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***Sustainable Energy Technologies and Assessments****Call for Paper on Special Issue – Efforts for Sustainable Development of District Heating and Cooling Systems*

Vienna, September 2021

Dear Reviewers, dear Associate Editors,

Please find attached our manuscript *“Determination of the heat density of centralized heat networks in Austria 2050 under the 1.5°C climate target”*, which we would like to submit for publication in your journal’s *Special Issue – Efforts for Sustainable Development of District Heating and Cooling systems.*

This work has been developed in the course of a research stay at the Institute of Applied Systems Analysis (IIASA) as part of the Young Scientist Summer Programme*.* The core objective of this research paper is to investigate the role of centralized heat networks under the 1.5°C climate target in 2050. In particular, we downscale European decarbonization scenarios to the Austrian grid/community levels. The results indicate that district heating networks are crucial in the highly efficient decarbonized heat supply in Austria in 2050. Nevertheless, most district heating networks do not reach the heat density required for economic and technical efficiency from today’s techno-economic perspective.

We believe that with this work, we can contribute to your special issue’s agenda, as our focus lies on the high-efficient integration of sustainable heat sources in the heating sector, network topology and design of district heating systems, and comparison/discussion of centralized heat networks under the climate targets.

We would like to propose the following proven experts as reviewers:

Jenny Sahlin from Chalmers University of Technology ([jenny.sahlin@me.chalmers.se](mailto:jenny.sahlin@me.chalmers.se)), Tom Brown from Technische Universität Berlin ([t.brown@tu-berlin.de](mailto:t.brown@tu-berlin.de)), and Urban Persson from Halmstad University ([urban.persson@hh.se](mailto:urban.persson@hh.se)).

The manuscript is original; no part of this work has been published before nor is it under consideration for publication in another journal. The authors declare that there are no conflicts of interest regarding the publication of this paper. The paper has been professionally proofread.

The corresponding author is Sebastian Zwickl-Bernhard. The contact details can be found above.

I am looking forward to your reply and thank you in advance for your consideration.  
  
Yours sincerely,

Sebastian Zwickl-Bernhard