



Renewable Energy Sources: A Solution in the Operation of Smart Grids and Sustainable Energy Systems

Guest Editors:

Dr. Seyed Masoud Mohseni-Bonab

1. Digital Systems Department,
Hydro-Québec/IREQ, Varennes,
QC, Canada
2. Electrical Engineering
Department, Université Laval,
Québec City, QC, Canada

Dr. Ali Moeini

Power System Simulation and
Evolution Department, Hydro-
Québec/IREQ, Varennes, QC,
Canada

Dr. Ali Hajebrahimi

Simulation and Evolution of
Electricity Grid, Hydro-
Québec/IREQ, Varennes, QC,
Canada

Deadline for manuscript
submissions:
closed (10 February 2024)



Message from the Guest Editors

This Special Issue aims to provide an optimal solution to expansion of renewable energies and smart grids technologies considering the planning and operation aspects. It also focuses on dealing with the imposed uncertainties associated with renewable energies in operation and real-time problems. Thus, scholars and researchers are kindly invited to consider submitting their original articles for consideration in this Special Issue to accelerate the existing practices in smart grids and sustainable energy systems. This Special Issue welcomes submissions in, but not limited to, the following subjects:

- Proposing new ideas on increasing the penetration levels of RESs (renewable energy sources);
- Activating large-scale RES-based loads in the power market mechanisms;
- Resilient integration of RESs into power systems and smart grids;
- Maximizing the utilization rate of installed capacity of RESs in planning and control strategies;
- Achieving net-zero carbon emissions and reliable power generation via RESs;
- Enabling RES capabilities in power system dynamics studies;
- Harmonic analysis of RES-dependant smart grids;

Any questions, please ask Mark Huang
<mark.huang@mdpi.com>.



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Steve W. Lyon

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

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. 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.

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](#), [RePEc](#), [CAPlus / SciFinder](#), and [other databases](#).

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

Contact Us

Sustainability Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

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