



**Research and Innovation activities  
about energy storage integration in the electricity networks:  
ongoing activities at national level and future needs**

**Regional workshop (Finland, Denmark, Sweden, Norway)**

Original Sokos Hotel Vantaa, Hertaksentie 2, 01300 Vantaa, Helsinki, Finland  
**26 and 27 January 2016**

**Background**

This two-day workshop relates to the SET Plan activities within the Energy Union Framework.

The [Grid+Storage](#) service contract aims at providing the European Commission and the Member States with an upgraded version of the [Research and Innovation Roadmap for the electricity grids](#) as approved in 2013.

The novel features of this upgraded roadmap are three folds:

1. The roadmap will take into account an explicit description of Research and Innovation (R&I) activities recommended **about energy storage integration in the future electricity networks** (operations, maintenance, planning and market mechanisms) since energy storage is a way to increase the flexibility of the electricity system;
2. The roadmap upgrading process involves **the active participation of Member States**, by giving them the opportunity to show where and how public national funding addresses energy storage integration into grid activities: this contribution will reinforce the monitoring of national or regional Research and Innovation activities, thus helping to minimise the future risks of funding overlaps in EU28. And it will underline the role of the [ERA-Net Smart Grid Plus initiative](#) in catalysing more cooperative R&I activities between Member States.
3. The debates which are organised during nine “regional” workshops will favour the **involvement of national players in identifying needs for further research and innovation activities** at national and European level in order to accelerate the deployment of energy storage solutions throughout the electricity system.

This third workshop covers R&I activities in Finland, Denmark, Sweden and Norway: it is therefore a **unique opportunity to interact with network operators and energy storage stakeholders about the R&I results obtained so far, and the scope and contents of the future Research and Innovation roadmap.**

All stakeholders involved in R&I activities dealing with smart grids and energy storage integration in the power system are invited to attend this workshop. National R&I projects representatives are welcome to join a labelling process where the European added value of their activities will be identified jointly by the [ERA-Net Smart Grid Plus](#) and [Grid+Storage](#) teams.

Six other regional workshops are scheduled throughout Europe until March 2016, in order to share knowledge and agree about the future Research and Innovation activities needed for the next ten years.



## Program

26 January 2016

**9:00 REGISTRATION and WELCOME COFFEE**

**9:30 Energy Policy framework and the new SET Plan organisation**

*Henrik Dam, Policy Officer New energy technologies and clean coal, DG ENER, European Commission*

**10:00 Introduction to the future integrated R&I activities on Grid + Storage, overall objective and background context**

*Eric Peirano, Grid+Storage Project Manager, TECHNOFI*

**10:15 Smart Integrated Energy Storage (Sweden)**

*Björn Jernström, CEO, Ferroamp*

**11h00 COFFEE BREAK**

**11:30 Helen Ltd 1 MW storage in the Kalasatama-area (Finland)**

*Janne Huvilinna, Smart Grid Team, Helen Ltd*

**12:15 First round table (moderated by Eric Peirano, Project Manager of Grid+Storage, TECHNOFI)**

Interactions with the audience about

- lessons learnt by the projects presented during this session
- new knowledge needs to better integrate energy storage into the electricity system

**12:45 LUNCH BREAK**

**14:15 The Grid+Storage road-mapping process**

*Eric Peirano, Grid+Storage Project Manager, TECHNOFI*

**14:30 The Smart Grid Knowledge Sharing Platform**

*Daniel Hernández Maldonado, Consultant, TECHNOFI*

**14:45 From local trials towards a European Knowledge Community: ERA-Net Smart Grids Plus**

*Ludwig Karg, CEO, B.A.U.M. Consult GmbH*

**15:00 Power-to-Gas via Biological Catalysis (P2G-BioCat) (Denmark)**

*Markus Forstmeier, VP Business Development, Electrochaea*

**15:45 COFFEE BREAK**

**16:15 Energy Storage – Storage related grid integration work in national projects in Finland (Finland)**

*Hannele Holttinen, Principal Scientist, VTT*

**17:00 Large battery systems to stabilize frequency output from wind farms and for provision of primary reserve power (Denmark)**

*Rasmus Lærke, Plant Control Systems Manager, Vestas.*

**17:45 Second round table (moderated by Eric Peirano, Project Manager of Grid+Storage, TECHNOFI)**

Interactions with the audience about

- lessons learnt by the projects presented during this session



- new knowledge needs to better integrate energy storage into the electricity system

**18:15**    **END OF FIRST DAY**

**18:30**    **NETWORKING COCKTAIL**

## 27 January 2016

**9:00**    **Introduction to the program of the day**

*Eric Peirano, Grid+Storage Project Manager, TECHNOFI*

**9:15**    **Large scale balancing from Norwegian (Norway)**

*Atle Harby, Sub-programme leader, CEDREN, SINTEF Energy Research*

**10:00**    **COFFEE BREAK**

**10:30**    **Third round table** (moderated by Eric Peirano, Project Manager of Grid+Storage, TECHNOFI)

Interactions with the audience about the lessons learnt by the projects presented during this session and proposals about the new knowledge needs to better integrate energy storage into the electricity system

**11:00**    **Final round table** (moderated by Eric Peirano, Project Manager of Grid+Storage, TECHNOFI, with participation of projects representatives and members of EASE, EDSO and ENTSO-E)

- Impacts of the new knowledge presented by the six projects onto the Grid and Storage roadmap
- Recommendations for future R&I activities and regional investments about grid and energy storage solutions
- Options for the tentative deployment plans of the described solutions and barriers to be overcome according to the ERA-Net Smart Grids Plus approach

**12:00**    **NETWORKING LUNCH**

**14:00**    **END OF SECOND DAY**



### About Grid+Storage

[Grid+Storage](#) is a service contract for the European Commission (DG ENER), aiming at defining the European Research and Innovation roadmap integrating energy storage into grid activities.

[Grid+Storage](#) partners are:



### About ERA-Net Smart Grids Plus

[ERA-Net Smart Grids Plus](#) is an initiative of 21 European countries and regions, aiming at enabling the right technologies, market designs and customer adoption in order to achieve the Smart Grids vision in Europe. It has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 646039.

[ERA-Net Smart Grids Plus](#) funding partners are:

