

Special Issue

From Carbon Fossil Based Energy to Alternative Energy Production Technologies

Message from the Guest Editor

The shift from carbon-based fossil fuels to alternative energy involves replacing coal, oil and gas with renewable sources driven by reduced costs and sustainability goals to cut emissions. The success of the energy transition depends on reducing energy-related CO₂ emissions to mitigate climate change and limit global temperature to within 1.5 °C of pre-industrial levels. This Special Issue is open to address this target through:

- **Energy Transition Pathways and Systems Transformation.**
- **Energy, Environment and Sustainable Transition.**
The topics concern the design, development and testing of all the processes and technologies aimed at bioenergy and biofuel production to decarbonize the energy system.
- **Energy Storage, Flexibility and Grid Integration.**
- **Electrification and Smart Energy Infrastructure.**
- **Renewable and Low-Carbon Energy Sources.**
- **Energy Conversion, Efficiency and Fundamentals.**
- **Policy, Economics and Governance of Energy Transition.**

Guest Editor

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Deadline for manuscript submissions

15 June 2026



Energies

an Open Access Journal
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Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/265928

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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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