

Welcome to SCHOTT Solar

- your partner for quality PV modules



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- A photograph of a modern glass skyscraper with the 'SCHOTT solar' logo on the top edge. Two blue flags with the 'SCHOTT solar' logo are flying in front of the building. The sky is clear and blue.
1. Introduction SCHOTT Solar
 2. SCHOTT Solar quality philosophy
 3. SCHOTT Solar product portfolio

SCHOTT Solar offers high quality components for solar power plants and photovoltaic applications

SCHOTT Solar AG

Solar power plants (CSP*)

- Solar-receiver



Photovoltaics (PV**)

- Crystalline silicon module



- Thin film module



* CSP: Concentrated Solar Power

** PV: Photovoltaik

SCHOTT Solar has experience in the manufacturing of solar energy since 1958


1958

- Development of solar cells for space travel at AEG

1980

- Development of thin-film solar cells at MBB (a-Si)

1983

- Delivery of glass tubes (SCHOTT Rohrglas GmbH) to the first solar thermal power plant

2002

- Development of receivers (SCHOTT Rohrglas GmbH)
- Founding of JV RWE SCHOTT Solar

2004

- Establishment of a production site for modules in the Czech Republic

2005

- 100% takeover of RWE SCHOTT Solar

2006

- Receiver series production begins

2007

- Founding of JV Wacker SCHOTT Solar
- Establishment of thin-film module production in Jena

2008

- Development cooperation with ersol Thin Film GmbH
- Foundation of new sites in Spain and the USA, expansion of existing sites

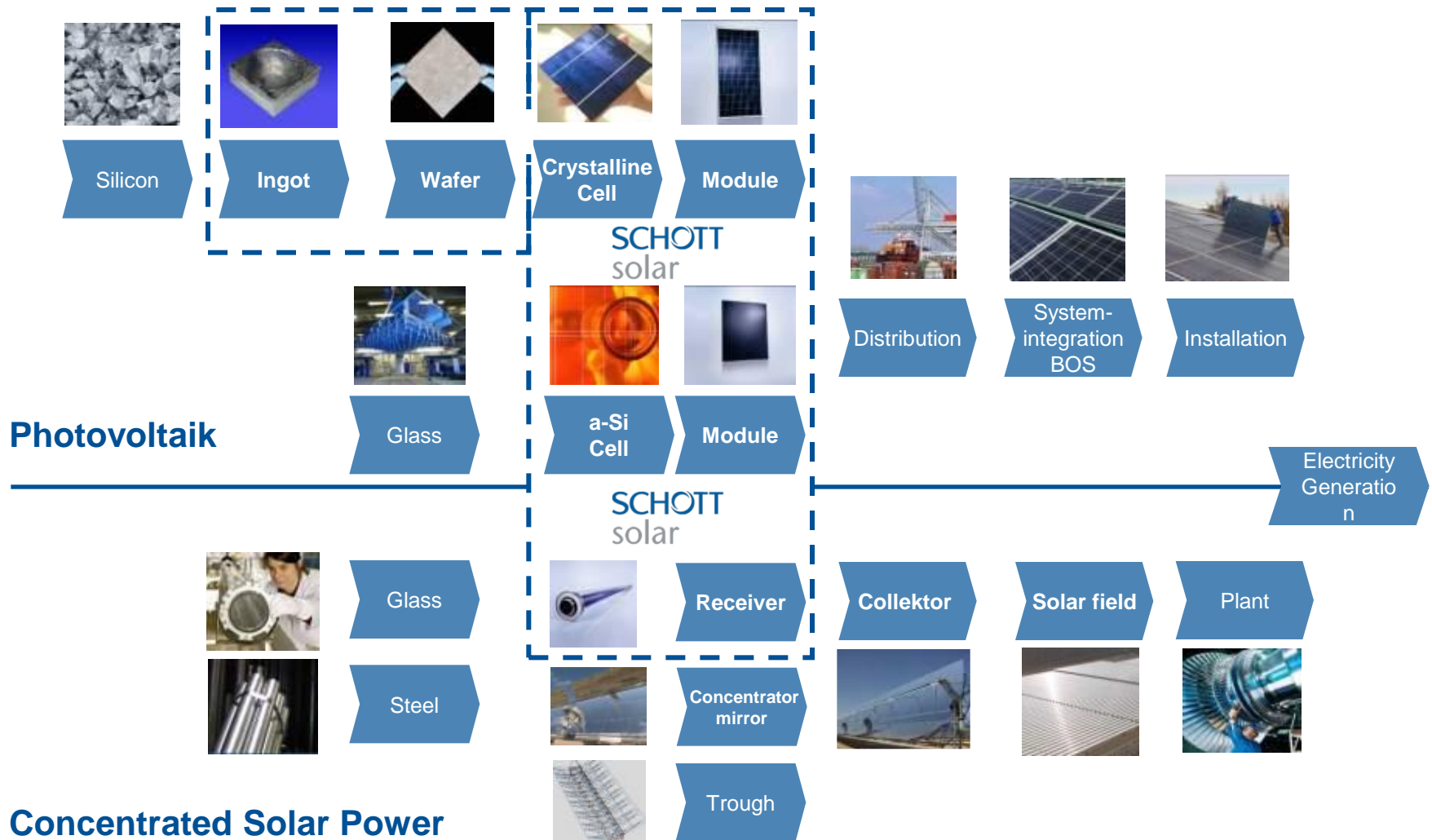
2009

- Start of production of CSP receiver and PV modules in the USA

2011

- Start of our JV production with Hareon in China

SCHOTT Solar covers the solar value chain from wafer to module



SCHOTT Solar is globally positioned in production and sales



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SCHOTT Solar pursues a strict quality philosophy



2 times stricter

- Modules of SCHOTT Solar have to perform twice as well as the IEC test criteria demand

Worldwide test systems

- Systems in different climate zones are being monitored in order to assure operational reliability under various conditions and impacts

Testing by independent institutes

- Modules are being continuously tested and certified to assure high quality standard.

More than 90% performance stability

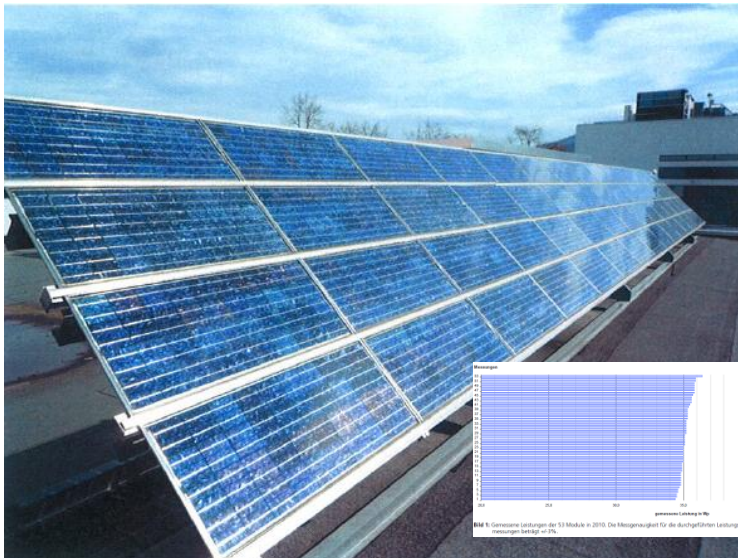
- In a long-term performance test conducted by Fraunhofer Institute SCHOTT Solar's modules perform even after 25 years with more than 90% of their original performance

Our excellent and reliable quality is regularly tested and approved by independent test institutes.



Our modules have proven long life and excellent performance stability

In a long-term study conducted by the Fraunhofer-Institute the SCHOTT Solar modules still achieved over 90 % of their original performance, even after 26 years.



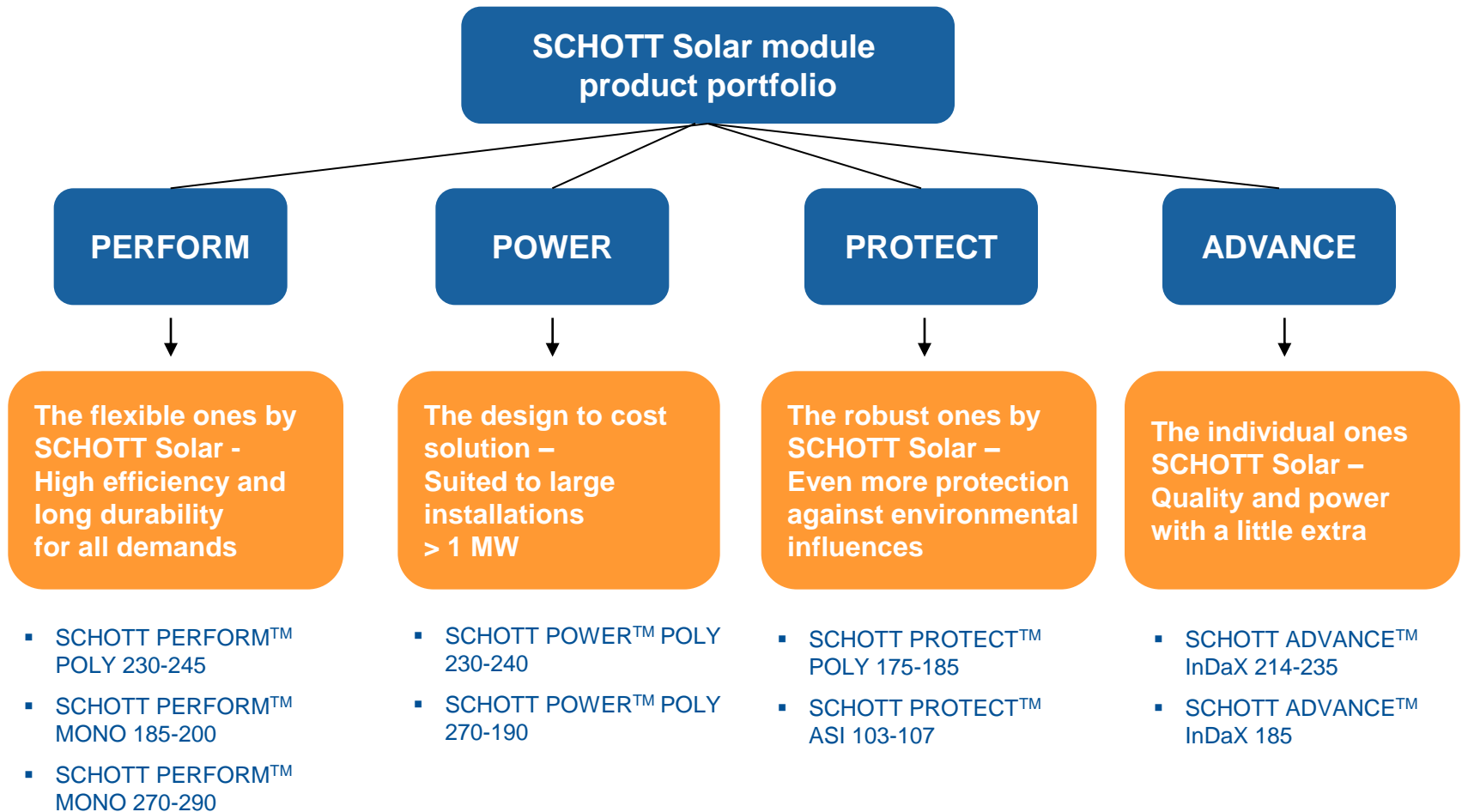
Location:	Fraunhofer ISE, Freiburg
Year of construction:	1984
Module type:	PQ 10/40/01 (38.4 P _{mpp})
Technology:	Polycrystalline, double glass
Nominal output:	2.3 kWp



Results of measurement of performance available in German, English, Italian and French under www.schottsolar.com
Updated Report available shortly

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SCHOTT Solar four product lines cover for residential, commercial and project customer needs.



SCHOTT PERFORM™ POLY Series

Always a Good Choice!

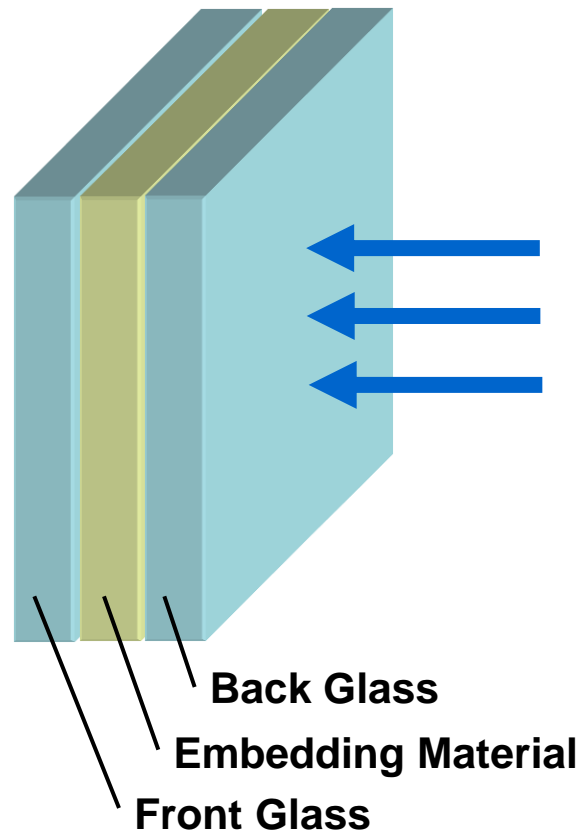
Winner of TÜV
Energy Yield Test



1. **Best-selling module produced by SCHOTT Solar** offering numerous installation possibilities and a highly marketable module format
2. **High resistance against weather conditions including wind, storms, ice and snow** through test-verified ability to withstand 5400 Pa pressure & wind loads
3. **Great flexibility during installation** as a result of a wide range of mounting variants and a large choice of mounting frame systems
4. **Suitable for agricultural surroundings** as demonstrated by successful outcome of DLG Fokus test on “resistance to ammonia”
5. Independent confirmation of quality through outcome of **Öko Test: Excellent**

SCHOTT POLY™ PROTECT Series

Double Glass Technology of SCHOTT Solar



- **SCHOTT POLY PROTECT™**
- **High long term stability through double glass technology**
- **High weather resistance due to double glass construction**
(Front glass – embedding material – back glass)
- **Glass is a natural barrier against any environmental factors**
Glass is impenetrable to water, condensation, humidity, water vapor, gases like Ammonia, etc.
- **Reliable double glass technology for crystalline modules** due to PVB free construction of the crystalline module and patented manufacturing process.

SCHOTT PROTECT™ ASI Series

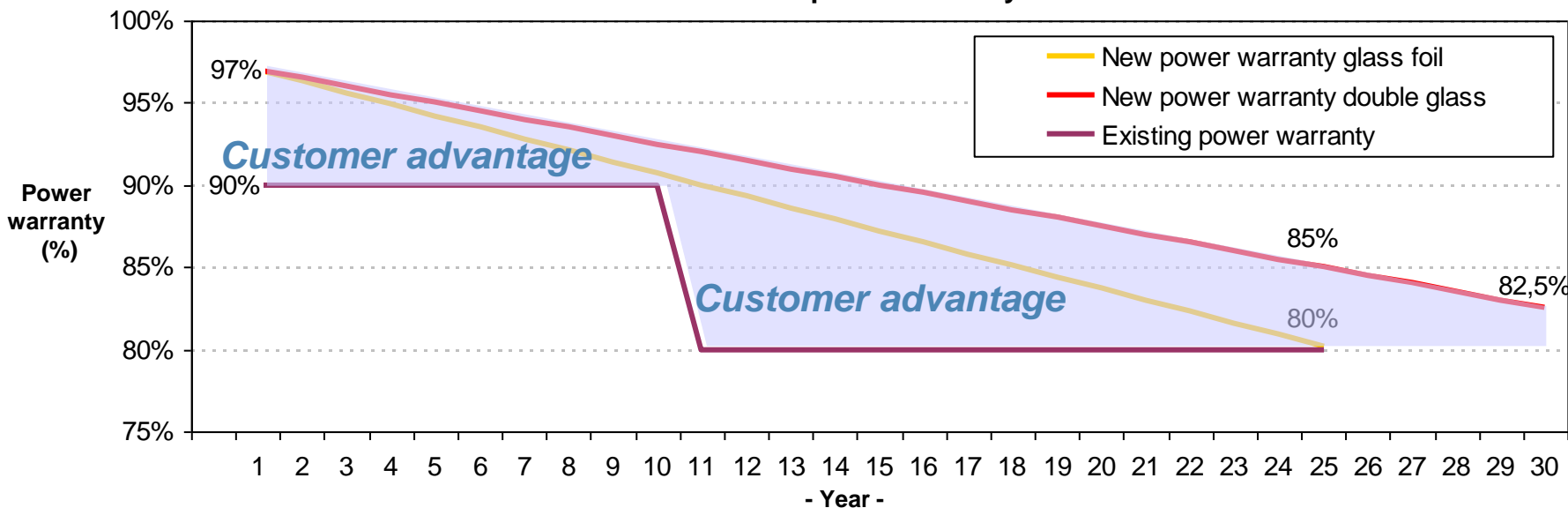
For a High Degree of Economic Efficiency



1. **High economic efficiency** through low price per square metre and peak Wattage
2. **Increased resistance against environmental influences** as a result of using front and rear glass
3. **Higher energy yield in warm regions** through low temperature coefficient
4. **Highly suitable for non-ideal roof surfaces** such as east-west facing roofs as a result of good performance in oblique lighting conditions
5. **Fulfils highest possible aesthetic expectations** as a result of homogeneous dark appearance
6. **Suitable for agricultural surroundings**, as verified by DLG test of “ammonia resistance”
7. **More than 20 % higher guaranteed energy yield** enabled by 30-year linear performance guarantee

SCHOTT Solar provides a linear power warranty and thus up to 20% more yield compared to competition.

SCHOTT Solar power warranty



Product	Power warranty
SCHOTT Solar glass foil	<ul style="list-style-type: none"> First year: 97% 2-25 year: -0,7% annually (after 25 years: 80,2%)
SCHOTT Solar double glass	<ul style="list-style-type: none"> First year: 97% 2-30 year: -0,5% annually (after 30 years: 82,5%)