



SOLAR HEATING & COOLING PROGRAMME
INTERNATIONAL ENERGY AGENCY

TASK 43 “Solar Rating and Certification – Global Collector Certification”

STATUS REPORT FOR THE 75th EXCO MEETING (Calgary)



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1 Task Description

1.1 Short Description - Task Objectives and Scope

The Task 43 extension aims at facilitating cross-border trading of solar thermal quality products by reducing testing and certification efforts and costs through the harmonization of requirements for testing and certification.

The scope is test procedures and standardization for solar thermal systems and components - and certification of solar thermal collectors.

1.2 Subtasks and their Lead countries

The task is divided into three subtasks:

- Subtask A: Harmonization of standards for solar thermal products (AU)
- Subtask B: Harmonization of certification schemes for solar collectors (US)
- Subtask C: Organizational framework for global collector certification (DE)

1.3 Main Deliverables

- The main deliverables will be:
- Support to ISO standardisation
- Rules/requirements for global collector certification
- Establishment of a "Global Solar Certification Network"

1.4 Duration

The Task 43 extension is running 2 years, from the July 2013 until June 2015.

2 Progress Since Last ExCo Meeting

2.1 General Work

2.1.1 Meetings

2nd expert meeting held March 13th in Las Palmas, Spain - 29 participants from 12 countries

2.1.2 Status of Participation (according to national participation letters)

- China
- Denmark

- Germany
- Portugal
- Spain
- US

2.1.3 Information Dissemination

International meetings

- "Global Solar Certification Network Meeting" March 12-13, Las Palmas, Spain – 35 participants from 14 countries.

New on website

- Global Solar Certification website under construction:
www.gsc-nw.org

Newsletter

Input to IEA-SHC newsletter concerning establishing the Global Solar Certification Network

Press release

- Press release about the new Global Solar Certification Network made - and send around to network members, organisations and others for announcements and further circulation.

2.2 Subtask Work

2.2.1 Subtask A Harmonization of standards

The general objectives of Subtask A is to give support to promotion of the new ISO/EN 9806 for collector testing and ISO TC 180 work on harmonizing standards for solar thermal systems and components on a global scale.

Work done / deliverables since ExCo 74th meeting in Singapore:

- EN ISO 9806 "Solar energy - Solar thermal collectors - Test methods" published November 2013.
- Questionnaire being elaborated to prepare for promotion of the collector testing standard in important market countries – to be send out in June
- EN ISO 22975 "Solar Energy - Collector components and materials" Part 1 and 2 on evacuated tubes: Committee Drafts available and Draft International Standard is under preparation. Inputs on further improvements already presented to ISO TC 180 (and standard opened for revision)
- EN ISO 22975 "Solar Energy - Collector components and materials" Part 3 on absorber surface durability: Final Draft International Standard available – next step: EN ISO Standard.

- New work item being elaborated on insulation (in collectors)
- Review of international and national standards for performance testing/characterisation of solar hot water stores – with the perspective of harmonizing.
- Review of international and national standards for reliability/safety of solar systems – with the perspective of harmonizing.
- ISO TC 180 and WGs meeting planned/organised in connection with Task 43 meeting in Beijing in October 2014

2.2.2 Subtask B Harmonization of certification schemes

The objective of subtask B is to define the set of requirements national/regional certification schemes shall fulfil in order to be accepted under the global “umbrella” certification scheme for collectors.

Work done / deliverables since ExCo 74th meeting in Singapore:

- Draft scheme rules / requirements made and dicussed at the meeting in Spain.
- Agreements on changes to be made: Scheme rules / requirements to be organised in two documents: “GSC - Scheme Rules” & “GSC – Mutual Recognition Rules ...”. Besides these document a number of Annexes are being worked out on the procedures etc. All documents are to be presented for approval at next meeting October 2014. Several web meetings took already place working on these documents.

2.2.3 Subtask C Organizational framework for global collector certification

The objective of subtask C is to set up rules for the organizational framework for the global certification of solar collectors. This includes defining the structure of framework/network, deciding who can/shall participate in the framework/network, defining voting rights, setting meeting frequencies, setting fees – and establishing the Global Solar Certification Network.

Work done so far:

- Main part of “Internal Working Rules” made and approved
- Global Solar Certification Network Established:
- Board Officers elected: Chair: H. Drück, Vice Chair: L. Nelson, treasurer: E. Prado, Secretary: Peter Markart
- Manager appointed: J.E. Nielsen
- Internal Quality Committee appointed
- Members listed

- Preparation for establishing a legal entity started
- 2nd MoU (Memorandum of Understanding) signed between Solar Keymark and SRCC at the meeting
- 3rd MoU aimed to be signed between Solar Keymark and Chinese certification scheme(s) in October
- Document archive/listing established
- Logo proposals discussed – decision next meeting

2.3 Collaboration with other SHC Tasks and IEA Programmes and related

- Expert meeting and Global Solar Certification meeting organised in cooperation with Solar Keymark Network
- Next expert meeting and Global Solar Certification meeting organised in cooperation with ISO TC 180

3 Deliverables, Timelines and Milestones

3.1 Achieved Milestones, Not Achieved Milestones and Future Milestones

See section 5.2 "Milestones/deliverables".

3.2 Future Meetings

Next Task 43 experts meeting and Global Solar Certification meeting will be in:

- 8-9 October 2014: Beijing (in connection with ISO TC180 meeting)

4 Issues for the Executive Committee

4.1 Issues only for ExCo members of interested/participating countries

4.1.1 Missing Participation letters

- Australia (on it's way)
- Austria?
- Canada (on it's way)
- RECREEE?
- ... ?

4.2 Issues for the entire ExCo

- 4.2.1 National participation letters from multi-national organisations (RECREEE, ECREEE) ?

5 Appendixes

5.1 List of Experts

List of official nominated national experts according to national participation letters as per 24th April 2014 (24 participants from 6 countries):

Country	Expert	Institution	e-mail	Role
Australia	Ken Guthrie	Sustainable Energy Transformation Pty Ltd / ISO TC 180	ken.guthrie@setransformation.com.au	Subtask A leader
Austria				
Canada	Alfred Brunger	Exova	Alfred.Brunger@Exova.com	National expert
China	Sun Yuquan	SDQI/ Energy saving Product Quality Inspection	jinxichuan@gmail.com	National expert
China	Li YuWu	SDQI/ Energy saving Product Quality Inspection	yuwuli@gmail.com	National expert
China	Lai Hanxiang	Guangdong Vanward New Electric C., Ltd.	laih@ms.giec.ac.cn	National expert
China	Ruicheng Zheng	China Academy of Building Research	zhengrc@vip.sina.com	National expert
China	Tong Xiaochao	China Academy of Building Research	xiaochao.tong@gmail.com	National expert
China	Wang Min	China Academy of Building Research	minwangbeijing@gmail.com	National expert
China	He Zinian	Beijing Solar Energy Research Institute	hezinian@sina.com	National expert
China	Zhou Xiaowen	Beijing Tsinghua Solar Ltd.	xwzhou2003@aliyun.com	National expert
China	Zhao Juan	Beijing Tsinghua Solar Ltd.	zhaojuan@thsolar.com	National expert
China	Jiao Qingtai	Jiangsu Sunrain Solar Energy Co., Ltd	jiaomt@sunrain.com	National expert
China	Tian Liangguang	Shandong Supervision and Inspection Institute for Product Quality	tianlg@12365.sd.cn	National expert
China	Kang Wei	China Quality Certification Centre	kangwei@cqc.com.cn	National expert
China	Joseph Huang	International Copper Association Asia	josephhuang@copper.org.cn	National expert
China	Ma Jie	Certification Center, China Academy of Building Research	majiejie2002@163.com	National expert
China	Na Mingliang	China General Certification	naml@cgc.org.cn	National expert
China	Bian Ji	CCQS UK LTD	Owen.bian@ccqs.co.uk	National expert
Denmark	Jan Erik Nielsen	SolarKey Int.	jen@solarkey.dk	OA
ECREEE				
Germany	Harald Drucek	ITW, Stuttgart University	drucek@itw.uni-stuttgart.de	Subtask C leader
Germany	Korbinian Kramer	Fraunhofer ISE	Korbinian.kramer@ise.fraunhofer.de	National expert
Portugal	Maria Joao Carvalho	LNEG	mjoao.carvalho@lneg.pt	National expert
RECREEE	Ashraf Kraidy	RECREEE	ashraf.kraidy@las.int	
Singapore				
Spain	Jaime Fernandez	AENAR	JAFERNANDEZ@aenor.es	Co Subtask B leader
US	Eileen Prado	SRCC	eprado@solar-rating.org	Subtask B leader
US	Jim Huggins	SRCC	jhuggins@solar-rating.org	National expert
US	Les Nelson	IAPMO	les.nelson@iapmo.org	National expert

5.2 Milestones/deliverables

Time Plan and Milestones - subtask A	2013			2014			2015		
A1: Finalizing the prEN ISO/DIS 9806 "Solar energy - Solar thermal collectors - Test methods" - and promotion of the final standard worldwide			R						
A2: Elaborating of ISO/AWI 22975 series on "Solar Energy - Collector components and materials"			D			D		R	
A4: Harmonization of the ISO 9459-4 with the EN 12977				D				R	
A5: Inputs to first draft of ISO Standards for test methods for reliability/durability and safety of solar heating systems						D		R	
A6: Revision of ISO/NP 9488 "Solar Energy - Vocabulary"				D				R	
A7: New areas for international standardization							D	R	
Milestones: D: Draft report (or draft standard); R Final report of work done									

Time Plan and Milestones - subtask B	2013			2014			2015		
B1. First draft set of requirements			D m						
B2. Make 2 nd draft set of requirements				D					
B3. Make final draft set of requirements					D m				
B4. Make and approve final version of requirements						R m			
Milestones: D: Draft reports(s); R: Final reports(s); m: meeting									

Time Plan and Milestones - subtask C	2013			2014			2015		
C1. First draft set of rules for the organizational framework			D m						
C2. Make 2 nd draft set of rules for the organizational framework				D					
C3. Make final draft set of rules for the organizational framework				m	D				
C4. Make and approve final version of rules for the organizational framework						R m			
C5. Operate the global collector certification for one year							m	R	
C6. Promote the global collector certification								R	
Milestones: D: Draft reports(s); R: Final reports(s); m: meeting									

5.3 Meeting participants – meeting 2 (of extended period)

First name	Last name	Company/organisation	Country
Ken	Guthrie	Sustainable Energy Transformation	AU*
Franz	Helmingner	AIT	Austria
Peter	Markart	GREENoneTEC	Austria
Alfred	Brunger	Exova	Canada
Zinian	He	Beijing Solar Energy Research Institute	China
Xiaowen	Zhou	Beijing Tsinghua Solar Ltd.	China
Tao	He	China Academy of Building Research	China
Min	Wang	China Academy of Building Research	China
Jan Erik	Nielsen	SolarKey Int.	Denmark
Pedro	Dias	ESTIF	EU
Franck	Cheutin	CSTB	France
Katharina	Meyer	DIN CERTCO	Germany
Sören	Scholz	DIN CERTCO GmbH	Germany
Korbinian	Kramer	Fraunhofer ISE	Germany
Stefan	Mehnert	Fraunhofer ISE	Germany
Carsten	Lampe	ISFH	Germany
Harald	Drueck	ITW/TZS	Germany
Stephan	Fischer	ITW/TZS	Germany
Giacobbe	BRACCIO	ENEA	Italy
Vinod	Sharma	ENEA	Italy
Daniele	Bernacchioni	ICIM S.p.A.	Italy
Massimiliano	Florio	ICIM S.p.A.	Italy
Maria	Rodrigues	ADENE	Portugal
João	Santos	CERTIF - Associação para a Certificação	Portugal
Maria João	Carvalho	LNEG	Portugal
Jana	Levicka	TSU Piestany	Slovakia
Jaime	Fernandez	AENOR	Spain
Oscar	Mogro	BDR Thermea (Baxi Calefaccion)	Spain
Rosa Maria	Rengel Glavez	INTA	Spain*
Pilar	Navarro	Technological Institute of canary Islands	Spain
Luis	González-Monroy	Termicol Energía Solar, S.L.	Spain
Martin	Persson	SP	Sweden
Susanne	Hansson	SP Technical Research Institute of Sweden	Sweden
Imed	Landoulsi	Agence Nationale pour la Maitrise de l'Energie	Tunisia
Les	Nelson	IAPMO	USA
Eileen	Prado	SRCC	USA
Jim	Huggins	SRCC	USA*