

TCP on Solar Heating and Cooling (SHC TCP)

Through multi-disciplinary international collaborative research and knowledge exchange, as well as market and policy recommendations, the SHC TCP works to increase the deployment rate of solar heating and cooling systems by breaking down the technical and non-technical barriers to increase deployment.

Main areas of work

- Building applications (solar water heating, solar combi systems, photovoltaic thermal systems and solar air conditioning);
- District scale systems for solar heating and cooling;
- Thermal storage (diurnal to seasonal);
- Solar process heating and cooling and water treatment assisted by solar energy for agriculture and industry.

Key activities and accomplishments (2017-2018)

- [Solar Heat Worldwide: Global Development and Trends](#) -annual statistics report covering 95% of the global solar thermal market
- [Position Papers](#) - published 3 papers on Solar Heating and Cooling & Solar Air-conditioning, Daylighting in Non-residential Buildings, and Solar Standards and Certification
- [Solar Academy](#) onsite trainings, webinars and national days
- [5th International Conference on Solar Heating and Cooling for Buildings and Industry](#) (SHC 2017) in Abu Dhabi, UAE
- [SHC Solar Award](#) presented at SHC 2017 in Abu Dhabi to Austria's Climate and Energy Fund who challenged how subsidies are implemented



Wits Junction solar system is the largest solar thermal installation in Sub-Saharan Africa. It combines solar, co-generation and gas heating technologies, servicing 14 student residence buildings with one centralised hot water plant. Installation includes a 600m² heating plant with 10m² of collectors. (Source: Wits Junction/SOLTRAIN)



The solar heating plant in Silkeborg is 156 694m² and covers 20% of the annual heat demand in Silkeborg, Denmark. (Source: Silkeborg Forsyning A/S).

New priorities and projects (2019 – 2020)

- To remain the primary source worldwide of high quality technical information and analysis
- To contribute to a significant increase in the cost effectiveness of solar heating and cooling technologies
- To increase awareness and understanding on the potential and value of solar heating and cooling systems

Multilateral collaborations

- [Material and Component Development for Thermal Energy Storage](#) with the TCP on Energy Storage
- [Integrated Solutions for Daylighting and Electric Lighting](#) and [Deep Renovation of Historic Buildings Towards Lowest Possible Energy Demand and CO2 Emission \(NZEB\)](#) with the TCP on Buildings and Communities
- [Towards the Integration of Large SHC Systems into District Heating and Cooling Network](#) with the TCP on District Heating and Cooling

Membership



- Economic Community of West African States (ECOWAS)
- International Solar Energy Society (ISES)
- European Copper Institute (ECI)
- Regional Center for Renewable Energy and Energy Efficiency (RCREEE)

Why should your organisation become a member of the SHC TCP?

The SHC TCP is the worldwide reference for tracking innovation and increasing deployment of solar energy used for heating and cooling.

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