Special Issue

Grid Integration of Renewable Energy Conversion Systems

Message from the Guest Editors

Renewable energy conversion systems will play an important role in the ongoing energy transition process, aiming to meet the future zero net emission goals for sustainable development. Renewable energy from different sources such as the sun, wind, currents, and waves may cover a substantial proportion of the growing energy demand. However, the integration of renewable energy sources into the grid can bring additional challenges related to grid stability, continuous electrical power supply and safe operation of the grid. Different approaches can be used at each resource level, such as control at the energy conversion system level, collaborative control within a farm of energy converters and the use of eventual complementarity between different energy sources to tackle eventual spatial and temporal variability. This Special Issue aims to present the current state of the art in the areas of control of individual devices and their farms, as well as existing and novel hybrid power parks, the use of different energy storages, and their capacity to cover power and energy demands.

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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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