

Special Issue

Carbon Capture, Utilisation and Storage

Message from the Guest Editors

This Special Issue explores and promotes research and applications in the field of CCUS to achieve carbon neutral processes, clean energy development, safe storage methods and climate change mitigation at large. Potential topics include, but are not limited to, the following:

- Pre- and post-combustion carbon capture from the chemical process industry—technologies and methodologies;
- Carbon capture and storage applications in power generation;
- Direct air carbon capture;
- CO₂ transmission in pipelines;
- Bioenergy with Carbon Capture and Storage;
- Negative emissions technologies;
- The thermal, electrochemical, and photochemical conversion of CO₂ into fuels and chemicals;
- The biological utilisation of CO₂ into value-added products;
- The CO₂ mineralisation into inorganic materials;
- System optimisation, digital twins, and decision-making models;
- Techno-economic feasibility and life-cycle analysis evaluation of CCUS;
- Risk assessment, intelligent monitoring, advanced sensors, and process control of CCUS processes;
- Supply chain, economics, social factors, governmental policies, and regulations regarding CCUS applications.

Guest Editors

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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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