IEA SHC Task 57

The Global Solar Certification Network (GSCN)

IEA SHC Solar Academy Webinar, Dec. 12, 2018

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GSCN Chairman and Leader Subtask A of IEA SHC Task 57
With support from: Jan Erik Nielsen, IEA SHC Task 57 operating agent
Global Solar Certification Network

The Global Solar Certification Network is a worldwide cooperation between:

- Solar thermal industry representatives
- Certification bodies
- Test laboratories
- Inspection bodies / inspectors
Global Solar Certification Network

Aim

- Facilitate worldwide cross-border trading for manufacturers of solar thermal quality products
- Avoid re-testing of products and re-inspection of production lines when entering new markets

Leading to:

- Increased quality
- Lower costs
- Bigger market - better business 😊
Global Solar Certification Network

Method

- Use **existing** certification schemes and have mutual recognition of test reports and inspection reports
The concept of GSCN:

Reports fulfilling requirements given in GSCN Working Rules and done by test labs and inspectors recognized by GSCN.
How it works

- Mutual recognition of test and inspection reports between 3rd party certification schemes:
  - Initial type testing - and surveillance testing
  - Initial inspection of the factory production control - and surveillance

- All operating bodies shall have relevant accreditation

- Basic standard is newest ISO 9806 on solar collector test procedures
How it works

Accreditation body

ISO 9806:2017

Standards for test procedures

Test Lab

Certification body

Certification body

Inspection report

Other certification bodies

Inspection report

Test report

Requirements in scheme rules

Product

Production line
How it is organized

Global Solar Certification Network (GSCN) structure

Harald Drück

Industry WG

GSCN Board
- Chair
- Vice Chair
- Treasurer
- Secretary

Certification bodies WG

Test laboratories WG

Inspectors and Inspection bodies WG

GSCN QAC*
- Chair

GSCN Manager
- Support to
  - Network
  - Board
  - QAC
- Organising meetings
- Updating documents
- Web site

Document

<table>
<thead>
<tr>
<th>Working Rules</th>
<th>No.</th>
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<tbody>
<tr>
<td>Main part of working rules</td>
<td>N0001</td>
</tr>
<tr>
<td>Annex A - Requirements for involved bodies</td>
<td>N0001A</td>
</tr>
<tr>
<td>Annex B1 - Data sheet</td>
<td>N0001B1</td>
</tr>
<tr>
<td>Annex C1 - Requirements for Factory Production Control</td>
<td>N0001C1</td>
</tr>
<tr>
<td>Annex D - Fees</td>
<td>N0001D</td>
</tr>
<tr>
<td>Annex E - Signing up</td>
<td>N0001E</td>
</tr>
</tbody>
</table>

*QAC: Quality Assurance Committee

GSCN Web Site

List of operators:
- CBs
- Test labs
- Inspectors
- Info on Network

Until 12/18: Jan Erik Nielsen
From 01/19: Shawn Martin
# Savings for a manufacturer - example

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>A</th>
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<tbody>
<tr>
<td>No. certified products</td>
<td>8</td>
</tr>
<tr>
<td>No. certification regions</td>
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### COSTS WITHOUT GSCN

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Initial testing</td>
<td>288 k€</td>
</tr>
<tr>
<td>Annual inspection</td>
<td>12 k€</td>
</tr>
<tr>
<td>Costs first year</td>
<td>300 k€</td>
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<tr>
<td>Costs following years</td>
<td>12 k€/year</td>
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### COSTS WITH GSCN

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<table>
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<tbody>
<tr>
<td>Initial testing</td>
<td>96 k€</td>
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<tr>
<td>Re-issuing of test reports</td>
<td>12 k€</td>
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<tr>
<td>Annual inspection</td>
<td>4 k€</td>
</tr>
<tr>
<td>GSCN fee - initial</td>
<td>4 k€</td>
</tr>
<tr>
<td>GSCN fee - annual</td>
<td>1.6 k€/year</td>
</tr>
<tr>
<td>Costs first year</td>
<td>116 k€</td>
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<tr>
<td>Costs following years</td>
<td>5.6 k€/year</td>
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</table>

### SAVINGS WITH GSCN

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<table>
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<tbody>
<tr>
<td>Savings first year</td>
<td>184 k€</td>
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<tr>
<td>Savings following years</td>
<td>6.4 k€/year</td>
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<tr>
<td></td>
<td>61%</td>
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<tr>
<td></td>
<td>53%</td>
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</table>
GSCN Success Stories

- GSCN established
- Harmonisation of testing, inspection and certification procedures achieved (within several global regions)
- GSCN based certification of solar collectors for the following manufacturers performed
  - Sammler Solar & Central Heating Systems, GR
  - KBB, Germany
  - GreenOneTec, Austria
  - …..
Status for the GSCN

- Final set of working rules approved
- GSCN System in Operation
- Members:
  - Industry: 5
  - CBs: 3
  - Inspectors: 2
  - Test labs: 5
- Applicants:
  - Industry: 1
  - CBs: 6
  - Inspectors: 3
  - Test labs: 2
- Ongoing promotion of the GSCN
- Acquisition of members
Fees (for 2019)

- Certification body: 200 €/year
- Inspection body / inspector: 200 €/year
- Test lab: 200 €/year
- Industry: 250 €/year
- Supporting members: 75 €/year
Participate!

Industry
Industry members can utilize the concept of "Global Solar Certification" in order to avoid re-testing and re-inspection in different certification regions. Industry members can save significant amounts of money and time this way.

Certification bodies
Certification bodies participating in the Global Solar Certification Network will attract big international customers.

Test labs
Test labs participating in the Global Solar Certification Network will attract big international customers.

Inspectors / inspection bodies
Inspectors / inspection bodies participating in the Global Solar Certification Network will attract big international customers.
Become a Member of the GSCN!

Please read and use our Guideline for Application (pdf) / Guideline for Application (docx)

Download "Application Package" with above guidelines and the GSCN working rules giving all requirements for being member (zip).

Send application and annexed documents to Jan Erik Nielsen at "manager(at)GSCN.SOLAR".
Thank you for your attention

www.iea-shc.org

http://gscn.solar/
http://task57.iea-shc.org/

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