Special Issue

Advancements in Energy Efficiency and Conservation for Sustainable Buildings

Message from the Guest Editor

The green transition in energy systems introduces challenges for designing energy-efficient and resilient buildings. Integrating passive and active technologies now requires evaluation beyond traditional energy and IEQ metrics. Key topics include the interaction of Front-of-the-Meter (FTM) and Behind-the-Meter (BTM) systems, occupant behavior, climate-adaptive design, and resilience to extreme weather. This Special Issue invites research on the following topics:

- Interaction of Front-of-the-Meter (FTM) and Behindthe-Meter (BTM) systems in buildings
- Occupant behavior and its effect on energy performance
- Building energy performance gap and resilience strategies
- Novel indoor environmental quality (IEQ) indicators (thermal autonomy, air quality, daylight, visual comfort) and energy implications
- Adaptation of active and passive systems to future climates and extreme weather events
- Material systems that influence building environmental behavior and energy performance

Guest Editor

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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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