Special Issue

Low-Carbon Energy Economy Transformation and Integrated Assessment of Energy

Message from the Guest Editors

Most of the global efforts in pursuing the goals of the Paris Agreement have been concentrated on developing a restricted set of low-carbon energy sources like solar panels, wind turbines, and the intensive electrification of means of transportation. But these sets of new technologies demand the intensive usage of a large amount of critical materials, some of which are very difficult and costly to produce, seriously harm the environment, and lead us to two key research questions: where will all the materials needed for this type of transition come from? Are we on the right track? Other questions can also be added, such as what is the ideal mix of energy sources? What about nuclear energy and the much talked about hydrogen economy? Both theoretical and empirical contributions that address one or more of the above pointed out concerns are welcome. The contributions can be in the form of theoretical essays, literature surveys, systematic reviews, umbrella reviews, scoping reviews, metaanalyses, content analysis, social network analysis, or applied studies that combine several techniques, including case studies, econometrics tools, and foresight tools.

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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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