The Global Solar Certification Network (GSCN)
- Unite for Solar Thermal -

IEA SHC Solar Academy Webinar, March 22, 2022

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GSCN Chairman
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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
Global Solar Certification Network

The concept of GSCN:

Reports fulfilling requirements given in GSCN Working Rules and done by test labs and inspectors recognized by GSCN.
Global Solar Certification Network

History

- Elaborated within IEA SHC Task 43

- Further developed within IEA SHC Task 57
  Solar Standards and Certification, 1/2016 – 12/2018
Global Solar Certification Network (GSCN)

Current status

- Implemented as an independent, autonomous network (no legal entity)
- Members
  - members: in total approx. 30 (around 23 formal members and 6 supporters)
- Applicants: 6

- Membership fees
  Certification Bodies: 200 €
  Inspection Bodies and Inspectors: 200 €
  Test Labs: 200 €
  Industry (manufacturers, distributors): 250 €
  Passive Network Supporting Members: 75 €
Global Solar Certification Network (GSCN)

Organisation

- Operated by the following “committees”
  - 4 Officers
  - Board (2 representatives from industry, test labs and certification bodies per continent)
  - Committees (e.g. QAC) and Working groups

- Officers (elected by the GSCN)
  - Chairman: Harald Drück, IGTE Uni Stuttgart, Germany
  - Vice Chairman: Shawn Martin, SRCC, US
  - Treasurer: He Tao, China
  - Secretary: Harald Poscharnig, GreenOneTec, Austria

- Marketing and Public Relations
  - Marisol Oropeza, matters.mx

- Management (day to day work incl. accounting)
  - Leopoldo Mico, SHE/ESTIF (free of charge!)

- Meetings: approx. 2 GSCN and 4 Board Meetings per year
How the GSCN 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

Requirements in scheme rules

Standards for test procedures

Test report

Test Lab

Certification body

Inspector

Production line

Other certification bodies

Certification body

Other certification bodies

Test report

Inspection report

Requirements in scheme rules

Standards for test procedures

Product
How it is organized

Global Solar Certification Network (GSCN) structure

Harald Drück

Industry WG

“Advisory Group”? 

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

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

Document
<table>
<thead>
<tr>
<th>No.</th>
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<tbody>
<tr>
<td>Working Rules</td>
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<tr>
<td>N0001</td>
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<tr>
<td>Annex A - Requirements for involved bodies</td>
</tr>
<tr>
<td>Annex B1 - Data sheet</td>
</tr>
<tr>
<td>Annex C1 - Requirements for Factory Production Control</td>
</tr>
<tr>
<td>Annex D - Fees</td>
</tr>
<tr>
<td>Annex E - Signing up</td>
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Until 12/18: Jan Erik Nielsen
From 01/19: Shawn Martin
### Savings for a manufacturer - example

<table>
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<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>
<td>3</td>
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#### COSTS WITHOUT GSCN

<table>
<thead>
<tr>
<th>Cost Type</th>
<th>Cost</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>
</tr>
<tr>
<td>Costs following years</td>
<td>12 k€/year</td>
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#### COSTS WITH GSCN

<table>
<thead>
<tr>
<th>Cost Type</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Initial testing</td>
<td>96 k€</td>
</tr>
<tr>
<td>Re-issuing of test reports</td>
<td>12 k€</td>
</tr>
<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>
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<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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#### SAVINGS WITH GSCN

<table>
<thead>
<tr>
<th>Cost Type</th>
<th>Savings</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Savings first year</td>
<td>184 k€</td>
<td>61%</td>
</tr>
<tr>
<td>Savings following years</td>
<td>6.4 k€/year</td>
<td>53%</td>
</tr>
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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 / Tunisia
  - GreenOneTec, Austria
  - .....
Global Solar Certification Network (GSCN)

Latest developments

- GSCN alliance with SHI: Unite for solar heat
  
  Aim: Common implementation of the SOLERGY label for collectors

- Joint marketing and communication activities with the Solar Heating Initiative

- Relaunch of GSCN website: www.gscn.solar
Participate in the GSCN!

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. Furthermore they can get the SOLERGY collector label in a very convenient way.

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

Test labs
Test labs participating in the Global Solar Certification Network will attract large international customers and benefit from international experience exchange

Inspectors / inspection bodies
Inspectors / inspection bodies participating in the Global Solar Certification Network have access to international customers
Global Solar Certification Network (GSCN)

“New” website: www.gscn.solar

Next GSCN-meeting: Oct 11th, 2022 at 2 pm CEST (UTC+2), online
Thank you for your attention

www.iea-shc.org

http://gscn.solar/

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