

Joint EERA – SmiLES Workshop on Hybrid energy and Energy Storage Systems

Date 7th – 8th November 2019

Location: GSE, Viale Maresciallo Pilsudski, 92, 00197 Roma RM, Italy

Thursday 7th of November

Time	Topic	Presenters
12:00	Get together lunch	All
13:00	Welcome	Luca Benedetti, GSE
13:05	Opening and introduction. Goals of the workshop	Workshop organisers
13:15	Introduction to SP6	Marco Ferraro, CNR and Manuel Baumann, KIT
Techno-economic and environmental assessment of materials for energy storage technologies		
13:20	The sustainability challenge of the energy storage technologies	Francesco Sergi, CNR
13:40	Introduction to AMPEA and a case study related to materials for chemical energy storage with the SUNERGY initiative	Frédéric Chandezon, CEA
13:50	Panel discussion and audience Q&A	Marco Ferraro, CNR
14:40	Coffee Break	
Techno-economic and environmental assessment of energy storage systems		
15:00	Techno-economic and environmental assessment of energy storage systems. Role of different storage technologies	Michael Belsnes, SINTEF and EERA JP E3S
15:20	Ecodesign of electrochemical and chemical storage	Maurizio Cellura, University of Palermo
15:30	Panel discussion and audience Q&A	Manuel Baumann, KIT
16:20	Coffee Break	
Topic: The SmiLES Project		
16:40	Introduction	Isabelle Südmeyer, KIT
16:45	Upscaling – Energy System Model Insights	Frank Meinke-Hubeny, VITO energyville
17:05	SmILES - PreCISE approach	Tue Jensen, DTU
17:25	Shared Data and Information Platform	Clemens Döpmeier, KIT
17:45	Discussion with the audience	Myriam Gil Bardají, KIT
18:00	End of meeting day one	

Friday 8th of November

Time	Topic	Presenters
Sustainability and evaluation of hybrid energy storage systems		
09:00	Assessment of combined renewable power, heat and fuels production in the context of time-dependent supply and demand	Moritz Raab and Ralph-Uwe Dietrich, DLR
09:20	Critical Raw Materials for Energy Storage - An Outlook on European Innovation and Education Activities	Olli Salmi, EIT RawMaterials
09:30	Summary of EERA Fuel Cells and Hydrogen workshop	Stephen McPhail, ENEA
09:40	Panel discussion and audience Q&A	Atle Harby, SINTEF
10:40	Coffee Break	
Optimization of hybrid energy storage systems regarding sustainability		
11:00	Optimal management of a hybrid battery pack	Luigi Pellegrino and Enrica Micolano, RSE
11:20	Stochastic power management strategy for hybrid energy storage systems to enhance large scale wind energy integration	Linda Barelli, University of Perugia
11:30	Panel discussion and audience Q&A	Giovanna Cavazzini, University of Padova
12:15	Final discussion, brainstorming and conclusion: Recommendations for research, industry and policy makers	Workshop organisers
13:00	Lunch	

JP AMPEA Special Session

Time	Topic	Presenter
14:00	Sustainability issues when developing innovative materials for energy technologies	Monica Fabrizio, CNR
14:20	Use case 1: photocatalytic membrane reactors for CO₂ conversion into liquid fuels	Giuseppe Barbieri, CNR
14:30	Use case 2: Direct electrocatalytic conversion of CO ₂ into chemical energy carriers in ionic membrane reactors"	José Serra, UPV
14:40	Use case 3: Redox flow batteries	Sophie Didierjean & Mathieu Etienne, Université de Lorraine
14:50	Discussion towards sustainability in AMPEA	Marie-Laure Fontaine, SINTEF
15:30	Final Discussion	
16:00	End of meeting day two	