



an Open Access Journal by MDPI

# **Microgrids and the Integration of Energy Storage Systems**

Guest Editors:

#### Dr. Alexander Micallef

Department of Electrical Engineering, Faculty of Engineering, University of Malta, MSD 2080 Msida, Malta

#### Prof. Dr. Zhaoxia Xiao

School of Electrical Engineering, Tiangong University, Tianjin 300387, China

Deadline for manuscript submissions: closed (5 June 2023)

### Message from the Guest Editors

Decarbonization of the utility grid, market integration, consumer empowerment, and technical innovations all are key objectives in the international energy policy for the coming decades. Grid integration constraints are limiting the deployment potential of renewable energy sources (RESs). Therefore, while RESs are essential components to reach the key objectives, energy storage is the enabler that facilitates the integration of RESs in a cost-effective and flexible manner. The diversification of RES generation and integration of energy storage in modern power systems are also leading to the formation of island microgrids and microgrid clusters/communities for more reliable and sustainable electricity networks.

This Special Issue aims to publish high-quality research and review papers related to microgrids and energy storage systems. Topics of interest for publication include but are not limited to:

- Integration of RES;
- Behind-the-meter energy storage systems;
- Utility-scale storage systems;
- AC/DC microgrids;
- Island microgrids;
- Microgrid clusters/communities;
- Ancillary Services under high variable RES penetration;
- Maritime microgrids.









an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Enrico Sciubba

Department of Mechanical and Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 Roma, Italy

#### 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.

# **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Control and Optimization)

### **Contact Us**

*Energies* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/energies energies@mdpi.com X@energies\_mdpi