

## Special Issue

# The Future of Energy Systems: Integration of Energy Technologies in Distribution Grids

### Message from the Guest Editor

As the energy industry continues to witness advancements in renewable distributed generation (DG), electric vehicles (EVs), energy storage systems, and capacitor banks, it becomes crucial to effectively manage their operational needs, technical characteristics, and economic considerations. Without careful integration and collaboration, we risk complications such as system overloading, equipment failure, voltage deviations, increased losses, and transient stability issues. Therefore, it is imperative that we address these challenges collaboratively to maximize the benefits of these technologies while minimizing their potential risks. I am therefore pleased to announce a Special Issue that aims to connect researchers from academia and industry, and compile studies that present innovative developments, challenges, and solutions in the field of energy technologies and their integration into electric grids. We invite you to contribute your expertise and insights to this important discussion.

### Guest Editor

Dr. Mahmoud Ghofrani

School of Science, Technology, Engineering and Mathematics (STEM),  
University of Washington, Bothell, WA, USA

### Deadline for manuscript submissions

20 August 2025



## Energies

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 7.3



[mdpi.com/si/219032](https://mdpi.com/si/219032)

*Energies*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[energies@mdpi.com](mailto:energies@mdpi.com)

[mdpi.com/journal/  
energies](https://mdpi.com/journal/energies)





# Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 7.3



[mdpi.com/journal/  
energies](https://mdpi.com/journal/energies)



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University  
Niccolò Cusano, 00166 Roma, Italy

---

### 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)