

Workshop: The Future of District Heating and Cooling Networks in an Integrated Energy System

Challenges for the industry and selected solutions in the international IEA DHC Annex TS3 „hybrid energy networks“

The integration of the different energy networks, such as electricity, gas and heating/ cooling is considered as one of the key measures for decarbonizing the energy system, since it triggers important synergies, that couldn't be realised by optimizing the sectors individually. However, a persistent implementation of an integrated energy system is connected to several challenges, such as an increasing competition between the energy domains and a higher complexity.

We would like to invite you to the workshop “The Future of District Heating and Cooling Networks in an Integrated Energy System” in the framework of the international cooperation program IEA DHC Annex TS3 „hybrid energy networks“¹. The focus within the "Annex TS3" is on

- The identification of application areas and synergy potentials in different countries
- The analyses of international case studies and the individual challenges
- The assessment of the different methodological approaches and available tools for evaluation, design and optimization of integrated energy systems
- Recommendation on suitable business models, market design and regulations

Aim of the Workshops is

- to presented and discuss concrete challenges from the (German) industry perspective and
- to initiate networking between industry stakeholders and international researchers for
- linking the results of the latest R&D projects with practical considerations.

The Workshop is directed towards:

- Network operators and energy suppliers (district heating/ cooling, electricity and gas)
- Policy makers, energy authorities and associations
- Consultancies and engineering offices
- National and international R&D institutes / universities

Attendees may attend free of charge, a light lunch and coffee breaks will be provided.

Date: Thursday, 11. October 2018, from 10.00 to 16.00

Place: Global Energy Interconnection Research Institute (GEIRI) Europe GmbH
Kantstrasse 162, 10623 Berlin

Registration is requested by the 27th September 2018 to Ralf-Roman Schmidt
E-Mail: Ralf-Roman.Schmidt@ait.ac.at , Tel: +43 664 235 19 01

¹ More information: <http://www.iea-dhc.org/the-research/annexes/2017-2020-annex-ts3-draft.html>

Agenda v_20.09

9:30	Registration and Coffee
10:00	Welcome of the host (Weilin Liu, GEIRI)
10:15	Introduction into the workshop and description of the international DHC Annex TS3 (Ralf-Roman Schmidt, AIT)
10:30	Presentations on concrete challenges from the industry perspective <ul style="list-style-type: none"> • <i>Jens Kühne (AGFW, der Energieeffizienzverband für Wärme, Kälte und KWK e.V.)</i> • <i>Michael Stolze (E.ON Energy Solutions GmbH)</i> • <i>Susanne Manger/ Thomas Jaenicke-Klingenberg (Vattenfall Wärme Berlin AG)</i> • <i>... Further presenters to be defined</i>
11:15	Coffee break
11:45	Presentations on selected solutions from the international DHC Annex TS3 <ul style="list-style-type: none"> • <i>Edmund Widl (AIT): assessment of integrated distribution networks</i> • <i>Shi You (DTU): demand side management in district heating networks</i> • <i>Weilin Liu (GEIRI): solutions for sensors embedded in energy system</i> • <i>Christian Spalthoff (Fraunhofer IEE): Economic aspects of network interaction</i> • <i>... Further presenters to be defined</i>
13:00	Lunch
14:00	Panel discussion <ul style="list-style-type: none"> • <i>All presenters from industry and academia</i>
14:45	Round table discussion <ul style="list-style-type: none"> • <i>General challenges and opportunities for district heating and cooling</i> • <i>Transferability of the existing solutions and gap analyses</i> • <i>Regulative aspects, energy markets and business models</i>
15:30	Presentation of the results of the round table discussion and summary
16:00	End of the workshop