



energies



an Open Access Journal by MDPI

Improving Energy Efficiency through Data-Driven Modeling, Simulation and Optimization

Guest Editor:

Prof. Dr. Dirk Deschrijver

Department of Information
Technology, Ghent University,
Technologiepark Zwijnaarde 126,
9052 Gent, Belgium

Deadline for manuscript
submissions:

closed (13 January 2021)

Message from the Guest Editor

Dear colleagues,

We are inviting submissions to a Special Issue of the *Energies* Journal on the subject area of “Improving Energy Efficiency through Data-Driven Modeling, Simulation, and Optimization”. Rising energy costs and the effect of greenhouse gases stimulate the need for more efficient energy systems. The increase of computational power combined with advanced modeling and simulation tools makes it possible to derive innovative solutions that can reduce the ecological footprint. This Special Issue focuses on novel contributions that are based on data-driven approaches, machine learning, and artificial intelligence for modeling, simulation, and optimization of energy systems.

Topics of interest for publication include, but are not limited to:

- * Non-intrusive load monitoring of energy consumption in buildings;
- * Data-driven modeling approaches for energy prediction and forecasting;
- * Energy modeling using neural architectures and deep learning;
- * Advanced decision making using machine learning or artificial intelligence;
- * Energy flexibility assessment, demand prediction, and load balancing for smart grids.



mdpi.com/si/34057

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 (Control and Optimization)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)