

Special Issue

Advanced Wind Energy Conversion Systems

Message from the Guest Editors

Wind power is now a mature technology that is expected to profoundly contribute to the ongoing energy transition and ultimately to the desired decarbonization of the power system. This Special Issue aims at bringing together contributions regarding all aspects relevant to the planning, design, operation, analysis, control, monitoring, and prognosis of Wind Energy Conversion Systems (WECS). The following is a non-exhaustive list of topics that are most welcome.

- Modelling and control of WECS; WECS technology; Virtual power plants and Micro-grids with WECS
- Impact of WECS on power system's stability; Integration in the power system; Power electronics for WECS
- Wind forecast; Economics of WECS; Wind power generation in electricity markets
- WECS aerodynamics; Offshore wind; Structural analysis; Component design
- O&M planning and deployment; Optimization of WECS siting
- Hybrid wind/hydrogen and Micro-grids systems
- Resource assessment; Environmental impacts
- Electrical protections for WECS; Fault detection
- Hybrid wind and other renewable in isolated systems
- Wind energy in urban environment and in developing countries
- Next generation of WECS

Guest Editors

Prof. Dr. Rui Castro

INESC-ID/IST, University of Lisbon, 1000-029 Lisbon, Portugal

Prof. Dr. Ghanim A. Putrus

Department of Mathematics, Physics and Electrical Engineering,
Northumbria University, Newcastle upon Tyne NE1 8ST, UK

Deadline for manuscript submissions

closed (10 November 2023)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/102915

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

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)



About the Journal

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

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 (Control and Optimization)