Special Issue

Smart Grid Technology Contributing to Sustainable Energy Development

Message from the Guest Editor

In this Special Issue, original research articles and comprehensive review papers are welcome, and research areas may include, but are not limited to, the following topics: (1) Virtual power plants (VPPs) and their role in grid stability and ancillary services; (2) Smart metering, data analytics, and energy demand forecasting; (3) Integration of distributed energy resources (DERs) and energy storage systems; (4) AI and machine learning for smart grid optimization and real-time control; (5) Grid automation, self-healing networks, and fault detection; (6) Demand-side management and flexible consumption strategies; (7) Resilient microgrids and decentralized energy systems; (8) Power quality monitoring and control in renewableintegrated grids; (9) Smart grid cybersecurity and data privacy challenges; (10) Policy, regulatory, and economic frameworks for smart grid deployment; (11) Digital twins and simulation platforms for smart grid operation and planning; (12) IoT-enabled grid infrastructure and interoperable communication protocols.

Guest Editor

Prof. Dr. Franco F. Yanine

Faculty of Engineering, Finis Terrae University, Av. Pedro de Valdivia 1509, Providencia, Santiago 7501014, Chile

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

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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. 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.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University, Columbus, OH 43210, USA

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