



## Advanced Energy Systems Planning and Scheduling in Energy Markets: The Role of Flexibility for the Energy Transition

Guest Editor:

**Dr. Nikolaos E. Koltsaklis**

Department of Electrical and  
Computer Engineering, University  
of Western Macedonia, 50100  
Kozani, Greece

Deadline for manuscript  
submissions:

**closed (20 November 2023)**

### Message from the Guest Editor

Dear Colleagues,

The global energy market is transitioning away from fossil fuel-based energy production and consumption systems, such as oil, coal, and natural gas, to renewable energy sources, including solar and wind. Decarbonization of the energy system necessitates immediate global action, and although a global energy transition is underway, additional interventions are required to minimize greenhouse gas emissions and reduce climate change's impacts.

The main scope of this Special Issue is to develop new optimization approaches and methodological frameworks for advanced energy systems planning and scheduling in energy markets, putting particular emphasis on the flexibility service providers. State-of-the-art works, in combination with innovative case studies, are invited. Multidisciplinary research and cutting-edge approaches are welcomed to address the challenges posed by energy systems and markets at various time scales, from the very short to the very long term.

Dr. Nikolaos E. Koltsaklis

*Guest Editor*





# 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 (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)