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# **Energy Management Systems: Challenges, Techniques and Opportunities**

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# **Message from the Guest Editors**

Dear Colleagues,

This Special Issue focuses on issues related to the development of modern energy management systems and platforms at different levels of contemporary energy systems and smart power grids. It aims to present original research and studies related to the development of technologies and methods of energy and demand management in distribution networks, microgrids, virtual power plants, prosumer installations or buildings equipped with renewable energy, storage tanks, heat pumps, etc. The scope of this Special Issue covers (but is not limited to) the following topics:

Energy management systems;

Effective demand-side management and response;

Flexibility of power supply and demand response;

Interactivity in the power grid;

Technologies and solutions in microgrids and virtual power plants;

Innovative transactive energy systems;

Data communication networks for energy management; Integration of renewable energy sources and storage;

Distributed generation with smart control and monitoring

functions;

Microgrids with buildings integrated;

Energy management in buildings and homes;

Energy efficiency in buildings;

Renewable energy technologies in buildings.









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## **Editor-in-Chief**

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# 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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