



What is the EERA joint programme for energy storage (JP es)?

The EERA Joint programme for Energy Storage is the first pan-European programme to bring together all major fields of energy storage research. JP ES therefore represents a unique opportunity to align research and development activities in the field.

What is the energy storage roadmap?

The roadmap is the result of a joint effort between the European Association for Storage of Energy and the Joint Programme on Energy Storage under the European Energy Research Alliance. The central parts of the work were done in January-February 2013 by a core working group composed of members appointed by both organisations.

How many joint research programmes does EERA have?

EERA's joint research programmes cover the whole range of low-carbon technologies as well as systemic and cross-cutting topics. To organise work within the association and realise its strategy, EERA operates 18 joint research programmes. AMPEA AMPEA AMPEA stand for "Advanced Materials and Processes for Energy Applications";

What are the applications of energy storage?

The storage applications in focus are mainly those directly related to an electricity system with significantly increased share of renewable generation, whereas needs for energy storage related to the future fuelling of transportation are only marginally mentioned.

How will the stories research consortium accelerate the development of hybrid energy storage?

The StoRIES research consortium will accelerate the development of innovative hybrid energy storage systems. (Photo: Amadeus Bramsiepe, KIT) The member states of the European Union (EU) plan to achieve climate neutrality by 2050. This will not only require extended use of renewable energy sources, but also investments in energy storage systems.

What are the benefits of industrial thermal energy storage?

"Industrial thermal energy storage (TES) can provide a wide array of benefits, such as catalysing an increase in the proportion of renewable energy supply, facilitating surplus heat recovery, and decoupling energy supply and demand for smart energy usage.



We are happy to inform you that the "Hybrid Energy Storage Days" - a 3-days event with several discussions on hybridisation for energy storage - will be held from 04-06 December 2023 in Vienna, Austria. The event is jointly organized by the EERA JP ES and StoRIES project and will take place at the premises of TU Wien as well as at the Austrian Institute of Technology.



EERA covers the complete range of low-carbon energy technologies and systematic topics. The RISEnergy project kick off meeting took place in Brussels and online between 12 and 13 March 2024. The recordings and presentations of the meeting can be found below: Agenda 1 st day ( a?|



Advanced adiabatic compressed air energy storage (AA-CAES) Industrial process flexibility and energy efficiency in glass, cement and steel industries, etc. Process steam supply from pressurized water storage, a.k.a. Ruths or steam accumulator



The White Paper "Industrial Thermal Energy Storage a?? Supporting the transition to decarbonise industry" has been produced by the European Energy Research Alliance's Joint Programme on Energy Efficiency in a?|



EERA covers the complete range of low-carbon energy technologies and systematic topics. Main electrochemical storage research topics of ENEA: ENEA has 12 research groups working on different aspects along the battery value chain. Electric energy storage systems: Lithium batteries and/or Ultra capacitors; Complete vehicles testing on rolling



EASE and EERA have joined their knowledge to produce a comprehensive Roadmap describing the future European needs for energy storage in the period towards 2020-2030. The Roadmap also gives recommendations on the developments required to meet those needs.



LAES is mainly an energy type rather a power type of storage technology and hence suitable for large scale applications. LAES has an application range that overlaps with compressed air energy storage (CAES) and pumped hydro energy storage (PHES). It is however far energy dense than the two technologies and also



EASE-EERA Energy Storage Technology Development Roadmap 9  
1. Remove regulatory barriers to enable innovative, first-of-a-kind demonstration projects to study the technical feasibility and market applications of energy storage systems.  
2. Establish a definition of energy storage in the EU regulatory framework.

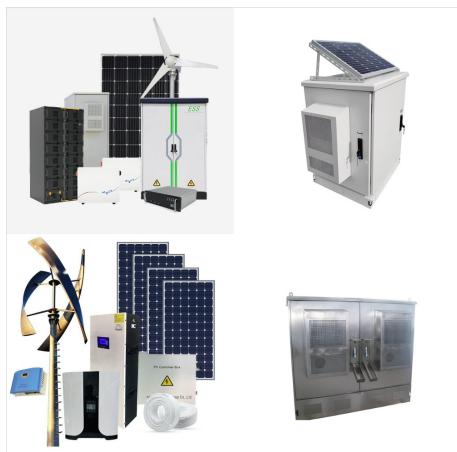


the use of energy storage in Europe and worldwide. EASE actively supports the deployment of energy storage as an indispensable instrument to improve the flexibility of and deliver services to the energy system with respect to European energy and climate policy. EASE seeks to build a European platform for sharing and disseminating energy storage-



The EERA Joint Programme on Energy Storage (JP ES) included in 2023 an Advisory Board, which serve as a forum for the energy storage sector to advise and give feedback to the JP ES

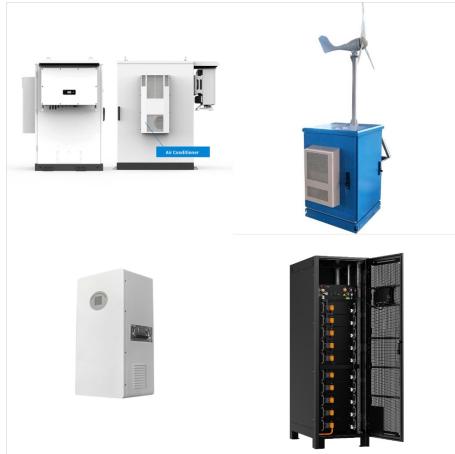
Management Board and Steering Committee. This ensures that the JP ES is aligned with the research and innovation needs from stakeholders in the energy storage domain.



The Sub-program 6: Techno-economics and sustainability of energy storage technologies of the EERA Joint Programme Energy Storage (JP ES) offers all EERA JP ES PhD students the possibility to present and discuss their work to their peers a?|



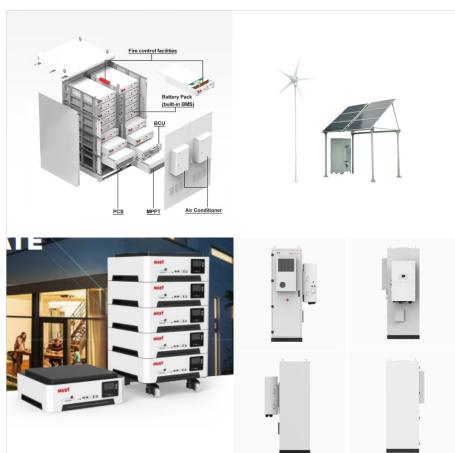
EERA covers the complete range of low-carbon energy technologies and systematic topics. The main objective of the JP ES Prize is to recognise the research achievements of young researchers from JP ES and outside JP ES. Workshop on Supercapacitors and Energy Storage. JP ES Awards 2022. EERA JP ES Award at GCMAC 2022. EERA JP ES Award at a?|



EERA is the European Energy Research Alliance that brings together universities and research centres working on low-carbon energy technologies, materials and systemic, cross-cutting topics related to the clean energy transition. The website provides information on the latest energy and climate policy and research developments as well as information on events and opportunities a?

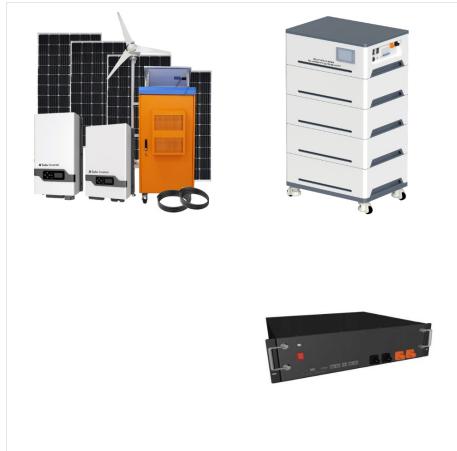


The existing joint energy storage roadmap of EASE and EERA will be expanded with the aim of optimizing the upgrade and networking of research infrastructures to promote short-term innovations. On top, StoRIES will establish an ecosystem with international peer partners from Research and Industry to foster open science and promote new energy



The Energy Storage Global Conference 2024 (ESGC), organised in Brussels by EASE a?? The European Association for Storage of Energy, as a hybrid event, on 15 - 17 October, gathered over 400 energy storage stakeholders and covered energy storage policies, markets, and technologies.

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Starting in 2021, EERA JP ES supports its members through student and young researcher exchanges. The main objectives of the EERA JP ES mobility scheme is to: reinforce collaboration within JP ES in order to realise new breakthrough energy storage solutions, increased understanding and deepening research relationships,



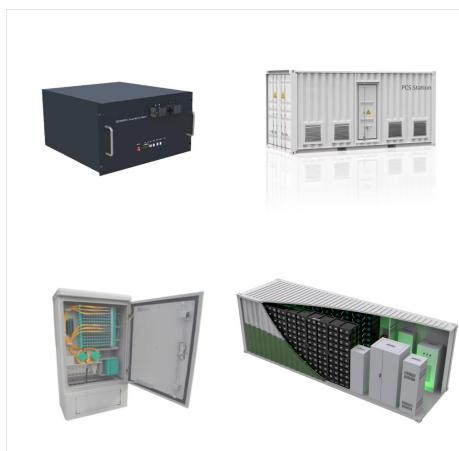
7 th of December 2021 9:00 am a?? 11:20 am cet. Prospective sustainability assessment of energy storage technologies - methods and case studies. The Sub-program 6: Techno-economics and sustainability of energy storage technologies of the EERA Joint Programme Energy Storage (JP ES) offered all EERA JP ES PhD students the possibility to present and discuss their work to a?|



EERA Joint Program on Energy Storage - SP3 on Thermal Storage <https://eera-es / Thermochemical Energy Storage> a?? Chemical Reactions Storage Principles Thermochemical energy storage (TCS) with chemical reactions is one of the most promising storage technologies of the future. The principle of TCS is a reversible gas-solid reaction consisting



EERA covers the complete range of low-carbon energy technologies and systematic topics. Visit the eera website; Become a Member; Home; About Us. Members; Sub-programmes. SP1 - EES The SUPEERA project supports the implementation of the SET-Plan and the Clean Energy Transition. It monitors and optimises the actions under the SET-Plan



The SP2 group focuses on the chemical energy storage based on the conversion of renewable electrical energy into the energy contained in chemical bonds. The conversion technology, Power to X (P2X), converts renewable feedstock air (CO<sub>2</sub>, N<sub>2</sub>) and water into energy dense fuels and chemicals, providing long-term (seasonal), large-scale (EJ)



EERA covers the complete range of low-carbon energy technologies and systematic topics EERA Joint Programme Energy Storage - News & Resources Meet Stefano Passerini, our Deputy Coordinator, sharing invaluable insights on the significance of energy storage. Renewable energy holds immense potential, but without effective #energystorage, achieving



EERA covers the complete range of low-carbon energy technologies and systematic topics SP1 - Electrochemical Energy Storage. SP1 focuses on batteries and electrochemical storage systems as two of the priority key enablers for the green energy transition within the transport sector when including intermittent supply from renewables.



Our mission is to drive the development and deployment of Carbon Capture and Storage (CCS) technologies to significantly reduce CO<sub>2</sub> emissions and help Europe achieve its climate goals. By fostering collaboration between research institutions, industry, and policymakers, EERA CCS is at the forefront of innovative solutions for a sustainable future.



First Annual Conference on Mechanical and Magnetic Energy Storage Contractors" Information-Exchange, Luray, Virginia, October 24-26, 1978. [4]  
Beck H.P., Schmidt M., "Windenergiespeicherung durch Nachnutzung stillgelegter Bergwerke",



EASE/EERA Energy Storage Technology Development Roadmap (2017) and the mission-oriented Study on Energy Storage to speed up the Energy Transition (2018). She is author/co-author of over 40 publications in peer-reviewed international scientific journals and she has participated in 10 European projects dealing with energy storage, including two



The European Association for Storage of Energy (EASE) and the Joint Programme on Energy Storage under the European Energy Research Alliance (EERA) have come together to draft an updated Energy Storage Technology Development Roadmap.. The roadmap provides a comprehensive overview of the energy storage technologies being developed in Europe today a?|



The EERA Joint Programme on Energy Storage (JP ES) was officially launched in 2011 and is coordinated by Karlsruhe Institute of Technology in Germany. This JP strongly fosters the efficient development of new energy storage technologies and supports the SET Plan objectives and priorities by "pooling and integrating activities and resources



EERA covers the complete range of low-carbon energy technologies and systematic topics. Visit the eera website; Become a Member; Home; About Us Reflections stemming from the collaborative workshop on Industrial Thermal Energy Storage, 7 November 2023. Read More. Past News & Resources. News 27 July 2023 JP ES Summer



Superconducting Magnetic Energy Storage, SMES, stores energy directly as electricity, and this allows a very fast delivery of high power at high efficiency. The central vision / mission is to enable highly efficient, reliable and cost effective fast SMES solutions.