Special Issue

Challenges and Opportunities for Renewable Energy

Message from the Guest Editors

As the world is stepping into the decarbonized future, the biggest transition is expected to come to the electrical grid. To have the future power grid operate only with RESs, the renewable build out would need to be well planned in order to provide sufficient flexibility to accommodate the fluctuations on the demand side. To that end, any capacity expansion planning for the future decarbonized grid would need to account for these challenges and would need to come up with innovative solutions to keep the power grid reliable and resilient. This Special Issue will address these challenges and opportunities for RESs and for all the supporting technologies that would enable renewable energy integration to the power grid. This Special Issue will focus on and include methods, techniques and studies that will investigate the role of RESs and energy storage in the reliable and resilient operations of the future decarbonized power grid. This issue will also include different challenges faced by different RESs and the needs arising from these challenges as we move towards fast paced but sustainable growth of the future decarbonized power grid.

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Deadline for manuscript submissions

closed (25 July 2025)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/176666

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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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