



*energies*



an Open Access Journal by MDPI

## Local Energy Systems: Modeling, Control, Optimization, and Applications

Guest Editors:

**Prof. Dr. Amjad Anvari-Moghaddam**

Department of Energy  
Technology, Aalborg University,  
9220 Aalborg, Denmark

**Prof. Dr. Frede Blaabjerg**

Department of Energy  
Technology, Aalborg University,  
9220 Aalborg, Denmark

Deadline for manuscript  
submissions:

**closed (31 December 2023)**

### Message from the Guest Editors

Dear Colleagues,

The energy transition is shifting from large national energy systems to local energy systems in communities, neighborhoods, districts, villages, and business parks. During this process, each local system requires its own sustainable, reliable, and affordable design, operation, and control scheme. Novel approaches are also needed to optimize network architecture, planning, and development based on the opportunities offered by integrated local energy systems and enabled by digitalization and power electronics (PE).

This Special Issue offers a major forum for the reporting of advances in modeling, control, optimization, and application of local energy systems as building blocks of future smart, flexible, and low-carbon energy systems. Similarly, the Special Issue also focuses on recent advances in cross-border cooperation in the energy sector on a wide range of topics.



[mdpi.com/si/46574](https://mdpi.com/si/46574)

# Special Issue



# energies



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Enrico Sciubba**

Department of Mechanical and  
Aerospace Engineering,  
University of Roma Sapienza, Via  
Eudossiana 18, 00184 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 (*Engineering (miscellaneous)*)

## Contact Us

---

*Energies* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

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