

Special Issue

Advanced Energy and Carbon Management for Net-Zero Buildings and Sustainable Cities

Message from the Guest Editors

This Special Issue aims to provide a comprehensive platform for researchers, engineers, and policymakers to share cutting-edge advancements in energy and carbon management technologies specifically tailored for net-zero buildings and sustainable urban development. Topics of interest for publication include, but are not limited to:

- Low-carbon retrofitting and energy performance optimization of traditional vernacular buildings
- Sustainable energy planning and carbon management strategies for historic villages and traditional settlements
- Advanced HVAC systems and thermal energy storage for net-zero buildings
- Building-integrated photovoltaics and renewable energy optimization
- Smart grid integration and demand-side management in urban districts
- Energy-efficient building envelopes and passive design strategies
- Artificial intelligence and machine learning applications in building energy management
- District heating/cooling systems and waste heat recovery
- Carbon capture, utilization, and storage (CCUS) in building applications
- Policy frameworks, economic incentives, and social aspects of net-zero transitions
- Case studies of successful net-zero building implementations and sustainable city planning

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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