



*energies*



an Open Access Journal by MDPI

## Design and Optimization of Sustainable Energy Systems

Guest Editor:

**Prof. Dr. Sara Lumbreras**

Institute for Research in  
Technology (IIT), ICAI School of  
Engineering, Comillas Pontifical  
University, 28015 Madrid, Spain

Deadline for manuscript  
submissions:

**closed (25 April 2022)**

### Message from the Guest Editor

The decarbonization of the energy system is a deep transformation that implies the design—and redesign—of its most fundamental structures. From region-wide generation expansion planning to the short-term operation of battery storage, a myriad perspective emerges with its own interrelated challenges. These issues call for the application of decision-making tools to take advantage of the technological possibilities in the most efficient manner. This Special Issue is dedicated to the application of advanced optimization methods to the design and operation of sustainable energy systems, focusing on innovative methods applied to the integration of renewables and the management of flexibility. The approaches can be based on mathematical optimization or on heuristic techniques, but, in any case, the selection of the technique must be justified and its performance shown with rigor. Results that can be clearly interpreted in terms of simple best-design policies will be highly valued.



[mdpi.com/si/56416](https://mdpi.com/si/56416)

**Special** Issue



# energies



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](http://www.mdpi.com)

[mdpi.com/journal/energies](http://mdpi.com/journal/energies)  
[energies@mdpi.com](mailto:energies@mdpi.com)  
[X@energies\\_mdpi](https://twitter.com/energies_mdpi)