

Joined Workshop SHC Task 55 & DHC Annex TS2 10th of April 2018, in Graz, Austria

Background

The programs of Solar Heating and cooling (SHC) as well as District Heating and Cooling (DHC) belong to the 5 main technology collaboration programmes (TCP) of the IEA (International Energy Agency). SHC was among the first programmes of the IEA established in 1977. Its goal is to promote the use of all aspects of solar thermal energy.

IEA SHC Task 55 focuses on: Towards the Integration of Large SHC Systems into DHC Networks.

IEA DHC Annex TS2 focuses on: Implementation of Low Temperature District Heating Systems.

The Task 55 is a successor of Task 45. The goal is to advance solar thermal large scale installations from Megawatt to Gigawatt systems and thereby to integrate SHC systems into DHC systems.

The objective of the TS2 Annex is the implementation of 4th Generation District Heating(4GDH). It is the continuation of the TS1 Annex where everything what was known about 4GDH was gathered. The research project is also a platform to exchange research results and allows the gathering, compiling and presentation of information concerning preconditions for implementation of 4GDH.

The Expert Meetings

In Task 55, two expert meetings per year within 4 years are a platform for industry, researchers, heat suppliers, local communities and policy makers. 41 experts from 27 organizations from all over the world were part of the 4th expert meeting in Graz, including 2 Executive Committee Members.

At the Annex TS2 meeting, the Kick-Off Meeting of the project, about 15 experts from all over the world were present as well. Prominent participant was Robin Wiltshire, Chairman of the DHC.

Joined Workshop

The joined workshop of the expert projects aimed to identify synergies between the Task 55 and the Annex TS2 working programs.

The two main issues of discussion were “Financial and Infrastructural Challenges in the fields of DHC and SDH”. Participants had two key presentations on these topics, followed by group discussions in individual settings.

Financial challenges are e.g. that public financing is still an issue and the value of “green” must be promoted in order to raise attention of investors. SHC projects are not part of much public awareness. The technology is available, but investors lack detailed information and attention of its relevance. Raising public awareness should speed up the implementation and success of future SDH and SDC projects. Main barriers to increase the solar fraction in existing DH networks are the supply and demand of generated energy, transportation of heat, storage availability and temperature settings of DHC systems. Organizational and social questions also influence the implementation of installations of such scales.

Conclusion

The joined workshop was a new attempt to the link the industries of solar thermal large-scale industry and researchers with the district heating and cooling community. A number of mutual challenges were identified, as well as options to for their solutions to be further discussed at upcoming events.