



Recent Advances in District Heating

Guest Editors:

Dr. Anna Volkova

Department of Energy
Technology, School of
Engineering, Tallinn University of
Technology, 12616 Tallinn,
Estonia

Dr. Hanne Kauko

Thermal Energy, SINTEF Energi
AS, NO-7465 Trondheim, Norway

Prof. Dr. Sanna Syri

Department of Mechanical
Engineering, School of
Engineering, Aalto University,
P.O. Box 14100, FI-00076 Aalto,
Finland

Deadline for manuscript
submissions:

closed (31 March 2022)

Message from the Guest Editors

Dear Colleagues,

District heating can significantly contribute to achieving carbon-neutral energy supply systems. The key challenges for existing district heating systems include reducing heat losses, replacing fossil-based heat sources with renewable or waste heat to reduce CO₂ emissions, as well as introducing new solutions and technologies for e.g storage and operation. There are technical, economic, and infrastructural barriers related to these challenges that can be overcome with the help of researchers.

This special issue aims to draw attention to research and review articles on existing district heating systems. The focus will be on transforming existing district heating networks into sustainable, energy-efficient, carbon-neutral energy systems that interact with the power grid and other energy carriers to provide more flexibility in renewable power production.

Dr. Anna Volkova
Dr. Hanne Kauko
Prof. Sanna Syri
Guest Editors





energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 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 Compindex, 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)