Special Issue

Research on the Environmental Impact throughout the Life Cycle of Buildings

Message from the Guest Editors

The building and construction sector is one of the largest contributors to global greenhouse gas emissions, resource consumption, and waste generation. As the world transitions toward sustainable development and decarbonization, understanding and mitigating the environmental impacts of buildings throughout their entire life cycle has become more critical than ever. This Special Issue aims to bring together cutting-edge research on assessing, reducing, and managing the environmental impacts of buildings from cradle to grave—including design, construction, operation, maintenance, renovation, and end-of-life stages. We welcome contributions that advance the scientific understanding, methodologies, and practical applications related to life cycle assessment (LCA), carbon footprint analysis, circular economy approaches, sustainable construction materials, and innovative building technologies.

Guest Editors

Dr. Yijun Zhou

Dr. Mingxue Ma

Dr. Lei Liu

Dr. Linna Geng

Deadline for manuscript submissions

31 March 2026

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/si/247344

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

mdpi.com/journal/buildings

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/journal/buildings

MDPI

About the Journal

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. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

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

High Visibility:

indexed within SCIE (Web of Science), Scopus, Ei Compendex, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Construction and Building Technology) / CiteScore - Q1 (Architecture)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).