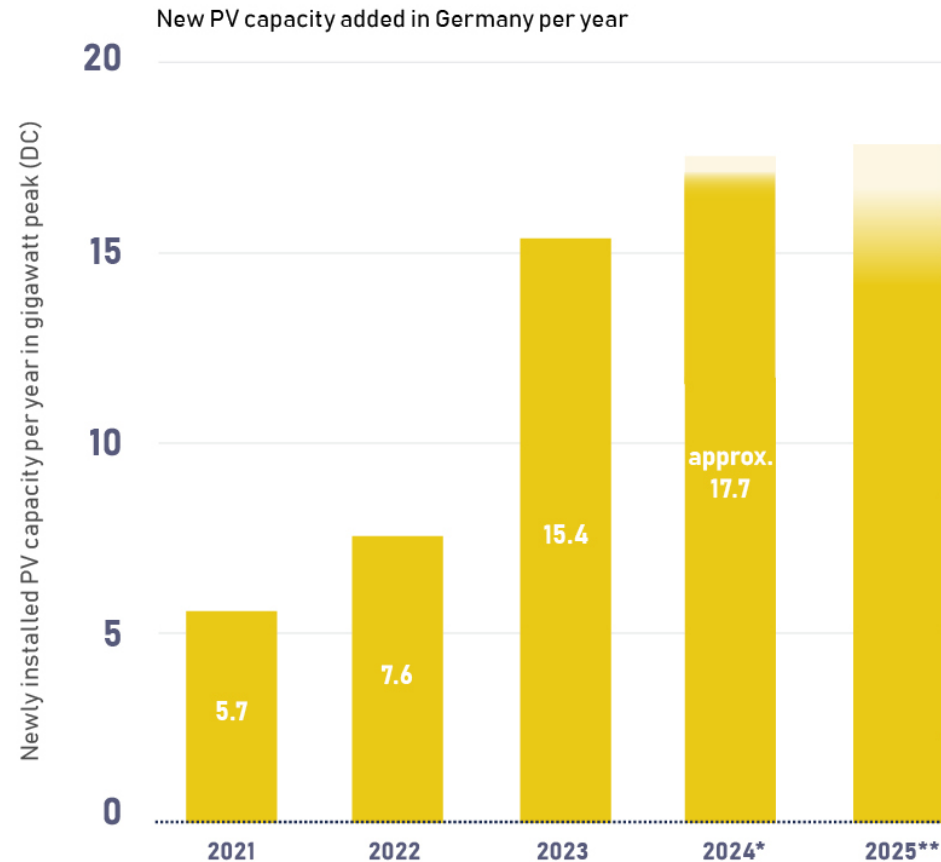
Source: BSW-Solar based on core energy market data register (Marktstammdatenregister as of 10/27/2025, commissioning date and registration date of PV unit, added capacity in DC)

Note: Preliminary data for 2025. Further late registrations are to be expected.

\*Comparison based on commissioned PV installed within identical registration periods to eliminate the distorting effect of late registrations.

Due to rounding, the sums and percentages may not reconcile exactly.

# 52 % of **current** 215 GWp PV expansion target for 2030 achieved PV additions in 2025 are expected to be at a similar level to 2024



Source: Wedepohl

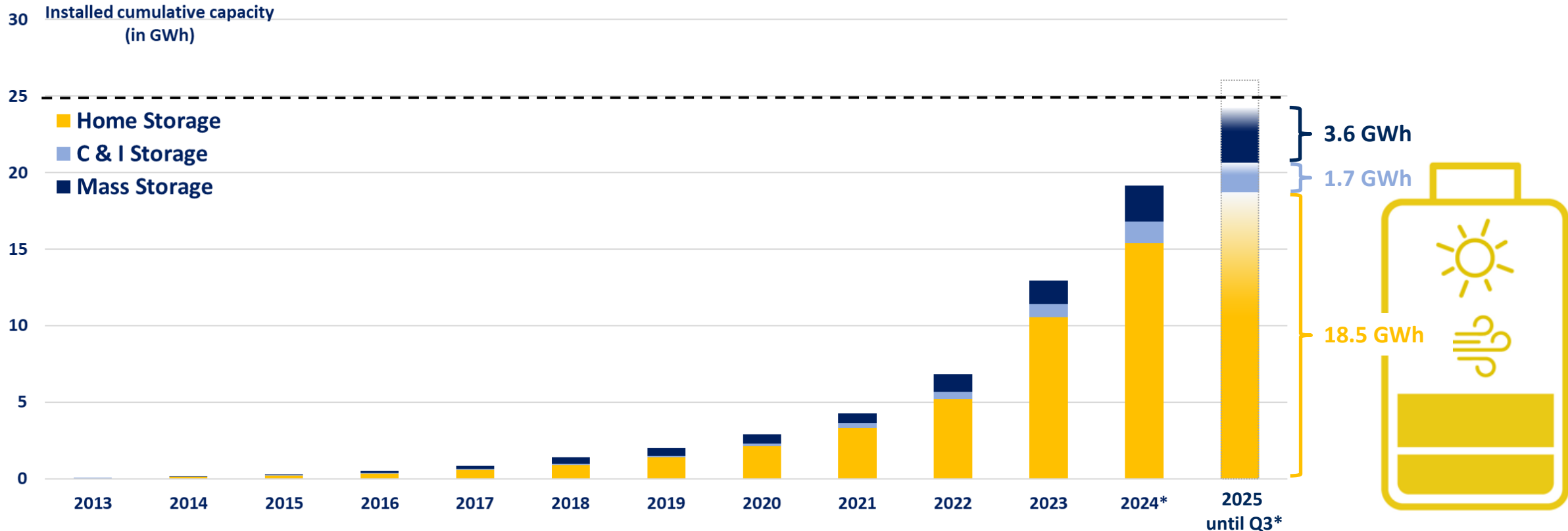


Source: Adobe Stock

\* Forecast for 2024 and 2025 including estimate of expected late registrations \*\* Preliminary forecast  
BSW-Solar based on Marktstammdatenregister (commissioning date of the PV unit), as of 10/27/2025; EEG 2023

# Battery storage likely to exceed 25 GWh before the end of 2025

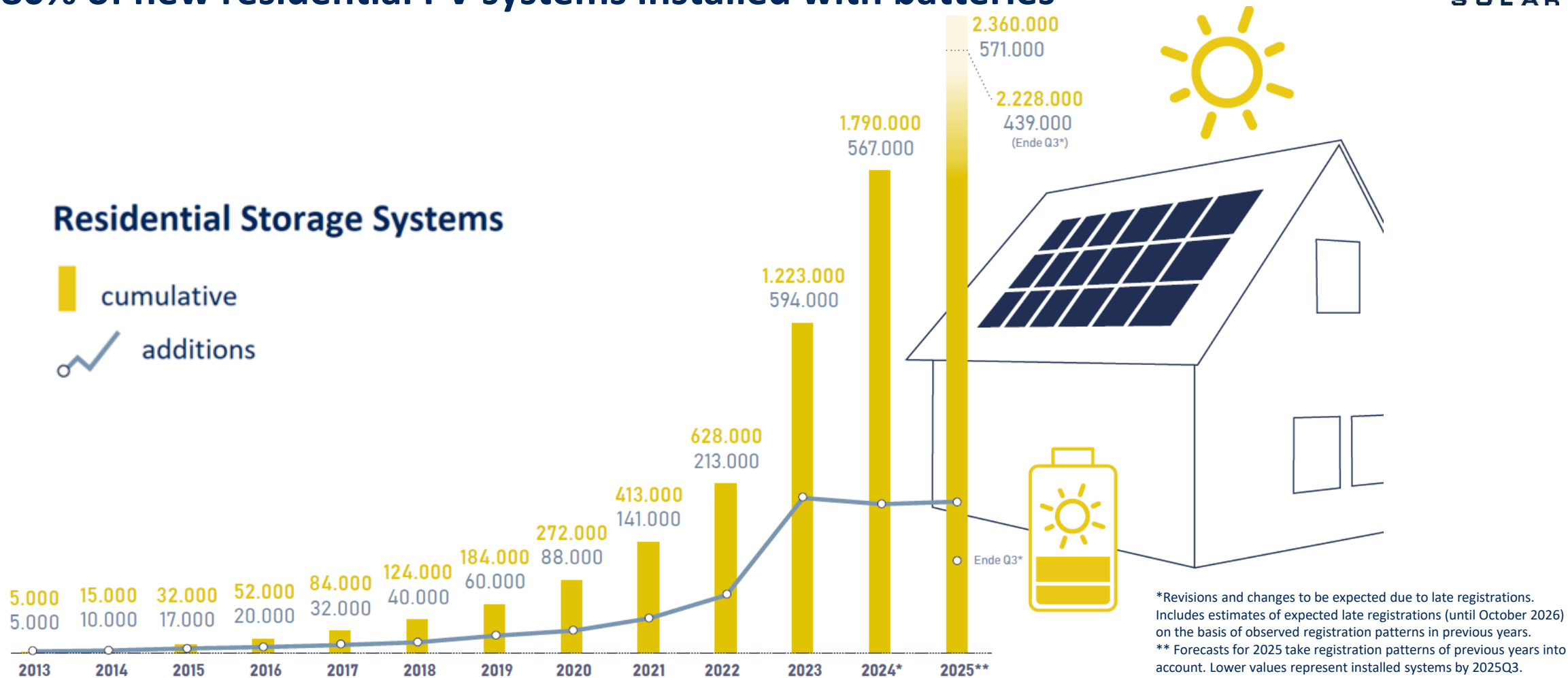
## 2.28 Million battery systems and 24.2 GWh across all segments in 2025Q3



\* Revisions to be expected due to delayed reporting. The reported values contain estimates of (late) registrations to be expected until the end of October 2026 based on previous registration patterns.  
Source: BSW, own estimates based on MaStR as of October 27th, 2025.

## 2.23 Mio. households utilize battery storage by 2025Q3

80% of new residential PV systems installed with batteries

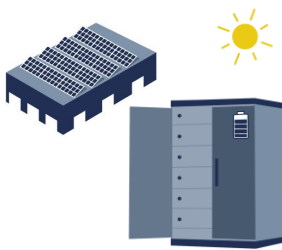
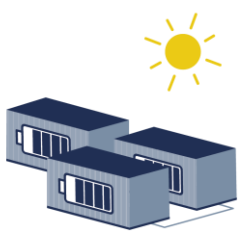


Source: BSW-Solar, own calculations based on MaStR as of 10/27/2025.

# Battery capacity additions in 2025: Likely to exceed 6 GWh again

Up to 5.0 GWh over 450,000 systems by Q3 - partly due to mass storage increase



| Installed Storage Capacity                                         | <br>Small Storage (≤ 5 kWh) |                          | <br>C & I Storage (20 – 1,000 kWh) |                               | <br>Mass Storage (> 1,000 kWh) |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------|
|                                                                    | Residential Storage (5 – 20 kWh)                                                                              |                          |                                                                                                                       |                               |                                                                                                                   |
| <b>2024 Q1–Q3</b><br><i>Including late registrations*</i>          | approx. 0.33 GWh                                                                                              | approx. 3.41 GWh         | approx. 0.38 GWh                                                                                                      | approx. 0.44 GWh              |                                                                                                                   |
| <b>2025 Q1-Q3</b><br><i>Including expected late registrations*</i> | approx. 0.41 GWh<br>+27%                                                                                      | approx. 2.94 GWh<br>-14% | approx. 0.51 GWh<br>+34%                                                                                              | up to 1.23 GWh<br>up to +180% |                                                                                                                   |

\*Revisions and changes to be expected due to late registrations. Includes estimates of expected late registrations (until end of October 2026) on the basis of observed registration patterns in previous years. Source: BSW-Solar, own calculations based on MaStR as of 10/27/2025.

## Join us on our path!



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