

Discussion summary



Information and dissemination

- Simple information: Energy storage for dummies
 - EERA JP ES Sub-programs to produce
- How to disseminate it?
 - National stakeholder groups in ETIPs
 - EERA AISBL platforms
 - Videos on YouTube
 - Newspapers (large national), magazines, etc
 - "Nature Energy" and other high quality publications

Message to the public and policy makers

Objective: Awareness of the need for storage to meet climate targets

Message:

- Not one solution fits all – use what there is!
- What is available today, what are the timeline for different options, what is the maturity level
- Balanced view on different options
- What is the challenges for the future energy systems (related to storage)

Use EERA budget to create suitable publications for public
EERA AISBL to assist JP's in communication

Research needs

- Goal to develop:
Power and energy rich combined storage systems that are not too complex and run smoothly
 - Labs: EnergyLab 2.0 (GE), CEDER (SP)
 - Simulation model tools available – combine all important aspects
 - Demonstration sites in real applications?
- Research on regulations important for energy storage
 - Evaluate the consequences of current and proposed regulations (costs, benefits, environmental impacts, etc)
- Bubble diagram
 - Include maturity, timeline, efficiency
 - Where is hydrogen? (or other chemical carriers)

Other issues – final comments

- Tender for large projects in Germany for "Energiewende"
 - Energy storage important part
- Power-to-molecule also next time
- Hybrid workshops show challenges very well
- Afraid we are repeating the same thing over again – need to have some new and "crazy ideas"
 - Carnot batteries?
 - Power to X to power
 - Geothermal + flow batteries (Jesus Palma starting a project)
 - Liquid metal battery
- Combination of different technologies
- Reliable and independent information required (EERA database?)
- Recycling, industry insight important
- Success stories (from companies) important
- Discussion level very good (improved)
- Good to see what is going on in science
- Combine workshops with one or even several EU projects together