



Sustainable and Low-Carbon Building Technology: Education, Design, and Practice

Guest Editors:

Prof. Dr. Wei Wang

Dr. Xianwen Huang

Dr. Peiyuan Chen

Prof. Dr. Aizhao Zhou

Dr. Shaoyun Pu

Dr. Wei Duan

Deadline for manuscript
submissions:

closed (28 May 2024)

Message from the Guest Editors

Dear Colleagues,

We are pleased to inform you that we have launched a new Special Issue of *Buildings* entitled "Sustainable and Low-Carbon Building."

Sustainable technology development is of great significance for the maintenance of the Earth's ecological environment. In order to ensure the low-carbon operation of buildings, engineers attempt to make progress in various aspects of their field, such as education, design and practice. By educating designers and builders, the waste of resources caused by human errors and omissions will be minimized. Through the optimization of building design and practice (e.g., BIM technology), resources can be utilized fully.

This Special Issue will publish high-quality, original research papers in the overlapping fields of:

- Carbon emission management of infrastructure in the whole process;
- Construction technology and the management of prefabricated buildings;
- BIM technology and practice;
- Sustainable design technology for buildings;
- Repair and protection of traditional and ancient buildings;
- Educational innovation in sustainable building design;
- Education of low-carbon architecture.





buildings



an Open Access
Journal by MDPI

Editor-in-Chief

Prof. Dr. David Arditi
Construction Engineering and Management Program,
Department of Civil, Architectural, and Environmental Engineering, Illinois Institute of Technology, 3201 South Dearborn Street, Chicago, IL 60616, USA

Author Benefits

Open Access: free for readers, with the added environmental innovation and technology that can bring dramatic improvements to design, planning, and policy as critical in developing the cities and buildings of the future.

High Visibility: indexed with ISI/Scopus, CiteWeb, Scopus, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Civil*) / CiteScore - Q1 (*Architecture*)

Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovation and technology can bring dramatic improvements to design, planning, and policy as critical in developing the cities and buildings of the future.

Contact Us

Buildings Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/buildings
buildings@mdpi.com
X@Buildings_MDPI