



*energies*



an Open Access Journal by MDPI

## Smart Power Grid Low Carbon Energy Systems: Current Trends and New Perspectives

Guest Editors:

### Dr. Zhengyu Lin

School of Mechanical, Electrical and Manufacturing Engineering, Loughborough University, Loughborough LE11 3TU, UK

### Dr. Hui Guo

Shanghai Key Laboratory of Power Station Automation Technology, School of Mechatronics Engineering and Automation, Shanghai University, Shanghai 200444, China

### Dr. Fulong Li

School of Mechanical, Electrical and Manufacturing Engineering, Loughborough University, Loughborough LE11 3TU, UK

Deadline for manuscript submissions:

**closed (30 July 2022)**

### Message from the Guest Editors

Dear Colleagues,

It is our pleasure to invite you to submit your paper for consideration in an upcoming Special Issue, entitled “Smart Power Grid Low Carbon Energy Systems: Current Trends and New Perspectives”. This Special Issue will focus on novel energy solutions in smart power grids to achieve a low carbon and sustainable energy system and reach ambitious carbon-neutrality targets.

Renewable energies, energy storage and electrical vehicles are among the key low carbon technologies in addressing the global climate change. However, with the increasing penetration of renewable energy sources and energy storage in the power grid, it is necessary to develop efficient and reliable energy system solutions to effectively integrate those low carbon technologies in the power grid. In a smart power grid, multi-way power flow and information flow are monitored or controlled by widespread and advanced equipment, including smart meters, smart transformers, distributed power electronics converters, etc. These trends enable novel low carbon energy system solutions, but have also raised concerns about the safety, stability, and economy of the smart power grid.



[mdpi.com/si/102487](https://mdpi.com/si/102487)

# 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 (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)