



energies



an Open Access Journal by MDPI

Renewable Energy Systems in the Design of Energy-Efficient Buildings

Guest Editors:

Prof. Fernando Lopez-Rodriguez

Badajoz School of Industrial Engineering, Universidad of Extremadura, Badajoz, Extremadura, Spain

Prof. Dr. Justo García Sanz-Calcedo

Department of Engineering Projects, University of Extremadura, 06006 Badajoz, Spain

Deadline for manuscript submissions:
closed (30 August 2022)

Message from the Guest Editors

Renewable energy sources are considered to be all those that arise from non-fossil renewable sources, i.e., wind, solar, aerothermal, geothermal, hydrothermal, ocean, hydro, biomass, sewage treatment plant gas and biogas, and green hydrogen, among others. Some of these types of energy can be implemented in buildings to improve their environmental impact. In this sense, renewable energy should not be considered as an added element to a building since, from a design point of view, it should be an integrated element in the building. Therefore, new buildings should be designed taking into account this variable from the beginning.

At the same time, new solutions appear in the fields of building with smart grids, renewable energies and battery or hydrogen storage, innovative thermal envelopes in buildings with respect to thermal insulation, and passive heating and cooling techniques. Finally, energy-efficient buildings based on the use of heat generated in photovoltaic solar chimneys and ventilation by the air through sheets of water must also be considered



mdpi.com/si/77425

Special Issue



energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 Roma, Italy

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.

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)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)