



energies



an Open Access Journal by MDPI

Energy Management of Renewable Integrated Microgrid Systems: Future Trends and Challenges

Guest Editor:

Dr. Guilherme Vieira Hollweg

Department of Electrical and
Computer Engineering, University
of Michigan-Dearborn, 4901
Evergreen Rd., Dearborn, MI
48128, USA

Deadline for manuscript
submissions:

15 November 2024

Message from the Guest Editor

This Special Issue focuses on the evolving landscape of renewable integrated microgrid systems. Our objective is to provide a comprehensive platform for discussing the latest advancements, future trends, and emerging challenges in this rapidly evolving field.

We invite contributions that explore innovative strategies in energy management, modeling, operation and control, emphasizing the integration of renewable energy sources into microgrid systems. Topics of interest include, but are not limited to, the following:

- Advanced control strategies for microgrids
- Power converters control and robustness in less-inertia microgrids
- Grid resiliency and reliability
- Energy storage solutions
- Economic and market analysis
- Regulatory and policy frameworks
- Environmental impact assessments
- Technological integration with IoT, AI and blockchain
- Socio-economic impacts
- Distributed generation and resource optimization
- Energy security and independence



mdpi.com/si/191027

This Special Issue aims to help bridge the gap between theoretical research and practical applications, providing insights that can guide future innovations and policy-making in the field of renewable energy integrated microgrid systems.

Special Issue



energi



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 (*Engineering (miscellaneous)*)

Contact Us

Energies Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)