Special Issue

Next-Generation Energy Systems for the Maritime Sector: DC Microgrids, Sustainable Practices, and Digitalization

Message from the Guest Editors

This Special Issue seeks high-quality research and review papers that address innovative system architectures, hybrid AC/DC power conversion, and cutting-edge energy management strategies. We welcome multidisciplinary contributions that explore topics such as the following:

- Novel designs for DC microgrids in maritime and port applications;
- Advanced power electronics and control systems for efficient energy distribution;
- The integration of renewable energy and energy storage solutions;
- Digital transformation in maritime operations using the IoT, AI, and cybersecurity measures;
- Sustainable green shipping practices and smart port management.

Keywords:

- maritime power systems
- electrical ships, ferries, and vessels
- seaport energy systems
- DC microgrids and hybrid AC/DC systems
- green energy integration
- sustainable green shipping
- digital transformation in maritime operations
- advanced energy management

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Deadline for manuscript submissions

30 September 2025

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/236936

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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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