Special Issue

Towards a Carbon Neutral Roadmap of the Building Sector by Mid-Century

Message from the Guest Editors

We welcome any study on methods, strategies, and applications useful to achieving the carbon neutral goal in the future building sector, and analyses aiming at building operation will be considered first. Topics of interest for the Special Issue include, but are not limited to, the following:

- Transition to low carbon in building operations;
- Transition to low carbon in building materials;
- Negative emission technologies in Net Zero Energy Buildings (NZEBs) and green buildings;
- Urban planning integrated with energy systems;
- Building Integrated Photovoltaics (BIPV) and renewable energy applications in building energy systems;
- Low-carbon and ecological cities;
- Climate change and policy options targeting lowcarbon energy systems;
- Demand response management and control;
- Energy management, policy and economics;
- Building emissions mitigation;
- Distributed energy systems;
- Integrated energy networks and microgrids

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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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