



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

Regional workshop (Portugal and Spain)

Centro para el Desarrollo Tecnológico Industrial (CDTI), Calle Cid 4, Madrid, Spain.

15 and 16 February 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 fifth workshop covers R&I activities in Portugal and Spain: 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.

Five 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

15 February 2016

10:30 REGISTRATION and WELCOME COFFEE

11:00 Welcome speech and presentation of CDTI

Guillermo Alvarez Jimenez, Head of Department Societal Challenges, CDTI

11:15 Energy Policy framework and the new SET Plan organisation

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

11:30 Introduction to the activities of the Grid + Storage project

Eric Peirano, Grid+Storage Project Manager, TECHNOFI

11:45 The Almacena Li-ion battery project (Spain)

Miguel Ordiales, Demand Side Management Project Manager, REE

12:15 Flywheel applications on the Canary islands networks (Spain)

Cristina Gomez Simon, R&D and European Projects, REE

12:45 LUNCH BREAK

14:15 The Life Factory Microgrid project (Spain)

Raquel Garde, Energy Storage Area Manager, CENER

14:45 First 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 the new knowledge needs to better integrate energy storage into the electricity system

15:15 The Smart Grid Knowledge Sharing Platform

Daniel Hernández Maldonado, Consultant, TECHNOFI

15:30 From local trials towards a European Knowledge Community: ERA-Net Smart Grids Plus

Iva Gianinoni, ERA-Net Smart Grids Plus Support Team, Italian Expert of ISGAN Annex 1&2, RSE

15:45 The STORE project: Multiservice applications of storage for DSO applications (Spain)

Pablo Fontela, Project Manager R&D Unit, Endesa

16:15 COFFEE BREAK

16:45 Lessons learned from the SIRVE project and perspective of the EV-OPTI Manager project (Spain)

Carlos Arsuaga, Delegation in Brussels, Fundación CIRCE

17:15 National storage projects in Portugal (Portugal)

Pedro Godinho Matos, Business Development Manager, EDP

17:45 Second 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 the new knowledge needs to better integrate energy storage into the electricity system



18:15 **END OF FIRST DAY**

19:15 **NETWORKING DINER**

16 February 2016

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

Eric Peirano, Grid+Storage Project Manager, TECHNOFI

9:15 **Multi-attribute Energy Storage Planning**

Miguel Moreira da Silva, Head of Asset Management, REN

9:45 **Li-ion battery storage applications in Gas Natural Fenosa's distribution grid (Spain)**

John Chamberlain, Project manager, Gas Natural Fenosa

10:15 **The InovGrid project (Portugal)**

Ricardo Santos, Electrical Engineer, EDP Distribuição

10:45 **COFFEE BREAK**

11:15 **Redox flow batteries for industrial and commercial use (Spain)**

Luis Manuel Santos, Head of R&D&I, EDP Spain

11:45 **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 the new knowledge needs to better integrate energy storage into the electricity system

12:15 **EV recharge system by using regenerative train brakes (Spain)**

Carlos Tobajas Guerra, R&D Project Manager, Adif

12:45 **LUNCH BREAK**

14:15 **The Gorona del Viento El Hierro project (Spain)**

Gonzalo Piernavieja, Head of the Technological Reserch and Development Division, Instituto Tecnológico de Canarias

14:45 **The ALIA2 project (Spain)**

Igor Cantero, R&D Manager, CEGASA

15:15 **Fourth 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 the new knowledge needs to better integrate energy storage into the electricity system

15:45 **COFFEE BREAK**

16:15 **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



16:45 **END OF WORKSHOP/AOB**

17:00 **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:



About ETP SmartGrids

The [European Technology Platform for Electricity Networks of the Future](#), also called ETP SmartGrids, is European forum to shape technology research and innovation pathways which will make electricity networks smarter