Special Issue

Environmental and Economic Analysis of Low-Carbon Energy Technologies

Message from the Guest Editors

Global greenhouse gas (GHG) emissions have significantly increased since 1900, which seriously impact the environment, human health, and the global economy. Facing this challenge, many low-carbon energy technologies, such as solar, wind, hydro, nuclear, hydrogen, carbon capture, utilization, and storage, and energy storage, are rapidly being developed to shift the economic activities to lower GHG emissions. Considering the resource availability and economic conditions, the above low-carbon energy technologies are highly heterogeneous in various regions and industries, which perform differently from both environmental and economic perspectives. Thus, it is crucial to explore low-carbon energy technologies through the perspective of multidisciplinary collaborations.

This Special Issue aims to investigate low-carbon energy technologies in an environmental and economic system to support their development and achieve the targets for climate change mitigation, while following the aspirations of the sustainable development goals (SDGs).

Keywords
low-carbon technology
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solar and wind energy
energy storage
hydrogen
clean fossil energy

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