

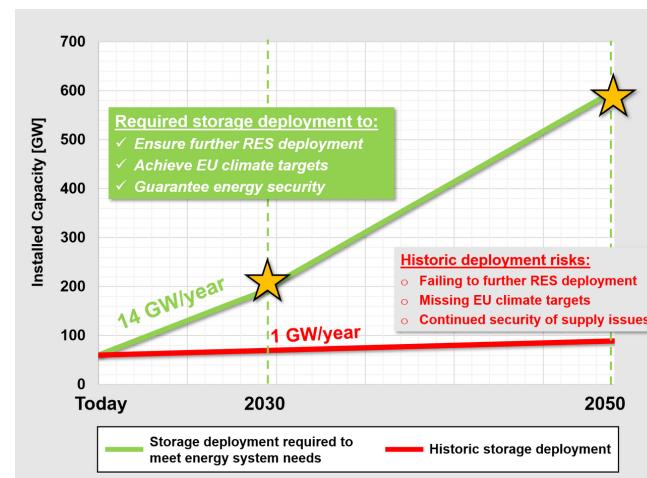
Energy Storage Targets 2030 and 2050

Ensuring Europe's Energy Security in a Renewable Energy System

While Europe faces an unprecedented energy crisis, the European Commission provides vital leadership with the Fit for 55 and REPowerEU packages, however Europe today is not ready to integrate the increasingly high shares of renewables and make them available when needed. Still operating its energy system on fossil centric-based principles means we will be locked into fossil fuels and continue curtailing unprecedented amounts of clean and cheap renewable energy.

Energy Storage providing critical energy shifting and fast-response flexibility services is an essential component for enabling renewables integration and establishing a secure, low-emission and affordable energy system. In its own study¹, the European Commission has acknowledged the critical role of storage to achieve its energy transition strategy. Based on this and numerous other studies, EASE presents its own extensive review on the system needs for energy storage in 2030 and 2050. In [this document](#), EASE estimates a no regret energy storage requirement of approximately 200 GW by 2030 and 600 GW by 2050 (including 435 GW from power-to-X-to-power solutions for energy shifting as a no regret option in 2050).

Current market trajectories for storage will fail to meet these requirements of the energy system by 2030 if urgent measures to boost deployment are not taken now. A massive ramp-up in storage uptake of at least 14 GW/year is required compared to historic rates. Energy Storage targets are a necessary complement to existing EU climate targets and will allow Europe to foster a local, sustainable green energy system independent of external energy imports. The EU urgently needs to adopt an Energy Storage Target and strategy to accelerate the necessary storage deployment today.



Without clear policy intervention, energy security risks will become even more critical going forward. This sentiment was echoed in the [joint letter](#) sent to the Commission by EASE, Breakthrough Energy, SolarPower Europe, and WindEurope, highlighting the key priorities for storage including:

- A clear political commitment from the European Commission on an energy storage strategy including energy storage targets replicating in scope and ambition the Hydrogen strategy.
- Promote the uptake of energy storage technologies, providing clear signals to investors and the energy storage industry to drive the necessary scale-up of storage solutions and a commitment to remove still existing barriers to their deployment and operation.
- Mainstream energy storage in the European Commission's implementation of the REPowerEU action plan and in the ongoing review of the Electricity Market Design.

That said, there are several additional sets of legislation changes needed to prevent falling short of the flexibility needs in 2030 and beyond and EASE will elaborate on this in the coming weeks. Nonetheless it still remains, without urgent measures to ensure low carbon flexibility, Europe will fail to achieve its ambitious climate goals and further jeopardise its energy security.

[1] European Commission, Directorate-General for Energy, Andrey, C., Barberi, P., Nuffel, L., et al., Study on energy storage : contribution to the security of the electricity supply in Europe, Publications Office, 2020