Special Issue

Renewable Energy-Integrated Power Systems and Techniques into High Voltage

Message from the Guest Editors

This Special Issue explores advanced methods and technologies that enhance the performance and security of renewable-rich power networks. Battery technologies, including their modelling, degradation prediction, and high-voltage management, also play an integral role in enabling flexible, low-carbon energy solutions. With the growth of grid-scale storage, effective control, balancing, and high-voltage safety techniques are critical for system resilience. This Special Issue encourages contributions that address these interdisciplinary challenges through innovative designs, data-driven tools, advanced control methods, and experimental validations. By combining expertise from electrical engineering, materials science, data analytics, and renewable technologies, this Special Issue will advance the development of robust smart grid-integrated high-voltage renewable power systems as the foundation of future sustainable energy networks.

Guest Editors

Dr. Sanath Alahakoon

School of Engineering, Central Queensland University, 43 Bryan Jordan Dr, Callemondah, Gladstone, QLD 4680, Australia

Dr. Md Ohirul Qays

School of Engineering, Central Queensland University, 43 Bryan Jordan Dr, Callemondah, Gladstone, QLD 4680, Australia

Deadline for manuscript submissions

10 June 2026

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/263618

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

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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