

Special Issue

The Role of Smart Grids in Promoting Sustainable Energy Practices

Message from the Guest Editor

The global energy structure is accelerating its transition to sustainable smart grids. To further promote academic exchanges in this field, we invite submissions on the following topics:

- Research on real-time monitoring and early warning systems for the conditions of smart grid equipment based on the convergence of 5G and the Internet of Things;
- Application of blockchain technology in smart-grid-distributed energy transactions and communication security;
- Research on smart grid load forecasting and integrated energy co-dispatch strategies based on big data analysis;
- Research on artificial-intelligence-driven fault diagnosis and self-healing control technology for smart grids;
- Studies on the application of synergistic and optimal allocation of distributed energy resources and energy storage systems in smart grid and integrated energy systems;
- Studies on the cross-regional interconnection of smart grids and new energy consumption methods based on flexible direct current transmission technology;
- Studies of multi-port energy conversion and the coordinated control of power electronic converters in integrated energy systems.

Guest Editor

Prof. Dr. Zhiqiang Geng

College of Information Science and Technology, Beijing University of Chemical Technology, Beijing 100029, China

Deadline for manuscript submissions

closed (31 May 2026)



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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full 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.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University,
Columbus, OH 43210, USA

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