

Special Issue

Sustainable Development and Energy Management of Hybrid Power Systems in Maritime Transport

Message from the Guest Editors

The issue emphasizes the advancement and application of hybrid propulsion technologies, including gas-electric hybrid systems, methanol-fueled hybrids, energy storage-driven hybrid architectures, and multi-energy hybrid configurations.

Research topics of interest include, but are not limited to:

- Integration strategies for low- and zero-carbon fuels (e.g., hydrogen, ammonia, methanol) in marine propulsion.
- System architecture design and energy flow optimization for hybrid vessels.
- Applications of energy storage technologies (e.g., batteries, supercapacitors) in maritime energy systems.
- Development of intelligent energy management and ship energy efficiency control systems.
- Utilization of renewable energy sources (e.g., solar, wind) in hybrid propulsion configurations.
- Implementation of digital twin technologies, artificial intelligence, and big data analytics for operational optimization.
- Life cycle assessment, carbon footprint analysis, and techno-economic evaluations of hybrid marine systems.

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Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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