

## Bridging the way for the future energy systems

**Thursday 20 June 16.00 - 17.30 - Brussels, Belgium**

The BRIDGE process fosters continuous knowledge sharing amongst projects thus allowing them to deliver conclusions and recommendations about the future exploitation of the project results, with a single voice. The BRIDGE initiative has been working continuously for four years and has now remarkable findings to share and discuss.

Within this session four distinctive projects presents their results, which in the end will be discussed and commented with EC representatives to take a look into how knowledge sharing can bridge the way for the development of the European future energy system

### Introduction to BRIDGE initiative – Eric Lecomte (16:00 – 16:05)

### STORY – Leen Peeters (10')

#### **The Story of Storage**

*Lessons learnt for storage technologies and implementations*

- *Is storage technology the solution for future 100% renewable energy production?*

STORY wants to demonstrate and evaluate innovative approaches for energy storage systems. The challenge is to find solutions, which are affordable, secure and ensure an increased percentage of self-supply. The project consists of eight different demonstration cases each with different local / small-scale storage concepts and technologies, covering industrial and residential environments.

### E-LAND - Thomas Mikkelsen (10')

#### **Building communities to support the energy transition**

*Challenges and lessons learnt from pilot site community building*

The continued decarbonization of the energy sector through the use of renewable energy sources provides both interesting opportunities for local energy systems and challenges for existing electricity networks. Mainland regions such as isolated villages, small cities, urban districts or rural areas oftentimes have issues with weak or non-existing grid connections. These areas are known as energy islands.

The goal of the European-funded H2020 project E-LAND is to provide a synergistic solution between technological, societal and business challenges that the energy sector faces.

The main concept is the E-LAND toolbox – a modular set of methodologies and ICT tools to optimize and control multi energy islands and isolated communities. The modular toolbox can be customized to meet local requirements and expandable to incorporate new tools as new challenges arise

## SMILE – Henrique Pinto Correia (10')

### **Local smart grids – the future grid structure for optimal use of renewables?**

*Lessons learnt from optimizing grids on island level*

The development of Smart grids are an important prerequisite for the transition towards a clean, affordable and reliable energy system. Through Smart grids, peak demand can be reduced and the energy grid can be stabilized. Therefore, the development of market ready technologies that facilitate this transition are important. The Smart Islands Energy System (SMILE) project will demonstrate nine different smart grid technologies on three different islands. The end goal of the project is to foster the market introduction of these nine technologies.

## GoFLEX – Bradley J. Eck (10')

### **Building a market for flexibility and decentral production**

*What is required to build an efficient market across Europe for flexibility and decentral production?*

GOFLEX innovates, integrates and demonstrates existing smart-grid technologies enabling the cost-effective use of energy flexibility in distribution grids for regional energy market actors by:

- increasing the grid's available adaptation capacity,
- safely supporting an increasing share of renewable electricity generation,
- improving observability and manageability of distribution grid for use of demand response and
- supporting localized concentration of prosumers DR for DSO to prevent congestion and energy imbalance and avoid investments in transmission and distribution networks

## The new Electricity Market Directive – Manuel Sanchez-Jimenez (16:55-17:10)

- What are the new provisions of the Electricity Market Directive that are most relevant for enabling the energy transition?
- How do they address the barriers encountered in the four projects presented?
- How can the demonstrations in the projects contribute to further developing the legislation?

## Panel discussion (17:10-17:30)

Discussion on the road to the transition of the energy system in Europe based on the four key topics presented in the first part of the conference.

- What drives the energy transition?
- What hinders the energy transition in Europe?
- How can storage, communities, smart grids and the market for flexibility help pave the way for successful transition of the energy system in Europe – and where is more focus and attention needed?

***The conference ends with a possibility to ask questions to the speakers and a short discussion among the participants.***