

# Special Issue

## Low-Carbon Urban Areas and Neighbourhoods

### Message from the Guest Editors

According to UN-Habitat statistics, urban areas, which account for less than 2% of the Earth's surface, consume 78% of global energy and are responsible for over 60% of greenhouse gas emissions. Exploration of the impact of multiple renewable energy coupling supply technologies on carbon reduction in urban and neighborhood settings is of paramount importance. This Special Issue aims to solicit analyses of the benefits of low-carbon technology to cities and neighborhoods across their entire life cycle through case studies, simulations, optimizations, and methodological innovations. Topics for articles include, but are not limited to, the following:

- Carbon accounting methods at urban and neighborhood scales;
- Modeling and simulation of district energy systems;
- Coordinated control methods and optimization evaluation systems of coupling applications of various low-carbon technologies;
- Development of city-level carbon reduction simulation technologies;
- Research on carbon emission reduction technologies in the urban planning field;
- Energy system planning configurations for low-carbon cities and blocks;
- Energy efficiency improvements of single buildings.

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### Guest Editors

Prof. Dr. Xiangfei Kong

Prof. Dr. Haizhu Zhou

Prof. Dr. Yong Ding

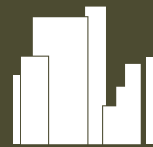
Dr. Jihui Yuan

Dr. Han Li

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### Deadline for manuscript submissions

closed (31 December 2025)



## Buildings

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

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## 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.

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### 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

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### Author Benefits

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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 15.1 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).