





an Open Access Journal by MDPI

# Advances in Smart Buildings, Energy Storage, and Sustainable Energy Engineering

Guest Editors:

#### Dr. Huangjie Gong

ABB Ltd, US Research Center, Raleigh, NC 27606, USA

#### Prof. Dr. Dan M. Ionel

Department of Electrical and Computer Engineering, University of Kentucky, Lexington, KY 40506, USA

Deadline for manuscript submissions:

31 December 2024

# **Message from the Guest Editors**

Building will play a key role in the effort to achieve a net-zero-energy future. Buildings serve as hubs of energy in the form of both electricity and heat. A smart modern building can be a generator as well as a consumer of electricity. Buildings can reserve and supply energy to the grid using electrical energy storage (e.g., batteries and EVs) as well as thermal energy storage (e.g., HVAC and water heaters).

The Special Issue aims to provide an advanced forum for research on heat, mass, building energy, and electricity, at both residential and power-system levels. This will add to value that Sustainability already has as an international, cross-disciplinary, scholarly, peer-reviewed open-access journal concerned with and the environmental cultural. economic social and sustainability of human beings.

In this Special Issue, original research articles and reviews are welcome. **Research areas** may include (but are not limited to) the following:

- Building energy modelling;
- Home energy management;
- Smart building;
- Net-zero-energy building;
- Vehicle-to-grid (V2G) and vehicle-to-home (V2H).

We look forward to receiving your contributions.









an Open Access Journal by MDPI

## **Editor-in-Chief**

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

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G 0C5, Canada

# **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 and applications of sustainability-based measures and activities.

#### **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, AGRIS, RePEc, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Environmental Studies*) / CiteScore - Q1 (Geography, Planning and Development)

### **Contact Us**