Special Issue

Bioenergy and Waste-to-Energy Technologies to Reach Climate Neutrality

Message from the Guest Editors

This Special Issue aims at investigating such unclear aspects, with analysis of novel solutions, as well as review papers with state-of-the-art findings that can deliver a significant contribution in assessing the potentials and implications of BECCS technologies. Even though the Special Issue is open to all contributions related to bioenergy, waste-to-energy, and their impact on climate change, potential focus areas are summarized as the following:

- Carbon capture techniques applicable to bioenergy and waste-to-energy systems;
- Assessments of GHG impacts also through life cycle assessment (LCA);
- Comparative analysis of different options, also entailing economic implications;
- Technologies applicable to specific streams (e.g., residual biomass, food waste, sewage sludge, sanitary waste);
- Gasification and pyrolysis associated with pre-combustion carbon capture techniques;
- Oxygen based thermal processes (e.g., oxy-combustion, chemical looping);
- Upgrading and conversion of biogas;

Guest Editors

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Deadline for manuscript submissions

closed (25 July 2025)

Energies

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Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/177395

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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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