

INTERVIEW

Solar Standards and Certification

Interview with Jan Erik Nielsen

The IEA SHC Programme will wrap up its work on Solar Standards and Certification (Task 57) this month. To learn first-hand of this Task's impact on standards and certification of solar thermal systems, we asked Jan Erik Nielsen, the Task Operating Agent, to share some of his thoughts on this 3-year project.



Why was this work needed?

Jan Erik Nielsen (Jan Erik): Solar collectors and solar water heaters are traded between countries and continents. But to do this is not always easy because in many cases there are national standards and certification setup with specific requirements for testing and certification, which means to sell in that country or region the manufacturers or distributors have to do testing and apply for certification many times for the same product. This is an expensive process and also requires significant time and resources. The harmonization of standards and certification requirements reduces these resources significantly.

What were the benefits of running it as an IEA SHC Task?

Jan Erik: IEA SHC provides an excellent platform for international co-operation, which is indeed needed when working on the harmonization of international standards and certification. We have ISO for elaborating and publishing the ISO standards, but normally a lot of work is needed in the preparation of standard proposals. Using IEA SHC for this (including the possibilities for funding connected to IEA SHC) makes it possible to do this preparatory work.

If someone wanted to learn more, which reports should they read first, and why?

Jan Erik: The most important ones are:

- The website WWW.GSCN.SOLAR gives information on the "Global Solar Certification Network" (GSCN) that facilitates the re-use of test and inspection reports from one certification scheme to another. The cooperation/concept makes it possible to save significant resources on testing and inspection. The specific rules/procedures/requirements are described in the "Global Solar Certification Network Working Rules" (available from this website).
- The draft proposal for four new ISO standards. These are very relevant standards for compact solar water heaters, building integrated solar components and large collector fields.
- The comprehensive guideline for the ISO 9806 collector test standard as it is very usable for both new and old test labs – and producers of solar collectors.
- The guideline for establishing certification schemes in emerging countries.

Do you have a Task success story from an end-user or industry?

Jan Erik: The first solar collector manufacturer has used the "GSCN concept" to obtain SRCC certification for their collectors in the USA based on their European Solar Keymark certification without any re-testing and re-inspection. Other manufacturers are following in this company's steps and starting the certification processes for their collectors.

Has the Task's work supported capacity and skill building?

Jan Erik: Our Task has been cooperating with the RCREEE's Solar Heating Arab Mark and Certification Initiative (SHAMCI), which is the first Arab certification scheme for solar thermal products. SHAMCI focuses on the needs of Arab states in the Middle East and North Africa and was inspired by Solar Keymark, Europe's certification scheme. This collaborative work focused on developing a guideline on how to establish certification schemes in emerging countries.

What is the future of the harmonization of standards and certification?

Jan Erik: The next step for the Global Solar Certification Network would be to include solar water heaters in the scope. This could happen in one or two years time.

Will we see more IEA SHC work in this area?

Jan Erik: The network is continuing to grow but still needs support from the IEA SHC and others to work on elaborating and improving ISO standards for existing and new solar products. That's why a proposal for a follow-up project is being worked on and will be presented at the next IEA SHC Executive Committee meeting in June 2019 so stay tune.