Special Issue

Power System Transformation and Smart Electricity Sustainable Development

Message from the Guest Editor

The global energy landscape is undergoing a profound transformation, driven by the urgent need for sustainability, resilience, and efficiency. This Special Issue seeks to explore the dynamic evolution of power systems in response to these challenges. The integration of renewable energy sources, the advent of smart grids, and the increasing role of digital technologies are reshaping how electricity is generated, distributed, and consumed. This Special Issue aims to provide a platform to share innovative research, case studies, and practical insights on the following themes:

- Smart grid technologies and their role in modern power systems.
- Integration of renewable energy sources and the challenges involved.
- Advanced energy storage solutions and their impact on grid stability.
- Digitalization of the power sector: IoT, AI, and big data analytics.
- Policies and regulations fostering sustainable energy development.
- Case studies on successful power system transformations.
- Strategies for enhancing energy efficiency and reducing carbon footprint.

Guest Editor

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About the Journal

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

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