Special Issue

Integration of Renewable Energy Systems in Power Grid

Message from the Guest Editor

The global energy landscape is transforming towards sustainable, low-carbon systems. This Special Issue focuses on integrating renewable energy systems (RESs) into power grids, crucial for achieving climate goals. As renewables dominate the energy mix, their integration poses technical, operational, and economic challenges. The issue aims to present recent advances in renewable energy integration and foster a global discussion on decarbonizing the power sector. It invites academics, industry professionals, and policymakers to submit original research, comparative studies, or interdisciplinary approaches. Key themes include innovative solutions for resilience and accessibility in future power grids. Topics of interest for publication include, but are not limited to, the following:

- Enabling technologies for the energy transition;
- Grid stability and reliability;
- Energy storage and flexibility;
- Advanced control and management systems;
- Grid modernization and digitalization;
- Innovative network schemes;
- Policy and economic analyses;
- Case studies and real-world implementations.

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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