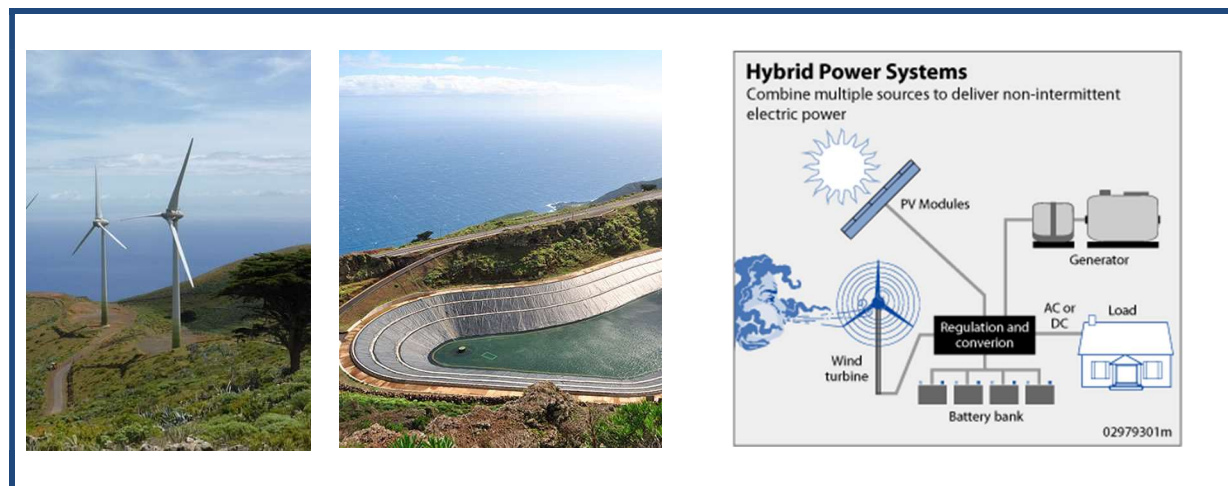


**Objectives:** To better understand sustainability implications (techno-economics and environmental impacts) of conventional and hybrid energy storage technologies regarding used materials, system design, their hybridization, and finally system optimization and modelling approaches.

**Target audience:** Scientists working in EERA and industry related to energy storage, smart grids and hybrid energy systems



**Expected outcome are:**

- Make information on existing hybrid systems and sustainability implications and modelling approaches available
- Point out research needs for hybrid energy and energy storage systems and their integration regarding sustainability aspects
- Raise awareness about the relevance of sustainability aspects for technology development and selection
- Produce popular science information on hybrid energy and energy storage to inform policy and public bodies

### Topics:

- **Materials for energy storage technologies:** Relevance of sustainability indicators for selection
- **Energy storage systems:** What are critical aspects for the design of energy storage technologies
- **Sustainability** of hybrid energy storage systems, how to evaluate them, which indicators should be used
- **Optimization** of hybrid energy storage systems regarding sustainability
- **Sharing best practices** of multi energy modelling approaches and data - The open Shared Data and Information Platform and PreCISES approach of the **SmILES project**
- EERA JP Advanced Materials and Processes for Energy Application (**AMPEA**) input

**Potential Publication:** Possibility to submit a paper in a special issue of the Journal of Energy Storage (Impact Factor 3.517) for EERA JP ES and the workshop (not limited to presenters).

*Location: Gestore Servizi Energetici; Viale Maresciallo Pilsudski, 92, 00197 Roma RM, Italy*  
Registration is open until 20th October at <http://www.sci.kit.edu/302.php>

Workshop partners: