

Special Issue

Frontiers in Energy Efficiency and Sustainability of Buildings

Message from the Guest Editors

The building sector is the largest energy consumer in most countries and accounts for 25–30% of total energy-related carbon dioxide (CO₂) emissions worldwide.

The high energy efficiency and sustainability of buildings can be realized through the lifecycle optimization and integration of multiple technologies within or beyond buildings. 1) a passive design to reduce building demand and environmental impact; 2) advanced HVAC (heating, ventilation, and air-conditioning) technologies and high efficient energy systems; 3) performance assessment, fault detection, and diagnosis, optimal control, and operation of existing buildings; 4) development and integration of renewable energy systems such as solar energy systems, wind energy systems, biomass energy systems, etc.; 5) smart buildings toward smart grids and energy-flexible buildings for power demand management and response.

This Special Issue invites researchers to contribute original research papers and technical review papers on innovative approaches and solutions to benefit the sustainability and energy efficiency of buildings and assist in reducing energy use and carbon footprint.

Guest Editors

Prof. Dr. Chengchu Yan

Dr. Zhengwei Li

Dr. Rui Tang

Deadline for manuscript submissions

closed (30 October 2022)



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/92976

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

[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)





Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)



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 0C5, 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, CAPIus / SciFinder, and other databases.

Journal Rank:

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