Special Issue

CO₂ Based Energy Harvesting and Storage Systems

Message from the Guest Editors

The issue of carbon emission reduction by many industrial processes and human activities leads to the necessity to cope with CO2 release, by introducing new processes focused on good practice through reusing and recycling. Among the possibilities, CO2 can be used as a reactant for power production in many advanced energy systems or as a storage and operating medium for waste heat recovery. This Special Issue will focus on the topics of interest for publication include, but are not limited to:

Advanced thermodynamic cycles;

Supercritical CO2 cycles;

Power-to-gas and gas-to-power storage systems;

Fuel cells and electrolysis with CO2;

New integrations of CO2 capture and energy systems; Combined heat and power generation with CO2;

Energy networks with CO2;

Biomethane and synthetic methane plants.

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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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