Task 57

Solar Standards and Certification

2016 report

Jan Erik Nielsen SolarKey Int., Denmark Operating Agent

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:

Level	3 rd party sampling	Initial testing	Initial in- spection	Surveillance inspection	Surveillance testing	Accred. level	Ex.
Low	From pro- ducer	ISO 9806				С	-
Medium	From pro- ducer	ISO 9806	Other	Annually	Bi-annually Special test	С	SHAMCI
High	From pro- ducer	ISO 9806	Other	Annually	Bi-annually Special test	AAA	KEYMARK

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

Other

• Article at solarthermalworld.org: http://www.solarthermalworld.org/content/global-so-lar-certification-network-facilitating-international-high-quality-collector-trade

Connected meetings

o 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 0ne plenary meeting
- Continued promotion of the Global Solar Certification Network (GSCN)

Processing aplications

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

Country	Name	Institution / Company	Email	Role
Australia	Ken Guthrie	Sustainable Energy Transformation Pty Ltd	ken.guthrie@setransfor- mation.com.au	National Expert
Australia	Jeremy Osborne	Energy Analysis & Engineering	jeremy.osborne@energ- yae.com	National Expert
Austria	Harald Poscharnig	GREENoneTEC	harald.poscharnig@greeno- netec.com	National Expert
China	He Zinian	Beijing Solar Energy Research Institute (BSERI)	hezinian_bj@163.com	Subtask B Leader
China	Zhou Xiaowen	Tsinghua Solar Energy Co. Ltd.	xwzhou2003@aliyun.com	National Expert
China	Tong Xiaochao	CABR Certification Centre	xiaochao.tong@gmail.com	National Expert
China	Lin Jiali	China General Certification Centre	linjl@cgc.org.cn	National Expert
China	Zhang Lei	China National Enginee- ring Research Center for Human Settlement	leiz@cadg.cn	National Expert
China	Shen Bin	Zhejiang Provincial Center for Quality Inspection & Testing of Solar Products	158877727@qq.com	National Expert
China	Wang Yansong	China Institute of Building Standard Design and Re- search	wysong2000803@sina.com	National Expert
Denmark	Jan Erik Nielsen	SolarKey Int.	jen@solarkey.dk	OA
France	Pierre Delmas	Newheat	pierre.delmas@newheat.fr	National Expert
France	Alexis Gonnelle	Newheat	alexis.gonnelle@newheat.fr	National Expert
Germany	Harald Drück	ITW, University Stuttgart	drueck@itw.uni-stuttgart.de	Subtask A Leader
Germany	Korbinian Kramer	Frauenhofer ISE	Korbinian.kramer@ise.fraun- hofer.de	National Expert
RCREEE	Ashraf Kraidy	RCREEE	ashraf.kraidy@las.int	Subtask C Leader
Germany	Arnulf Knorr	GIZ/RCREEE	Arnulf.Knorr@GIZ.de	Observer
Portugal	Maria Joao Carvalho	LNEG	mjoao.carvalho@Ineg.pt	Observer
Switzer- land	Andreas Bohren	SPF, Rapperwil	andreas.bohren@so- larenergy.ch	Observer