

Padova, 9 maggio 2022

## **INNOVAZIONE NEI SETTORI DELL'ACCUMULO DI ENERGIA, DELLE CELLE A COMBUSTIBILE E DELL'IDROGENO**

### **DOMANI INCONTRO AL PALAZZO DELLA SALUTE**

Il Centro Interdipartimentale di ricerca "Centro Studi di Economia e Tecnica dell'Energia Giorgio Levi Cases" martedì **10 maggio 2022** ospita l'evento internazionale "*Energy storage, Fuel Cells & Hydrogen. Bringing research and industry closer: accelerating innovation and uptake of new technologies*" legato al progetto europeo SUPEERA, coordinato dall'associazione European Energy Research Alliance (EERA aisbl), rete internazionale che vede coinvolti molti ricercatori dell'Ateneo di Padova.

Tale evento vedrà la partecipazione congiunta di due diversi programmi di EERA, il **Joint Program Energy Storage** ed il **Joint Program Fuel Cell and Hydrogen**. L'organizzazione di questo e degli altri meeting di EERA che si terranno a Padova nei giorni 11 e 12 maggio 2022, è stata affidata alla **prof.ssa Giovanna Cavazzini**, membro del Management Board del Joint Program Energy Storage e vice-coordinatore del sottoprogramma dedicato al Mechanical Storage.

**Il tema dell'incontro verterà sulla cooperazione tra ricerca e industria come opportunità per accelerare l'innovazione nei settori dell'accumulo di energia, delle celle a combustibile e dell'idrogeno.** Verranno presentati dei casi di successo italiani e sarà approfondito il loro potenziale di replicazione in altri paesi europei. Parte della discussione sarà dedicata al ruolo della R&I nelle strategie dell'UE per rispondere all'attuale crisi energetica.

In allegato il programma dell'evento che si svolgerà il **10 maggio 2022 al Palazzo della Salute, via San Francesco 90 a Padova.**

## Energy storage, Fuel Cells & Hydrogen. Bringing research and industry closer: accelerating innovation and uptake of new technologies.

EERA through the strategic [SUPEERA project](#) supports the implementation of the SET Plan, integrating it at the same time into the broader context of the Clean Energy Transition. The project foresees several activities to facilitate the innovation and uptake by the industry. One of the adopted approaches has been an [analysis of the energy measures in the 27 National Energy and Climate Plans \(NECPs\)](#) aiming at reaching Member States' and EU's 2030 climate targets. This analysis resulted eventually in the identification of six common pathways (Wind energy, Energy System integration, Bioenergy, Energy storage, Hydrogen and Solar Power).

These common pathways will provide the basis for the recommendations on R&I priorities in support to the Clean Energy Transition goals across Europe and will serve as an input to improve cooperation between research and industry. In addition to long-term strategies and policies, the European energy research community is requested to react swiftly to unprecedented geopolitical settings with energetic priorities which are laid down in the [REPowerEU communication](#).

**Following a series of introductory [webinars](#), this workshop will take place in Padova, Italy, and it will discuss research-industry cooperation practices and opportunities to accelerate innovation in the **Energy Storage** and **Fuel Cells and Hydrogen** technologies/sectors.**

The purpose is to bring forward successful Italian implementation examples of the two selected pathways, and to explore their replication potential towards other regions/countries with similar priorities which would eventually trigger investments in low-carbon technologies. Part of the discussion will be dedicated to the role of the R&I in the EU strategies to respond to the current energy crisis.



## Draft Agenda

09:00	Welcome and greetings	<b>Alberto Bertucco</b> , Head of the Interdepartmental Center Levi Cases
09:05	Background: SUPEERA project. Presentation of two pathways: Energy Storage & Fuel Cells & Hydrogen	<b>Maria Oksa</b> , Senior Scientist - Project Manager, VTT
09:20	<b>Collaboration between research and industry: best practices, barriers and replicability potential</b>	
75' – 5 ppt of 15'	<ul style="list-style-type: none"> <li>The SET Plan as a tool for EU-wide collaboration on R&amp;I priorities of low-carbon technologies</li> <li>JP Energy Storage</li> <li>JP Fuel Cells and Hydrogen</li> <li>Best practice/ barriers and R&amp;I needs from relevant Italian stakeholders (industry, SMEs, researchers, etc.)</li> <li>5 MW wind park and a hydrogen plant in Sicily</li> </ul>	<p><b>Ivan Matejak</b>, SUPEERA coordinator, EERA</p> <p><b>Myriam Gil Bardaji</b>, JP Energy Storage Manager, KIT</p> <p><b>Stephen Mc Phail</b>, JP FCH coordinator,</p> <p><b>Andrea Bernardi</b>, Head of Solar Storage &amp; Bio-Energy Technologies, ENI</p> <p><b>Paolo Prevedello</b>, Hydrogen Innovation Project Engineer, ENEL Green Power</p>
10:35	Panel discussion and Q&A	
10:55	<b>Initiatives, funding and collaboration opportunities on Energy Storage and FCH</b>	
50' - 2 ppt of 15', 1 ppt of 20	<ul style="list-style-type: none"> <li>Horizon Europe calls (title and a short description) scheduled for 2023-24 in Cluster 5 and Cluster 4 relevant for JP FCH/ES with the aim to defining potential participants</li> <li>ETIP Batteries</li> <li>SIMBA project</li> </ul>	<p><b>Madalina Rabung</b>, Scientist, Project Manager, Fraunhofer IZFP</p> <p><b>Alessandro Romanello</b>, ETIP Batteries coordinator, InnoEnergy</p> <p><b>Maiden Zarrabeitia Ipina</b>, Postdoctoral Researcher, KIT</p>
11:45	Panel discussion and Q&A	
12:05	Coffee break	
12:20	<b>Cross-sectorial dialogue for system solutions towards the CET objectives</b>	
35' – 2 ppt of 15', 1	<ul style="list-style-type: none"> <li>Systemic and cross-sectorial issues pertaining to the Clean Energy Transition</li> </ul>	<b>Spyridon Pantelis</b> , Project Manager, EERA

ppt of 5'	<ul style="list-style-type: none"> <li>• Examples from technological cross-cutting issues (energy efficiency, ESI, advanced materials?)</li> <li>• Examples from non-technological cross-cutting issues (policy &amp; regulation, standardization)</li> </ul>	<p>?</p> <p><b>Dina Lanzi</b>, Head of Technical Business Unit Hydrogen, SNAM</p>
12:50	Panel discussion and Q&A	
13:10	Lunch break	
	<b>Towards EU's strategic autonomy: The crucial role of energy storage and hydrogen</b>	
14:30	<b>EERA Joint Programme Energy Storage</b>	
45' – 3 ppt of 15'	<ul style="list-style-type: none"> <li>• Chemical energy storage</li> <li>• Hydropower</li> <li>• Superconducting Magnetic energy storage</li> </ul>	<p><b>Linda Barelli</b>, Associate Professor, University of Perugia</p> <p><b>Prof. Giovanna Cavazzini</b> Turbomachinery &amp; Energy System research group, University of Padova</p> <p><b>Xavier Granados</b>, Senior Scientist, CSIC-ICMAB</p>
15:15	Panel discussion and Q&A	
15:35	Coffee break	
15:50	<b>EERA Joint Programme Fuel Cells and Hydrogen</b>	
45' – 3 ppt of 15'	<ul style="list-style-type: none"> <li>• Biomass: the natural link between energy storage and hydrogen</li> <li>• Underground storage, liquid organic hydrogen carriers, compression</li> <li>• Monitoring catalyst degradation using electron energy loss spectroscopy and microscopy</li> </ul>	<p><b>Vincenzo Mulone</b>, Associate Professor, Uni Tor Vergata</p> <p><b>Klaus Taube</b>, Representing Director, Inst. of Hydrogen Technology, Hereon</p> <p><b>Paulo Ferreira</b>, Group Leader Atomic Structure-Composition of Materials, INL</p>
16:35	Panel discussion and Q&A	
16:55	Wrap-up and next steps	

