

Digitalisation of District Heating

An initiative with the IEA - The IEA DHC Annex TS4

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Our future Energy system will be digital!





Background: Digitalisation

- District heating and cooling networks are traditionally operated with a limited number of controls.
- A wider implementation of information and communication technologies, as in many other industries, opens up for better network management based on real time measurement data.
- Opportunities:
 - offering flexibility by integrating digital processes and demand side management (peak shaving)
 - Enabling the integration of fluctuating heat sources (renewables)
 - New business models for district heating provider



Aim of DHC Annex TS4

- The new project aims at promoting the opportunities of the integration of digital processes into DHC schemes and to clarify the role of digitalisation for different parts within the operation (and maintenance) of the district heating and cooling system.
- Furthermore, the implementation of these technologies is going to be <u>demonstrated</u>.
- On the other hand <u>new challenges</u> need to be tackled, such as data security and privacy as well as questions about data ownership.



principle goals of the task shared Annex

- <u>Create</u> awareness for the advantages of the implementation of digital processes to the various stakeholders and users
- Provide a state-of-the-art overview of the digitalisation of district heating schemes in terms of R&D projects, demonstrators and case studies
- Evaluate non-technical barriers and enablers for digitalisation processes in district heating and cooling schemes such as business models, legal aspects and policy instruments



Our focus areas for a digitalisation in DHC





DHC Annex TS4 working structure





Annex TS4 meetings & industry workshops







The project started recently.

Interested to join us?

www.iea-dhc.org/the-research/annexes/2018-2024-annex-ts4/



Technology Collaboration Programme

Thank you for your attention!



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More information at:

https://www.iea-dhc.org/the-research/annexes/2018-2024-annex-ts4/

