Special Issue

Heat Pumps for the New Generation of Sustainable Buildings: Future Trends and Aspects

Message from the Guest Editors

Heat pumps are efficient heat generators which can satisfy entirely the thermal demands of buildings' space heating, space cooling and domestic hot water production by means of a single device. This Special Issue aims to present and disseminate the most recent advances in heat pumps and heat pump applications, giving new insights related to the theory, design, modeling, application, control, and field monitoring of all types of heat pumps. Topics of interest for publication include, but are not limited to:

- Research and development on heat pump refrigerant cycle;
- New environmentally friendly refrigerants;
- Recent advances in heat pump systems and components;
- Industrial and high-temperature heat pumps;
- Hybrid heat pump systems;
- Sorption and non-traditional heat pump systems;
- Simulation-assisted design and optimization of heat pumps and heat pump applications.

Guest Editors

Dr. Matteo Dongellini
Department of Industrial Engineering, Alma Mater Studiorum-University of Bologna, 40136 Bologna, Italy
Dr. Claudia Naldi
Department of Industrial Engineering, Alma Mater Studiorum-University of Bologna, 40136 Bologna, Italy

Deadline for manuscript submissions

closed (5 December 2025)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 8.3

mdpi.com/si/201227

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 8.3

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)