

**ees Europe
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EES EUROPE TREND PAPER:

INSTALLATION FIGURES FOR NEW SOLAR STORAGE SYSTEMS ON THE RISE THROUGHOUT EUROPE

Germany is the market leader with a share of 59%, followed by Italy and Austria. Sweden and Poland are catching up.

Munich/Pforzheim, March 2023: In recent years, there have already been enough good reasons to invest in storage systems for self-generated solar power. Nevertheless, the arguments for installing storage systems have gained even more importance in the past year. How else should the current challenges - climate change, a foreseeable increase in electricity demand due to the expansion of electromobility, more complex requirements for grid stability with volatile power generation, permanently rising electricity prices, and the desire for greater energy self-sufficiency at both national and individual level - be met? The sales figures for solar batteries more than clearly reflect this development: according to calculations by the German Solar Industry Association (BSW), around 214,000 new home storage units and around 3,900 new commercial storage units were installed in Germany last year.

Exponential growth in newly installed solar batteries

In the home storage segment alone, the market in Germany grew by 59 percent year-on-year. This means that the exponential growth of new solar batteries has intensified once again in the last four years and is expected to continue to increase in private households as well as in industry and commerce: According to a representative survey commissioned by BSW, about half of private property owners can currently imagine storing self-generated solar power as needed. Similar considerations are common in companies. There, 28 percent plan to install a solar power storage system in the next three years.

Four manufacturers cover three quarters of the German storage market

The four energy storage manufacturers BYD, Sonnen, Senec and E3/DC were responsible for around three quarters of storage installations in Germany in terms of both the number of installed storage systems and the installed storage capacity, according to a study by EUPD Research in December 2022.

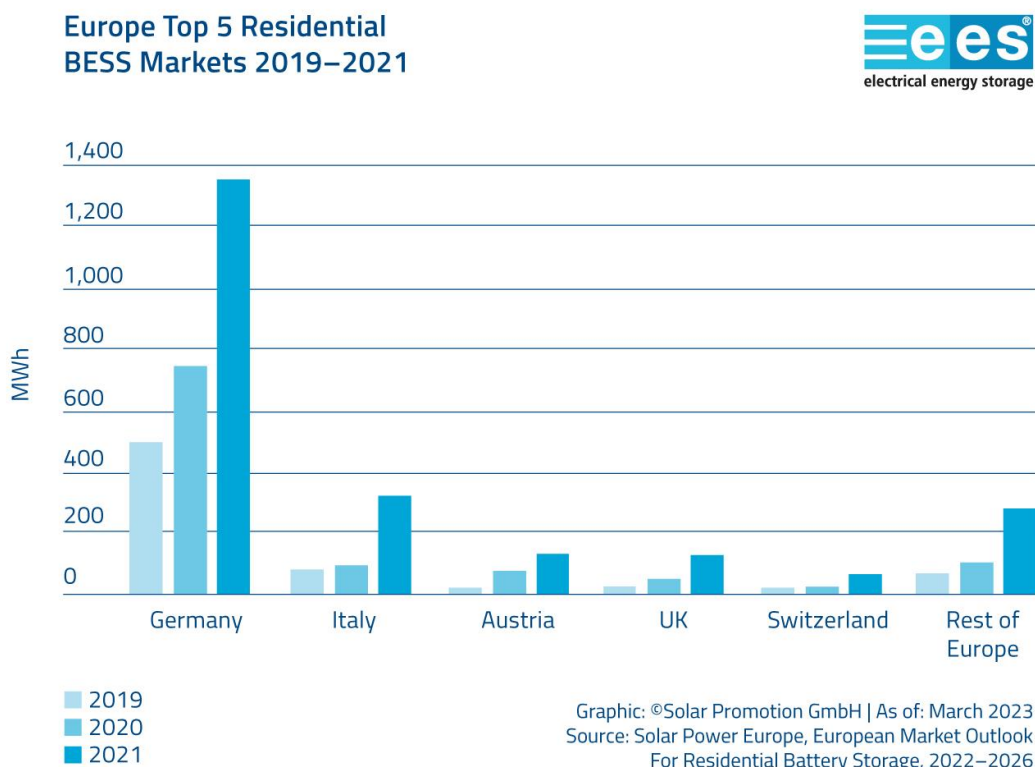
In terms of the number of installed storage systems, the Chinese manufacturer BYD was able to cover the largest share of the German market in the first half of 2022 with 23 percent of new home storage systems. The two German companies Sonnen and Senec followed in second and third place with 21 and 20 percent market share, respectively. Fourth place was also taken by a German company, the Hager Group with its E3/DC brand. In terms of installed storage capacity, BYD and Sonnen increased their market shares slightly to 24 percent and 23 percent respectively. The market shares of Senec and E3/DC came slightly closer together at 15 percent and 14 percent respectively. The other manufacturers Alpha ESS, Huawei, Varta, RCT Power, LG Energy Solutions and Tesla had a combined market share of 25 percent of installed storage systems and 20 percent of storage capacity.

The top 5 home storage markets in Europe

More than two-thirds of newly installed solar power systems on private properties in Germany are now installed together with a home storage system. Current figures from the German Federal Network Agency show that around 630,000 private households and 10,000 companies already own solar storage systems. According to a recent study by SolarPower Europe (SPE), Germany held the unchallenged top position in the European country ranking of home storage markets in 2021, with a market share of 59%, and will most likely retain this position until 2026 - the period considered in the study. According to SPE, the top position of the German storage market is essentially based on the fact that the demand for systems for residential and commercial solar power generation is driven by the exploding cost of electricity and, at the same time, 70% of newly installed photovoltaic systems are built in combination with a storage battery.

Italy reached second place among European home storage markets in 2021 with a market share of 15 percent, not least due to the very successful "Superbonus 110" subsidy program. Despite the discontinuation of subsidy programs, Austria tripled its market to 132 MWh of new installations and was in third place with a 6 percent market share. The UK followed at a close distance with also a 6 percent market share and 128 MWh of newly installed capacity, but ultimately dropped one position to fourth place. Switzerland took 5th place with 3 percent. Every third newly installed photovoltaic system there is already combined with a storage system.

Together, these five countries cover 88 percent of the European market for home storage. However, all other markets considered in the study also grew by an impressive 137 percent on average - starting from lower figures and against the background of different market conditions. The greatest potential in this group was shown by Poland and Sweden, which, according to the SPE forecast, could take the third and fourth places in Europe by 2026.



Europe-wide growth

Predominantly positive market conditions and supportive framework conditions, as expected in additional countries in the medium term, will most likely increase the annual home battery market in Europe to 7.3 GWh by 2026, according to the SPE study. Thus, in the most likely scenario, SolarPower Europe's market study for home electricity storage already calculates an increase in storage capacity of 71% (3.9 GWh) for the past year. This corresponds to more than 420,000 new storage batteries.

In terms of cumulative capacity, the European battery fleet has grown by 9.3 GWh by the end of 2022, while also exceeding the threshold of more than 1 million installed storage systems. By 2026, the number of European households using PV and electricity storage will grow to 3.2 million, bringing capacity to 32.2 GWh under the SPE study's medium scenario, with annual growth rates exceeding 29 percent in all intervening years. Under optimal conditions, private households in Europe could even operate a battery fleet of 44.4 GWh by the end of 2026. But even in the most pessimistic scenario, the study still assumes an inventory of 23.2 GWh in the home storage segment.

Electricity storage significantly cheaper than purchasing from the grid

While prices for electricity from rooftop photovoltaic systems in most European countries have already been well below those of electricity suppliers for several years, rapid cost reductions in battery storage systems are now enabling solar electricity from combined photovoltaic and storage systems to be priced below grid electricity prices in an increasing number of European countries. In Germany, the cost of electricity from combined solar and storage systems rose slightly last year to 14.7 euro cents/kWh, but this is still less than half the grid electricity price of around 32 euro cents/kWh for private households in the same period. This is because while solar system component prices and installation costs have increased due to product and labor shortages and inflation in 2022, and these market barriers will continue in 2023, skyrocketing electricity prices have only made the economics of combined solar and storage systems more attractive.

Industry meeting point: ees Europe 2023 and accompanying trade conferences.

An overview of trends and technology, markets and market participants will be provided by ees Europe, which will take place from June 14-16, 2023 at Messe München as part of The smarter E Europe. Mirroring the industry, ees Europe has grown by more than 100% to over four exhibition halls. Europe's largest and most international trade fair for batteries and energy storage systems is dedicated to the exciting area of the storage market for homes, commercial and industrial applications. This year, there will again be an ees Forum. In Hall C2, Booth C2.131, there will be presentations on the topics that move the battery industry on all three days of the show. The in-depth ees Europe Conference begins one day before the start of the exhibition and will be held at the International Congress Center Munich (ICM) from June 13 to 14.

Exhibitors ees Europe 2023

- sonnen GmbH, B1.110
- SENEK GmbH, B1.310
- BYD Battery Box by EFT-Systems GmbH, B1.130
- E3/DC (HagerEnergy), B1.240
- LG Energy Solution, B1.410
- Alpha ESS, B1.150
- Varta Storage GmbH, B1.210
- RCT Power GmbH, B1.460
- Viessmann, B1.431
- Huawei and partners: Hall C1

ees Forum:

- June 14, 2023, 14:00 – 15:30: [European Energy Storage Market & Technology Developments 2023 & Beyond](#)
- June 14, 2023, 10:30 - 13:00 Uhr: [Presentations of the ees AWARD Finalists 2023](#)

ees Europe Conference 2023:

- June 13, 2023, 16:30 – 18:00: [Technology is Driving the Battery Business: Current Trends and Developments](#)
- June 14, 2023: 09:00 - 10:30: [Artificial Intelligence in Battery Storage: Hype or Real Benefit?](#)

More information:

www.ees-europe.com

www.ees-europe.com/press?lang=en -> Energy Storage Market Graphics

www.TheSmarterE.de