

Special Issue

Renewable Energy Generation, Smart Grid and Sustainable Power System Development

Message from the Guest Editors

This Special Issue is designed to capture cutting-edge research, innovative solutions, and practical implementations that contribute to the development of resilient and efficient energy systems. It lies in exploring the various dimensions of renewable energy generation and smart grid innovations, as well as their role in creating sustainable power systems. It emphasizes the importance of integrating renewable energy sources, such as solar, wind, and hydroelectric power, into existing energy grids. It includes research on the latest advancements in renewable energy generation technologies. It also covers the integration of these renewable sources into the grid, focusing on both technical and economic aspects, including grid modernization efforts, the deployment of smart meters, and the role of distributed energy resources (DERs). It builds on previous studies that have explored the technical, economic, and policy aspects of renewable energy and smart grids, but extends the conversation by focusing on the synergies between these elements.

Guest Editors

Dr. Michele Quercio

Department of Industrial, Electronic and Mechanical Engineering, Roma Tre University, 00146 Rome, Italy

Prof. Dr. Francesco Riganti Fulginei

Department of Industrial, Electronic and Mechanical Engineering, Roma Tre University, 00146 Rome, Italy

Deadline for manuscript submissions

21 October 2025



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/216402

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)