

Special Issue

The Impact of Technological Innovation on Renewable Energy Production: Simulation and Control of New Energy Power Generation Systems—2nd Edition

Message from the Guest Editors

In recent years, the use of fossil energy has led to various environmental problems around the world, thus further promoting the rapid development of renewable energy in the world. Not only can the development of renewable energy improve these environmental problems, but the production cost is also significantly reduced. Wind power, photovoltaic power, and hydroelectric power, which are important components of renewable energy, can be developed as viable options for future power generation. However, the development of new energy power generation systems makes the control of hybrid power generation systems consisting of multiple new energy sources, the control between renewable energy and grid-connected hybrid energy storage, and the complex energy management control of distributed power generation systems very challenging. This Special Issue aims to promote the development and research of control strategies and simulation techniques for new energy power generation systems so that the stability of these systems and the power quality of AC grids can be improved. We look forward to receiving your contributions.

Guest Editors

Dr. Wenlong Fu

Dr. Yang Zheng

Prof. Dr. Nan Yang

Dr. Chuanshen Wu

Dr. Dunjian Xie

Deadline for manuscript submissions

31 August 2025



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/220091

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)