

## Special Issue

# Development of Energy-Efficient Solutions for Smart Buildings

### Message from the Guest Editor

The building sector is one of the main contributors to final energy consumption, with 104.9 exajoules globally, and it is still highly dependent on the consumption of oil products and natural gas, resulting in a high production of greenhouse gas emissions. Thus, in this scenario, it is essential to study innovative and advanced technological solutions that can contain the energy consumption of buildings while ensuring high indoor environmental quality. This Special Issue on the “*Development of Energy-Efficient solutions for Smart Buildings*” aims to collect high-quality scientific papers varying from innovative HVAC and lighting systems solutions to smart and green building proposals. The Special Issue welcomes papers on the following topics: HVAC systems solutions; Lighting systems solutions; HVAC and lighting control systems; Building simulation; Smart and green buildings; Sustainable and innovative materials; Climate change; Renewable energy sources for buildings; Thermal and visual comfort; Heat transfer in multilayer building components; Daylight harvesting; HVAC control strategies; Urban building energy modeling; Smart solutions; Case studies.

### Guest Editor

Dr. Tullio De Rubeis

Department of Industrial and Information Engineering and Economics (DIIIE), University of L'Aquila, Piazzale Pontieri 1, Monteluco di Roio, I 67100 L'Aquila, Italy

### Deadline for manuscript submissions

31 January 2025



## Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.2



[mdpi.com/si/166555](https://mdpi.com/si/166555)

*Energies*

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 3.0  
CiteScore 6.2



[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 Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 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)