Task 57

Solar Standards and Certification

2016 report

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TASK DESCRIPTION

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 avoid the need for re-testing and re-inspection.

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.

Subtask B: Improvement of test procedures – support and input to ISO
(Leader: He Zinian, BSERI, 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 increasing 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 avoid the need for re-testing and re-inspection.

Duration

This Task 43 extension began in January 2016 and will end December 2018.

RESULTS IN 2016

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

- 5 Global Solar certification Network (GSCN) Board meetings (web meetings)
- Approval of working rules for GSCN
- Call for applications for membership (incl. “application package”)
- Processing applications started
- Plan for promotion of GSCN
- New website

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

- Chinese – German cooperation on collector durability / accelerated ageing testing: Chinese plan for long term testing of evacuated tubular collectors planned
- Translation of 3 Chinese standards for systems done

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

- Supporting documents uploaded
- Work on guideline for ISO 9806:2017 started, so the guideline will be ready when the standard is published around July 2017
- Draft questionnaire on ISO 9806:2017 made
- Outline of “model certification schemes” done. Three levels are proposed see table below:

<table>
<thead>
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<th>Level</th>
<th>3rd party sampling</th>
<th>Initial testing</th>
<th>Initial inspection</th>
<th>Surveillance inspection</th>
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<td></td>
<td>Special test</td>
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Highlights of Industry Involvement & Market Activities
Applications from three very large collector manufacturers received. Involvement of relevant stakeholders in North Africa / Middle East (workshop in Cairo).

Dissemination/Presentations

Presentations given at:
- ESTIF webinar February
- Solar Keymark Network meetings March and October, JE Nielsen
- ISO TC 180 meeting in October, JE Nielsen
- Danish Technical University for Chinese delegation, JE Nielsen
- ESTIF general assembly, H Drück

Website
- New extended web site for “Global Solar Certification”: [WWW.GSCN.SOLAR](http://WWW.GSCN.SOLAR)

Other
- Article at solarthermalworld.org: [http://www.solarthermalworld.org/content/global-solar-certification-network-facilitating-international-high-quality-collector-trade](http://www.solarthermalworld.org/content/global-solar-certification-network-facilitating-international-high-quality-collector-trade)

Connected meetings
- Global Solar Certification Network meetings, Berlin, March

WORK PLANNED FOR 2017

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

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

• Make final draft set of requirements for participating bodies
• Publish approved version of the harmonized requirements
• Continue Chinese – German cooperation on collector durability / accelerated ageing testing
• Make first initial 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

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

• Finish work on guideline for ISO 9806:2017; the guideline will be ready when the standard is published around July 2017
• Make final questionnaire on ISO 9806:2017; send out and analyze respons
• Describe in more detail “model certification schemes”.

**REPORTS PUBLISHED IN 2016**

No reports published in 2016.

**REPORTS PLANNED FOR 2017**

No reports planned to be published in 2017

**MEETINGS IN 2016**

1st Task Meeting
March
Berlin, Germany

2nd Task Meeting
October
Cairo, Egypt

**MEETINGS PLANNED FOR 2017**

3rd Task Meeting
March
Freiburg, Germany

4th Task Meeting
November, Abu Dhabi
### Task 57 Task Experts

<table>
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