Special Issue

Smart Grids and Active Distribution Networks: Modeling, Optimization, and Planning Approaches

Message from the Guest Editor

The use of renewable energy sources and electric vehicles will continue to drastically change the operation of distribution systems. In opposition to conventional approaches, modern distribution planning algorithms should emulate new environments to produce strategic expansion plans for guiding the evolution of the system in times of financial restriction. In this Special Issue, we invite original submissions of new research outcomes that highlight innovations in the area of planning power distribution networks. Topics of interest include, but are not limited to, the following:

- Innovative planning techniques for MV and LV distribution networks:
- Probabilistic approaches to power distribution network planning;
- The smart management of distributed energy resources in power distribution networks;
- Regulatory requirements for innovative power distribution network planning;
- Power distribution network planning with innovative no-network solutions (flexibility exploitation);
- The optimization of power distribution networks.

Guest Editor

Dr. Gian Giuseppe Soma

Department of Electrical and Electronic Engineering, University of Cagliari, Via Marengo 2, 09123 Cagliari, Italy

Deadline for manuscript submissions

closed (31 January 2025)



Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



mdpi.com/si/195894

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

mdpi.com/journal/ energies





Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



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)

