



# Latest developments related to the Global Solar Certification Network (GSCN) and SOLERGY

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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

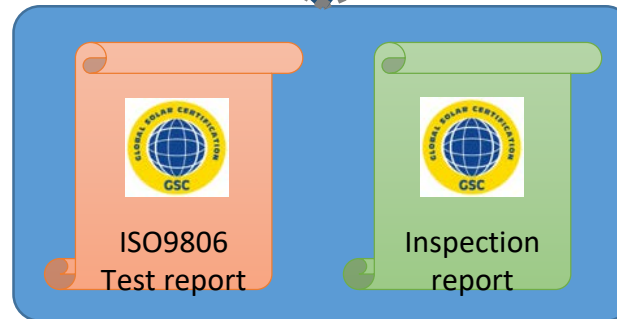
- ❑ Use **existing** certification schemes and have mutual recognition of test reports and inspection reports

# 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 (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 €

# How the GSCN works

- ❑ Mutual recognition of test and inspection reports between **3<sup>rd</sup> 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

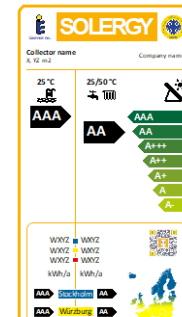
# Global Solar Certification Network

## History

- **Elaborated within IEA SHC Task 43**  
Solar Rating and Certification, 7/2009 – 6/2015
- **Further developed within IEA SHC Task 57**  
Solar Standards and Certification, 1/2016 – 12/2018

## GSCN alliance with Solar Heating Initiative in 2021

→ **Unite for solar heat !!**



Aim: Common implementation of SOLERGY label for collectors

- Joint marketing and communication activities with the Solar Heating Initiative





Created and launched the collector label **SOLERGY** in Germany in 2016



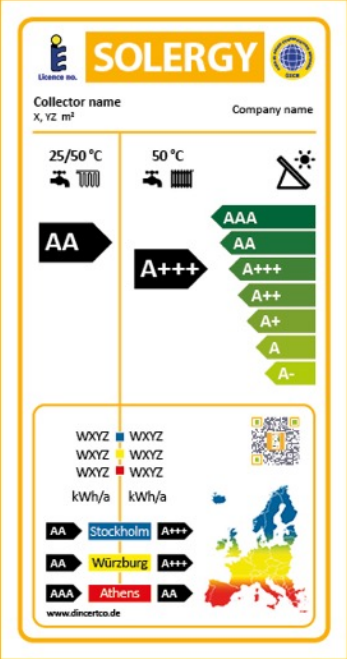
Gathers the most relevant solar collector **certification schemes** worldwide.



# Labels compared

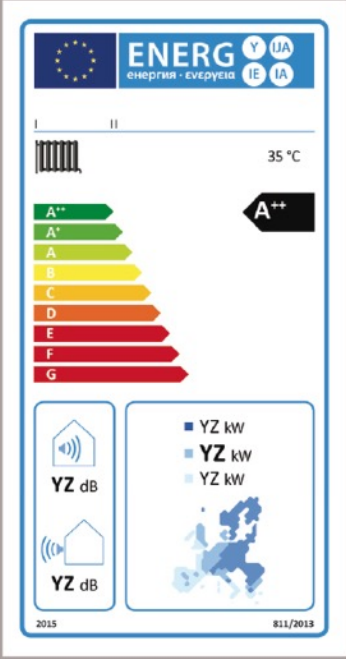
It looks familiar but is quite innovative: the solar label refers to the energy gain instead of the primary energy consumption.

### SOLERGY collector label



Renewable energy gain

### EU efficiency label



Primary energy consumption

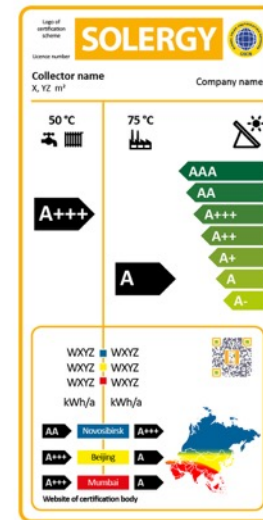
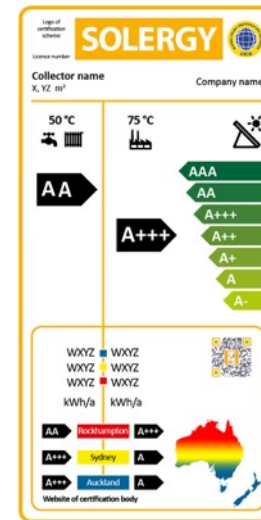
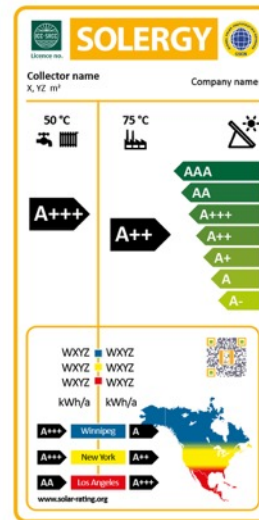
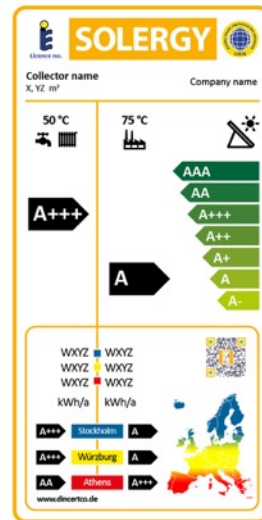
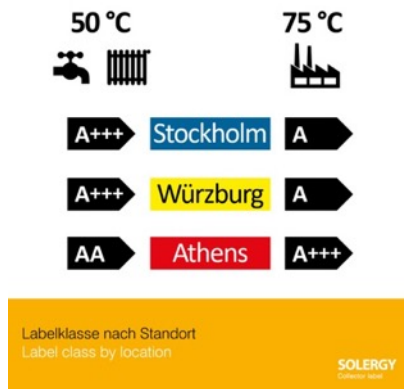
Higher yield

Higher consumption

# The SOLERGY Label...



- Shows how much solar collectors can contribute to a CO<sub>2</sub>-free heat supply in different locations and at different temperature levels.
- Takes existing collector certification schemes acknowledged by the GSCN as basis.



[www.gscn.solar](http://www.gscn.solar)



GSCN Global Solar Certification Network

[ABOUT US +](#)

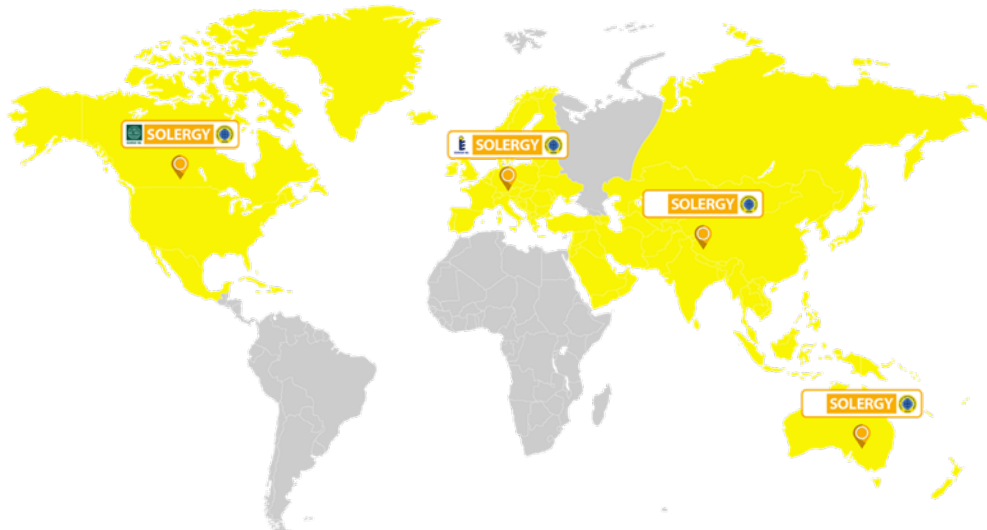
[SOLERGY](#)

[SERVICES +](#)

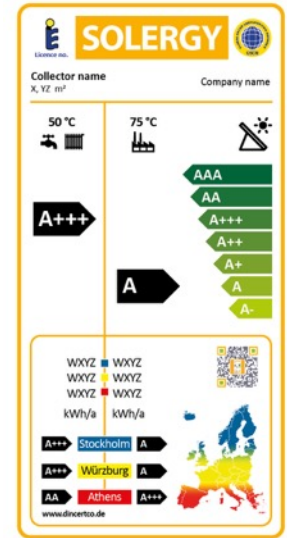
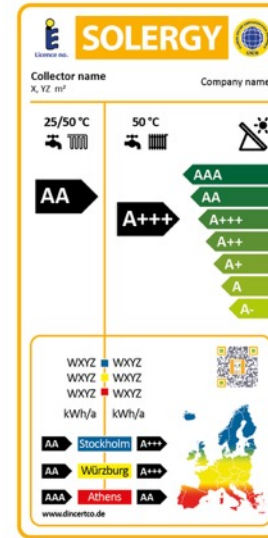
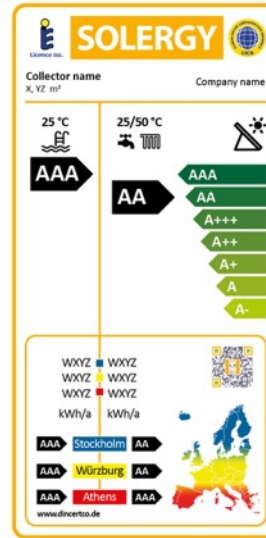
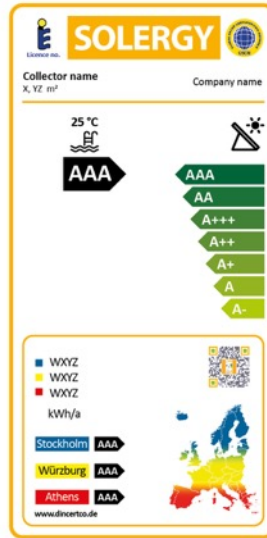
[MEMBERSHIP +](#)

[CONTACT](#)

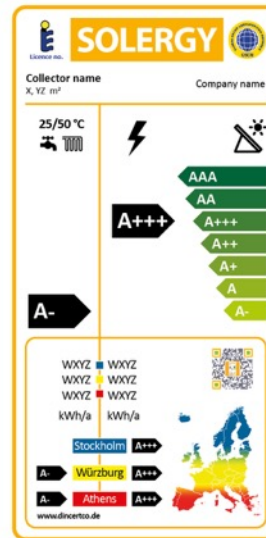
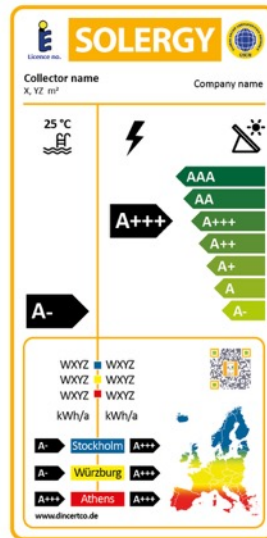
**HIGH QUALITY SOLAR THERMAL COLLECTORS ARE A KEY FACTOR FOR INCREASING THE SHARE OF SOLAR HEAT WORLDWIDE.**



Swimming pool collectors  
 Flat plate collectors  
 Evacuated tube collectors



PVT collectors



# How does SOLERGY work?

## SOLERGY label of the collector

Displays information relevant for marketing purposes



## SOLERGY registration Collector output data sheet (one per collector certificate)

Information publicly available to increase transparency

TÜV Rheinland®		Reg.-Nr.	EL 50M 1009
DIN CERTCO		Registrierungs-Nr.	
<b>Kollektortrags-Datenblatt</b>		Ausstellungsdatum: 07.12.19	
Kollektor output data sheet		Date of issue:	
Labelgeber:		PAPAEMANOUEL SA	
Reg.-Nr. Solar KEYMARK Zertifikat		DIN 15039	
Registrierungs-Nr. Solar KEYMARK Zertifikat			
<b>Typbezeichnung: FMAX TOP_372</b>			
Typbezeichnung		2,73 m²	
Strahlungsleistung			
<b>16 °C</b>			
Ertragsklasse des Kollektors		Blockheim	Würzburg
Output class of collector		A+++	AA
Strahlungsleistung des Kollektormoduls (kWp)		1407	1524
Annual collector output per module (kWh)		915	508
Annual collector output per m² (kWh)		335	185
Jahresausbeutegrad des Kollektors		44%	43%
Annual efficiency of collector		44%	43%
<b>15 °C</b>			
Ertragsklasse des Kollektors		Blockheim	Würzburg
Output class of collector		A++	A+
Strahlungsleistung des Kollektormoduls (kWp)		889	926
Annual collector output per module (kWh)		318	339
Annual collector output per m² (kWh)		116	122
Jahresausbeutegrad des Kollektors		27%	27%
Annual efficiency of collector		27%	27%


## Valid collector certificate

Only certification schemes acknowledged by the GSCN

Requirement to apply for the SOLERGY label registration



## Register-Nr. EL011-7S3118 P

<b>Inhaber:</b>	<b>ABORA ENERGY SOCIEDAD LIMITADA</b> C/ Buenos Aires 117 50196 La Muela (Zaragoza) Spanien
<b>Produkt:</b>	Kollektorertragslabel SOLERGY
<b>Typ / Modell:</b>	Abora aH72SK
<b>Prüfgrundlage(n):</b>	Zertifizierungsprogramm Kollektorertragslabel nach der Richtlinie zur Erstellung DIN Certco für weitere 5 Jahre verlängern. 11.03.21 (Stand: 2016-06)
<b>Konformitätszeichen:</b>	 Kollektorertragslabel
<b>Register-Nr.:</b>	EL011-7S3118 P
<b>Gültig bis:</b>	2024-07-31
<b>Technische Daten:</b>	gilt nur in Verbindung mit dem gültigen Solar KEYMARK Zertifikat mit der Registernummer 011-7S3118 P
<b>Dokument:</b>	<a href="#">Info (PDF)</a> 

### Weitere Informationen

» [Alle Zertifikate / Registrierungen von ABORA ENERGY SOCIEDAD LIMITADA](#)



Reg.-Nr. EL011-7S3118 P  
Reg. No.

#### Kollektorertrags-Datenblatt /

#### Collector yield data sheet

Kontinent / Continent

Labelinhaber / Label holder

Zertifizierungsschema / Certification scheme

Registrierungs-Nr. / Registration No.

Typbezeichnung / Type designation

Typ / Type

Bruttokollektorfläche / Gross area

Ausrichtung / Orientation

25 °C

Ertragsklasse / Rating

Bruttowärmeertrag

Gross Thermal Yield (GTY)

Jahreswirkungsgrad / Annual efficiency

25/50 °C

Ertragsklasse / Rating

Bruttowärmeertrag

Gross Thermal Yield (GTY)

Jahreswirkungsgrad / Annual efficiency

25 °C

Ertragsklasse / Rating

Bruttostromertrag /

Gross Electric Yield (GEY)

Jahreswirkungsgrad / Annual efficiency

25/50 °C

Ertragsklasse / Rating

Bruttostromertrag /

Gross Electric Yield (GEY)

Jahreswirkungsgrad / Annual efficiency

Ausstellungsdatum /

Date of issue

Europe

ABORA ENERGY SOCIEDAD LIMITADA

Solar Keymark

011-7S3118 P

Abora aH72SK

PVT

1,96 m<sup>2</sup>

fixed

45°

35°

25°

Wärme / Heat

Stockholm

Würzburg

Athens

AA

AA

AAA

1080 kWh

1188 kWh

2129 kWh

per module

per m<sup>2</sup>

551 kWh/m<sup>2</sup>

606 kWh/m<sup>2</sup>

1086 kWh/m<sup>2</sup>

47%

49%

62%

A++

A+++

AA

819 kWh

893 kWh

1670 kWh

per module

per m<sup>2</sup>

418 kWh/m<sup>2</sup>

456 kWh/m<sup>2</sup>

852 kWh/m<sup>2</sup>

36%

37%

48%

A+

A+

558 kWh

369 kWh

393 kWh

528 kWh

per module

per m<sup>2</sup>

188 kWh/m<sup>2</sup>

201 kWh/m<sup>2</sup>

285 kWh/m<sup>2</sup>

16%

16%

16%

A

A

352 kWh

375 kWh

532 kWh

per module

per m<sup>2</sup>

180 kWh/m<sup>2</sup>

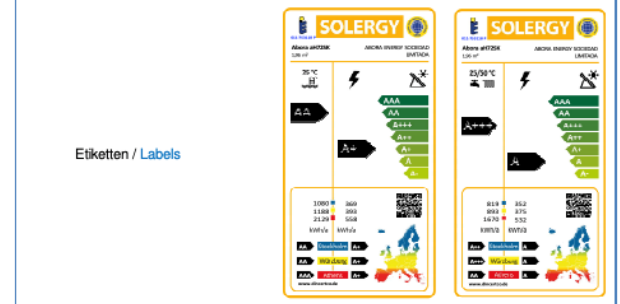
191 kWh/m<sup>2</sup>

271 kWh/m<sup>2</sup>

15%

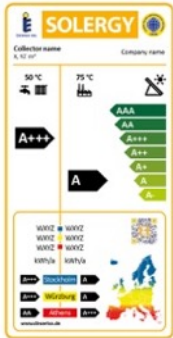
15%

15%



Etiketten / Labels

# SOLERGY label - Status



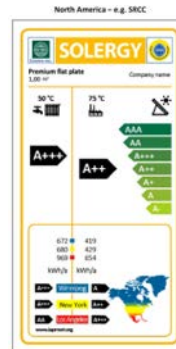
## Europe

In the market since 2016

- Collector certification scheme: **Solar KEYMARK**
- Certification body: **DIN CERTCO**

Facts:

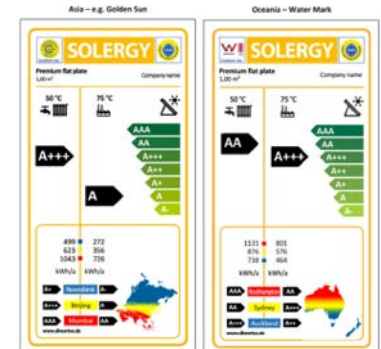
- **24 companies** have applied for the label
- **53 registrations** have been processed
- **170 labels** have been issued



## North and Central America

To be launched in 2023

- Collector certification scheme: **SRCC**
- Certification body: **SRCC**



## Asia and Oceania

Coming soon



# Who can apply for SOLERGY?

## Manufacturers with own brand

Collector manufacturing companies that sell the collectors with their own brand.

## OEM manufacturers

Collector manufacturing companies that don't sell with their own brand to end-customer market but sell the collectors to third companies only (B2B).

## OEM customers

Companies that don't have an in-house collector production, buy from OEM manufacturers and sell the collectors with their own brand.

### Requirements:

- Valid collector certificate Solar KEYMARK, SRCC, etc.
- Collector test report (e.g. ISO 9806) and data sheet
- GSCN Membership

# Follow us in social media and learn more...

## Twitter:

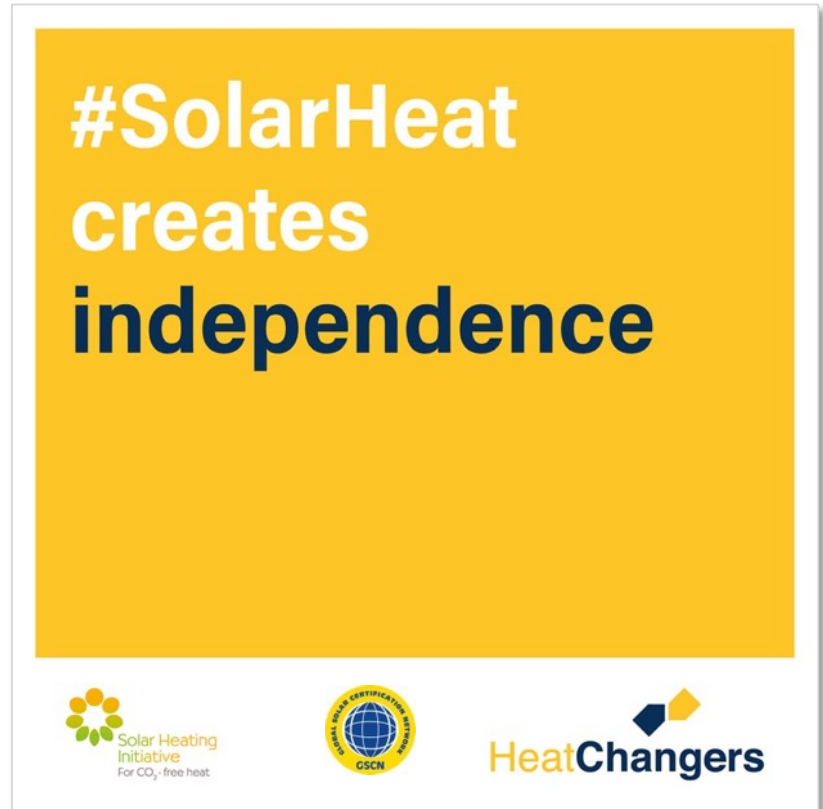
@WeLoveSolarHeat  
@HeatChangers  
@matters\_mx

## Facebook/Instagram:

@SolergyLabel  
@HeatChangers  
@matters.mx

## LinkedIn:

@Heat-Changers  
@Marisol Oropeza



# 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

**Next GSCN-meeting: Oct 25<sup>th</sup>, 2023 at Athens, Greece**

# Thank you for your attention

[www.iea-shc.org](http://www.iea-shc.org)



SOLAR HEATING & COOLING PROGRAMME  
INTERNATIONAL ENERGY AGENCY

<http://gscn.solar/>

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