



Brussels, May 2019

Open Letter to Directorates–General for Energy and for Climate addressing energy storage in the National Energy and Climate Plans

The European Association for Storage of Energy (EASE) is the voice of the energy storage community, representing companies and organisations from across the entire value chain. EASE promotes the deployment of energy storage technologies in order to meet the EU’s ambitious decarbonisation objectives while enhancing the flexibility and security of the energy system.

Energy storage can bring numerous benefits to the energy system:

- ✓ It supports the integration of variable renewable energy sources into the energy system by helping balance supply and demand across different timescales.
- ✓ Energy storage can play a crucial role in increasing the stability and reliability of the electricity network by providing a wide range of system and ancillary services.
- ✓ It can act as a complement to grid development, allowing network operators to defer or even avoid investments in transmission and distribution grids.
- ✓ It can also aid in decarbonising the heating and cooling and transport sectors.

At EU level, the growing importance of storage was emphasised throughout the whole “Clean Energy for All Europeans” Package, which clarified the regulatory framework for energy storage. In addition, the Commission’s long-term [strategic vision](#) for a prosperous, modern, competitive and climate neutral economy clearly recognises storage as having a key role in achieving the EU’s 2050 decarbonisation goals. It foresees a significant expansion of storage capacities in the future.

We believe that the National Energy and Climate Plans (NECPs) are an excellent opportunity for Member States to examine the current status of energy storage deployment, assess future flexibility needs, and identify the biggest barriers to storage deployment. Developing a clear strategy to support the development and deployment of storage technologies is essential in order for Member States to achieve their decarbonisation targets for 2030 and beyond.

Many of the draft NECPs do not devote sufficient attention to energy storage technologies. The need to develop energy storage is mentioned in most of the plans, but they often lack clear data and concrete steps to remove barriers to deployment. Furthermore, no NECP provides a method for assessing progress in energy storage deployments based on clear Key Performance Indicators (KPIs).



We believe that by including clear KPIs to assess the development of energy storage and committing to put in place specific policies, Member States will be fully equipped to take on the flexibility challenge and thus accelerate the energy transition.

EASE would like to support the drafting of ambitious yet achievable plans that can have a true impact on the energy sector. Therefore, EASE proposes a set of KPIs that Member States could include in their draft plans and that could also help the European Commission when evaluating the draft plans and making recommendations for their amendment.

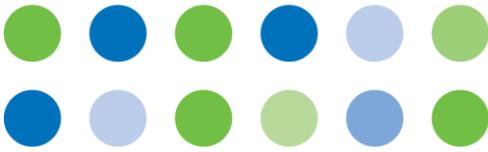
KPIs related to assessing the flexibility needs of the system:

- ✓ Quantify the current flexibility needs of the energy system at different timescales (short-duration to seasonal) and make an informed prediction on the evolution of those needs under credible future energy scenarios using adequate models and temporal granularity, e.g.:
 - MW of flexible (power generation) capacity/frequency control/ramping capacity per hour, etc.
 - MWh of energy that must be supplemented by other sources when RES are not producing in a future energy system with a share of RES in the energy mix corresponding to the percentage foreseen by the national government.
- ✓ Quantify the contribution of energy storage in increasing security of supply by reducing fossil fuel import dependency, e.g. Member States could perform a “stress test” to determine the ability of the future energy system to safeguard against supply disruptions (such tests should be conducted first without energy storage as an additional flexibility provider, and then including energy storage).¹
- ✓ Analyse and quantify the current level of participation of energy storage and other flexibility technologies in relevant markets, e.g. balancing and ancillary services markets.

KPIs related to grid-scale storage deployment:

- ✓ Compile data on installed and planned capacity (in MW) and expected annual use in terms of energy (MWh) of energy storage resources installed front-of-meter per technology category (electrochemical, electrical, chemical, mechanical, thermal).

¹ As an example of a stress test, the ENTSO-E mid-term adequacy forecast uses a reliability indicator called “Energy Not Served” (ENS), which indicates whether there is a supply adequacy problem or not looking 10 years ahead. A similar test and KPI could be executed for the integrated electricity, gas, and heat infrastructures, and cover a mid-to-long term timeframe ranging from 10 to 20 or even 30 years (towards 2050).



- ✓ Assess the contribution of energy storage technologies in decarbonising other sectors such as heating and cooling and transport.
- ✓ Quantify storage needs in order to optimise the integration of variable renewable energy, in alignment with network development plans.

KPIs related to behind-the-meter storage:

- ✓ Identify current capacity and volume of installed behind-the-meter storage (including not only batteries but also thermal storage).

KPIs related to electro mobility:

- ✓ Identify the number of electric vehicles (“EVs”) currently registered and asses the expected growth of EVs up to 2030.
- ✓ Identify the number of recharging/hydrogen refuelling infrastructure points per type of connection (e.g. fast chargers, bi-directional chargers, etc.) and needed development to cope with expected EV growth.

EASE would like to also highlight the importance of Member States assessing and identifying any potential barriers to the participation of energy storage in different markets, as well as any barriers to the further deployment of storage at all the different levels of the energy system, e.g. distorted tariff regime.

In addition, we believe that it is very important for Member States to monitor the development of competitive, simple, fair, and transparent ancillary services markets that allow for the stacking of multiple revenue streams.

Lastly, Member States should also define clear policy measures aimed at ensuring a level playing field for all flexibility providers, providing clear price signals and removing the identified regulatory and market barriers.

Future energy systems will rely on a wide range of services based on energy storage. Energy storage is a key technology which will play a central role in the decarbonisation of the European economy and it has already brought significant benefits to the current energy system. It is, therefore, important to ensure that energy storage is properly considered under the NECPs.

Yours sincerely,



Patrick Clerens

On behalf of the European Association for Storage of Energy



About EASE:

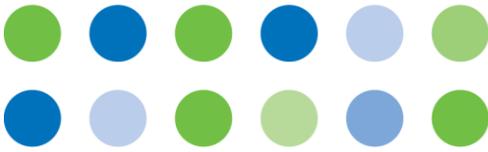
The European Association for Storage of Energy (EASE) is the leading member-supported association representing organisations active across the entire energy storage value chain. EASE supports the deployment of energy storage to further the cost-effective transition to a resilient, low-carbon, and secure energy system. Together, EASE members have significant expertise across all major storage technologies and applications. This allows us to generate new ideas and policy recommendations that are essential to build a regulatory framework that is supportive of storage.

For more information please visit www.ease-storage.eu

Disclaimer:

This response was elaborated by EASE and reflects a consolidated view of its members from an Energy Storage point of view. Individual EASE members may adopt different positions on certain topics from their corporate standpoint.

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