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.

Guest Editors

Dr. Mikaeel Ahmadi

Graduate School of Engineering and Science, University of the Ryukyus, Nishihara, Okinawa 903-0213, Japan

Dr. Atsushi Yona

Graduate School of Engineering and Science, University of the Ryukyus, Nishihara, Okinawa 903-0213, Japan

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Sustainability
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sustainability@mdpi.com

mdpi.com/journal/ sustainability





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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. *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.

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G OC5, Canada

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