



*energies*



an Open Access Journal by MDPI

## Power System Dynamics with Renewable Energy

Guest Editors:

### **Prof. Dr. Vijay Sood**

Department of Electrical,  
Computer and Software  
Engineering, Ontario Tech  
University, Oshawa, ON L1G 0C5,  
Canada

### **Dr. Héctor Chávez**

Departamento de Ingeniería  
Eléctrica, Universidad de  
Santiago de Chile, Estación  
Central, Santiago 9160000, Chile

### **Dr. Harold R. Chamorro**

Department of Electrical  
Engineering at KTH, Royal  
Institute of Technology, SE-100  
44 Stockholm, Sweden

Deadline for manuscript  
submissions:

**closed (31 December 2021)**

### **Message from the Guest Editors**

Dear Colleagues,

In this issue, we are aiming to contribute to a better understanding of the systemic impacts of renewable energy integration on power system dynamic stability. The topics considered by this Special Issue include but are not limited to the following:

- Simulation-based/offline power system dynamic stability assessments for increasing integration of renewable energy;
- Power system inertia and frequency control frameworks to increase the dynamic stability margins of power systems under the integration of renewable energy;
- Estimation and data analytics/machine learning-based/offline tools to increase the situation awareness of power system dynamic stability margins under the integration of renewable energy;
- Synthetic/virtual inertia, energy storage approaches to increase the contribution of power electronic converters to power system dynamic stability.

Prof. Vijay K. Sood

Dr. Harold Rene Chamorro Vera

Dr. Héctor Chávez



[mdpi.com/si/67453](https://mdpi.com/si/67453)

# Special Issue



# energies



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Enrico Sciubba**

Department of Mechanical and  
Aerospace Engineering,  
University of Roma Sapienza, Via  
Eudossiana 18, 00184 Roma, Italy

## 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.

## Author Benefits

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

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** CiteScore - Q1 (*Engineering (miscellaneous)*)

## Contact Us

---

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

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/energies](http://mdpi.com/journal/energies)  
[energies@mdpi.com](mailto:energies@mdpi.com)  
[X@energies\\_mdpi](https://x.com/energies_mdpi)