



an Open Access Journal by MDPI

Techno-Economic and Environmental Analysis of Hybrid Renewable Energy Systems

Guest Editors:

Dr. Dilip Khatiwada

Division of Energy Systems, Department of Energy Technology, KTH-Royal Institute of Technology, 100 44 Stockholm, Sweden

Dr. Farzin Golzar

Division of Heat and Power Technology, Department of Energy Technology, KTH-Royal Institute of Technology, 100 44 Stockholm, Sweden

Deadline for manuscript submissions: closed (31 December 2023)



Message from the Guest Editors

Renewable energy is much safer and cleaner than conventional sources. However, there are still a wide variety of challenges in this sector that can be addressed with the help of emerging techniques, such as Artificial Intelligence (AI) and the Internet of Things (IoT), to deal with the uncertainties associated with renewable energy resources. Furthermore, evaluating renewable energy resources in an integrated approach could lead to addressing the challenges of the water–energy–food nexus. This Special Issue will deal with innovative techniques and concepts for integrating renewable energy resources with energy systems. Topics of interest for publication include, but are not limited to, the following:

Optimum design and operation of hybrid renewable energy systems;

Innovative techniques for analyzing renewable energy resources;

Application of AI and IoT for sustainable energy systems;

Renewable energy strategies for sustainable development goals (SDG);

Security aspects of future renewable energy systems;

Balancing supply and demand condition energy storage system;

Demand side management;

Optimal allocation/dispatch of neweables and renewable electricity.



mdpi.com/si/150885





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us

Energies Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/energies energies@mdpi.com X@energies_mdpi