

Special Issue

Integration of Energy Storage Technologies into Smart Grids and Modern Power Systems

Message from the Guest Editor

The increasing demand for sustainable and resilient power and energy systems is accelerating the transformation of power infrastructure. Central to this evolution is the integration of energy storage technologies into smart grids and modern power distribution systems. These advancements not only facilitate the reliable incorporation of intermittent renewable energy sources but also enable enhanced grid stability, load balancing, and energy management. This Special Issue seeks original research, review articles, and practical case studies that delve into the multifaceted applications of energy storage in smart grids and power distribution networks. Contributions are encouraged on topics such as system modelling and simulation, storage control strategies, grid integration approaches, economic and policy analysis, and the role of storage in enhancing grid resilience and sustainability.

Guest Editor

Dr. Ahmed Awad

Electrical Engineering Department, College of Engineering and Technology, University of Doha for Science and Technology, Doha 24449, Qatar

Deadline for manuscript submissions

20 July 2026



Energies

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 8.3



mdpi.com/si/250418

Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

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





Energies

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 8.3



[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)