

## Special Issue

# Innovative Building Envelope Materials and Sustainable Constructions

### Message from the Guest Editors

The built environment has been identified as one of the most significant sectors affecting sustainability. Particularly, the buildings are regarded as substantial components for pursuing decarbonisation and priority is given to the design, construction and operation of new or renovated existing buildings in order to reach zero energy or zero emission levels. Furthermore, in the light of the life cycle approach, concepts such as waste-free building sites as well as re-use and re-cycle of building materials are more often discussed in the relevant fora. Furthermore, special emphasis is placed on the building envelope and the materials that compose it. Within this framework, this Special Issue of *Energies* will attempt to study, analyse and evaluate the relationship between building envelope materials and building performance under the sustainability concepts. More specifically, potential topics of interest include but are not limited to the following:

- Building envelope configurations;
- Nature-based and carbon-neutral solutions;
- Passive design strategies and systems;
- Innovative building materials and elements characterized by their cost effectiveness, resource-efficiency...

---

### Guest Editors

Prof. Dr. Katerina Tsikaloudaki

Laboratory of Building Construction and Physics, Department of Civil Engineering, School of Engineering, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

Prof. Dimitrios Kraniotis

Department of Civil Engineering and Energy Technology, Faculty of Technology, Art and Design, Oslo Metropolitan University, N-0130 Oslo, Norway

---

### Deadline for manuscript submissions

closed (20 July 2022)



## Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 7.3



[mdpi.com/si/78156](https://mdpi.com/si/78156)

*Energies*  
Editorial Office  
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 3.2  
CiteScore 7.3



[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)