

## Special Issue

# Advanced Renewable Energy for Sustainability Volume II

### Message from the Guest Editor

The interest in alternative cost-effective, sustainable, and clean energy sources has grown significantly due to the technical, economical, and environmental influences of conventional power plants. Renewable energy sources such as solar, wind, biomass, hydrogen, tidal, and geothermal energy have thus attracted much attention and are widely utilized in power systems. On the other hand, energy storage systems have been integrated with renewable energy sources to maintain the safe operation of power systems and balance supply and demand. This Special Issue aims to be a hub for contributions related to advanced trends in renewable energy sources and energy storage systems and to facilitate the exchange of up-to-date research results.

- Renewable energy sources.
- Storage energy technologies and green storage solutions.
- Sustainable energy policy and management.
- Grid integration of renewable sources.
- Distributed generation and multienergy systems.
- Smart cities, smart home, and IoT.
- Zero-energy buildings (ZEBs).
- Vehicle-to-everything communication (e.g., V2H, V2G, V2B).
- Power system.

---

### Guest Editor

Dr. Mohammed Elsayed Lotfy

Electrical Power and Machines Department, Zagazig University,  
Zagazig 44519, Egypt

---

### Deadline for manuscript submissions

closed (24 September 2023)



## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



[mdpi.com/si/162722](https://mdpi.com/si/162722)

*Sustainability*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[sustainability@mdpi.com](mailto: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)