



## Renewable and Sustainable Energy: Modeling, Control, Modern Optimization and Multi Criteria Decision Making

Guest Editors:

**Dr. Hegazy Rezk**

**Dr. Mokhtar Aly**

**Prof. Dr. Mohammad Ali  
Abdelkareem**

**Dr. Ahmed Fathy**

Deadline for manuscript  
submissions:

**closed (30 June 2022)**

### Message from the Guest Editors

The consensus among scientists is that sustainable renewable energy sources with no or very low environmental impact are the best solution. Modeling and optimization are effectively used to solve complicated processes in a short time with minimum effort. Modeling based on AI and modern optimization methods is playing a key part in the industrial revolution, being extensively used by practicing engineers to solve complicated problems. Moreover, Model predictive control (MPC) methods can achieve fast, precise, and multiobjective control tasks for renewable energy systems. By contrast, multicriteria decision making (MCDM) models provide a useful way to model several real-world problems, and they are extensively used in many engineering applications, such as energy efficiency, sustainable development, and so forth. The Special Issue provides a platform for researchers and practitioners who are experts in the area of modern optimizations, control systems, artificial intelligence, and decision making applied to renewable and sustainable energy. Topics in both science and engineering, such as: soft computing, neural networks, fuzzy logic, multicriteria decision making, are welcome.





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, 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](https://twitter.com/Sus_MDPI)