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China ESS Integrators

Europe-led ESS installation growth through 2027; offset by some margin pressure on costs

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Global ESS installations should remain on a strong growth trajectory through 2026-27. Commentary from major ESS manufacturers points to robust multi-region momentum, with Europe emerging as the key incremental growth market into 2027. That said, such would be offset by some margin pressure in 2H26 and 2027. Elevated input costs (notably LFP cells) and the export tax rebate step-down are likely to constrain gross margins, as cost pass-through should vary by region and product type. Separately, rising geopolitical and policy uncertainty remains an overhang for US market access – an incremental negative for Sungrow. We like Deye, on the back of its riding Europe and EM C&I ESS growth. For Sungrow, we believe the ~40% underperformance since 1 July (vs the SHCOMP Index) has largely priced in geopolitical risks. We maintain our OW rating on Sungrow, supported by its strong ESS integration capabilities and robust ex-US ESS installation growth outlook.

Across key ESS manufacturers, **management commentary supports a constructive 2H26 and 2027 installation outlook**. Deye raised its FY26 new energy segment revenue target to RMB 24bn (from RMB 20bn), while other manufacturers maintained their FY26 shipment targets. Sungrow cited >50% YoY global ESS installation growth in 2026 and reiterated a constructive 2027 outlook, implying 30-50% growth potential across key markets – led by Europe (~50%), followed by China (~30%) and the Americas (~20–30%) – with APAC (ex-China) also expected to sustain solid momentum. Sineng expects overseas ESS demand to increase by >50% YoY in 2027, while domestic growth may moderate off a higher base. Please refer to the report body for detailed analysis on the European and China ESS installation outlook.

We expect shipments to skew to 2H versus 1H on seasonality, consistent with company guidance. Sungrow expects 2H26 shipments to account for >60% of full-year volumes. Sigenergy guided that 2H26 revenue should exceed 1H26, supported by share gains in Europe and a longer-term mix shift toward C&I and utility-scale storage. Deye's higher full-year target implies ~RMB 14bn of 2H26 revenue (vs ~RMB 10bn in 1H26). Management also expects scheduled production to increase month-on-month in 3Q26, driven by incremental demand from Europe and Africa, while 4Q26 shipments could accelerate as customers pull forward purchases and build inventory ahead of the export tax rebate cancellation in January 2027.

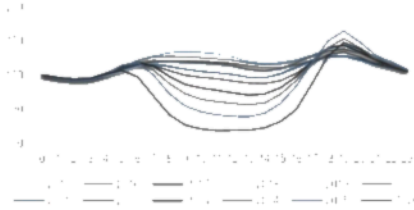
Elevated lithium prices and the export tax rebate step-down are likely to pressure ESS gross margins. Deye noted that 2Q ESS battery pack gross margin declined due to: 1) higher LFP cell prices, 2) a lower export tax rebate, and 3) FX losses. The export tax rebate rate was cut from 9% to 6% in April 2026 and is set to fall further to 0% from January 2027, implying incremental margin headwinds into 2027. Deye also highlighted that passing on higher costs through to end customers has been difficult amid intensified competition, and it intends to adopt more aggressive pricing to gain share. Sungrow indicated that overseas ESS system pricing for new order intake was broadly stable at RMB~0.8/Wh in 1H26.

Figure 1: Share of renewables and gas in power generation in Spain



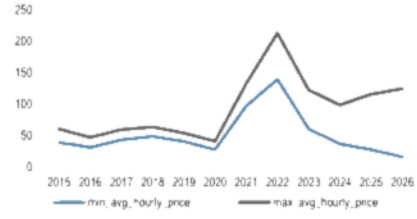
Source: BloombergNEF.

Figure 2: Duck curve of power prices in Spain: duckier



Source: Ember Energy, J.P. Morgan. Note. Indexed Hourly Price by Year (Indexed to 100 at hour 0).

Figure 3: Indexed hourly power price spread in Spain



Source: Ember Energy, J.P. Morgan. Note: Indexed Hourly Price by Year (Indexed to 100 at hour 0).

See page 9 for analyst certification and important disclosures, including non-US analyst disclosures.

Given the market shift towards longer-duration systems (which mechanically lowers RMB/Wh), this stability suggests Sungrow was able to pass through part of the cost inflation in 1H26 despite input-cost volatility. However, we see near-term margin risk in 2H26 due to timing effects: revenue recognized in 2H will largely reflect 1H shipments – when lithium-related input costs were elevated – while the underlying orders were likely secured in 2H25, when lithium prices were more moderate. Overall, we expect pass-through to vary by region and product type, but it should be more seamless for new utility-scale ESS orders in developed markets. We therefore believe ESS gross margins are likely to trend lower in 2H26 and into 2027.

Competition is intensifying across segments as integrators expand beyond their traditional niches. Deye and Sigenergy – two major distributed generation (DG) ESS manufacturers – are entering utility-scale ESS, while Sungrow (a leading utility-scale player) is stepping up efforts in DG ESS. We view utility-scale ESS as having higher entry barriers, as customers typically impose stricter requirements (e.g., bankability, product quality/track record, and brand recognition). As such, we believe Sungrow retains a competitive advantage in utility-scale ESS, particularly in developed markets. Meanwhile, we expect Deye to sustain its leadership in emerging-market DG ESS, supported by first-mover advantage and cost leadership.

Several integrators have already secured AIDC ESS orders. Sungrow has won ~2GWh of AIDC ESS orders and cited a pipeline of >10GWh. GoodWe has secured two overseas AIDC ESS orders (on the power-generator side), each with a contract value below RMB 100mn, with deliveries expected to start in 4Q26. Sineng has also obtained a small AIDC ESS order in the US. Overall, we view AIDC as a genuine source of incremental ESS demand, with further order opportunities likely ahead.

US policy uncertainty is increasing market access risks; behind-the-meter (BTM) appears lower risk. Sungrow acknowledged risks of constrained US market access amid evolving policy uncertainty (including the Executive Order and FCC rule). Risk appears highest in utility-scale ESS given its closer linkage to grid connection and transmission-related definitions. By contrast, Sungrow's read-through suggests BTM ESS solutions – particularly AIDC ESS – may face lower policy risk given the apparent focus on bulk transmission systems and a clearer "behind-the-meter / distribution-side" framing. For details, please refer to our report (link).

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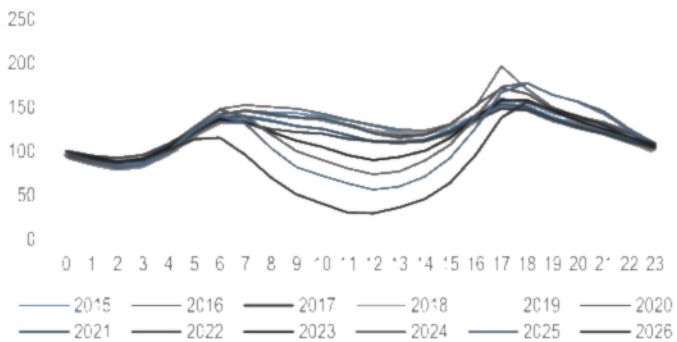
Why is European ESS demand so strong?

The duck curve in major European power markets is getting duckier

We analyzed power price data across four major European markets (France, Germany, the Netherlands, and Spain) and found that the "duck curve" is becoming increasingly pronounced. The widening gap between mid-day and evening peak prices reflects rising renewable penetration – particularly solar – and more frequent periods of excess generation. This dynamic is pushing mid-day prices lower (declining each year through 2026), while evening prices remain supported by tighter net-load conditions, fuel-linked marginal costs, and ramping constraints.

Figure 4: Duck curve of power prices in France

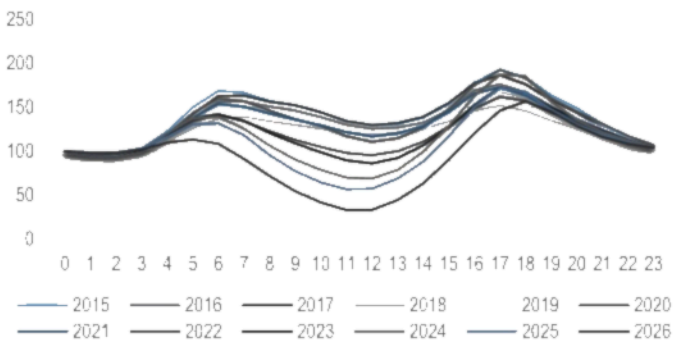
Indexed to 100 at hour 0



Note: Indexed Hourly Price by Year.
Source: Ember Energy, J.P. Morgan

Figure 5: Duck curve of power prices in Germany

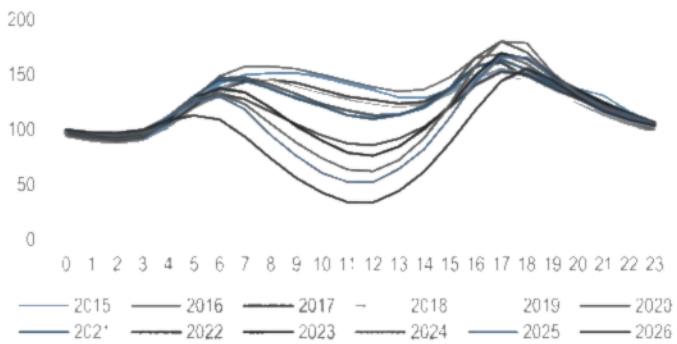
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Note: Indexed Hourly Price by Year.
Source: Ember Energy, J.P. Morgan.

Figure 6: Duck curve of power prices in the Netherlands

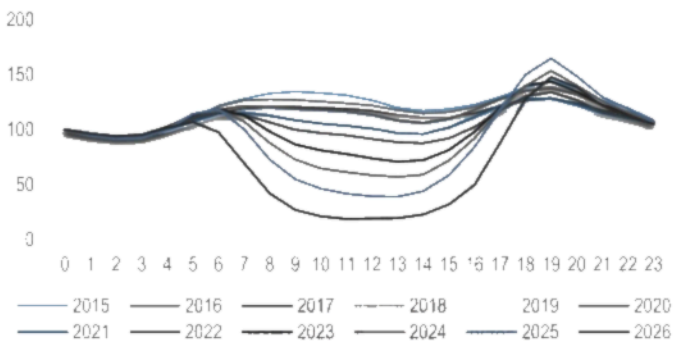
Indexed to 100 at hour 0



Note: Indexed Hourly Price by Year.
Source: Ember Energy, J.P. Morgan

Figure 7: Duck curve of power prices in the Spain

Indexed to 100 at hour 0



Note: Indexed Hourly Price by Year.
Source: Ember Energy, J.P. Morgan.

Renewables overtake gas in power generation

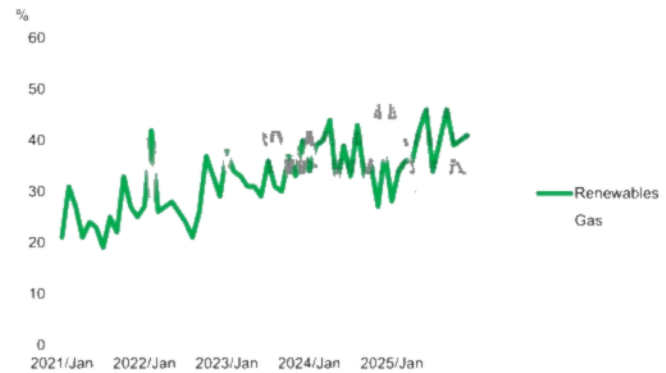
We believe the increasingly pronounced duck curve reflects the rapid expansion of wind and solar – one of the most significant structural shifts since the previous crisis. Renewables now account for ~34% of power supply across core European power markets, up from ~24% in 2021.

Figure 8: Share of renewables and gas in power generation in Germany



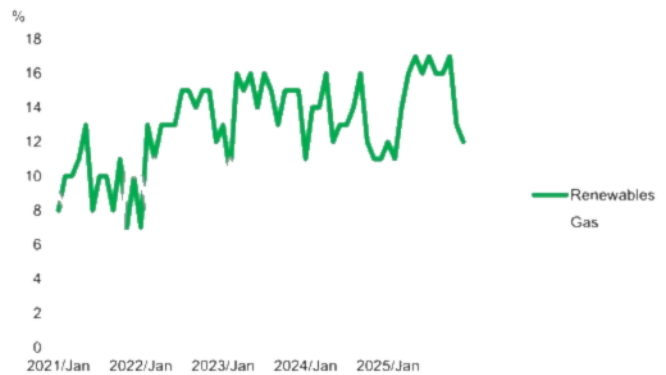
Source: BloombergNEF.

Figure 9: Share of renewables and gas in power generation in Great Britain



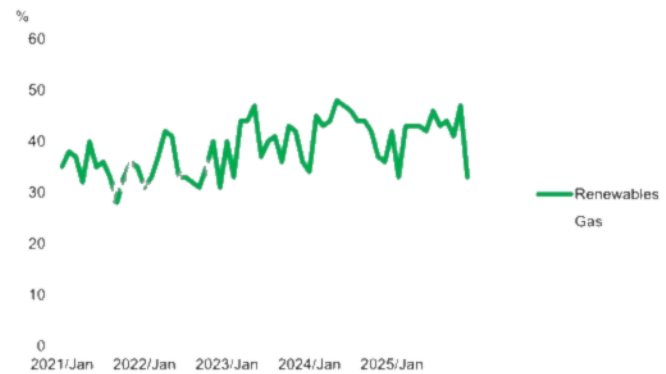
Source: BloombergNEF.

Figure 10: Share of renewables and gas in power generation in France



Source: BloombergNEF.

Figure 11: Share of renewables and gas in power generation in Spain



Source: BloombergNEF.

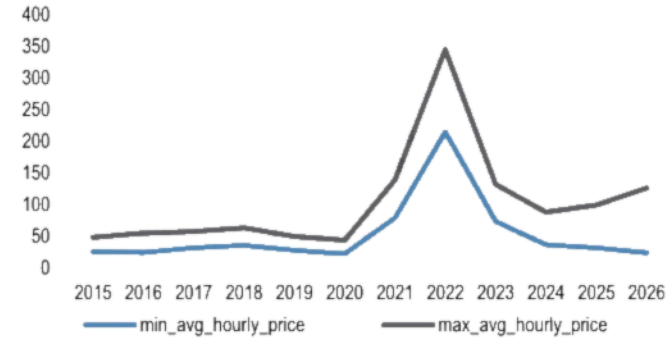
Widening power price spreads should incentivize ESS installation

Intraday power price volatility is rising and the value pool is increasingly shifting toward flexibility. We see this as supportive for energy storage demand in Europe, as ESS can monetize volatility through applications such as demand response and peak shaving. As long as price spreads remain elevated, we expect European ESS project returns to improve, underpinning secular growth potential for ESS installatoin in the region.



Figure 12: Indexed hourly power price spread in France

Indexed to 100 at hour 0



Source: Ember Energy, J.P. Morgan.

Figure 13: Indexed hourly power price spread in Germany

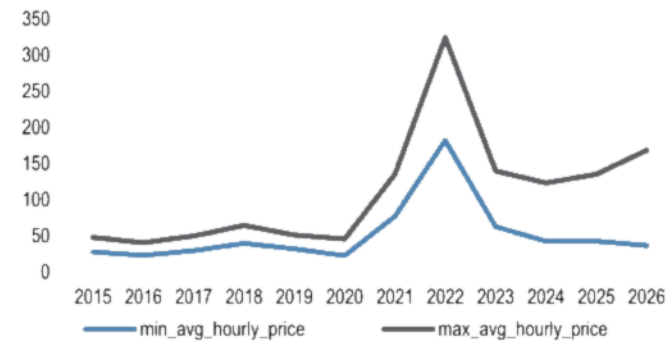
Indexed to 100 at hour 0



Source: Ember Energy, J.P. Morgan.

Figure 14: Indexed hourly power price spread in the Netherlands

Indexed to 100 at hour 0



Source: Ember Energy, J.P. Morgan

Figure 15: Indexed hourly power price spread in Spain

Indexed to 100 at hour 0



Source: Ember Energy, J.P. Morgan.

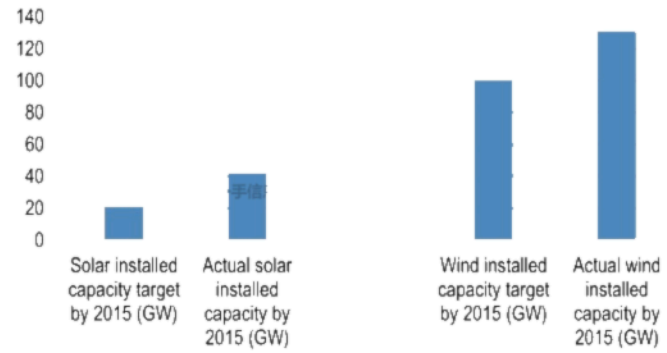
Demystifying China's ESS demand into 2027

China's 180GW ESS target by 2027 should set a floor for 2027 ESS installations

At the national level, on 12 September 2025, the NDRC issued the Action Plan for Energy Storage Development, calling for cumulative ESS installations to reach 180GW by 2027 (vs ~75GW as of FY24). We view the significance of this development as less about the absolute number. In our view, 180GW by 2027 is not particularly ambitious, and China has historically tended to exceed renewable-related targets – for example, the country met its 2030 wind + solar capacity target of 1,200GW as early as July 2024. For details, please see the charts below.

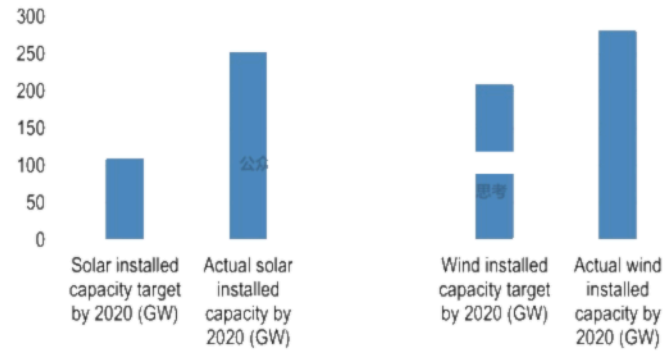
More importantly, the target helps ease concerns over whether the cancellation of mandatory ESS attachment is a meaningful detour for ESS deployment, versus simply a shift in policy design. We expect China to surpass its 2027 ESS installation target.

Figure 16: Solar/Wind installed capacity targets vs actual by 2015



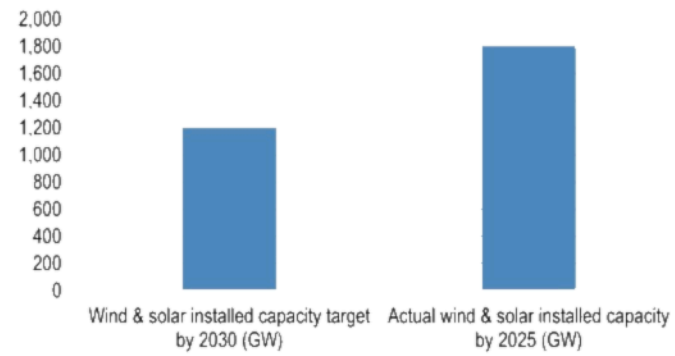
Source: State Council, NEA.

Figure 17: Solar/Wind installed capacity targets vs actual by 2020



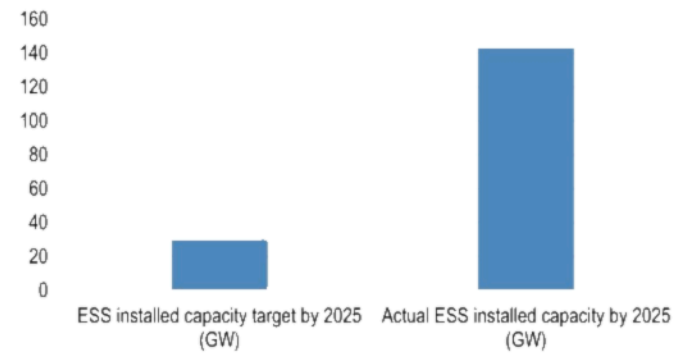
Source: State Council, NEA.

Figure 18: Solar & Wind installed capacity targets in 2030 vs actual in 2025



Source: State Council, NEA.

Figure 19: ESS installed capacity targets by 2025 vs actual in 2025



Source: State Council, NEA.

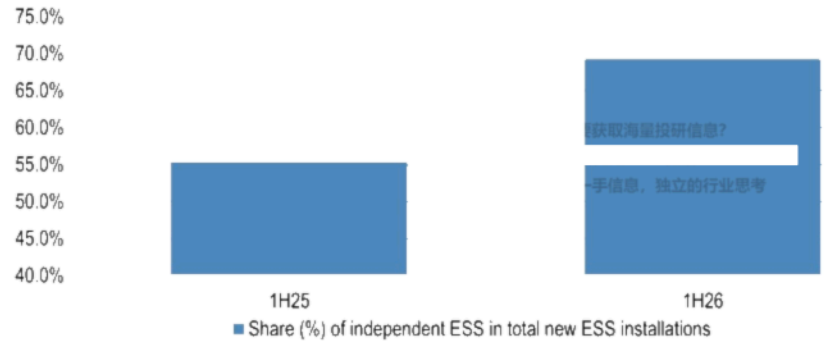
Share of independent ESS continues to rise, likely reflecting improving project returns

On 30 January 2026, the NDRC and NEA issued a notice guiding local governments on capacity charges for ESS projects, supporting the national target of 180 GW of ESS by 2027. Eligible grid-side independent ESS that support system security can receive capacity fees benchmarked to local coal-fired capacity payments and adjusted for peak discharge capability (including a duration-based factor capped at 1), and can also earn reliability compensation plus participate in energy and ancillary services markets—without duplicative capacity support.

We view this framework as giving local governments room to add incentives and strengthen project returns. Consistent with improving economics, CNESA data show independent ESS accounted for 69% of new ESS installations in 1H26, up 13.9ppts YoY, indicating a shift from generator-side mandatory add-ons towards grid-side independent projects.

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Figure 20: Share % of independent ESS in total new ESS installations

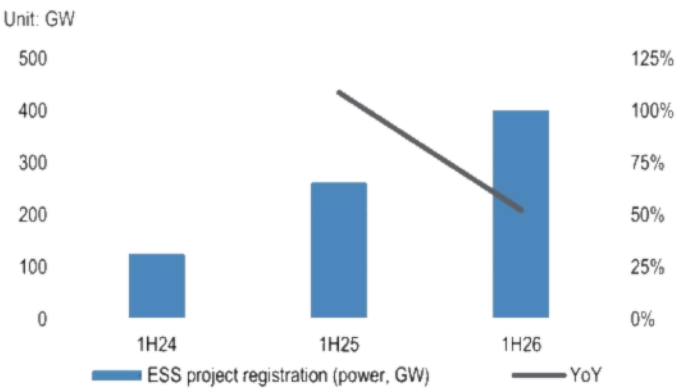


Source: CNESA.

ESS tender and project registration volumes should support our positive stance on 2027 ESS installation outlook

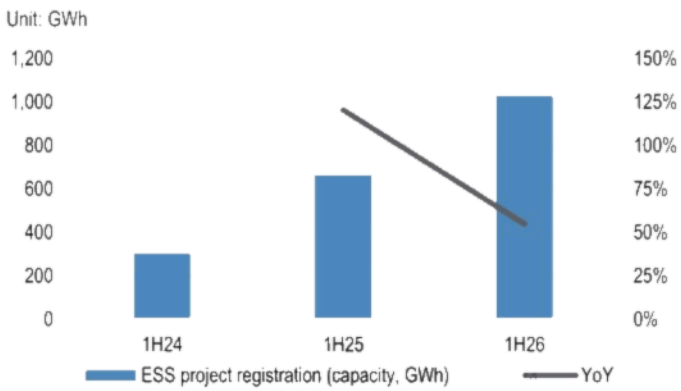
Per China Energy Storage Alliance (link), China's new ESS project registration volume reached 263GW/665GWh in 1H25, up 109%/120% YoY. Separately, Solarbe Energy Storage (link) reported 401GW/1,030GWh of new ESS project registrations in 1H26. While these figures come from different sources and may not be strictly comparable, they still point to a clear pickup in registration activity, implying >50% YoY growth. While we acknowledge there is typically leakage from project registrations to tenders to actual installations, we believe comparing YoY trends remains a useful indicator for future installation momentum.

Figure 21: China's new ESS project registration volume (GW)



Source: CESA, Solarbe Energy Storage.

Figure 22: China's new ESS project registration volume (GWh)

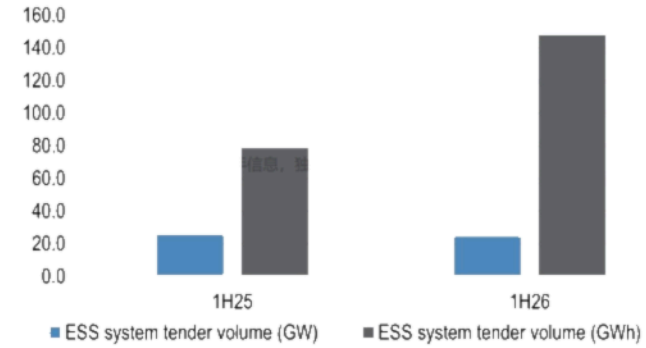


Source: CESA, Solarbe Energy Storage.

Per CNESA (link), ESS system tender volumes in 1H26 totaled 24.5GW/148.1GWh (-3.4%/+88.3% YoY), while ESS EPC tender volumes in 1H26 reached 80.1GW/227.9GWh (+98.7%/112.2% YoY). We view these data points as supportive of our positive stance on China's ESS installation outlook in 2027.

Figure 23: China's ESS system tender volume (GW/GWh)

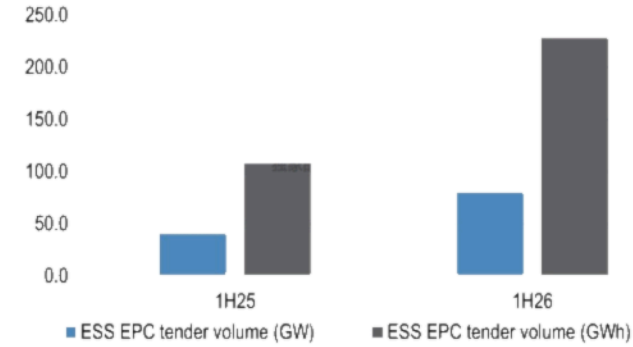
Unit: GW/GWh



Source: CNESA.

Figure 24: China's ESS EPC tender volume (GW/GWh)

Unit: GW/GWh



Source: CNESA.

Appendix

Table 1: Remarks from major ESS manufacturers on FY26 ESS shipment targets changes and 2027 outlook

ESS	Changes to FY26 ESS shipment target	Comments on 2H26 and 2027 ESS outlook
Hyperstrong	No change	N/A
Sineng	No change (partly due to capacity constraints)	Management remains positive on ESS demand in Europe, India, and Southeast Asia in 2026, and expects overseas ESS PCS shipment growth of ~50% YoY in 2026. Management expects 2027 overseas ESS demand to increase by >50% YoY, while domestic ESS demand growth may moderate due to a higher base.
Sungrow	No change	Management reiterated a robust demand backdrop, pointing to >50% YoY global ESS installation growth in 2026 and a constructive 2027 outlook. The regional breakdown implies ~30–50% growth potential across key markets, with Europe expected to deliver the strongest growth in 2027 (~50% YoY), followed by China (~30%) and the Americas (~20–30%), while APAC (ex-China) is also expected to maintain solid momentum. Management is particularly positive on ESS demand in Europe, driven by: 1) supportive policy measures and 2) favourable economics under a wide peak-to-trough tariff spread.
Deye	Lifted New Energy (inverter and battery pack) FY26 revenue target from Rmb20bn to Rmb24bn	Management remains positive on 2H26 demand: 1) scheduled production volume is expected to pick up MoM in 3Q, driven by incremental demand from Europe and Africa; and 2) 4Q shipments could accelerate, as customers may pull forward purchases and build inventory ahead of the export tax rebate cancellation starting in January 2027.
GoodWe	Confirmed to meet full-year shipment target, with potential to exceed it	Management guided that 3Q shipments are likely to be weaker than 2Q, but expects a strong 4Q. Management expects residential (resi) to sustain similar growth in 2H versus 1H, while C&I growth should outpace resi. Shipment growth in Europe was strong in 1H26, driven by Spain, Italy, and the UK. Looking into 2H26/2027, management sees additional opportunities in Australia, the UK, and Mexico, etc..
Ginlong	No change	Management remains positive on residential ESS demand over the mid- to long-term, and expects 10-20% CAGR.
Sigenergy	No guidance	Management guided directionally that 2H revenue should exceed 1H revenue. Residential (resi): 1) Europe should continue to grow, with further share gains into year-end; 2) Australia should continue to expand, although subsidy support is stepping down. Longer term: Management sees residential demand as structurally supported through 2030, albeit dependent on subsidy policies. Mix shift is likely to continue towards C&I and large-scale storage, which could rise to ~60-70% of the mix.

Source: Company reports, J.P. Morgan.