

Special Issue

Advances in the Development of Electricity and Carbon Markets: Challenges and Opportunities

Message from the Guest Editor

The aim of this Special Issue is to gather pioneering research and advancements in the development of electricity and carbon markets. The scope of this Special Issue includes, but is not limited to, the following topics: the mechanisms driving market synergy, the role of policy and regulation, technological innovations facilitating market development, and the economic and environmental impacts of these integrated markets. Research areas may include (but are not limited to) the following:

- Interaction between electricity market dynamics and carbon pricing mechanisms
- Technological innovations in electricity and carbon market operations
- Market design and regulatory frameworks for electricity and carbon trading
- Decentralized energy and carbon trading and blockchain applications
- Impact of renewable energy on electricity and carbon markets
- Large-scale energy storage in electricity and carbon market integration
- Economic analysis of integrated electricity and carbon markets
- Market risk management in electricity and carbon markets
- Resilience and flexibility in electricity and carbon markets design.

Guest Editor

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Deadline for manuscript submissions

closed (25 August 2025)



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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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