

## Special Issue

# Sustainable Development of Thermal Comfort and Energy-Savings and Storage of Green Buildings

### Message from the Guest Editors

The increase in the global temperatures and carbon emissions, accompanied by recent geo-political developments, has triggered drastic measures by most governments to reduce the dependency of energy in buildings on fossil fuels. This Special Issue is focused on new methodologies, low-carbon strategies and technologies, energy storage to reduce the fossil fuel-reliance of heating and cooling in buildings. We invite researchers to contribute original research articles as well as review articles that will stimulate the continuing efforts to understand the recent advances and innovation in these research fields. Manuscripts combining experimental implementation with theoretical calculations and technoeconomic assessment are also welcome. Themes and topics for this Special Issue include the following:

- Energy storage to low-carbon heating and cooling in buildings;
- Passive energy transition to reduce demand and fossil fuel dependency in buildings;
- Occupants' comfort, health and wellbeing in a changing climate;
- Energy flexibility and resilience in the built environment;
- Advanced materials to face with thermal comfort.

---

### Guest Editors

Dr. Xin Xiao

College of Environmental Science and Engineering, Donghua University, Shanghai 201620, China

Dr. Yousef Golizadeh Akhlaghi

New Energy and Advisory Team, Jacobs, UK

Prof. Dr. Guoqing Yu

College of Environment and Architecture, University of Shanghai for Science and Technology, Shanghai, China

---

### Deadline for manuscript submissions

closed (26 July 2024)



Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 8.9



[mdpi.com/si/186439](https://mdpi.com/si/186439)

*Sustainability*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)

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





## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 8.9



[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. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full 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. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University,  
Columbus, OH 43210, USA

---

### 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)