Special Issue

Waste-to-Energy Biorefinery Technologies

Message from the Guest Editors

Driven by the global energy transition and carbon neutrality goals, renewable energy systems are undergoing unprecedented innovative development. With the continuous expansion of the installed capacity of renewable energy sources such as wind power and photovoltaic power, their volatility and intermittency pose challenges to the stable operation of the power system. Hydrogen energy, as an ideal energy carrier, provides an innovative solution for the large-scale consumption of renewable energy. This Special Issue aims to present and disseminate the most recent advances related to innovation in renewable energy power generation technology, hydrogen production and energy storage from renewable energy, and system integration and policies. Topics of interest include, but are not limited to the following:

- Research and development of high-efficiency photovoltaic/wind power technologies;
- Renewable energy prediction and intelligent regulation;
- Progress in hydrogen production technology by water electrolysis;
- Optimization of wind-solar-hydrogen coupling system;
- Design of multi-energy complementary energy system;
- Multi-Scenario Carbon Capture Technology;
- Policy support and business model.

Guest Editors

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Deadline for manuscript submissions

30 June 2026

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/243516

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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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