Special Issue

Grid-Scale Energy Storage Technologies in Achieving a Carbon Free Electricity System – Technological Challenges and Perspectives

Message from the Guest Editors

Energy storage is expected to play a key role in enabling the future grand transitioning of the global electricity sector to a carbon-free, reliable and secure electricity system, facilitating the grid penetration and market introduction of renewable-based power generation. This Special Issue invites high-quality research papers covering a wide range of topics related to the key challenges of well advanced or forthcoming grid-scale energy storage applications from the aspect of a number of underlying technical, economic and regulatory issues that need to be overcome to allow further storage deployment at European and global level.

- Electricity system
- Electricity production and storage
- Grid-scale storage
- Electricity system flexibility
- Security of energy supply
- Renewable energy sources
- Decarbonization
- Carbon-free electricity
- Energy storage technologies

Guest Editors

Prof. Dr. John Anagnostopoulos

School of Mechanical Engineering, National Technical University of Athens, Athens, Greece

Dr. Marina Kapsali

Mechanical Engineer, Energy Planning and Security of Supply Unit, Greek Regulatory Authority for Energy (RAE), Athens, Greece

Deadline for manuscript submissions

closed (30 June 2022)

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Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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