



Task 57

Solar Standards and Certification

2017 report



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TASK DESCRIPTION

The purpose and objectives of the task are:

- to harmonize at international level certification schemes, in order to increase in general the level of quality and at the same time avoid the need for re-testing and re-inspection
- to develop, improve and promote ISO standards on test procedures and requirements for solar thermal products
- to assist establishing certification schemes in new areas

The main activities in Task 57 are grouped in the following subtasks:

Subtask A: Kick-off of operation of Global Solar Certification Network (GSCN)

(Leader: Harald Drück, Germany)

Subtask A will support the operation of the Global Solar Certification Network with the aim to harmonize certification schemes and have mutual accept of test and inspection reports.

Subtask B: Improvement of test procedures – support and input to ISO

(Leader: He Zinian, BSEI, China)

Elaborate specific proposals for new and improved test procedures. Initiating new "ISO work items" for revisions of existing standards and for elaborating new standards.

Subtask C: Promotion and capacity building with respect to ISO standards and state-of-the-art certification schemes

(Leader: Ashraf Kraidy, RCREEE)

The ISO standards for solar thermal products are becoming increasingly popular throughout the globe; but still some countries stick to old national standards or even make new national standards. Subtask C will work to convince stakeholders in such countries that the ISO standards are very well proven and useful – and give guidance for implementation.

Main Outcome

The purpose and objectives of the task are to develop, improve and promote ISO standards on test procedures and requirements for solar thermal products - and to harmonize at international level certification schemes in order to increase in general the level of quality and at the same time avoid the need for re-testing and re-inspection.

Duration

This Task 57 began in January 2016 and will end December 2018.

MAIN RESULTS IN 2017

Subtask A: Kick-off of operation of Global Solar Certification Network (GSCN)

- Now 12 members:
 - 4 industry members
 - 2 test labs
 - 2 inspectors
 - 1 certification body
 - 3 supporting
- 2 Global Solar certification Network (GSCN) Board meetings (web meetings)
- 1 Global Solar certification Network (GSCN) plenary meeting
- Updated website

Subtask B: Improvement of test procedures – support and input to ISO

- Chinese – German cooperation on collector durability / accelerated ageing testing ongoing. Considerations if draft proposal for standard could be elaborated in this field
- Second version draft proposals for new ISO standards on:
 - “close-coupled systems”
 - mechanical load (B2)
 - reliability and safety (B4)
 - building integrated collectors and systems (B3)
- First version draft proposal for new ISO standard on
 - Performance check of large collector fields (NEW B6)

Subtask C: Promotion and capacity building with respect to ISO standards and state-of-the-art certification schemes

- Final “Guideline on ISO 9806” (C1)
- Draft version on “Guideline for Implementing Certification Schemes for Solar Heating and Cooling Products” (C3)
- Survey on new ISO 9806 planned

Highlights of Industry Involvement & Market Activities

Four large manufacturers now members:

- GREENoneTEC
- TiSUN
- Beijing Tus-Clean Energy Technology Co. Ltd.
- Savosolar
- Indication of interest from: Kingspan

Support given to assist manufacturer in new markets.

Dissemination/Presentations

Publications

- GUIDE TO STANDARD ISO 9806:2017, K. Kramer
- Revised GSCN working rules

Presentations given at:

- ESTIF webinar February, JE Nielsen
- Solar Keymark Network meetings March and October, JE Nielsen
- CEN TC 312 meeting in October, JE Nielsen
- ISO TC 180 meeting in December, JE Nielsen
- SHC Conference, December, JE Nielsen
- Asian Pacific Solar Research Conference, December, JE Nielsen

Website

- Updated web site for “Global Solar Certification”: WWW.GSCN.SOLAR

Other

Video interview with GSCN Manager Jan Erik Nielsen at SWC 2017 in Abu Dhabi:
<https://www.youtube.com/watch?v=zEe8NkeNt0U>

Connected meetings

- Global Solar Certification Network meetings, Freiburg, March

WORK PLANNED FOR 2018

Subtask A: Kick-off of operation of Global Solar Certification Network (GSCN)

- Continued operation of the Global Solar Certification Network (GSCN) – included 4-5 board meetings and one plenary meeting
- Continued promotion of the Global Solar Certification Network (GSCN)
- Processing applications
- Maintaining website

Subtask B: Improvement of test procedures – support and input to ISO

- Continue Chinese – German cooperation on collector durability / accelerated ageing testing
- Make final draft proposals for new standards for:
 - ✓ Test methods for mechanical load on support of close-coupled solar water heating systems
 - ✓ Test methods and requirements for building integrated collectors and systems
 - ✓ Test methods for close-coupled solar water heating systems- reliability and safety
 - ✓ Performance check of large collector fields

Subtask C: Promotion and capacity building with respect to ISO standards and state-of-the-art certification schemes

- Send out questionnaire on ISO 9806:2017 and analyze responses
- Finalize “model certification schemes”.

REPORTS PUBLISHED IN 2017

GUIDE TO STANDARD ISO 9806:2017. K. Kramer

REPORTS PLANNED FOR 2018

Guideline for Implementing Certification Schemes for Solar Heating and Cooling Products
Final Task report

MEETINGS IN 2017

3rd Task Meeting, March, Freiburg, Germany

4th Task Meeting, November, Abu Dhabi, UAE

MEETINGS PLANNED FOR 2018

5rd Task Meeting, March, Madrid, Germany

6th Task Meeting, September - November, Switzerland, Portugal or China

Task 57 Task Experts

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