





an Open Access Journal by MDPI

# Advanced Energy Systems in Zero/Positive Energy Buildings, Communities and Districts

Guest Editors:

## Dr. Ala Hasan

VTT Technical Research Centre of Finland, FI-02044 VTT Espoo, Finland

#### Dr. Hassam Ur Rehman

VTT Technical Research Centre of Finland, FI-02044 VTT Espoo, Finland

Deadline for manuscript submissions:

closed (25 October 2023)

## **Message from the Guest Editors**

For this Special Issue, authors are kindly invited to submit high-quality papers on one or more of the following topics related to advanced energy systems in net-zero/positive energy buildings and districts:

- Concepts, definitions and KPIs development of nearly/net/zero and positive energy buildings/communities/districts;
- Energy efficiency of buildings in communities and districts;
- Advanced HVAC systems in buildings;
- Heating/cooling energy and electricity demand;
- Advanced short/long-term energy storage for heating/cooling/electricity and controls;
- Renewable-based energy generations and smart controls;
- Energy resiliency of the buildings during grid outages under various weather conditions;
- Energy flexibility offered by buildings, communities and districts to the grid;
- Energy self-sufficiency of the buildings, communities and districts;
- Advanced simulation and optimization methods;
- Experience and results from demos and monitoring sites;
- Economic-, social- and policy-related aspects;
- User's acceptance and engagement in communities and districts.



**Special**sue







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 (*Engineering (miscellaneous)*)

## **Contact Us**