# **Special Issue**

# The Sustainable Pathway towards Zero-Energy/Emission Buildings: Exploring High-Efficiency Solutions and Integrated Approaches

Message from the Guest Editors

In order to face the challenging energy targets of the 21st century, this Issue will promote the achievement of zero-emission buildings by 2028 for new buildings and 2050 for the existing ones. In order to meet this objective, scientists and designers are encouraged to adopt an effective and integrated approach to decrease end-use energy consumption and pollutant emissions in both designing new buildings and retrofitting existing ones. The highly efficient building envelope and the high-performance and optimal management of the heating, ventilation and air conditioning (HVAC) systems are mandatory in order to achieve satisfactory results in tems of energy consumption reductions.

This Special issue proposes to deal with the challenging topic of reaching zero-energy and zero-emission buildings and adopting high-efficiency building envelopes and HVAC plants integrated with RES.

We welcome manuscripts on the following topics, but not limited to these topics:

Zero-energy and Zero-emission buildings; Energy efficiency in the built environment; Sustainable buildings; Optimal design for new buildings.

### **Guest Editors**

Dr. Silvia Di Turi

Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), Rome, Italy

Dr. Raniero Sannino

Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), Rome, Italy



# Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/189404

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

mdpi.com/journal/ sustainability





# Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



# **About the Journal**

# Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

# Editor-in-Chief

#### Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G OC5, Canada

## **Author Benefits**

### **Open Access:**

free for readers, with article processing charges (APC) paid by authors or their institutions.

### **High Visibility:**

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

### **Journal Rank:**

JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

