

Special Issue

Microgrids, Electrical Power and Sustainable Energy Systems

Message from the Guest Editors

This special issue aims to compile cutting-edge research contributions that advance our understanding of hybrid microgrid systems and their integration with emerging energy technologies.

Suggested themes include, but are not limited to:

- Novel control strategies and power management algorithms for hybrid AC/DC microgrids
- Integration of advanced energy storage systems (batteries, supercapacitors, hydrogen) in hybrid configurations
- Power quality enhancement and stability analysis in mixed AC/DC environments
- Fault detection, isolation, and recovery mechanisms for hybrid microgrids
- Vehicle-to-grid integration and bidirectional power flow management
- Standardization and interoperability solutions for hybrid microgrid systems
- Artificial intelligence and machine learning applications in hybrid microgrid control
- Economic and technical feasibility studies of hybrid AC/DC implementations
- Cybersecurity and resilience enhancement in hybrid microgrid architecture
- Real-world case studies and practical implementation experiences

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Deadline for manuscript submissions

28 February 2026



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/230957

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Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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