



*energies*



an Open Access Journal by MDPI

## Solar PV and Wind Energy Systems for Energy Transition

Guest Editors:

**Prof. Dr. Olimpo Anaya-Lara**

Department of Electronic and Electrical Engineering, University of Strathclyde, Glasgow, G1 2TB, Scotland, UK

**Dr. Ayman Attya**

Electrical Power Engineering, University of Huddersfield, HD1 3DH, Huddersfield, UK

**Dr. José Luis Domínguez-García**

Catalonia Institute for Energy Research IREC, Barcelona, Spain

Deadline for manuscript submissions:

**closed (28 February 2023)**

### Message from the Guest Editors

In order to meet the Green Deal targets, renewable energy sources must take the lead when it comes to change. Future energy scenarios worldwide foresee a very high penetration of renewable energy sources (RES), in particular, wind and solar PV. These electricity generation sources are integrated into the grid through power electronic converters which lead to new power system dynamics and the need for RES to provide ancillary services (AS) typically procured by synchronous plants. The realisation of an optimal approach that incorporates AS provision from RES in transmission and distribution networks in an effective manner will require a series of paramount challenges in terms of models, power electronics converter interfaces, intelligent controllers, market schemes, and flexible loads, to name but a few of the areas that need to be addressed. In addition, some key challenges must be overcome so as to make the technologies cost competitive and ensure their proper coordination and to cope with their variability. This Special Issue aims to collate the results of key research in such fields that examine the energy transition.



[mdpi.com/si/48748](https://mdpi.com/si/48748)

**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)