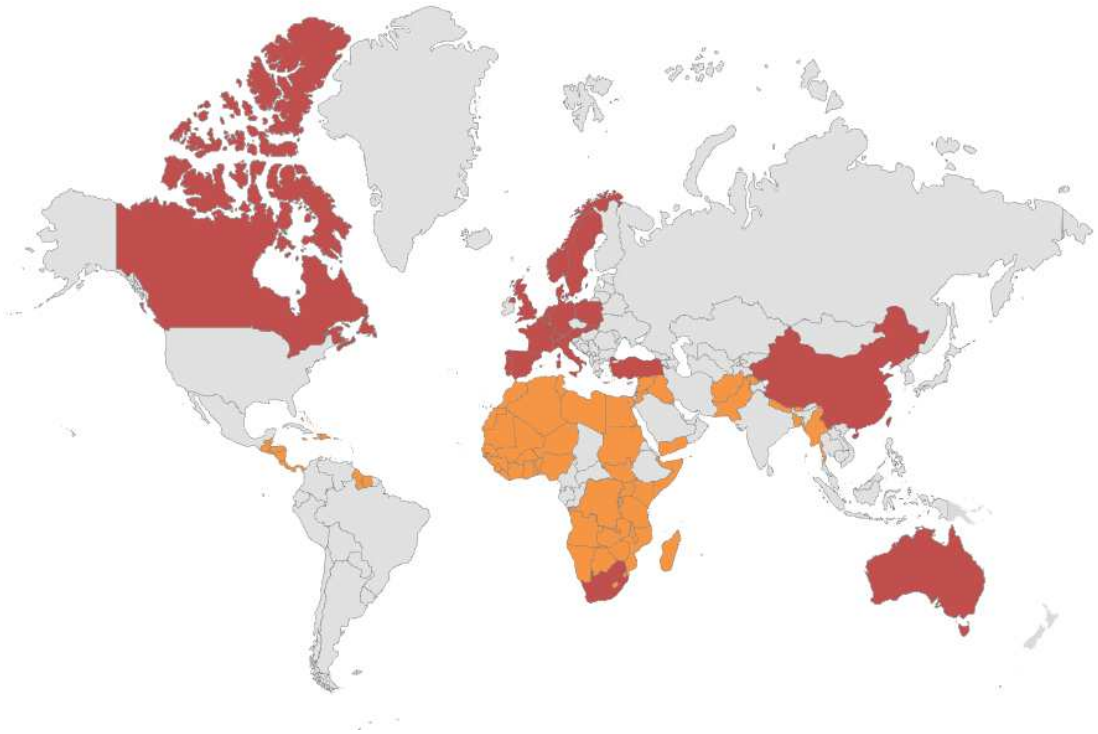
What is the Solar Heating & Cooling (SHC) Programme?



20 Countries + the EC

Sponsor Organizations

ISES, Solar Heat Europe & 7 UNIDO GN-SECs: CCREEE, EACREEE, ECREEE, REEECH, RCREEE, SACREEE, SICREEE

- Project-focused **international R&D collaboration** since 1977
- **20 member countries, European Commission plus 9 international organizations**
- **200+ experts**
- **7 running Tasks**
  1. PVT Heating Systems
  2. Solar district heating
  3. High comfort integrated lighting
  4. Solar hot water for 2030
  5. Life cycle and cost assessment for heating and cooling technologies
  6. Solar photoreactors for the production of fuels and chemicals
  7. Compact Thermal Energy Storage Materials

What is the SHC Solar Academy?

The Solar Academy is **a platform the SHC Programme uses to share and apply** our findings and experiences from our Tasks with as many people as possible.

Our Tasks produce not only valuable **scientific results**, but also:

- **training materials**
- **case studies, fact sheets** and **databases**
- **design, evaluation** and **assessment tools**

What does the SHC Solar Academy offer?

Webinars – held quarterly and hosted by ISES

- Next webinar is June 24/26, 2025
- All webinars: 14.00 GMT and rebroadcast with live Q&A at 6:00 GMT

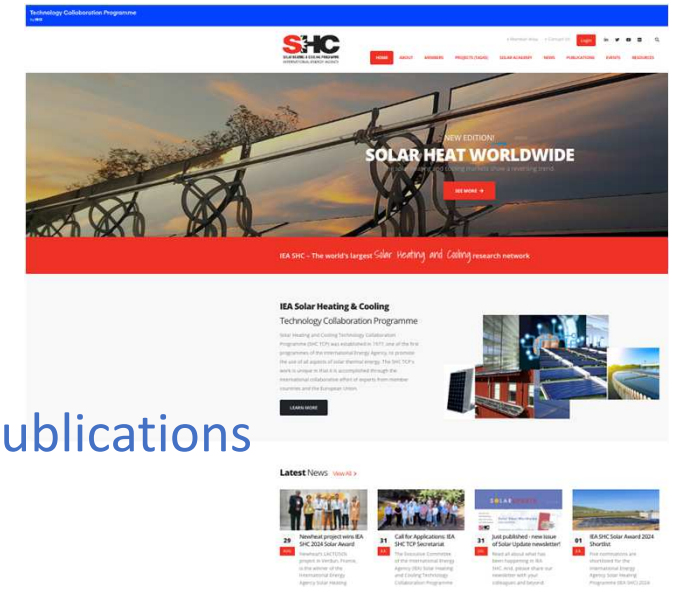
Recording of previous Webinars

👉 https://www.iea-shc.org/solar-academy/webinars

Onsite Training – solar heating and cooling training workshops by our experts. Available upon request by IEA SHC member countries/organizations.

- Past trainings: China, Cap Verde/ECREEE/West Africa, United Kingdom
- Next training: Solar drying and industrial cooling in SADC region at 18-22 August 2025

Where to find more information



Visit our website – www.iea-shc.org

Download a free SHC publication – www.iea-shc.org/publications

Follow us on social media –

IEA Solar Heating and Cooling Programme (group 4230381)

YouTube @ieashc2365

Have questions? Want to be part of an SHC Task? – secretariat@iea-shc.org

Our flagship report

Our semiannual newsletter

Free to download

https://www.iea-shc.org/solar-heat-worldwide

If after the webinar, you want to join this SHC Task

1. **Check** if your country is an IEA SHC member

   www.iea-shc.org/members

   www.iea-shc.org/organization-members

2. **Learn** more about the Task on the SHC website

   www.iea-shc.org/tasks

3. **Contact** the Task Manager to discuss your interest & expertise

   www.iea-shc.org/tasks

Compact Thermal Energy Storage materials characterization : Advances in Materials and Performance Insights from IEA SHC Task 67

Wim van Helden

is working at the Austrian institute AEE INTEC since 2014 as a Senior Expert on Thermal Energy Storage. He has long experience in leading national and international research and demonstration projects, developing large scale Thermal Energy Storage and compact Thermal Energy Storage. He is Task Manager of Task 67 on *Compact Thermal Energy Storage Materials Within Component Within Systems*. Wim studied Technical Physics and did his PhD in Energy Technologies at the Eindhoven University of Technology in the Netherlands.

Compact Thermal Energy Storage materials characterization techniques

Dr Daniel Lager

has been working in the field of Thermophysics and Thermal Analysis since 2007 and is head of the associated accredited laboratory at the AIT Austrian Institute of Technology since 2019. He received a PhD degree from Vienna University of Technology in 2017 for his dissertation which focused on thermophysical characterisation of heat storage materials. Parallel to his work at AIT, he is an external lecturer at the University of Applied Sciences Burgenland, Austria.

How to determine and categorise materials performance degradation

Christoph Rathgeber

is Deputy Head of the Thermal Energy Storage Group at the Bavarian Institute for Applied Energy Research (ZAE Bayern) in Germany. His main field of research are phase change materials based on salt hydrates. As part of several working groups within IEA SHC, he has investigated experimental methods for the characterization of PCM under application conditions.