



Renewable Energy Production and Distribution for a Sustainable Future: Models and Strategy

Guest Editors:

Dr. Rosaria Volpe

Department of Electrical,
Electronic and Computer
Engineering, University of
Catania, Catania, Italy

Prof. Dr. Alberto Fichera

Department of Electrical,
Electronic and Computer
Engineering, University of
Catania, Catania, Italy

Dr. Samiran Samanta

School of Mechanical
Engineering, Kalinga Institute of
Industrial Technology, Deemed
to be University, Bhubaneswar,
Odisha, 751024, India

Deadline for manuscript
submissions:

closed (26 March 2023)

Message from the Guest Editors

Dear Colleagues,

The energy sector is undergoing a fundamental transition towards decentralization and decarbonisation. In this context, renewable energy-based production systems have contributed to raising awareness on the role of prosumers. The energy produced by consumers is used for the satisfaction of their own energy needs; however, exceeding production can be distributed within the neighbourhood, thus allowing for the creation of a local decentralized energy distribution network. This will also reduce the use of conventional fossil-fuel-based centralized grid supply, leading to a carbon-free future. Currently, however, there is still the need for proper methodologies, models, strategies, and perspectives.

Under these premises, the Special Issue includes but are not limited to the following main topics: Energy production and distribution models; Operation and management of decentralized energy distribution networks; Case studies; Renewable production technologies favoring the energy distribution among prosumers; Organizational models for energy distribution among prosumers; Socioeconomic and environmental perspectives.





an Open Access Journal by MDPI

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

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.

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](#), [AGRIS](#), [RePEc](#), [CAPlus / SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Environmental Studies*) / CiteScore - Q1 (*Geography, Planning and Development*)

Contact Us

Sustainability Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sustainability
sustainability@mdpi.com
[X@Sus_MDPI](#)