Special Issue

Energy Efficiency and Carbon Neutrality in Buildings—2nd Edition

Message from the Guest Editor

Following the successful completion of the first edition, the second edition of this Special Issue calls on researchers who are working on topics relevant to energy efficiency and carbon neutrality (i.e., net-zero carbon emissions) in the buildings and construction sector to share their latest accomplishments and research findings. Both review and original papers are welcomed. Topics of interest include, but are not limited to, the following:

- Energy efficient and net-zero carbon emissions focused planning, design, construction, operation, maintenance, renovation, and demolition of buildings.
- Energy and carbon management and mitigation in buildings and construction.
- Digital solutions to save energy and carbon in buildings and construction.
- Assessing, monitoring, and reducing energy demand and consumption, and the carbon emissions of buildings and construction.
- In-use energy consumption estimating, monitoring, and reduction.
- Building energy modeling and simulation.
- Renewable energy generation and utilization.
- Carbon offsetting.
- Energy efficient and net-zero carbon building materials.
- Energy efficiency and net-zero carbon-focused retrofitting.
- Net-zero project management.

Guest Editor

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Deadline for manuscript submissions

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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.

Editor-in-Chief

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