

Special Issue

Driving Electric Power Solutions for a Sustainable Energy Transition

Message from the Guest Editors

This Special Issue aims to explore cutting-edge research and practical developments that address the challenges and opportunities arising from the global transition to low-carbon, sustainable energy systems. This issue invites original contributions that advance intelligent system design, data-driven grid management, flexible operation strategies, and resilience-enhancing technologies.

Topics of interest include, but not limited to, the following:

- Multi-vector and sector coupling energy systems;
- Large-scale renewable energy integration;
- Hybrid energy storage technologies for energy systems;
- System dynamics for inverter-dominated electric power systems;
- Grid resilience analysis and enhancement;
- Grid balancing, including frequency/voltage control and regulation;
- Intelligent coordination of distribution and transmission networks;
- Flexible resource management (V2G, demand response programs, and EMS);
- Siting, sizing and planning of power systems under uncertainties;
- Data-driven grid control;
- AI-enabled power systems.

Guest Editors

Dr. Wenfa Kang

Prof. Dr. Goran Strbac

Dr. Yajuan Guan

Prof. Dr. Juan C. Vasquez

Deadline for manuscript submissions

30 June 2026



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/242561

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

[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)





Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario
Institute of Technology, Oshawa, ON L1G 0C5, Canada

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1
(Geography, Planning and Development)