Auctions and Corporate PPAs: European Market Review 2025

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Auctions and Corporate PPAs: European Market Review 2025

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Please cite as:
SolarPower Europe (2026): Auctions and Corporate PPAs: European Market Review 2025

For media use and queries:
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Date of publication:
March 2026

ISBN:
9789464669428

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Design:
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Cover image:
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Thanks to our sponsor members:

Methodology:
All figures are based on SolarPower Europe's best knowledge at the time of publication.

Data collected is based on news articles, official national documents, and intelligence providers. Awarded PV capacity is generally expressed in AC output delivered to the grid. This convention is recommended in technical standards and widely applied in Europe's auction disclosures. Where information has not been made public, PPA announced capacities have been calculated based on the PPA announced volumes and a geographical capacity factor.

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25.2 GW

More than 25 GW of awarded solar PV capacity through auctions in the EU in 2025

70 GWh

Almost 70 GWh of utility-scale BESS granted support in the EU in 2025

25 GW

More than 25 GW of solar PV have been deployed in Europe through private agreements with corporates

-56%

In 2025, Germany, the second biggest market, experienced a 56% decrease in announced cPPAs capacity

EU policymakers are seeking effective ways to enhance energy price competitiveness. They already have proven instruments at their disposal with long-term power purchase agreements (PPAs) and contracts for difference (CfDs) allocated through competitive auctions.

The EU awarded 25.2 GW of solar PV capacity through auctions and tenders in 2025, a 23% increase compared to 2024 and a new historical high after several years of weak performance. Following the previous peak in 2021, when 14.8 GW was allocated, the energy crisis exposed significant shortcomings in auction design across many Member States. Heightened PV equipment costs arising from the energy crisis were met with insufficiently low ceiling tariffs, unfit technology-neutral schemes, lengthy administrative procedures and complex non-price criteria. These design flaws contributed to sharply rising undersubscription rates, which persisted until 2024.

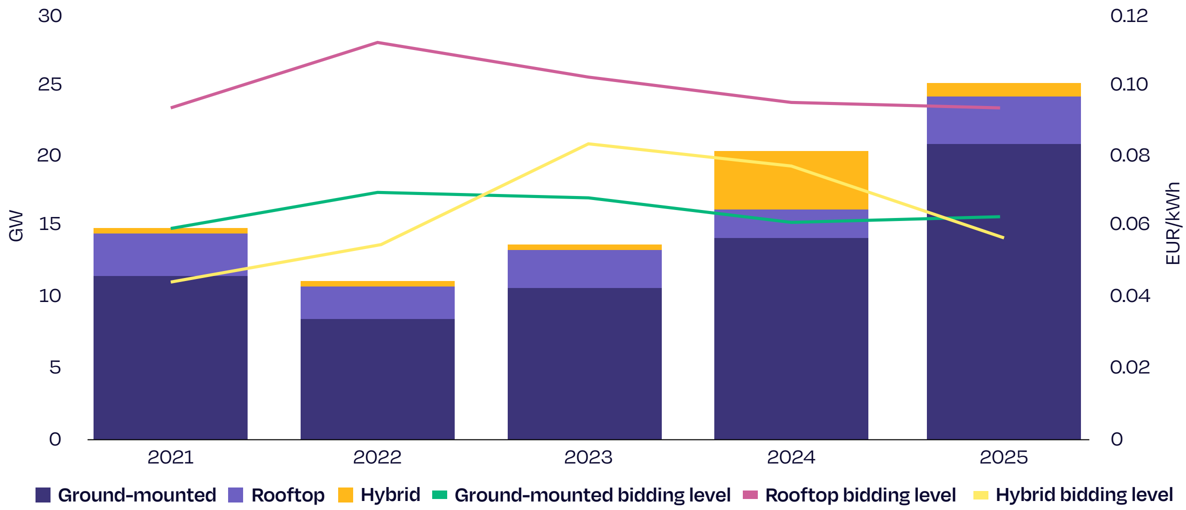
Comprehensive reforms in several major markets have since helped reverse the trend. As a result, awarded PV capacity rebounded in 2025, although high undersubscription rates remain one of the most persistent barriers to fully unlocking Europe's solar potential. Between 2021 and 2025, nearly half of EU auction rounds attracted bids below the capacity on offer, highlighting a major missed opportunity for accelerating solar deployment.

Auctions are now a cornerstone of Europe's strategy for scaling large-scale solar installations, and the pace of the energy transition increasingly depends on their effectiveness. To ensure continued progress, EU policymakers should prioritize improving auction design, supporting technology-specific tenders, providing long-term investment visibility, and integrating storage solutions into solar auction frameworks.

Figure 1

2025 brought record EU solar auction volumes, with low bidding prices

EU awarded solar PV capacity per segment, average bidding pricing levels 2021-2025



Note: Floating-PV and Agri-PV capacity is included in the ground-mounted segment. Hybrid segment includes solar+storage auction schemes. Bidding pricing levels reflect a representative average across auction rounds where such data was revealed.

In 2025, announced corporate PPA volumes for solar PV fell below the previous year's record for the first time in several years, signalling a moderate slowdown rather than a structural decline in corporate demand.

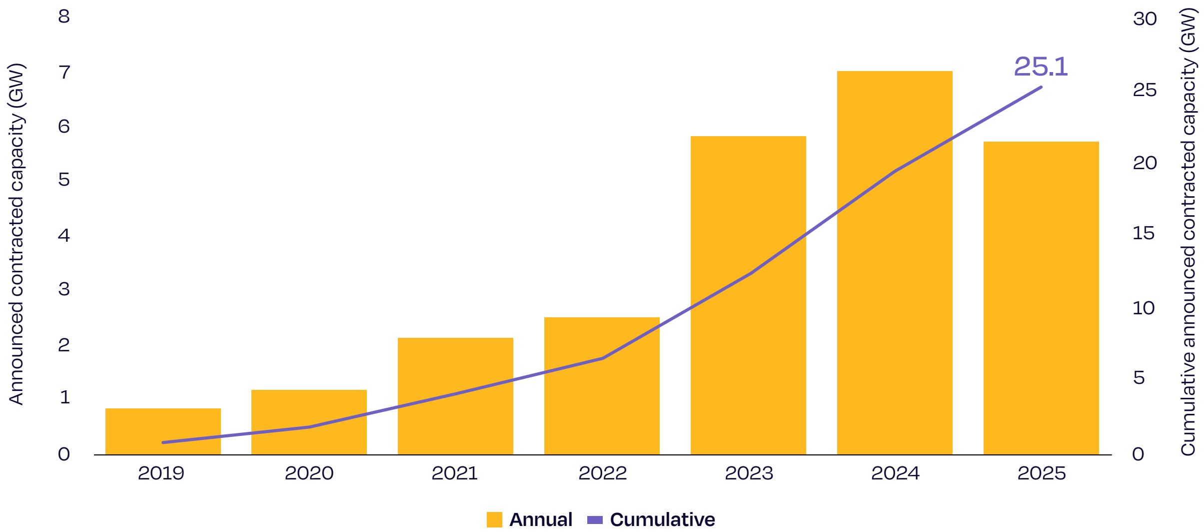
In several countries, structural constraints such as price cannibalisation, grid congestion and curtailment are putting downward pressure on PPA prices. Germany clearly illustrates these dynamics, with signed solar corporate PPA volumes declining by 56 percent. In electricity systems that are already largely decarbonised, additional corporate demand increasingly depends on new sources of consumption, particularly from electrified industrial processes.

Spain remains a notable exception and continues to lead the European market, with more than 2 GW of corporate solar PPAs signed annually between 2023 and 2025. Italy, Poland and Bulgaria have also recorded strong growth. These countries still rely heavily on gas-fired generation and therefore face comparatively high wholesale electricity prices. Looking ahead, integrating flexibility into private agreements can help revitalise and extend the solar corporate PPA market.

Figure 2

Announced solar corporate PPAs return to 2023 levels after record year in 2024

Solar PV announced corporate PPA capacities 2019-2025, EU-27 + UK



Together with public support contracts awarded through solar PV auctions, PPAs have proven highly effective in stabilising revenues for renewable energy developers. By providing long-term revenue certainty, these instruments reduce the cost of capital, facilitate access to project financing, and enable the large-scale deployment of solar PV and other renewable technologies. Their strategic importance has been recognised at EU level, notably in the Electricity Market Design Regulation (2024), which recognises the importance of CfDs and calls on Member States to promote PPAs by removing unjustified barriers to their development.

Against this backdrop, delivering the energy transition while safeguarding energy security for European consumers and businesses requires a clear identification of the remaining barriers affecting both corporate PPAs and public auction schemes, as well as the key success factors underpinning their effectiveness. The following policy recommendations therefore address both instruments in a complementary manner. By pursuing targeted and proportionate reforms to improve the uptake and accessibility of PPAs and public contracts, Europe can unlock their full potential, accelerate decarbonisation, and strengthen long-term energy price competitiveness.

1 Ensuring a level-playing field between all routes-to-market

Recent data on long-term solar PV contracts sends a clear message: Europe will need both public support schemes and PPAs to deliver its targeted renewable capacity, reduce energy prices, and strengthen EU competitiveness. These instruments are complementary, not substitutes, and each plays a distinct role in scaling up investment and managing risk.

As a guiding principle, Member States should establish regulatory frameworks that ensure a level playing field across all available routes to market, from public support mechanisms to market-based instruments. Renewable energy developers must remain free to choose the model best aligned with their financing strategy and commercial objectives, without regulatory bias in favour of any single approach or the imposition of mandatory procurement requirements. In particular, investors in solar PV should retain the flexibility to pursue their preferred route to market throughout the entire lifetime of their assets. When routes-to-market are combined, a careful balance is needed to preserve project bankability.

2 Tailoring auctions and tenders to asset and system needs

Avoiding undersubscription in renewable energy auctions is essential to prevent disruptions to capacity planning and the timely integration of new generation into the electricity system. This requires auction design to remain aligned with market and system conditions, while ensuring a stable and predictable framework for investors.

First, a technology-specific approach should be promoted to reflect the structural differences between solar and other renewable technologies, ensuring that auction features are tailored to the realities of each technology. Prequalification requirements and non-price award criteria must be proportionate and carefully designed to avoid slowing deployment, particularly for solar. At the same time, auction design should incentivise full and timely project completion through appropriately calibrated guarantee mechanisms, flexible penalties, and, where suitable, bonuses for accelerated delivery.

Only consider applying the Net-Zero Industry Act's market access chapters and non-price criteria related to public auctions (Art 26) to battery storage projects or components earliest as part of the mid-2028 review. Europe's battery storage market is still maturing and depends on support schemes and global supply chains.

If Member States incentivise hybrid renewables with battery storage, **resilience rules should only apply to renewable assets, including the inverter.** It is therefore crucial that hybrid inverters are treated the same as standard inverters under NZIA, especially since Europe maintains strong domestic production of these key components.

To strengthen investor confidence and maximise participation, auctions must provide clear and credible investment signals. This requires the publication of stable, multi-year auction schedules and the systematic application of price indexation, including inflation indexation throughout the project lifetime to preserve revenue certainty. In addition, bid ceilings should be set at adequate and regularly updated levels, reflecting actual project development costs, LCOE trends, and broader macroeconomic conditions, in order to reduce the risk of undersubscription.

Finally, smaller installations below 1 MW should remain exempt from mandatory tendering requirements. Maintaining this threshold will help avoid administrative burdens for small-scale and rooftop projects, prevent undersubscribed tenders, and support the development of hybrid installations. Together, these refinements would enhance the effectiveness of auction schemes in delivering EU renewable energy targets while safeguarding investment attractiveness and cost efficiency.

3 Integrating flexibility in long-term hedging contracts

The growing frequency of negative price hours, rising curtailment, and increasing grid congestion are placing mounting pressure on the design of renewable support schemes and on the appetite for private long-term agreements. These trends highlight a structural reality: long-term renewable contracts cannot operate independently of the energy system's broader and accelerating need for flexibility.

Addressing these challenges can be achieved without undermining investment certainty through unnecessary or distortive market interventions. Instead, support frameworks and private contracting models should evolve in a way that integrates flexibility signals while preserving the long-term revenue stability that underpins renewable investment.

National regulators should ensure support scheme designs are adapted to the hybridisation of PV systems, considering the growing combination of solar and battery energy storage systems (BESS) at the same connection point. Co-located storage facilities should be permitted to participate to traditional CfD auctions, with robust metering arrangements enabling the distinction between electricity generated by the PV installation and electricity exported from the battery asset to the grid.

CfD payments can then be calculated solely on the electricity generated by the contracted renewable asset, based on the applicable reference price, and on metered volumes at the point of generation rather than at the point of export. This approach preserves the integrity of the support mechanism while enabling hybridisation and unlocking additional system value.

Unlocking private contracts incorporating battery storage requires to maintain undistorted electricity price signals, as they are fundamental to drive investment in flexibility and retain hedging value. Hybrid PPAs usually come at a higher cost than PPAs for one specific renewable technology, Member States may look at what incentives could be developed to promote their uptake where their benefits to the system are proven. These incentives should be inclusive to assets retrofitting (e.g. with BESS) or repowering through the conclusion of a PPA. It is critical that any incentives for end-users, including industrial offtakers, are designed as lump-sum compensation rather than price-distorting interventions. This approach preserves incentives for market-based hedging and ensures that hybrid PPAs can retain their full economic and flexibility value. Tax rebates could also be linked to the uptake of PPAs to incentivise their adoption.

In parallel, regulatory and administrative barriers to the deployment of hybrid systems must be removed[1]. Permitting and grid-connection procedures should be streamlined for existing PV plants seeking to hybridise their assets by adding BESS at the same connection point. Battery systems should be allowed to operate independently from associated solar generation that receives public support by defining a correct metering procedure, enabling their full participation in flexibility and balancing markets. In addition, double grid charges for BESS should be avoided, and transparency regarding available grid hosting capacity needs to be ensured.

Renewable electricity, which has been stored should qualify as clean electricity by receiving GOs under harmonised rules across the EU. Currently the methodology for certifying megawatt-hours of renewable electricity that have been stored before injection into the grid is not implemented in a harmonised manner by Member States. As a result, an increasing share of green electricity loses its associated attributes and cannot access routes to market that value them. A fit-for-purpose, pan-European Guarantees of Origin (GO) framework should ensure stored renewable electricity is eligible to GOs while preventing double counting, allow correct energy measurement procedures considering the particularities of hybrid plants and be harmonised across EU Member States.

Finally, contractual freedom must be preserved to enable innovation in private agreement structures. Forced standardisation of PPAs should be avoided, as PPAs require bespoke, flexible contractual arrangements to reflect diverse risk profiles and market conditions.

1 SolarPower Europe, Embracing the benefits of Hybrid PV systems (2025)

4 Ensuring fair treatment of PPAs in EU carbon accounting rules

EU carbon accounting methodologies must recognise market instruments used in corporate energy procurement as a route to decreasing carbon footprints. A uniform approach to carbon accounting methodologies, across all product categories starting with EV batteries and PV-modules, which recognises clean and renewable power purchase agreements and guarantees of origin is needed. As established in leading international voluntary carbon-accounting frameworks, such as the Greenhouse Gas Protocol (GHG Protocol) and the Science Based Targets initiative (SBTi), as well as existing EU legislation, including the Corporate Sustainability Reporting Directive (CSRD) and the Carbon Border Adjustment Mechanism (CBAM), PPAs play a significant role in reducing the carbon footprint of businesses and products. By unlocking additional public and private investment in renewable generation capacity, PPAs increase the supply of clean electricity to the grid and contribute to the reduction of Scope 2 emissions at both company and system level.

However, this contribution is not yet fully recognised in EU carbon-accounting methodologies. Ongoing discussions under the Ecodesign framework and the Batteries Regulation, both still under development, continue to debate the eligibility of PPAs for calculating actual Scope 2 emissions. The ability of PPAs and other forms of green electricity procurement to deliver measurable emissions reductions is a primary driver of corporate investment in these instruments. If such reductions cannot be reflected in product-level carbon accounting, demand for PPAs as a key tool for competitiveness is likely to decline.

By using robust criteria and reliable verification methods, we can confidently allow market-based instruments like PPAs in carbon accounting methodologies with credibility.

5 Boosting electricity demand with electrification across all sectors

As outlined in the paper, electricity demand is now the main driver for new renewables offtake in many European countries, and the growth of decarbonisation through private contracts will remain diminished if the electrification rate continues stagnating in Europe. Increasing electricity demand has the potential to decrease need for support, rebalance supply and demand of renewable electricity and stimulate the PPA market with new industrial offtakers. Therefore, European countries should accelerate the pace of electrification across all sectors to embrace all its benefits.

Accelerating electrification in Europe first requires the full and consistent implementation of the existing EU energy framework. Proper enforcement would help narrow the electricity-to-gas price ratio across Member States, unlock flexibility markets, speed up infrastructure roll-out, and reinforce investor confidence. In parallel, Member States should establish a robust governance framework for electricity consumption by integrating dedicated electrification chapters into their National Energy and Climate Plans (NECPs), including clear milestones, demand projections, and smart electrification measures. Electrification must also be supported by predictable and scalable funding instruments: the Innovation Fund pilot auction on industrial process heat should evolve into a permanent tool, broader EU funding should prioritise smart and industrial electrification, infrastructure modernisation, and workforce development, and approval procedures under the Climate, Energy and Environmental Aid Guidelines (CEEAG) should be streamlined. Addressing permitting and grid connection bottlenecks, including through the mapping of industrial clusters, will be equally essential to align renewable deployment with network expansion.

A comprehensive electrification strategy must also tackle economic and regulatory barriers. The revised Energy Taxation Directive should be adopted to level the playing field, with fossil fuel subsidies phased out, VAT reduced for electrification technologies, and levies limited to grid-related costs. The upcoming 2026 review of the Primary Energy Factor (PEF) should align its methodology with the EU's decarbonisation objectives, transforming it from a constraint into a genuine incentive for electrification and ensuring regular updates of national methodologies. To overcome high upfront costs, the EU should expand social leasing schemes for electric vehicles, heat pumps, and solar PV with storage, supported by coordinated guidance and financial guarantees. At the same time, improved consumer information through one-stop-shop models and harmonised electrification indicators would help households and businesses navigate available technologies and incentives.

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The European Union is entering a new phase of the energy transition, which requires evolutions in how it approaches solar PV long-term contracts. After achieving its 2025 solar target and surpassing 400 GW of installed capacity, the outlook for future growth has become increasingly uncertain.

In 2025, the EU solar market shrank for the first time in more than a decade, bringing to a halt a seemingly unstoppable growth trajectory[2]. This slowdown reflects more than a temporary fluctuation, it indicates growing structural strains within the system. Solar PV is now facing cannibalisation, the downside of its own rapid success.

One clear symptom of the system integration challenges is the increasing occurrence of negative power pricing hours, which has accelerated over the past years. In 2019, EU Member States registered on average less than 30 hours of below-zero electricity prices. Six years later, the average EU Member State experienced ten times more negative power prices (about 310 hours per country). Leading solar markets like Spain or Germany exceeded 540 hours[3] - more than 22 days under below-zero power prices. Curtailment rates of renewables are also hitting new records in the EU, while grid access and congestion remains one of the primary bottlenecks of the energy transition.

Without parallel progress in electrification, grid infrastructure, and storage, increasing solar generation further suppresses its own market value, undermining project bankability and challenging future investments.

With energy security and competitiveness sitting at the top of the EU agenda, the transition to renewables remains the primary instrument for energy self-sufficiency, driving down energy costs for businesses and households, and meeting decarbonisation goals.

In this context, it is fundamental to highlight that the EU already possesses effective tools to strengthen industrial competitiveness and energy security: **Corporate PPAs** offer price stability and protect industrial consumers from market volatility, while **contracts for difference** (CfDs), set to become mandatory in auction schemes by 2027, help lower electricity costs by enabling renewable projects to secure financing at more favorable rates. Together, these mechanisms form a robust framework to support both industrial competitiveness and the accelerated deployment of renewable energy in Europe.

Unless Europe finds a way of ensuring healthy continuity for both market routes, solar and storage capacity will not be brought online at the speed and scale that the energy transition requires. This is the fastest route to reducing exposure to international fossil gas prices and, consequently, to structurally lowering wholesale electricity prices in Europe.

This briefing paper provides a comprehensive overview of the state of auctions, tenders and cPPAs in Europe, to shed a light on current, past and future trends that determine the future of solar PV and battery storage capacity deployment.

2 SolarPower Europe (2025): EU Solar Market Outlook 2025-2030
3 SolarPower Europe (2026): EU Battery Storage Market Review 2025

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01

Auctions and tenders

Auctions and tenders are market-based competitive allocation mechanisms used by Member States to award public support for renewable energy projects based on transparent bidding criteria.

The following chapter, provides an overview of the state of auctions and tenders in the European Union, with a clear focus on breaking down every scheme that has been held over the past five years, to shed a light on such a capital market route for solar and battery storage.

Awarded PV capacity and price levels

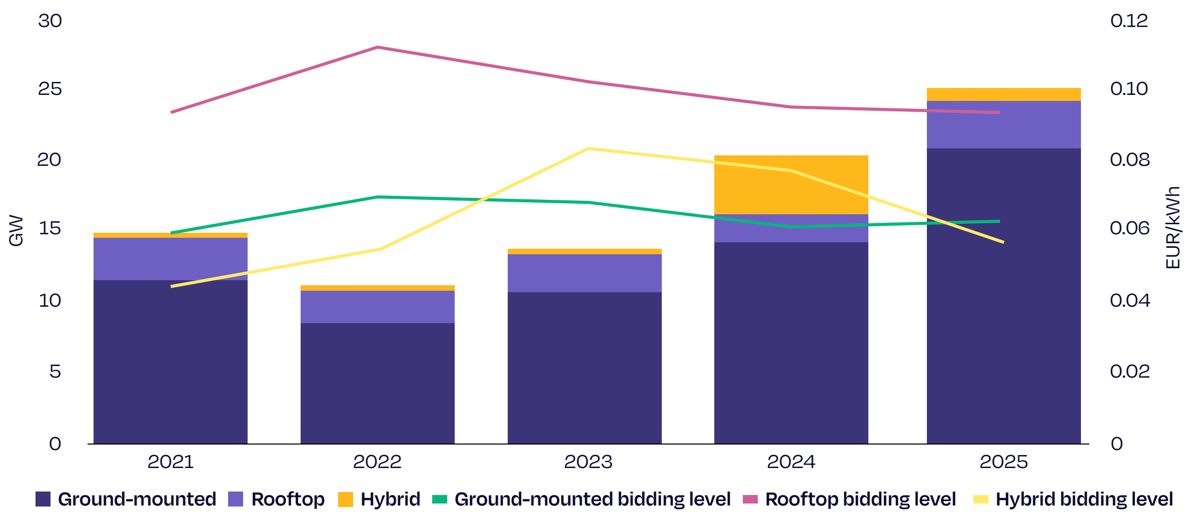
Last year, the EU achieved yet another record in auctions and tenders[4]: 25.2 GW of solar PV capacity were awarded across Europe (see Fig. 3), with a 23% increase relative to 2024. However, despite the positive development of awarded volumes over the past two years, the weight of auctions out of yearly deployment has waned since 2021. Last year, the relative share of auctions stood at less than 40%, while in 2021, the share of auctions was at 52%. This indicator of auction relevance reached its lowest point in 2023 at just 22%, when the EU installed 63.8 GW. These fluctuations reflect varying auction success rates over time, the rise and subsequent stagnation of cPPAs, the attractiveness of merchant business models, and the evolution of yearly solar installation levels.

Nonetheless, auctions remain central to shaping the future project pipeline. The impact of the record volumes awarded in recent years will extend well beyond 2025. Auction results secure a substantial portion of future solar deployment, meaning that today's procurement decisions will continue to influence the pace and composition of the EU's solar expansion for many years to come.

Figure 3

2025 brought record EU solar auction volumes, with low bidding prices

EU awarded solar PV capacity per segment, average bidding pricing levels 2021-2025



Note: Floating-PV and Agri-PV capacity is included in the ground-mounted segment. Hybrid segment includes solar+storage auction schemes. Bidding pricing levels reflect a representative average across auction rounds where such data was revealed.
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The **ground-mounted** segment, which had seen its share of awarded capacity fall to 70% in 2024 due to the increased share of rooftop and hybrid auctions, rebounded strongly in 2025. The segment captured more than 80% of total allocations and exceeded 20 GW. A key factor behind this performance was the consistent competitive bidding: on average, submitted prices remained around 20% below the ceiling support levels. This provided clear economic incentives for investors to engage in the auction process. With such a robust margin between project costs and available support, auctions were able to accomodate last year a 3% increase in average bid prices, driven largely by rising capital expenditures.

4 Auctions and tenders generally differ in the bidding process. In auction schemes, bids are public, while in tenders, bids made by participants are sealed and undisclosed. For simplicity, these two terms are used indistinctively across the report.

The **rooftop** segment registered an all-time high in awarded capacity (3.3 GW). Margins were less pronounced in the segment, as price support levels stood 6% higher on average relative to bids. Nevertheless, despite auctions typically supporting large-scale projects, schemes in Italy, Germany, and France continue to boost future large rooftop commercial installations.

Germany remained the only Member State to run **hybrid** renewable+storage tenders in 2025 through its innovation tender programme. Despite being open for both wind and solar, combined with energy storage, solar+batteries has remained the dominant winning configuration. These auctions continued to attract exceptionally strong interest, with submitted capacity exceeding offered volumes by a factor of four. Bidding levels fell by an impressive 26% compared with the previous year, reflecting the continued decline in grid-scale battery costs. The scheme keeps demonstrating that attractive market premiums can coexist with further reductions in bidding prices, reinforcing the bankability and competitiveness of hybrid solar and storage assets.

Although auctions have become a central driver of solar deployment, their effectiveness has not always been guaranteed, as developers have had to navigate a highly volatile investment landscape in recent years.

Back in 2021, despite the lingering impacts of the COVID19 pandemic and sub-optimal ceiling tariff levels, the EU succeeded in awarding 14.8 GW of solar PV capacity. In early 2022, surging energy and raw material prices drove a sharp increase in PV equipment costs, pushing auction bid prices up by roughly 20% amid broader inflationary pressures. Auction schemes failed to adapt sufficiently to this deteriorating economic context. On average, awarded bid levels exceeded ceiling tariffs by 12%, and most schemes lacked inflation indexation, leaving developers exposed to escalating costs. As a result, auctions became significantly less attractive, prompting most developers to forgo participation and to seek alternative routes to market for advancing their projects.

In 2023, improving market conditions, combined with significant adjustments to auction design, particularly in major markets such as Germany and France, supported a partial rebound in awarded volumes (+23% compared with 2022). Substantial increases in ceiling prices (25% higher than in 2022), helped align support levels with prevailing economic realities, while bid prices in both ground-mounted and rooftop segments moved downward. In contrast, Germany's innovation tenders experienced sharp cost pressures: rising battery raw material prices drove bidding levels up by 54%, underscoring the sensitivity of hybrid and storage integrated projects to global commodity markets.

2024 marked the end of this urgent and critical transformation of auction schemes in the EU, with 50% more awarded capacity (20.4 GW) than in the previous year. As inflationary tensions eased, equipment costs went down again, and developers offered much lower bids, which were properly captured within auction rounds. Ceiling tariffs were, on average, 22% higher than bidding prices.

Geographical breakdown

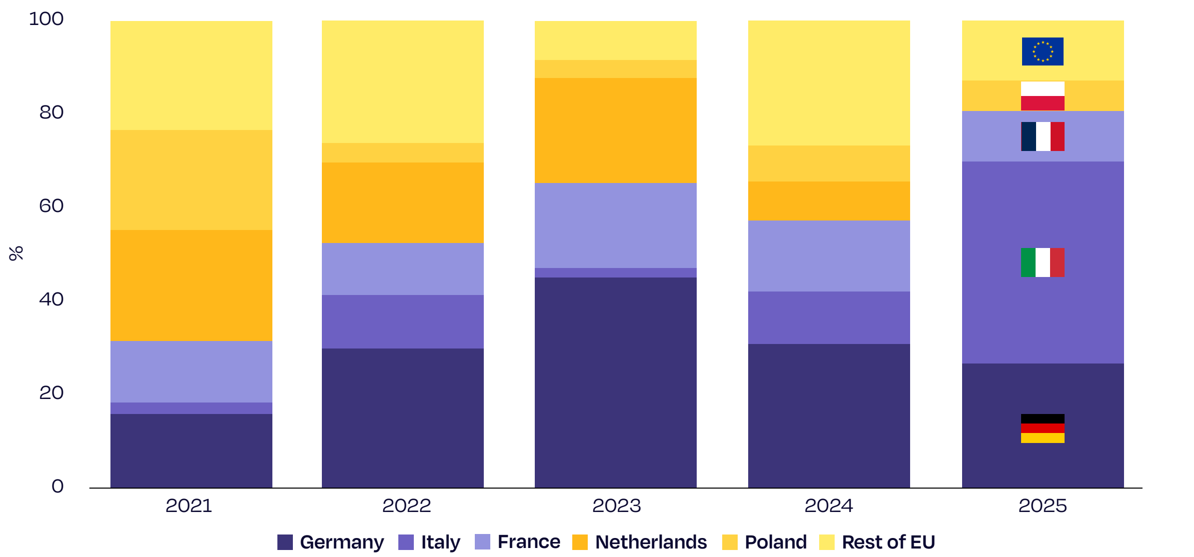
Despite these clear, cross-cutting patterns at the aggregated EU level, the geographical breakdown of awarded volumes offers unique insights on the constantly evolving landscape of solar auctions. Five years ago, in 2021, the Netherlands and Poland were the leading auction markets (45% of total awarded capacity), followed by Germany and Italy (see Fig. 4). But the tide changed very quickly in favour of EU's biggest solar market.

German tenders emerged as the largest contributors to auctioned solar capacity as early as 2022, and maintained the leading position until recently. Over the past five years, Germany has awarded nearly 25 GW of solar PV capacity through its tendering schemes, making them one of the most impactful deployment instruments underpinning the country's rapid solar expansion.

Figure 4

In 2025 Italy led the EU solar auction pack, with double Germany's annual awarded capacity

EU awarded solar PV capacity per country 2021-2025



Italian solar auctions have faced longstanding difficulties, hindered by complex permitting frameworks, inadequate remuneration levels, limited auction volumes, and repeated undersubscription. It was not until 2024-2025 that Italy began to effectively leverage auctions as a meaningful deployment tool, marking a clear shift toward more functional and impactful procurement mechanisms.

After allocating 2.3 GW in 2024, Italy's newly launched FER X auction scheme delivered an exceptional 10.8 GW of solar PV capacity in 2025 across ground-mounted, rooftop, and Agri-PV applications. No other Member State has ever awarded such a large volume of PV capacity in a single year, and much of the success in 2025 is owed to Italy's performance. Altogether, Italy has now granted support for 15 GW of solar PV capacity, positioning it as the second largest auction market in Europe.

Pre-NZIA criteria and the FER X scheme

The Net-Zero Industry Act (NZIA) is part of the European Union's broader effort to align climate ambition with industrial policy. Alongside accelerating renewable deployment, the Act aims to strengthen domestic manufacturing capacity in strategic net-zero technologies. For solar PV, this objective is framed against a target of at least 30 GW of manufacturing capacity across each stage of the value chain by 2030. At the same time, European manufacturers face structural cost disadvantages. SolarPower Europe's September 2025 report on reshoring solar manufacturing indicates a cost gap of 2.2 to 5.8 €ct/Wp between NZIA-compliant EU-made modules and NZIA-compliant non-EU-made modules, and estimates that €1.4–5.2 billion in annual support may be required to reach the 30 GW target[5].

Within this context, renewable energy auctions are a central policy lever. Traditionally, such auctions have generally awarded solely on price. Under the NZIA framework, however, Member States must incorporate non-price criteria (NPC) into part of their auction design. As of 1 January 2026, at least 30% of annual auction volumes, or up to 6 GW, per country must consider criteria beyond price. These may include sustainability requirements, environmental footprint considerations, or resilience measures aimed at diversifying supply chains away from dominant sources of supply.

For solar auctions specifically, the NZIA implementation act introduces a "3+1" resilience rule: modules, cells and inverters, plus one additional main component, must originate from outside the dominant source of supply. Member States retain flexibility in how they operationalise these criteria, including whether they apply them as pre-qualification requirements or as scoring bonuses. The Act also provides guidance that any price differential linked to these criteria should remain within a 15% margin relative to comparable standard auctions.

Italy's FER-X Auction, concluded at the end of 2025, offers an early example of how these principles can be implemented. Alongside a traditional auction basket, Italy introduced a dedicated "resilience" basket for solar PV. In line with the NZIA rule, the resilience basket required compliance with the 3+1 component diversification requirement. The Italian design went further by excluding Chinese companies and their subsidiaries from participating in this basket, a company-specific condition not explicitly foreseen in the NZIA framework. The resilience basket focused exclusively on supply-chain diversification and did not include additional sustainability-based non-price criteria.

The results of the two solar baskets are illustrated in Figure 5. In the regular FER-X solar auction, the quota ranged from 600 MW minimum to a maximum of 8 GW, with a target of 1 GW. A total of 10.1 GW was submitted across 818 projects, and 7.7 GW was awarded, implying an award rate of over 75% in capacity terms. The basket was therefore significantly oversubscribed relative to its target volume, and submissions exceeded the target by a factor of roughly ten.

5 SolarPower Europe, Reshoring Solar Manufacturing to Europe

Figure 5

FER-X auctions in Italy deliver record solar volumes

Italy awarded solar PV auction capacity 2025

In the pre-NZIA resilience basket, the quota ranged from 200 MW minimum to a maximum of 1.6 GW, with a 900 MW target. A total of 1.8 GW was submitted across 157 projects, and 1.1 GW was awarded. This corresponds to an award rate of just over 60% in capacity terms. Here too, the basket was oversubscribed: submitted capacity was more than double the target volume and exceeded the maximum quota.

In terms of price outcomes, the regular solar auction cleared at an average of 56.8 EUR/MWh, while the pre-NZIA resilience basket cleared at 66.4 EUR/MWh. This represents a premium of approximately 10 EUR/MWh, or around 17%. While this premium is slightly above the 15% reference margin indicated under the NZIA, the resilience auction nevertheless achieved its target and attracted meaningful competition.

Although the focus here is on solar, it is worth noting that the regular FER-X auction also included wind capacity, with 0.9 GW awarded. Overall, the FER-X results demonstrate that NZIA-aligned resilience criteria can be integrated into auction design at scale, while maintaining competitive participation and substantial awarded volumes.

France accounts for a yearly average of 14% of EU-wide awarded volumes since 2021 and has supported a cumulative solar capacity of 11.5 GW to date. Despite these substantial contributions, the country's PPE auction framework remains sub-optimal, characterised by frequent undersubscription. Recent government-led reductions in total auctioned volumes put the brake on one of the most attractive routes to market in the country.

The Netherlands, the fourth largest auction market with 10.3 GW awarded between 2021 and 2025, has recently discontinued the SDE scheme in order to transition to a new two-way CfD support framework. The proposed shift aims to align national policy with the EU electricity market reform.

Closing the top-5, **Poland** has struggled to get back to the auctioned volumes of 2021 (3.5 GW), with persistently high undersubscription rates over the last years. Nevertheless, the Polish scheme has successfully driven investment in 7.4 GW of solar PV capacity, maintaining its position as a key pillar to Europe's auctioned solar pipeline.

Looking at **other EU countries** - including Romania, Ireland, Bulgaria, Austria, Spain, Finland, Croatia, Belgium or Luxembourg, have also provided sizeable contributions, with 16.3 GW during the previous 5 years. In total, this adds to less than 20% of the total, given that over 80% of the capacity has been awarded in the top-5 markets.

Overall, the EU has awarded more than 85 GW of solar PV capacity through auctions and tenders since 2021. By the end of 2025, roughly one-quarter of the Union's total installed PV capacity can be traced back to auction-driven deployment, underscoring the central role of competitive procurement in Europe's solar expansion.

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Technology in auction designs

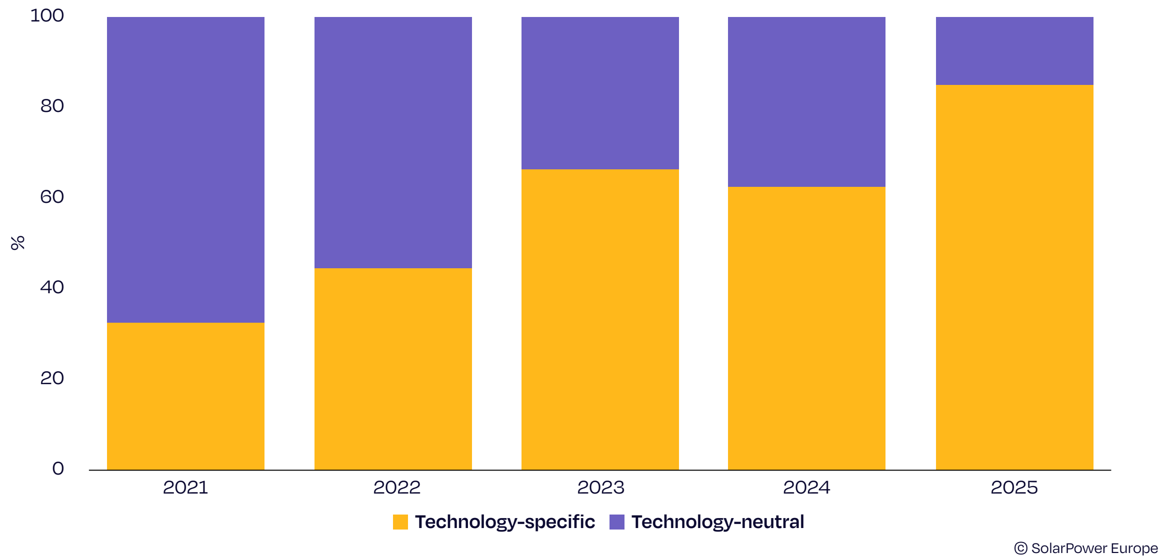
Another critical element in the design of renewable auctions is whether renewable technologies compete in a single, **technology-neutral** bidding process or in separate, **technology-specific** rounds. Each approach involves trade-offs in terms of cost efficiency, competition, diversification, and risk mitigation, making this choice a central strategic consideration for policymakers.

In 2021, almost 70% of awarded PV capacity was delivered through technology-neutral schemes, where solar PV often competed against wind or bioenergy (see Fig. 6). At the time, the prevailing view was that technology-neutral auctions would maximise cost efficiency by allowing the most competitive projects to surface regardless of the technology. However, renewable technologies tend to differ in terms of capital costs, financing structures, and development risks – these disparities were often insufficiently captured in auction design. As a result, many investors often chose not to participate, or in many occasions, solar PV single-handedly dominated technology-neutral exercises, to the expense of new wind capacity.

Figure 6

Over 80% of EU energy auctions with solar PV are now technology-specific

EU auction design breakdown 2021-2025



Since then, auction design has decisively shifted away from technology-neutral approaches toward schemes tailored specifically to the characteristics and needs of solar PV and wind. In 2025, 85% of awarded solar capacity was allocated through technology-specific auctions, which have now become the cornerstone of the route-to-market for auctioned PV projects.

Over and undersubscription rates

At last, in order to evaluate the success of EU auctions, it is paramount to monitor the evolution of **subscription rates**[6]. Assessing these trends provides further evidence of the need for well-designed auction frameworks that reflect real economic conditions and incorporate streamlined criteria and application processes.

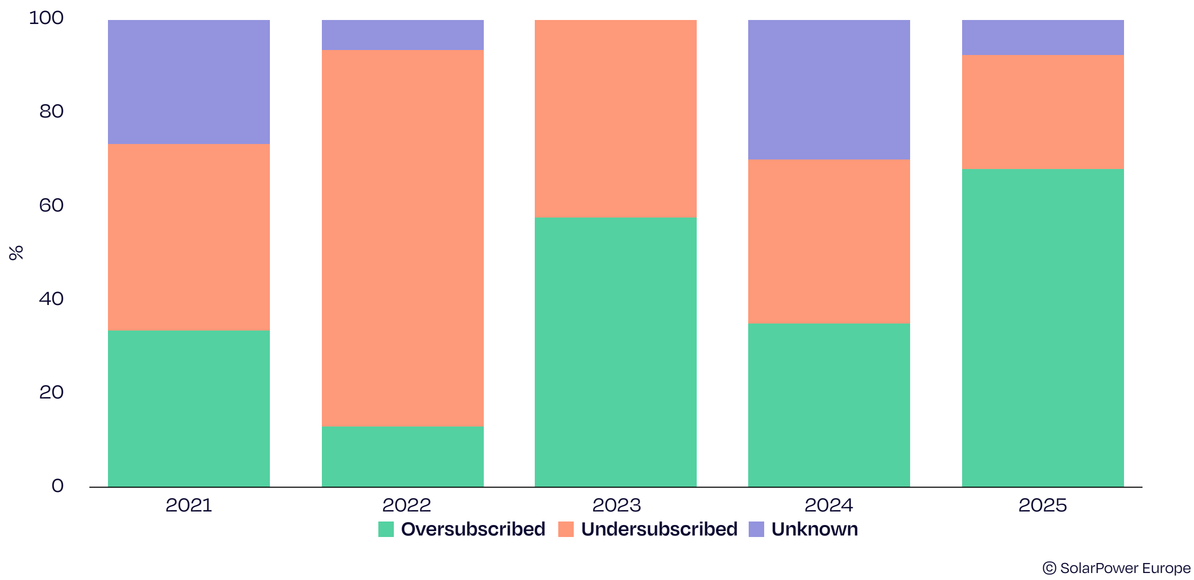
Despite the substantial volumes ultimately awarded, EU solar auctions have repeatedly struggled to achieve consistently high subscription levels. Beyond ceiling prices that were often set unrealistically low, developers faced administrative burdens, varied auction designs across countries, and complex non-price criteria that discouraged participation. Such barriers have remained evident in several major markets, including Germany, Spain, France, and Italy, where procedural complexity and misaligned scheme parameters have periodically undermined auction performance.

Aggregated data clearly marks this trend: over the past five years, nearly half of all EU auction rounds have been undersubscribed, representing a huge, missed opportunity for solar deployment (see Fig. 7). In 2022, at the peak of the energy crisis, more than 80% of auction rounds attracted fewer bids than the capacity offered. Subsequent improvements to auction design helped restore investor confidence, and in 2025 the EU achieved a 70% success rate across all rounds, its strongest performance in the available records.

Figure 7

After years of struggle, the EU achieved a 70% oversubscription rate in solar auctions in 2025

Subscription rates in EU solar PV auctions 2021-2025



6 Subscription rates are generally assessed based on the offered capacity against the submitted offers. If the submitted capacity by participants is higher than the offered volume, it is considered to be an oversubscribed exercise. Conversely, if the submitted capacity is lower than the offered, it is deemed to be under subscribed. In some rounds, subscription rates may be inferred from share of used budget, or insights from participants, as lack of data prevails in some Member States.

This fundamental improvement in the success rate of auctions is largely due to the promotion of technology-specific auction designs for solar PV, careful design of prequalification and non-price criteria, and ceiling tariffs that are reflective of the economic reality.

However, outside countries like Germany or France, there is no clear provision of investment signals and visibility to developers and investors on the planned auction schedules. France and Germany are both communicating on the number of auction rounds per year, giving high visibility on future rounds. Germany discloses key elements months in advance, such as terms for the capacity on offer or the reference price. France also provides visibility on the longer term (e.g. number of technology neutral auctions for 2022-2026). Beyond support to market access and industrial investments, what manufacturers need is visibility and certainty on the market trajectory. This also has benefits for the developers. Member states must define long auction schedules and give visibility on such schedule in the National Energy and Climate Plans (NECPs).

Going forward, auctions need to also be reflective of the current system integration challenges. This entails launching hybrid auctions that bundle together solar PV and battery storage under long-term contracts. More EU Member States should consider hybrid auctions as a key tool to bring flexible, firm solar generation at competitive pricing levels. The innovation tenders in Germany prove that solar and batteries are able to deliver low power generation costs, with very small support needs.

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Content box 2

State of support for utility-scale batteries in the EU

Battery storage has expanded significantly in the EU over the past years, rising from less than 1 GWh in 2019 to more than 27 GWh installed last year[7]. In total, the EU has now connected 77 GWh of batteries to the grid, with almost 60% located in the residential segment. For much of the past decade, utility-scale batteries saw limited momentum, constrained by regulatory uncertainty and market conditions that were not yet conducive to large-scale deployment. The landscape has changed markedly. In 2025, grid-scale systems accounted for 55% of all new installations, an all-time high for the segment. This shift is expected to accelerate in the coming years, as utility-scale batteries emerge as the fastest growing segment, driven by their essential role in delivering grid flexibility, stability, and system-wide resilience.

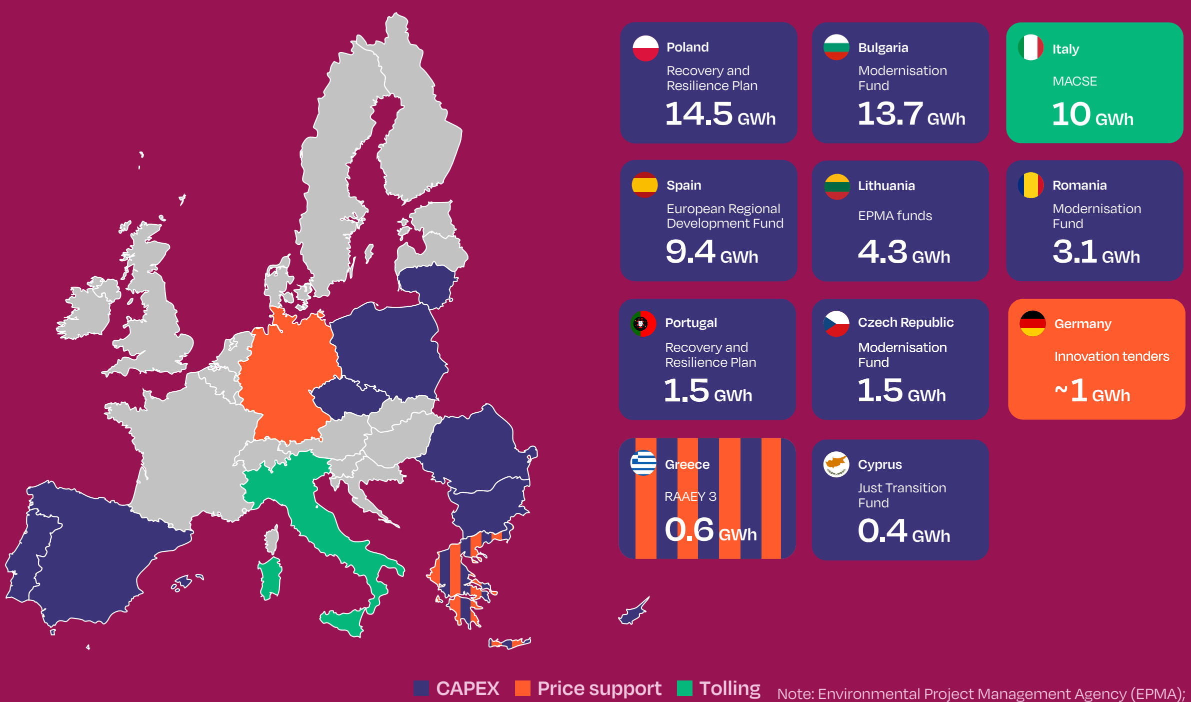
A key driver of utility-scale storage growth is the financial support provided by national governments. Across the EU, this support generally takes three main forms: upfront CAPEX grants, various types of price-support mechanisms, and fixed-price tolling agreements offered to asset owners.

In 2025, EU Member States procured an unprecedented 70 GWh of grid-scale battery storage (see Fig. 8), a volume nearly equivalent to the entire battery capacity connected to the EU grid today. The majority of this, around 50 GWh, was contracted through CAPEX-based support schemes financed by EU instruments such as the Modernisation Fund, the Recovery and Resilience Facility, and the Just Transition Fund. Notable examples include Poland's 14.5 GWh support programme, combining upfront investment grants and loans, and Spain's 9.4 GWh CAPEX-driven incentive scheme.

Figure 8

Almost 70 GWh of EU utility-scale batteries were granted government support in 2025

Support schemes for utility-scale BESS in the EU in 2025



Note: Environmental Project Management Agency (EPMA); Regulatory Authority for Energy, Waste, and Water (RAAEY).

7 SolarPower Europe (2026): EU Battery Storage Market Review 2025

Other relevant schemes were launched in Portugal, Lithuania, the Czech Republic, Romania, Bulgaria, and Cyprus. Notably, many of these programmes initially offered far smaller volumes, but were expanded after attracting overwhelming interest from developers, prompting governments to increase budgets and award significantly more capacity.

Price support mechanisms have also played a role, including feed-in premiums (FiPs) under Germany's innovation tenders and CfDs awarded in Greece's third storage auction. Germany's tenders have proven effective at deploying hybrid solar+BESS projects at falling price levels; however, the scheme continues to under-utilise the full capabilities of battery storage. Projects are allowed to draw only a limited amount of electricity from the grid, constraining the broader system-level services that hybrid assets could otherwise provide.

Greece, meanwhile, concluded its final auction round for standalone large-scale batteries, awarding roughly 600 MWh of capacity. Yet, none of the selected projects has been connected to the transmission grid, hindered by unclear market rules and protracted permitting procedures. With auctions now discontinued, Greece has shifted to granting grid-connection approvals for merchant battery projects, reaching a total of 4.7 GWh.

Italy's first MACSE auction in September 2025 marked a major shift in the BESS market. Developers prioritised long-term revenue stability over potential merchant market upside, bidding very low prices to secure 15 year fixed tolling contracts[8] from TSO Terna. All 10 GWh offered across the eligible zones were allocated, with average awarded prices landing just below 13,000 EUR/MWh/year, far below the 37,000 EUR/MWh/year ceiling. Along with the low bidding prices, long-duration systems dominated. Winning projects averaged 6.7 hours of storage, as shorter duration batteries would have sacrificed too much merchant upside to justify participation.

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8 The MACSE mechanism operates as a tolling contract in which the awarded assets forgo exposure to wholesale market price fluctuations and, in exchange, receive monthly payments from the TSO Terna based on their bid, along with a smaller share of ancillary service revenues. Project owners keep operational control and responsibility, while Terna only gains the right to dispatch and use the storage capacity for system needs—not to operate the assets themselves.

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Corporate Power Purchase Agreements

Corporate power purchase agreements are long-term bilateral contract under which a private company (the corporate offtaker) agrees to purchase electricity directly from a renewable energy producer at pre-agreed terms, typically including a fixed or structured price and a defined contract duration.

In recent years, corporate power purchase agreements (cPPAs) have played a decisive role in securing stable revenues for solar projects, providing the investment certainty needed to bring many of them online.

Contracted solar PV capacity

Following Russia's invasion of Ukraine, the resulting energy crisis placed significant pressure on corporate electricity costs. In this context, PPAs proved to be a vital instrument: by offering long-term price visibility for renewable electricity, they enabled companies to simultaneously advance climate goals and hedge efficiently against market volatility.

Since then, European businesses have announced record levels of corporate PPA capacity almost every year. In 2024, signed capacities for solar PV reached an all-time high, marking a record year not only for solar but also across other renewable technologies.

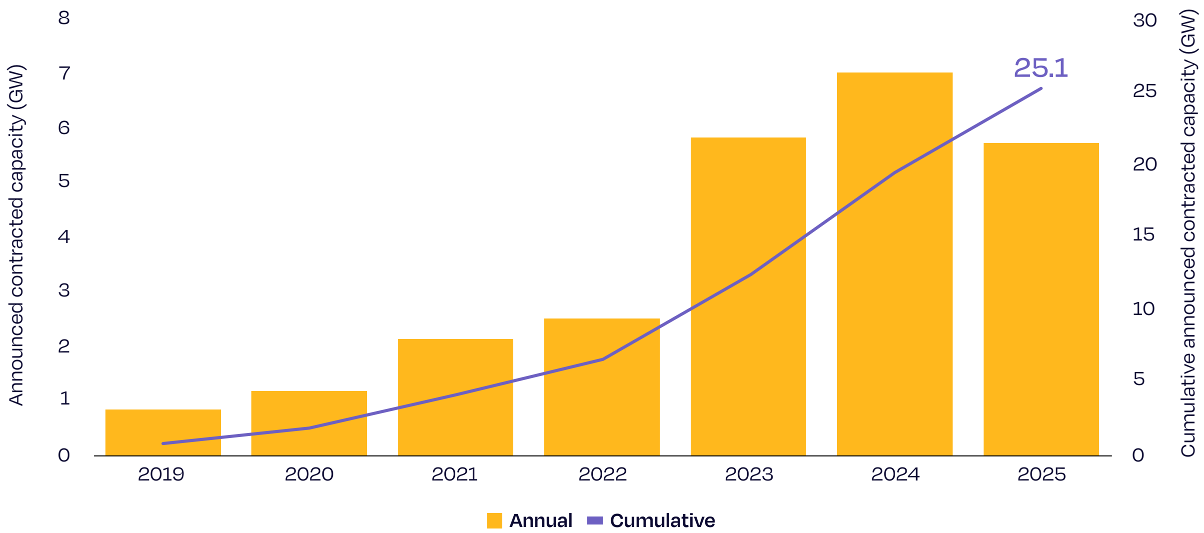
With 7 GW of solar projects secured under corporate offtake agreements, 2024 underscored the growing appetite among companies to drive decarbonisation while strengthening competitiveness and improving the predictability of their electricity costs. At the same time, the PPA market has continued to expand and diversify: beyond the strong momentum in standalone solar PV deals, hybrid contracts, and specifically the ones combining solar and wind assets, also reached record levels with around 1.9 GW of capacity announced by corporates in 2024.

In 2025, however, announced corporate PPA capacities fell below the previous year's record levels for the first time in several years (see Fig. 9). Industry stakeholders have broadly characterised this development as a moderate slowdown, with volumes returning to levels comparable to those seen in 2023 rather than signalling a structural decline in corporate demand.

Figure 9

Announced solar corporate PPAs return to 2023 levels after record year in 2024

Solar PV announced corporate PPA capacities 2019-2025, EU-27 + UK



It is important to stress that the slight decline in announced capacities reflects diverging trends across European markets rather than a uniform contraction, even though some issues can clearly be observed horizontally. As previously highlighted, price cannibalisation has significantly reduced solar capture prices, weakening project economics. At the same time, grid congestion and curtailment risks are undermining business cases and delaying investment decisions. These structural challenges are also exerting downward pressure on PPA prices, in some cases reaching levels that jeopardise project bankability. The flexibility revolution our electricity system demands will be instrumental in preventing PPAs from falling off a cliff.

Geographical breakdown

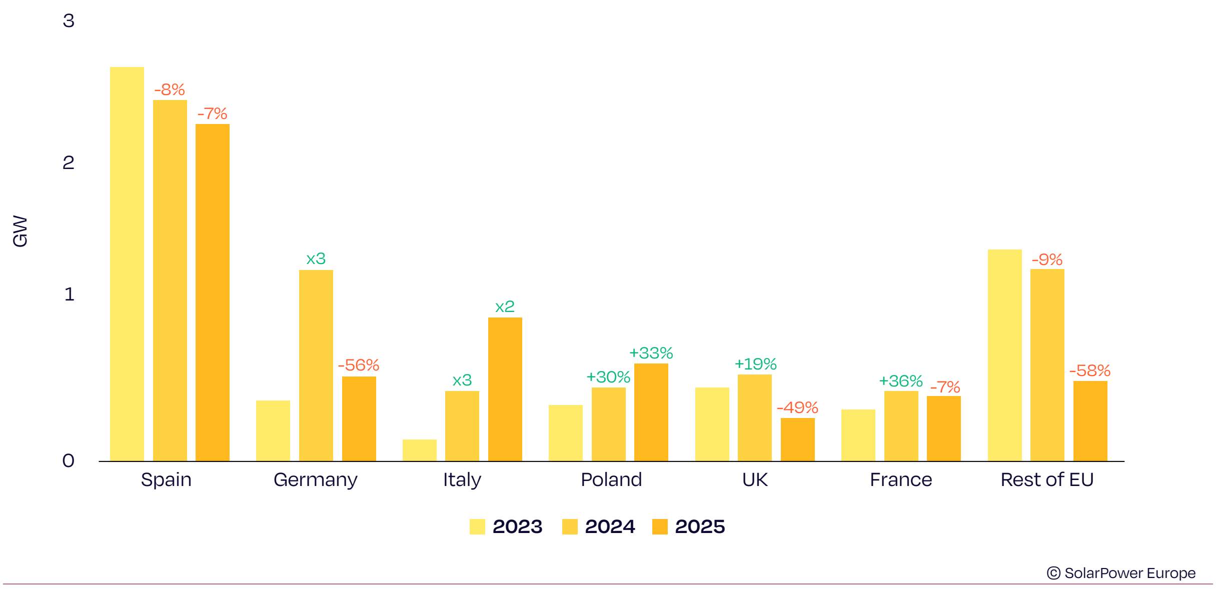
Germany provides a clear illustration of these dynamics, with corporate PPAs signed for solar PV declining by 56% in capacities (see Fig. 10). Similar trends have been observed in Sweden, Denmark and the Netherlands, where price cannibalisation, grid congestion and other signs of saturation, like curtailment, are particularly pronounced. In several European countries, stagnating electricity demand, linked to the slow pace of industrial electrification, has further dampened momentum. In systems that are already largely decarbonised, additional corporate PPA demand increasingly depends on new electricity consumption, especially from electrified industrial processes. France, where corporate PPA volumes have rather stagnated in recent years, also reflects this broader challenge of limited demand growth.

Spain stands out as an outlier and notable exception. Despite experiencing pronounced price cannibalisation, it remains Europe's leading market for announced corporate solar PPAs, with more than 2 GW signed annually between 2023 and 2025. This resilience can be attributed to the continued strong value proposition of solar contracts in Spain. Favorable irradiation levels and advantageous seasonal production profiles during winter months allow buyers to secure significant cost savings, sustaining corporate appetite even in the more challenging price environment.

Figure 10

Spain remains the European leader in solar PPA deals while fossil-dependent Member States are the hottest PPA markets

Solar PV announced corporate PPA capacities 2023-2025, EU-27 + UK



At the same time, the overall slowdown narrative requires nuance, as several markets continue to expand rapidly. Italy, Poland, and Bulgaria have all recorded significant growth in announced solar PPA capacities over the past three years. These countries still rely heavily on gas-fired generation and consequently face comparatively high wholesale electricity prices relative to more decarbonised systems. In this context, PPAs provide an attractive hedging instrument for industrial consumers particularly in power systems with a relatively low share of renewables and limited occurrences of negative price hours. Italy in particular has seen remarkable momentum, with announced deal capacities tripling from 2023 to 2024 and doubling again in 2025. This surge has the opportunity to be further supported by the recent launch of the "Energy Release" scheme, designed to secure low-cost renewable PPAs for businesses, which was heavily oversubscribed in the first call for interest. With the mechanism, renewable electricity is made available to energy-intensive industrial consumers at a predefined, stable price to enhance competitiveness and decarbonisation. In return, participating companies commit to supporting the development of new renewable capacity, typically by entering into long-term contracts like PPAs.

Finally, two additional factors can shape the current geographical disparities. In some markets, a degree of "wait-and-see" behaviour has emerged ahead of upcoming auction rounds potentially influencing corporate contracting strategies. For example, the UK awarded more than 5 GW of solar PV capacity in early 2026. Moreover, the rapid decline in battery energy storage system costs is reshaping market expectations, as storage increasingly offers a pathway to mitigate cannibalisation risks and can enhance the value of solar assets to some offtakers, as we explore later in this paper.

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Sectorial breakdown

In 2025, the Big Tech sector continues to dominate corporate investment in solar through power purchase agreements, based on announced corporate PPA capacities (see Fig. 11). After nearly 2 GW of announced capacity last year, driven by rapidly growing electricity demand particularly from data centres, technology companies like Amazon, Google and Microsoft are set to remain the largest consumers of solar corporate PPAs.

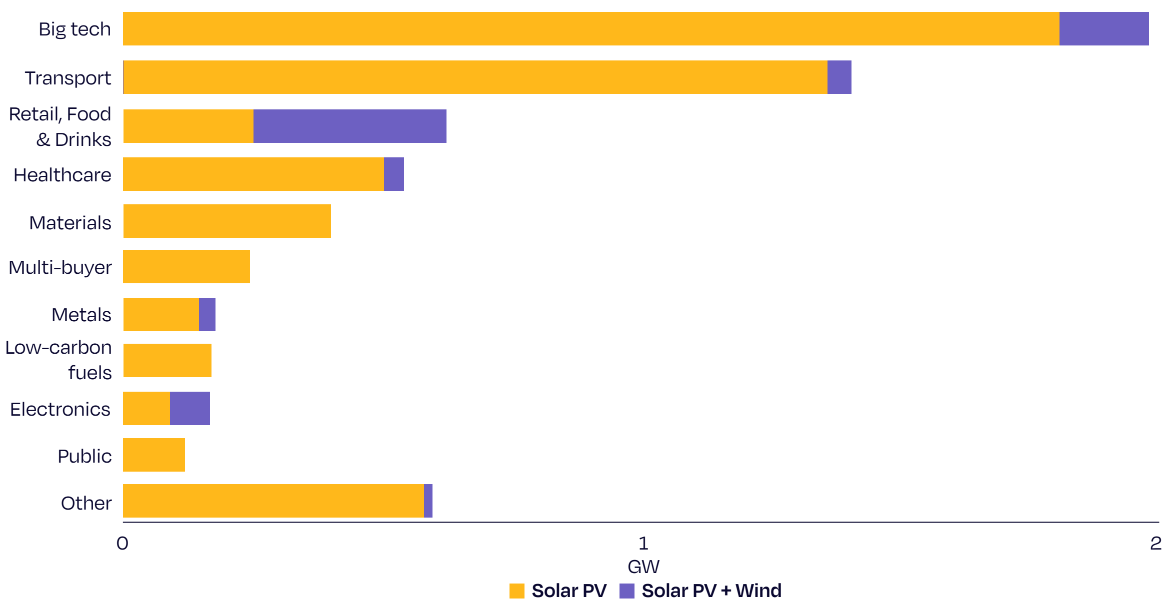
This year has also been marked by a significant rise in corporate PPA uptake within the transport sector, notably among national railway operators and automotive manufacturers. With close to 1.5 GW of announced solar cPPA capacity, the sector is emerging as one of the leading contributors to decarbonisation through private investment. This momentum is even more evident when considering the number of announced deals, with transport ranking first by the end of 2025. Companies such as SNCF, Renfe and Deutsche Bahn have all expanded their solar PV procurement. The same applies to automotive and industrial players including Stellantis, Tesla and Brembo.

Rounding out the top three sectors in both announced capacity and number of deals, the retail and food & beverages sector is becoming a major offtaker, particularly in Spain and Poland. In Spain, companies such as Puratos, Burger King, Mercadona and Monbake have been active, while in Poland, Carrefour, Leroy Merlin, Bricoman and Pepco have also secured solar PPAs.

Figure 11

Big tech signs the most new corporate PPAs in Europe, followed by transport, healthcare, and retail sectors

Announced solar PV corporate PPA capacities 2025 per sector, EU-27 + UK



Hybrid Solar PV + Wind: Agreements where Solar PV and Wind assets are combined under the same deal.

While the healthcare sector continues to sign corporate PPAs with solar PV in 2025, the past year has seen a marked slowdown in both announced capacities and deals in the chemical, metals and glass industries. These sectors recorded a peak in solar PPA activity in 2024. However, given their baseload profiles and limited demand flexibility, many energy-intensive industrial players are now seeking hedging solutions to manage price exposure during periods of high electricity prices, which often coincide with low solar generation.

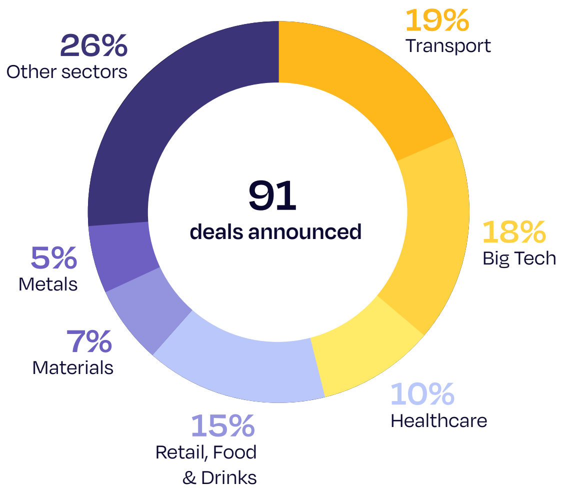
Closing the list, the "Other" category covers 8 additional sectors including logistics, waste management and hospitality, further illustrating that sectorial diversification continues increasing in the market.

The most experienced renewable energy buyers also tend to engage in more complex deal structures. The technology, transport, electronics and healthcare sectors are leading adopters of hybrid solar PV + wind agreements. For less experienced buyers, multi-buyer PPAs offer a promising entry point, although such arrangements remain marginal within the broader market landscape. While solutions exist, expectations on how PPAs can be a the best-fitting solution to smaller offtakers have to be managed given the long-term nature of contracts and creditworthiness aspects.

Figure 12

More and more European industries are signing renewable energy contracts

Announced solar PV deals by sector in 2025, EU-27 + UK



Note: Includes Solar PV + Wind cPPAs

Technological breakdown

Looking at the sub-technologies incorporated in solar PV agreements between 2023 and 2025, ground-mounted utility-scale PV continues to dominate, accounting for 81% of all announced deals (see Fig. 14).

At the same time, solar + wind agreements have gained traction in recent years, as this combined structure offers more attractive generation profiles and better alignment with corporate consumption patterns. These multi-technology agreements, often referred to as "hybrid PPAs", have in fact been largely limited to solar PV and wind so far. Corporate offtake of battery energy storage systems remains scarce, with solar + BESS agreements representing only a small number of deals within the segment.

The market is still in the process of defining standard structures for corporate agreements with BESS. While we have observed an increase in BESS-related transactions over the past year, these have primarily been concluded between energy companies, often labelled as "utility PPAs." However, as these agreements increasingly reflect the value of flexibility services rather than pure energy offtake, the terminology may need to evolve to better capture their underlying structure and purpose.

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Content box 3

Market innovations incorporating BESS in private contracts

The rapid deployment of BESS across electricity systems worldwide has triggered significant innovation in long-term private contracting structures. Storage assets are increasingly being incorporated into energy trading portfolios. This facilitates the development of hedging solutions specifically designed around the operational characteristics of BESS, their flexibility value, and their interaction with renewable generation and wholesale power markets. In practical terms, the market is shifting away from the simple procurement of low-cost decarbonised MWh toward the capture of incremental value derived from flexibility[9].

Among the available structures, tolling agreements have gained strong momentum in Europe, particularly as a tool to underpin project financing through stable and more predictable cash flows. Under a tolling arrangement, the asset owner receives fixed payments in exchange for transferring operational control of the BESS to the offtaker. As a result, market risk is assumed by the offtaker, who retains full exposure to and control over market revenues.

Alternative structures, often referred to as day-ahead swaps or "top-to-bottom" products, grant the counterparty market exposure based on a floating index. This index is typically linked to day-ahead wholesale power prices, although other benchmarks may also apply. These contracts have been especially popular in the UK, where they enable counterparties to monetise the intrinsic flexibility of BESS assets.

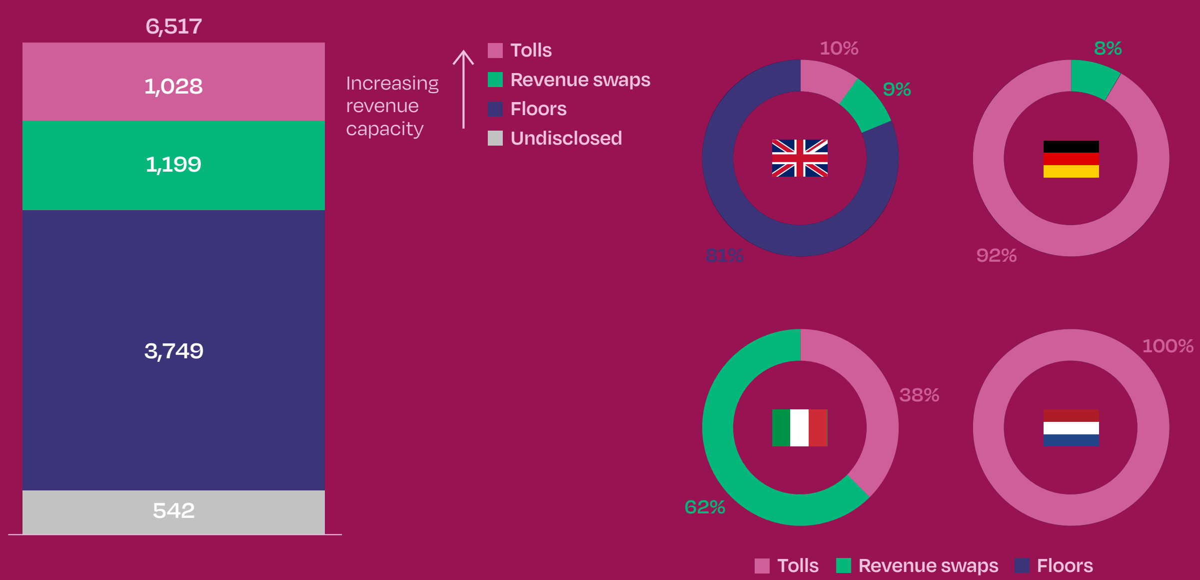
Revenue-sharing models have also emerged, providing a more balanced allocation of market exposure between parties according to their respective risk appetites. In practice, these structures often incorporate minimum revenue guarantees (such as revenue floors) or fixed optimisation fees.

Finally, combining BESS with renewable generation typically takes the form of hybrid PPAs, in which the aggregated production profile of multiple assets is incorporated into a single agreement. Whether structured between energy companies or with a corporate offtaker, such hybrid transactions have so far remained relatively limited in scale.

Figure 13

New long-term contracts with BESS gaining traction in Europe

Flexibility Purchase Agreements contracted capacity, EU + UK, 2025



© SolarPower Europe. Source: Pexapark

9 Pexapark (2026), Renewables Market Outlook 2026

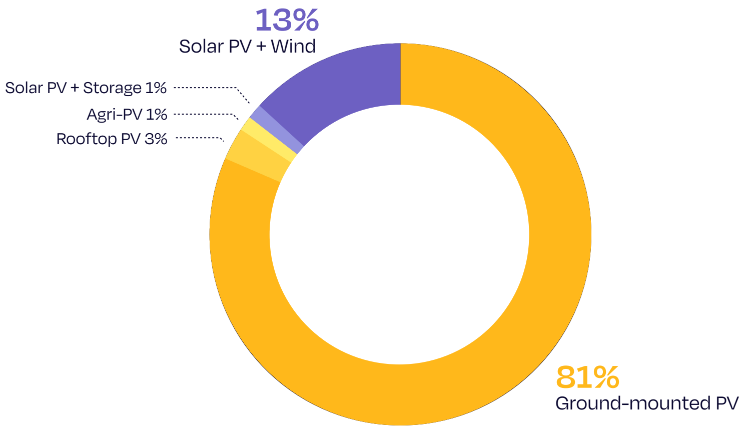
Combining Solar PV and BESS, whether it is with hybrid PV systems or virtually, under a single agreement, is still subject to a number of market and regulatory barriers. Removing those will be key to unlock the next wave of private offtake agreements.

Solar PV's exceptional ability to be deployed across a wide range of configurations, whether through hybridisation with other technologies or integration into existing infrastructure, buildings, or production sites, makes it the most flexible technology to navigate corporate procurement strategies.

Figure 14

Combined solar & wind PPA deals are increasing in popularity, while solar & storage deals begin to emerge

Solar PV announced cPPA deals by sub-technology 2023-2025, EU-27 + UK



Solar PV + Wind: Agreements where Solar PV and Wind assets are combined under the same deal.

Within the corporate PPA sub -technology mix, rooftop PV and Agri-PV remain viable options, although their uptake depends strongly on company-specific priorities, such as onsite generation strategies, ESG objectives, and community engagement goals.

Looking at the big picture again after going through the different angles of analysis presented in this report, one overarching conclusion emerges: solar PV corporate PPAs are, and will always remain, a reflection of electricity markets and the broader energy system. They are not immune to the structural challenges shaping the energy transition, whether infrastructure scarcity, limited system flexibility, or imbalances between supply and demand. To remain powerful instruments of decarbonisation, PPAs must continue to be considered as such, while we simultaneously embrace the flexibility revolution our power systems urgently require. Sectoral diversification also has its limits: PPAs will not become universally suitable instruments for every corporate offtaker. Yet their expansion potential has by no means been exhausted. The ongoing electrification of demand and the massive roll-out of BESS is set to open an entirely new playing field for PPAs, one in which they can continue to play a central role in supporting Europe's progress toward its climate ambitions.

Enery Expands PPA Portfolio with First Hybrid Deal in CEE

Overview

In 2025, Enery signed a landmark 15-year hybrid Power Purchase Agreement (PPA) with Teva Pharmaceutical Industries Ltd., introducing the first structure of its kind in Central and Eastern Europe (CEE). The agreement represents a major step forward for the regional renewable energy market, demonstrating how integrated solar and storage solutions can support industrial decarbonization at scale.

Project and Asset Background

The PPA is backed by a newly developed 122 MWp solar power plant located near Knizhovnik and Dolno Voyvodino villages in the Haskovo municipality in southern Bulgaria. The project is complemented by two battery energy storage systems (BESS) with a combined capacity of 200 MWh (70 MWh and 130 MWh). Together, the assets are designed to produce around 200 GWh of renewable electricity annually, while also strengthening grid stability and flexibility.

© Enery, 122 MW solar PV asset with 200 MWh battery storage hybrid PPA in southern Bulgaria

PPA Structure

Under the agreement, Teva will contract approximately 60,000 MWh of renewable electricity per year. The deal is structured as a financial (virtual) PPA, enabling Teva to meet its decarbonization targets and long-term price stability, while maintaining operational flexibility.

The hybrid structure is central to the agreement's significance. By integrating battery storage with solar generation, Enery improves the predictability and usability of renewable electricity. The BESS units enable peak shaving, balancing services, and optimized market participation, reducing intermittency risks typically associated with solar-only projects. This makes renewable procurement more attractive for industrial off-takers seeking both sustainability impact and reliable long-term energy hedging.

Challenges

Hybrid solar + BESS PPAs offers require careful structuring to fully unlock these benefits. Clear dispatch frameworks and transparent value allocation are essential to ensure the storage component prioritizes shaping and risk mitigation in line with the off-taker's needs. For developers, integrating BESS strengthens the overall value proposition by enabling firmed or optimized delivery, while introducing additional capital and operational considerations that must be proactively managed. When incentives are properly aligned and risk allocation is clearly defined, hybrid PPAs create a more resilient, flexible, and strategically attractive long-term energy solution for both parties.

Impact for Teva

The agreement supports the decarbonization of Teva's pharmaceutical production sites in Bulgaria and contributes to its target of reducing Scope 1 and 2 emissions by 46.2% by 2030. The renewable electricity supplied under the PPA is expected to avoid approximately 15,840 tonnes of CO_2 emissions annually.

Impact for Enery and the CEE Market

For Enery, the transaction reinforces its position as a leading renewable energy producer and corporate PPA provider in CEE. With 16 PPAs signed in the past four years, the company continues to expand its role as a partner for industrial decarbonization. This hybrid deal also sets a precedent for future corporate renewable procurement in the region, where solar-plus-storage structures are becoming increasingly important for grid integration and long-term market resilience.

Conclusion

By combining long-term price certainty, measurable decarbonization impact, and integrated solar-plus-storage assets, the Enery–Teva hybrid PPA establishes a scalable model for corporate renewable procurement in Central and Eastern Europe.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