

EASE Energy Storage and Batteries: EU state of play and policies

19.09.2023 Vienna Patrick Clerens EASE Secretariat General



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European Association for Storage of Energy







To promote a fair, future oriented, sustainable energy market design that recognises storage as an indispensable element of the energy system to build a bridge between EU policymakers and the energy storage stakeholders.



To have a renewable-based carbon-neutral Europe by 2050, enabled through energy storage.



1. Who we are EASE Services	ADVOCACY EASE influences the European decision- making process	European Association for Storage of Energy
VISIBILITY & NETWORKING EASE allows its members to maximise their visibility and enlarge their network	influences the EU R&D	
	MARKET INTELLIGENCE EASE updates its members on the energy storage market	5

2. EU Energy Storage Outlook



Key takeaways - European Market Monitor on Energy Storage (EMMES) 7

Demand for storage is bigger than ever

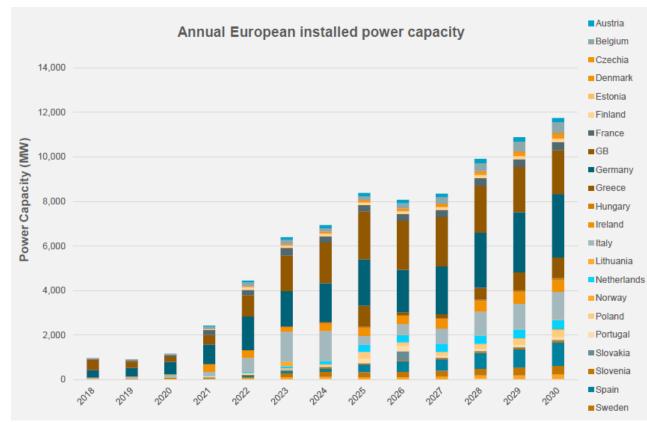
- About 4.5GW of new installations in 2022
- An even more positive outlook of >6GW for 2023.

Accelerating factors for demand

- 2022 Energy crisis
- National governments support
- Growing Front of the Meter project development pipelines
- Overall positive future policy direction on a EU level.

Electricity Market Design reform proposal

- Boosting investments in renewables and flexibility
- Reducing energy price volatility
- Protecting customers from price spikes





Electricity Market Design Update

The European Commission presented its draft for a revision of the electricity market design on the 14th March.

> Many new provisions for energy storage

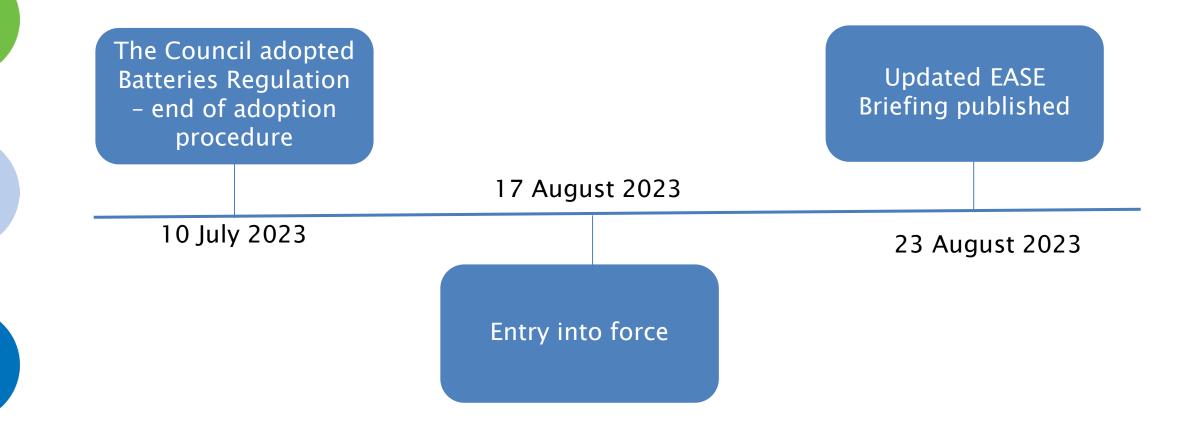
- Main points of contention:
 - Flexibility assessments, objectives and schemes.
 - > Capacity mechanisms
- Parliament has reached an initial agreement
- Council is still under negotiations





Sustainable Batteries

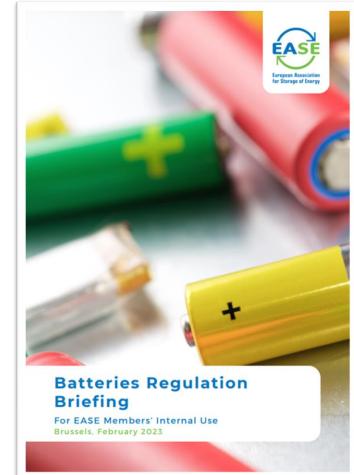
Batteries Regulation





EASE Publication: Updated Analysis of Battery Regulation

- An updated analysis of the Batteries regulation was shared with members
- The Battery Regulation did not undergo dramatic changes when it entered into the force, in comparison to the Agreed Text published earlier this year
- Updated dates relating to delegated and implementing acts stemming from the Regulation remain and numbering of the articles

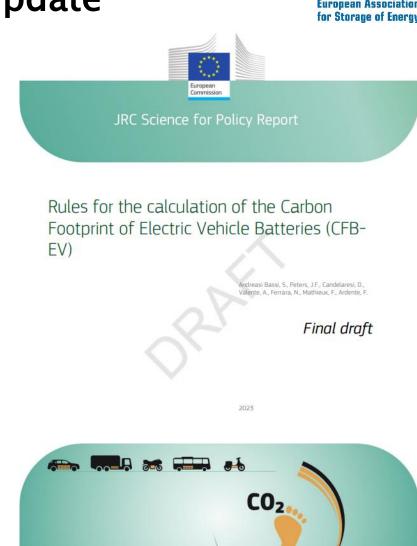




Sustainable Batteries

Carbon Footprint Calculation Methodology

- **CO2 footprint methodologies** are part of secondary legislation (delegating and implementing acts) from the Battery Regulation
- Each methodology targets different battery types (EV, rechargeable industrial batteries except those with exclusively external storage and rechargeable industrial batteries with external storage)
- European Commission's Joint Research Center (JRC) is finalising work on the methodology for EV batteries – expected to influence the following methodologies.





Sustainable Batteries

Carbon Footprint Calculation Methodology

- One of the issues that emerged in the context of CFC is the issue of Geographic Criteria for Guarantees of Origin (GoO).
- <u>Context</u>: Key to ensure that energy consumed for the manufacturing of batteries comes from RES matter of credibility, vis-a-vis consumers, to develop a system so the carbon footprint of batteries is actually as low as declared.
- <u>Challenge:</u> So far, market-based methods for assigning emissions from electricity consumption have been imperfect.
 - Reported emission reductions don't match reductions in the atmosphere due to loose Guarantees of Origin criteria. Specifically, using contracts to allocate electricity production to consumers proved to be challenging as we can't trace electrons.



The Critical Raw Materials Act - Commission Proposal

According to the Commission, by 2030, the EU should aim to:

- produce at least 10% of its annual consumption for extraction
- produce at least 40% of its annual consumption for processing
- produce at least 15 % of the Union's annual aggregated consumption of strategic raw materials as well as +7.5% volume for each strategic raw material (including for all intermediate recycling steps)



4. EASE Review Study: Energy Storage Targets

EASE Storage Targets for 2030 and 2050 – Already existing targets for Energy Storage 2030 & 2050

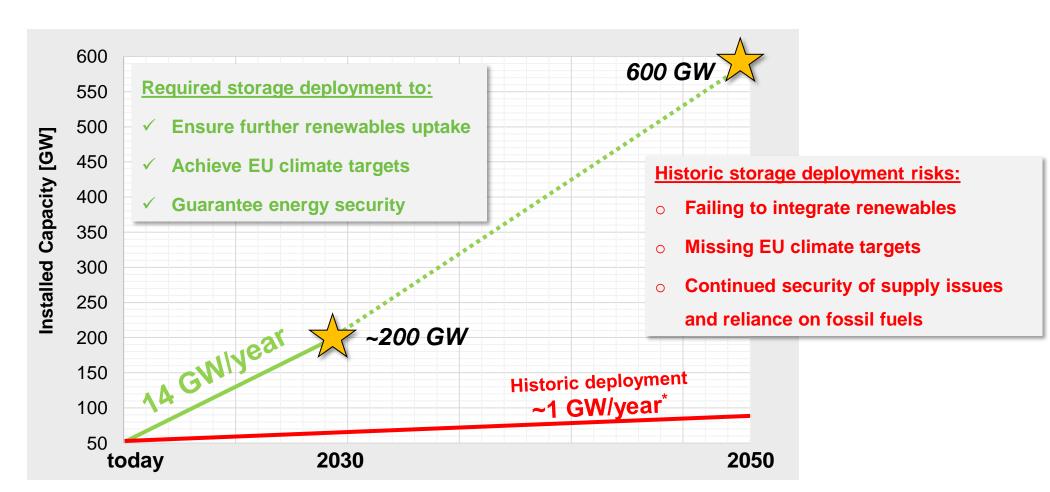


- EASE has published an extensive review study for estimating Energy Storage Targets for 2030 and 2050
- Present-day regional targets existing in the US can inspire EU-wide targets
 - Energy Storage targets of 1. 325 MW by 2020 were thus enacted in 2010 in California
 - More recently, the New York State has defined a deployment goal of 3,000 MW of additional storage by 2030
- National-wide ES targets are starting to appear in the EU
 - Spain, which is already targeting 74% renewables in the power sector by 2030, has long-term storage goals of 20 GW by 2030 and 30 GW by 2050

4. EASE Review Study: Energy Storage Targets

EASE Storage Targets for 2030 and 2050 – Compared to Historic Market Deployment





4. EASE Review Study: Energy Storage Targets EASE Storage Targets for 2030 and 2050 – Measures that need to be taken

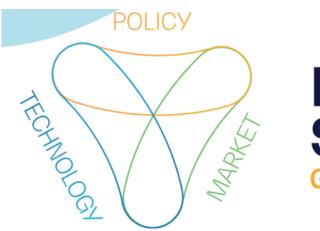


EASE emphasise these key priorities for storage:

- > Set European energy storage targets for 2030 and 2050
- > Eliminate double taxation and harmonise taxation at EU level
- > Signal scarcity with **appropriate prices** while compensating grid supportive behaviour
- > Tender specific **curtailment minimisation** products and allow for CCfD
- Ensure the permitting process for co-located (ES and renewable energy) infrastructure is efficient, short, and simple

Talk to us.

We're ready to answer your questions.



ENERGY STORAGE Global Conference

BRUSSELS, 10 — 12 OCTOBER 2023

Get ready and save the date! The EASE Secretariat is excited to announce plans for the next Energy Storage Global Conference 10-12 October 2023.



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