



Advances in Low-Carbon Buildings

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Message from the Guest Editors

New challenges are present in the application and evaluation of carbon capture and storage in civil engineering, i.e., CO₂ capture and adsorption in construction materials, CO₂ curing technology, carbonation treatment, the analysis of carbon sinks, and carbon capture and storage in civil construction. Innovative theories, insights, and data on low-carbon or carbon-negative theoretical and technological applications are thus highly anticipated by the whole world.

In light of these considerations, this Special Issue intends to provide researchers worldwide with a forum to share their research outcomes and report recent advancements in *Advances in Low-Carbon Buildings*. We hope this Special Issue will provide a timely overview of the recent case histories, theoretical advances, laboratory and field testing, and design methods. Original contributions containing fundamental and applied research, case studies, or the state of the art are encouraged for submission.

For further reading, please follow the link to the Special Issue Website at: <https://www.mdpi.com/journal>

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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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