



## 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. Steve W. Lyon**

School of Environment and  
Natural Resources, Ohio State  
University, Columbus, OH 43210,  
USA

## 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. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full 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](#), [RePEc](#), [CAPlus / SciFinder](#), and [other databases](#).

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

## Contact Us

---

*Sustainability* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sustainability](http://mdpi.com/journal/sustainability)  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)  
[X@Sus\\_MDPI](#)