Special Issue

New Trends in Energy, Climate and Environmental Research

Message from the Guest Editors

To reduce greenhouse gas (GHG) emissions effectively, it is crucial to explore new technologies and deploy them in society. These include renewable energy technologies, such as solar, photovoltaic (PV), and wind power generation, storage, and hydrogen, which are promising measures for a sustainable society in the future. Meanwhile, large-scale deployment of renewable energy sources raises concerns about the coupling of their intermittent power with the current power grid systems. The digitalization of the power system is a promising approach to alleviate the stated concerns. The penetration of virtual power plants (VPPs), the Internet of Things (IoT), and vehicle-to-grid (V2G) technologies into the power system paves the way to delivering flexible electric power in the digital power system. In addition to these power generation technologies, a digital power system requires an intelligent control system, an optimization module, and load and weather forecasting modules to make this system as smart as possible.

Guest Editors

Prof. Dr. Mika Goto

Institute of Science Tokyo, School of Environment and Society, 3-3-6 Shibaura, Minato-ku, Tokyo 108-0023, Japan

Dr. Reza Nadimi

School of Environment and Society, Institute of Science Tokyo, 3-3-6 Shibaura, Minato-ku, Tokyo 108-0023, Japan

Deadline for manuscript submissions

closed (19 March 2025)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 8.3

mdpi.com/si/194569

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

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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

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