

Special Issue

Enhancing Sustainability Through Power System Flexibility, Smart Grids, and Energy Digitalization

Message from the Guest Editors

This Special Issue seeks to explore innovative research and insights into the intersection of power system flexibility, smart grid solutions, and energy digitalization, with a primary focus on promoting sustainability across various sectors. We invite original research papers, reviews, and case studies that address topics including, but not limited to, the following: Novel approaches to enhancing power system flexibility for variable renewable energy integration (VRE). Cybersecurity challenges and solutions in the context of smart grids and digitalized energy systems. Policy and regulatory frameworks driving the adoption of smart grid and digitalization initiatives. Economic and environmental implications of transitioning towards flexible and digitally enabled energy systems. Resilience assessment of power systems with an emphasis on flexibility and sustainability. Innovative technologies and solutions for enhancing power system flexibility in urban energy systems. Human factors and behavioral aspects in the adoption of power system flexibility solutions.

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Message from the Editor-in-Chief

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. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full 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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