

Special Issue

Advancing Energy-Efficient Buildings for Net-Zero Carbon Emission Goals

Message from the Guest Editors

Energy optimization in buildings requires a comprehensive approach that integrates efficient systems with structural solutions to minimize energy consumption and emissions. This includes the development of advanced insulation materials, passive heating and cooling techniques, and highly efficient ventilation systems. Furthermore, effective building envelope design and the integration of renewable energy sources, such as solar and wind power, are essential to achieving net-zero status. At the core of these efforts is the ability to analyze and optimize building energy use through rigorous data collection and measurement techniques, ensuring that systems operate with minimal energy waste. This Special Issue aims to create a platform for knowledge sharing, promoting strategies and techniques that advance the built environment's sustainability. We invite researchers and practitioners alike to share their insights on technologies and methods that contribute to energy-efficient and low-carbon buildings. We also encourage submissions that provide comprehensive reviews of recent advancements in energy efficiency for the building sector.

Guest Editors

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Prof. Dr. Zuzana Vranayova

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Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Marc A. Rosen

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