

Special Issue

Theories and Applications of Sustainable Energy Systems and Smart Power Grids

Message from the Guest Editors

The world is facing increasingly serious energy and environmental crises. Sustainable energy systems and smart grids play vital roles in solving the non-renewable problem of traditional fossil energy and protecting the environment, as well as improving the efficiency of resource utilization. Research on the theories and applications of sustainable energy systems and smart power grids has attracted considerable attention. The Special Issue covers both new developments, recent advances, emerging trends, and the state-of-the-art technologies in related fields. The main topics include 1) fundamentals, modeling, control, optimization, and simulation aspects of sustainable energy systems and smart grids; 2) grid integration of renewables; 3) micro-grids; 4) distribution networks; 5) low-inertia power systems; 6) planning and operation of smart grids; 7) energy storage technologies; 8) technologies and applications of superconductivity; and 9) intelligent operation and maintenance. Since sustainable energy resource and smart grid facilities are quite different in different countries and regions, a wide range of contributions are invited from all over the world.

Guest Editors

Dr. Xinshan Zhu

Dr. Yuenan Li

Dr. Leijiao Ge

Deadline for manuscript submissions

closed (31 December 2023)



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/145216

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)