

Special Issue

Energy and Technical Building Systems - Scientific and Technological Advances

Message from the Guest Editors

Future buildings have not only to be energy efficient, but they need to be equipped with proper building automation and control systems' functionalities in order to be capable to respond to the needs of occupants and energy grids. These development paths, raised by the revised Energy Performance of Buildings Directives as a new smart readiness indicator, require one to focus more on occupant needs such as good indoor climate, easy operability, and the monitoring of buildings.

Another area to be tackled is energy flexibility, which is needed to make buildings responsive to price signals of electricity grids with increasing amounts of fluctuating renewable energy generation both installed in central grids and on building sites. This Special Issue follows ten domains of the smart readiness assessment scope, namely, the following:

- Heating;
- Domestic hot water;
- Cooling;
- Mechanical ventilation;
- Lighting;
- Dynamic building envelope;
- On-site energy generation;
- Demand side management;
- Electric vehicle charging;
- Monitoring and control.

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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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