



# EASE Position on THINK Project Topic 8: Electricity Storage



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#### Promoting the use of energy storage in Europe and worldwide

EASE, the European Association for Storage of Energy, represents the voice of the energy storage community, actively engaged in promoting the use of energy storage in Europe and worldwide. EASE welcomes the public consultation on the THINK project, namely Topic 8 on Electricity storage.

EASE commends THINK for the work and progress achieved so far and welcomes the opportunity to provide feedback as well as to offer expertise in a constructive dialogue. We comment below on the aspects most relevant to EASE.

#### EASE positioning in the report - beyond a communication partner

In this report, EASE is proposed to adopt a dynamic communication role as a knowledge pool:

- by gathering information related to existing commercial or pilot & demonstration facilities in EU member states;
- by facilitating the exchange of information related to operating conditions of existing pilot projects

An energy storage road mapping exercise up to 2050 is proposed. It should take into consideration both centralised and decentralised energy storage based on intermediate milestones (2020, 2030 and 2040).

The European Electricity Grid Initiative (EEGI) is identified as the primary actor to carry out the task.

#### EASE comments and proposals

EASE welcomes its recognition as an important actor of the EU involvement.

EASE defined upon its creation an all-inclusive Working Programme 2011/2012, which objectives are to consolidate the EASE launch on the one hand by providing valuable answers to the points of concern of the members. On the other hand it will deliver a sound answer to the items currently questioned by the European institutions, which are mostly referring to storage in the overall system.

The EASE Working Programme can be clustered as follows:

- 1. Technology: Even though technology itself is not in the primary focus of a trade association, it is the basis for any kind of associative work. Apart from the knowledge that can be gathered by polling members' expertise, a minimum common EASE technology knowledge is needed. This addresses both storage devices and their system applications.
- **2. Economics**: Being in economic competition with other technical options, energy storage has to be carefully as well as properly assessed regarding its cost to benefit ratios. Assessment schemes and possible key figures need to be derived objectively. A common assessment scheme will be developed, promoted and established by EASE.
- **3. Regulations**: The implementation of storage systems within the energy system faces several regulatory challenges that require an approach at European level. The different storage functionalities must be framed by regulation allowing a proper allocation of revenues and costs between the different stakeholders within the system. EASE will evaluate the market design including storage, which is set around the world, and formulate appropriate proposals at European level. Consequently EASE will also become an interlocutor for the European institutions regarding storage–related regulatory issues such as network access fees, the eligibility to operate storage or cost allocation.
- **4. Outlook:** Defining itself as advocate of energy storage, EASE will clearly point out the opportunities for and shortcomings of storage nowadays and give recommendations for both R&D and the energy system evolution. **This includes a technical roadmap for energy storage**.

Communication has been given a fundamental role in the association. It is important not only to create knowledge but to ensure its dissemination to all the relevant stakeholders.

To carry out the task mentioned above, EASE has created five Working Groups (WGs):

#### Working Group 1

Storage Fact Sheets

#### Working Group 2

Segmentation & Application

#### Working Group 3

Assessment Schemes & Assessment of Applications

#### **Working Group 4**

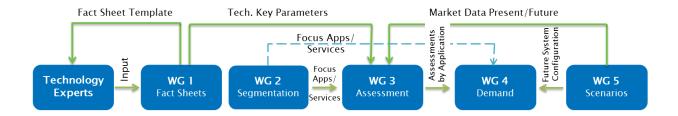
Determination of storage demand in Europe

#### **Working Group 5**

**Scenarios** 

- Draft storage fact sheets
- Poll input from nominated experts within EASE
- Segmentation of Storage
- Elaboration of Key Applications
- Evaluation Approach
- Evaluation of Applications
- · Definition of KPIs
- Assessment schemes for storage demand
- Definition of scenarios
- Choice of existing scenarios as EASE scenarios

The interfaces of the Working Groups can be schematically represented as follows:



The potential of energy storage should be explored in synergies with the broad EU energy policy – the internal market, 2020 and 2050 targets and infrastructure priorities. Energy storage shall be clearly positioned within these policies, in order to give consistent signals to the industry and other stakeholders.

The optimisation of the power system and the synergies between the existing system and storage technologies must be stressed. EASE considers the following as major action items:

- ✓ Developing and assessing visions for the role of energy storage in integrating variable renewable energy, optimising the use of generation and energy network capacities, providing services to the electricity system and promote distributed generation to improve energy efficiency and reduce CO₂ emissions envisaged by the EU's 2020 binding targets and the indicative targets for 2050 (Renewable Energy Sources Directive, Energy Roadmap 2050). Synergies could be identified by addressing storage for electricity systems and storage for transport together.
  - ✓ Consumer-based energy storage services.
- ✓ Storage is currently an unregulated electricity system asset; this may evolve if the added value for regulating it is identified.

- ✓ Develop a level playing field remove barriers related to access to neighbouring markets.
  - ✓ The support for storage within the EU internal electricity market.
- Regulatory adjustments to enable storage to facilitate the progress in internal electricity market in Europe.
- ✓ Support to storage potential mapping and to storage technology development, and demonstration including the development of interoperability of different smart energy networks and deployment through Horizon 2020 (Research, Development & Demonstration); how to integrate storage in the European Strategic Energy Technology (SET) Plan activities (European Industrial Initiative).
  - ✓ Support for energy storage should be given by Horizon 2020
- ✓ Distinctions to be made between short-term (by 2015 emergence of business cases supported by demonstrators...); and long-term visions (after 2020 storage used in Smart cities and in RES integration...? electric vehicles in common use..?) for storage roadmaps
- ✓ All different forms of energy storage will contribute to achieve the European climate and energy targets and to increase social welfare.
- ✓ Given the added value of energy storage regulation must support it within the EU internal electricity market.

To increase the market uptake of storage market introduction mechanisms are needed.

#### Conclusion

EASE reiterates its full support to the THINK report on Topic 8 – Electricity Storage and welcomes the possibility given to provide feedback and input through public consultation.

In its Working Programme, EASE has identified the need and is giving the first steps towards the development of an energy storage roadmap.

Representing all actors involved in the promotion of energy storage along the full value chain of electricity, EASE believes to gather the best combination of expertise necessary to deliver a comprehensive roadmap of energy storage technologies and applications.

Although recognising the crucial role of the EEGI, EASE points out the fact that by attributing the role of executor to this initiative one is indirectly positioning energy storage as a grid asset thus regulated. The existing complexity and uncertainty of issues like ownership and responsibility positions EASE as the best player to conduct such an effort.

We would therefore propose to the THINK Project team to recognise the crucial role of EASE for the future promotion of energy storage. We propose in addition that EEGI provides delegation of authority to EASE for performing this exercise thus avoiding duplication of efforts.

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The European Association for Storage of Energy (EASE) is the voice of the energy storage community, actively promoting the use of energy storage in Europe and worldwide.

EASE actively supports the deployment of energy storage as an indispensable instrument to improve the flexibility of and deliver services to the energy system with respect to European energy and climate policy. EASE seeks to build a European platform for sharing and disseminating energy storage-related information. EASE ultimately aims to support the transition towards a sustainable, flexible and stable energy system in Europe.

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#### Contact person:

Maria João Duarte | Policy Officer | EASE | m.duarte@ease-storage.eu | + 32 2 7432982

#### Disclaimer:

This paper was elaborated by EASE and reflects a consolidated view of its Members. It does not necessarily represent the exact views of any specific member company.

European Association for Storage of Energy – EASE aisbl Avenue Adolphe Lacomblé 59/8

B-1030 Brussels

Tel: +32 2 743 29 82 | Fax: +32 2 743 29 90

www.ease-storage.eu

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