

Special Issue

Thermal Energy Storage, District Heating and Optimization in a Multi Energy System Context

Message from the Guest Editor

The challenge of reaching 100% renewable cities must rely on different technologies for energy production that should be opportunely linked at different levels (country, region, city). District heating connected to thermal storage represents an interesting option to reduce pollutant emissions for house space heating, even more in a Multi-Energy context (heat, electric and gas) since thermal grids represents a cheap buffer for the energy excess (i.e. conversion by power to heat). Despite thermal storage, district heating and multi-energy systems are expected to play a significant role for an efficient energy supply to buildings, they are still characterized by limitations that require further research efforts. This Special Issue will comprise a selection of papers presenting original and innovative contributions on the above bullet points and, in general, in the following main fields:

- thermal storage technologies and their integration for urban/building-scale and multi-energy applications;
- district heating and multi energy system in the transition towards future sustainable societies.

Guest Editor

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Deadline for manuscript submissions

closed (15 March 2022)



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Editor-in-Chief

Prof. Dr. Steve W. Lyon

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