Special Issue

Advancements in Building Energy Efficiency and Flexibility: Challenges and Opportunities

Message from the Guest Editor

In response to the growing need to address environmental challenges and foster sustainable development. This Special Issue aims to explore cutting-edge research and innovative solutions related to aspects of sustainable building practices with constraints related to greenhouse gas emissions, the increase in renewable energy utilisation, energy efficiency needs and occupant comfort. The topics of interest for publication include, but are not limited to, the following:

- Energy system concepts and related operational strategies considering aspects of energy flexibility, related to the electrification of our energy system;
- Optimization of the thermal comfort of occupants in these buildings;
- Increased energy efficiency and mitigation of carbon emissions.

While this edition covers both new and renovated buildings, particular attention will be paid to the renovation of existing buildings since the main effort in the following decades and achievement of greenhouse gas emission goals will rely mainly on the success in this field.

Guest Editor

Dr. Peter Riederer
Centre Scientifique et Technique du Bâtiment, Sophia Antipolis, France

Deadline for manuscript submissions

25 December 2025

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/229098

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

mdpi.com/journal/energies

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

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)