





an Open Access Journal by MDPI

The Sustainable Performance of Power Supply Chain Systems

Guest Editors:

Dr. Harsha Vardhana Padullaparti

Power Systems Engineering Center, National Renewable Energy Laboratory (NREL), Golden, CO 80401, USA

Dr. Sambuddha Chakrabarti

Energy System Researcher, Andlinger Center for Energy the Environment, Princeton University, Princeton, NJ, USA

Deadline for manuscript submissions:

2 May 2025

Message from the Guest Editors

The Special Issue will cover a broad spectrum of topics related to sustainability, digitization, and the resilience of power supply chain systems, with emphasis on addressing complex and emerging challenges, including supplydemand integration, cybersecurity, logistics optimization, and efficiency improvements. Submissions are encouraged to explore these areas:

- Sustainable sourcing and procurement practices in the power industry;
- Supply-demand integration: integrating various consumption points such as buildings, households, and industries, and EV infrastructure with supply chain systems for coordinated optimization;
- Integrating renewable energy sources into the power supply chain, both at large scales and as distributed energy resources (DERs);
- Resilience planning and risk management in power systems, including cybersecurity measures, anomaly detection, predictive analytics, and disaster management;
- Optimization of complex logistics systems, including efficient energy dispatch, managing storage, electric vehicles, and their intersections;
- Innovations in technology and infrastructure, power supply chain systems.









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G 0C5, Canada

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 and applications of sustainability-based measures and activities.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, AGRIS, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Environmental Studies*) / CiteScore - Q1 (Geography, Planning and Development)

Contact Us