



Renewable Energy-Enabled Power System: Realizing Low-Carbon Transformation of Electricity

Guest Editors:

Dr. Jiajia Yang

School of Electrical Engineering
and Telecommunications,
University of New South Wales,
Sydney, NSW 2052, Australia

Dr. Yue Zhou

School of Engineering, Cardiff
University, Cardiff CF24 3AA,
Wales, UK

Prof. Dr. Fushuan Wen

School of Electrical Engineering,
Zhejiang University, Hangzhou
310027, China

Deadline for manuscript
submissions:

closed (15 October 2022)

Message from the Guest Editors

To combat climate global change, more than 100 countries have pledged to achieve net-zero emissions, which is also known as carbon neutralization, by 2050. Renewable energy generation (REG) technology with low carbon mission potential has long been recognized as one of the most promising solutions for achieving carbon neutralization. In order to realize the transition towards a low-carbon power system, research efforts have been devoted to the planning and operation of power systems with high REG potential in the context of carbon neutrality, as well as the design of supportive electricity wholesale market mechanisms for enhancing the accommodation capability for REG. In addition, at the distribution system level, endeavors have also been devoted to research on virtual power plants, industrial/business park energy management, smart home energy management, and community energy storage systems, so as to increase the integration of renewable distributed energy resources (DERs) through demand-side management solutions.





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 initiatives 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

Sustainability Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sustainability
sustainability@mdpi.com
[X@Sus_MDPI](#)