

Swiss PV Label

Independent quality label for photovoltaic-devices, -systems and services.





Swiss PV Label:
A comprehensive quality label
for the all photovoltaic sector.

Photovoltaics – a trend with potential

There are over 60,000 photovoltaic systems in Switzerland today generating a total of about one gigawatt. And the potential is upwards! Falling prices for solar modules and technical advances make electricity production from photovoltaics a good investment.

An area of about 80 square kilometres on roofs and facades – which is less than 20 % of the total roof area in Switzerland – would be sufficient to cover 20 % of the current electricity demand from solar energy. An impressive statement which suggests that radical change in the supply of electricity is imminent. The future for highly innovative photovoltaic research in Switzerland looks bright, particularly in view of plans for multinational photovoltaic production on a large scale throughout Europe. Switzerland is also a world leader in the integration of solar modules in buildings.

Photovoltaics – an attractive energy source:



Since the introduction of feed-in remuneration at cost, the prices for solar power have fallen by about 70 %.

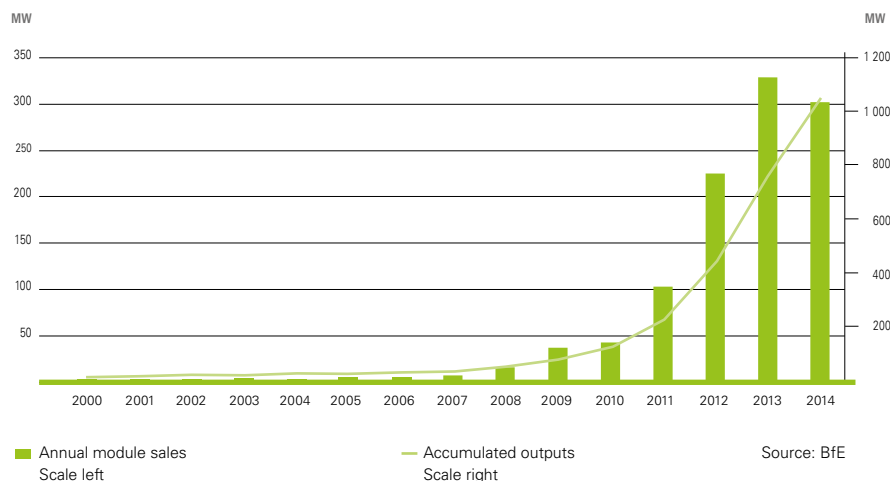


Since 2014, owners of solar power plants are allowed to simultaneously use the electricity they produce.



Technical advances in solar energy storage methods are forging ahead.

Photovoltaic market in Switzerland



Solar energy with quality label

The solar market is booming. Solar energy benefits not only the environment, but also the manufacturers, installers, planners and owners of photovoltaic systems (PV systems). However, this is only as long as the systems are safe, reliable and capable of continuously producing electricity. For this purpose, Electrosuisse has developed the first independent quality label – the Swiss PV Label – in three certification levels.

Having a Swiss PV Label pays:



The label guarantees reliable, safe and efficient PV system performance over the long term.



Certification is based on current international and country-specific standards and directives for photovoltaic-devices and -systems.



The benefits of the certificate are reflected in collaboration with investors, power supply companies and insurers.

Standards, lightning and hail protection

With the Swiss PV Label, Electrosuisse, as an independent body for operators, investors, planners and installers, verifies the quality and performance of PV systems. From planning to delivery and installation through to commissioning and maintenance, all basic requirements according to the standard IEC 62446 are examined. Also taken into consideration are aspects such as snow load, hail, fire and lightning protection.

Advantages with insurers and market benefits

Faultless connections, correct terminations and minimal electromagnetic fields – these are also important components that ensure trouble-free electricity production. Certification of all of the above offers system owners benefits in collaboration with investors and insurers. It is a well known fact that everyone likes working together with a reliable partner.

Our three PV Quality Labels at a glance

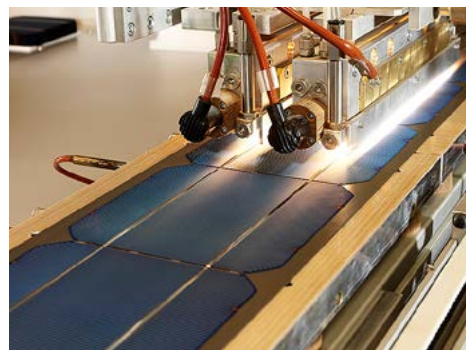
For PV systems



For deliveries and inspection batches



For solar system manufacturers



University of Applied Sciences and Arts
of Southern Switzerland

SUPSI

Accredited inspection
body for photovoltaic
modules in Switzerland



Electrosuisse-Partner for
China and Taiwan



Electrosuisse-Partner for
Logistics and Consulting



**SWISS PV
CERTIFIED**

The quality label for quality,
safety and trouble-free opera-
tion of the entire PV system.

Swiss PV Certified – the label for PV systems

For customers, investors, insurers and PV system operators, standards and directives are becoming increasingly important. What has been missing up to now is a comprehensive, structured and standard-compliant validation scheme for photovoltaic systems. With the Swiss PV Certified testing and certification processes, the quality, safety and efficiency of PV systems – from individual module to system switch – are tested.

The Swiss PV Certified Label is the basis for trouble-free operation and has benefits for you as a system operator: in collaboration with investors, power supply companies and insurers, you are regarded as a reliable partner.

The quality label is based on the European standard for grid connected photovoltaic systems. Also taken into consideration for certification are country-specific requirements such as the low-voltage installation standard or wind, snow load, hail and lightning protection requirements.

The Swiss PV Certified Quality Label stands for:



The guarantee for trouble-free operation of your system over the long term.



Reliability towards partners, investors, banks and insurers.



Maximum productivity, optimal utilisation of investment, achieving the highest possible return.



**SWISS PV
CHECKED**

The quality label attesting
the conformity of PV modules
samples of your deliveries and
of inspection batches receipt.

Swiss PV Checked – the label for deliveries and acceptance of inspection batches

With the Swiss PV Checked quality label, you can be sure as an importer, planner and installer that the solar modules you market or deliver for installation are of the highest quality.

In what condition were the PV modules you ordered when they were delivered?

With the Swiss PV Checked process, deliveries and inspection batches are subject to random checks.

Prior to shipment samples are taken at the manufacturer's site (e.g. in China, Taiwan, etc.). The quality is monitored locally by specialists that have been evaluated and assigned by Electrosuisse. Shock Data Loggers accompany the transport from the factory to the construction site – they will not miss anything. Upon arrival, the logger data is analysed and the delivered items are evaluated with new samples. These are tested and classified by our contractor, the University of Applied Sciences of Southern Switzerland (SUPSI). Finally, you receive a comprehensive confirmation of the delivery quality.

The Swiss Checked Quality Label stands for:



Perfect quality of supplied PV modules.



Confirmation of the quality of the entire lot.



Optional verification of Swiss and international hail and snow load requirements.



**SWISS PV
TESTED**

The quality label for the
manufacturers of PV modules
and components.

Swiss PV Tested – the label for manufacturers

Flawless material: This quality label is intended for solar modules such as panels, inverters and connection boxes. The label guarantees compliance with Swiss standards and quality requirements and shows the manufacturer as being a fair and responsible player on the international market.

Electrosuisse distinguishes PV system manufacturers with the Swiss PV Tested quality label. As a producer, you will be regarded worldwide as a quality-conscious partner and accordingly increase your chances of success on the market.

With the Swiss PV Tested label, you will avoid the costs of faulty production and raise your products to a new and constant quality level.

The Swiss Tested Quality Label stands for:



A quality-conscious partner on the international market.



Inspection and meaningful assessment of manufacturer, factory and production sequences.



Product compatibility on the Swiss market and compliance with all relevant standards.

Our additional services in the PV sector

In addition to the testing and certification of photovoltaic systems, we offer numerous additional services in the PV system sector.

Monitoring:

We provide online data evaluations of current performance throughout the entire service life of the PV system.

Audit for viable feed-in remuneration:

With the PV certification, we can also audit you for proof of feed-in remuneration at cost.

Audit for proof of origin:

Proof of origin is an integral part of PV certification.

Audit for «naturemade» rating:

As an option to PV certification, we can additionally audit your system or products with «naturemade» rating.

Flasher tests:

These tests are used to detect faulty PV modules in the system. We perform this optional test on site in the event of negative batches inspections.

Grid concepts:

For the connection of PV systems to power grids, we provide support in all calculations, analyses and evaluations.

Storage systems:

We offer advice and simulations for new, forward-looking technologies. Electrosuisse is active in relevant national and international committees.

Warranty verification:

Verification of quality and performance prior to expiration of the manufacturer's warranty.



Our primary aim:
To ensure that your system
delivers power safely, reliably
and continuously.
That is why we have developed
the Swiss PV Label.

