

Special Issue

Power System Flexibility in High Renewable Energy Systems

Message from the Guest Editors

A broad range of economic, environmental, technical, and socio-political forces have driven the deployment of renewable energy to unprecedented levels in many countries and regions. High renewable penetration challenges the flexibility of the electric power system – often defined as the ability to cope with variability and uncertainty. Moreover, meeting the flexibility challenges of high penetration renewable systems may be facilitated by appropriately designed and operated cross-sector solutions such as the electrification of the end-use sectors, particularly transportation, and power-to-gas or to-hydrogen development. These trends call for an interdisciplinary approach to investigate the flexibility topic.

This special issue in *Sustainability* will cover this promising and dynamic area of research and development, and emphasize the broad array of considerations and state-of-art approaches in effectively planning and managing bulk power systems with high variable renewable energy as the foundation for broader clean energy economies.

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Deadline for manuscript submissions

closed (31 December 2020)



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



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I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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