



## Power System Challenges toward Renewable Energies' Integration

Guest Editors:

**Prof. Dr. Inga Zicmane**

**Dr. Gatis Junghans**

**Dr. Svetlana Beryozkina**

**Dr. Sergey Kovalenko**

Deadline for manuscript  
submissions:

**closed (15 December 2022)**

### Message from the Guest Editors

Currently, the energy sector is undergoing a transformation which is leading to significant structural changes on both global and local scales. To ensure a smooth transformation process, a key challenge is the integration of an increasingly larger share of intermittent, less controllable renewable energy sources and decreasing share of centralized, controllable conventional thermal power plants.

The issue is aimed toward problems related to the integration of renewable energy sources into both large and small power energy systems. This consideration includes renewable sources' influence on the intelligent network construction and the energy market design, also assessing the impact of distributed generation increase on the energy power system stability and reliability, the behavior of distributed generation in the presence of disturbances in the energy system, and many other factors. We believe that the results of analytical, experimental or numerical studies of scientists all over the world, which shall become available to a wide audience through the open access journal *Sustainability*, will help to solve the abovementioned problems.





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](http://www.mdpi.com)

[mdpi.com/journal/sustainability](http://mdpi.com/journal/sustainability)  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)  
[X@Sus\\_MDPI](#)