

Special Issue

Editorial Board Members' Collection Series: Economic Growth, Energy Consumption and Carbon Emission

Message from the Guest Editors

Hydrogen, the lightest energy molecule that burns to produce only water, is considered a frontrunner to replace carbon-dioxide-emitting fossil fuels. However, dihydrogen does not exist in nature in enough abundance; thus, it has to be produced from other primary energy feedstocks such as water and biomass. A recent surge in R&D activity is focused on addressing challenges centred around the entire hydrogen value chain: production, storage, transport, and end uses. The Special Issue will host papers on these topics to showcase hydrogen's potential key role in the energy mix by the end of this decade. A foreword will capture the complexity of this non-carbon molecule. In the modern economy, growth is sustained by energy consumption, with carbon emissions being a part of this. The nexus between economic growth, energy consumption, and carbon emissions is important for us to understand the physical foundations and constraints of the anthropocentric world. This Special Issue will host papers reflecting the nexus from different aspects.

Guest Editors

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Prof. Dr. Pierre Failler

Prof. Dr. Zhan-Ming Chen

Deadline for manuscript submissions

closed (25 August 2025)



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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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