

# AUSTRIA

A brief description of the most important elements in Austrian regulations and certification/subsidy schemes related to solar thermal products is given here below. The description is valid for November 2007

## Background/status

In 2006, 292,700 square meters of flat-collectors-and vacuum pipe-collectors were installed in Austria (2005: 237,000 square meters), 33.0% there from in Tyrol, 17.9% in Upper Austria, 14.5% in Lower Austria, respectively 10.2% in Carinthia and Styria, 6.5% in Vorarlberg, 4.3% in Salzburg, 1.9% in Burgenland and 1.4% in Vienna. Therewith 22,500 solar thermal systems were erected for DHW and space heating support; market growth in 2006 was 24%.

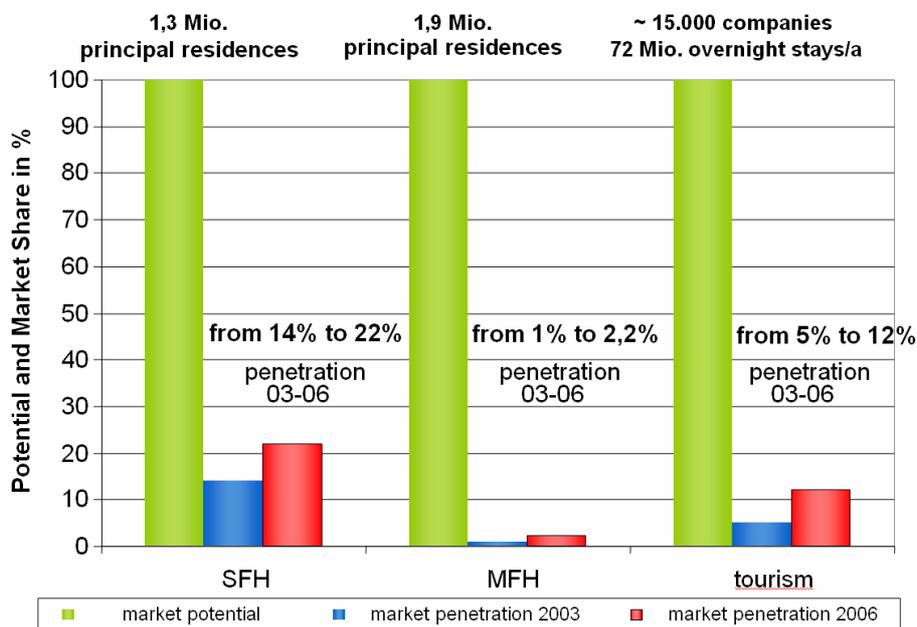


Figure 1: Market penetration for separate housing segments.

Opening up new possibilities for application is the central factor of success for the rapid market growth besides the already high density of solar thermal systems.

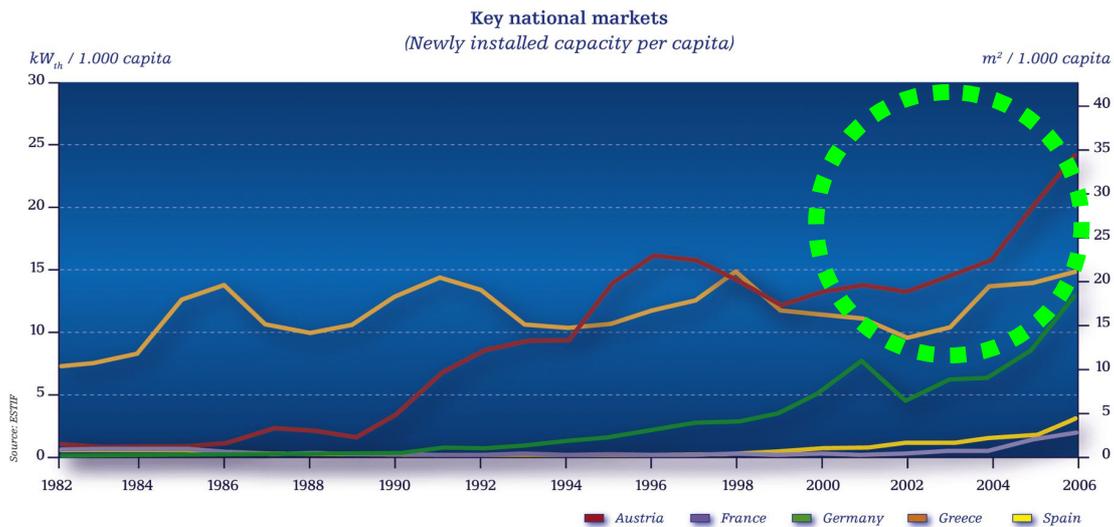


Figure 2: Comparison of national markets showing the steady growth of the Austrian market. (Source: ESTIF)

## Regulations

- **Building Regulation (general)**  
Building regulations are in the responsibility of the provinces. There are no barriers for the use solar thermal energy, with exceptions on historical buildings or some regions/cities with intense tourism.
- Requirements for solar thermal systems according safety and recommendations for design are stated in ÖNORM M 7731. However, this standard is just in a review process, since some of the topics are meanwhile covered by prEN 12977. As long as this European draft is not available as standard, the ÖNORM M 7731 is valid.

## Subsidies

Solar thermal installations are subsidized in all nine provinces in Austria. Additional subsidizing comes from some hundred municipalities, which give some additional money; the requirement for this is mainly the same like the subsidy from provincial side. From a European marketing aspect it is essential, that currently the only requirement for subsidies is the test according to EN 12975; which means that no local barriers concerning additional requirements exist. It is the intention of the main drivers in Austria (Solar association, research institutes) to finally have the European Solar Keymark as the requirement; which means that additional to performance testing also quality testing is needed.

Federal subsidies for industries are controlled and organised by KPC (Kommunalkredit Public Consulting). For funding solar thermal systems any kind of test report according to ÖNORM-, DIN- or ISO (includes EN 12975) is required, in detail the application form asks for the number of the test report of the collector.

For solar thermal systems larger than 100 m<sup>2</sup> a forecast of the energy results has to be delivered but no further requirements are linked to it.<sup>1</sup>

<sup>1</sup> <http://www.public-consulting.at/de/portal/umweltfrderungen/bundesfrderungen/betrieblicheumweltfrderungiminland/erneuerbareenergietrger/solaranlagen/>

Private persons get subsidies from regional bodies, (region and/or municipality) predominantly without any relevant requirements. The regions/provinces Lower Austria, Upper Austria and Vienna require that the system has to fulfil all relevant standards, whereas only in Vienna this is specified as EN 12975. In Salzburg the installer of the system has to declare that he has fulfilled all relevant standards and legal requirements. Further for systems operated by communities the system has to deliver a yield of at least 350 kWh/m<sup>2</sup> per year. The regions Burgenland, Carinthia, Styria, Tyrol and Vorarlberg have no relevant requirements for subsidies at all.

The different schemes in the nine provinces provide in average 20% of the total installation costs for hot water system, 30% if heating is included. Although the circumstance of 9 different subsidy schemes might make the market a bit complicated it also drives the market, since there exists kind of competition between the responsible bodies on who is providing a better subsidy. The effective Austrian subsidy system and mainly its continuity seem to be one of the main success factors for the high instalment rates in Austria. (More than 3.3 Mio m<sup>2</sup> for 8 Mio people).

## **Testing**

arsenal research is the only accredited test institute which performs tests according EN 12975:2006.

## **Certification**

**Product certification:** No national certification scheme for solar thermal products.

No Austrian certification body is awarding Solar Keymark certificates. Solar Keymarks certificates are awarded by DIN CERTCO in Germany in cooperation with arsenal research.

**Installer certification:** There exists a voluntary certification scheme for installers and planners of solar thermal systems, made by arsenal research<sup>2</sup>.

**Industry certification:** The solar companies can apply for the "Austria Solar Gütezeichen"<sup>3</sup>, a label for solar thermal companies; the requirements for getting this label are mainly: tested products (collector according EN12975, Solar Keymark to come), high quality documentation, and customer friendly product information, 10 years of guarantee on collectors and 5 years on storage tanks.

**Environmental certification:** on a voluntary basis an environmental label called "Umweltzeichen" according to the schemes "UZ15 Sonnenkollektoren und Solaranlagen"<sup>4</sup> can be gained. Besides environmental criteria tests according to EN12975 or EN12976 respectively are required.

## **Insurance**

Special insurance products for solar thermal and PV system are available on the Austrian insurance market. None of them have any special requirements on the collector or other parts of the solar thermal system.

## **Others**

No other trade barriers identified.

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<sup>2</sup> [http://www.arsenal.ac.at/products/products\\_schulungen\\_solarw%E4rmeinstallateur\\_de.html](http://www.arsenal.ac.at/products/products_schulungen_solarw%E4rmeinstallateur_de.html)

<sup>3</sup> <http://www.austriasolar.at/Service/Guetesiegel/>

<sup>4</sup> UZ15 - Sonnenkollektoren und Solaranlagen, [www.umweltzeichen.at](http://www.umweltzeichen.at), VKI & BMFLUW

## ***Actions taken in the project period***

### **Regulation**

Implementation of the coming European standard EN 15316-4-3 for calculation the influence of solar thermal systems on the energy performance of the buildings in the procedures used for calculating the energy performance of buildings in the national a federal building regulations. Responsible peoples for implementation of the EPBD were contacted and awareness on the calculation methods was created with the effect that the EN 15316-4-3 is now one of three possible calculations methods in the *ÖNORM H 5056:2007 Energy performance of buildings - Energy use for heating systems*. The other calculations methods are a simplified calculation based on ÖNORM M 7701 and the use of simulation software such as Polysun or TSol.

### **Certification**

#### **Industry certification:**

Solar Keymark certificate proposed as a requirement for the “Austria Solar Gütezeichen”<sup>5</sup> instead of a EN12975 test only.

### **Others**

The main topic to address in Austria is the market of multifamily houses and industry. So far, thermal systems are predominately installed at private houses. Up to now, about 22% of all single family houses have a solar system on their roof. Large and complex systems are not well introduced so far, bad experiences with large systems (especially in Vienna) have nearly stopped this development in the late 90’s. Guaranteed yields and certification (installers, products, and planners) overcome this problem in the last years. For accelerating this development arsenal research, together with the other main actor in research AEE-INTEC as well as the solar association Austria Solar has therefore launched an installer and planner training, focussing on large and complex solar systems. (about 350 participants since 2004)

Projects together with new European neighbours (Hungary, Czech Republic, Slovak Republic) intends in establishing a market of solar thermal in these countries based on the Austrian experiences. Joint workshops, networking in research and industry, excursions as well as general information on solar energy are part of these initiatives.

### **Proposed items**

Common European standard of solar thermal industry based on the experiences with the Austrian industry label (“Austria Solar Gütezeichen”) committing the industry to sell only high quality (certified) products, fair competition and other high quality standards.

## ***Remaining trade barriers at the end of the project***

### **Regulation**

No barriers to trade related to subsidies.

### **Subsidies**

No barriers to trade related to subsidies.

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<sup>5</sup> <http://www.austriasolar.at/Service/Guetesiegel/>

**Testing**

No barriers to trade related to testing.

**Certification**

No barriers to trade related to certification.

**Insurance**

No barriers to trade related to insurance.

**Others**

No other barriers to trade identified

***Actions needed to overcome remaining trade barriers*****Regulation**

Support CE-marking of water installation components.

**Subsidies**

No actions needed.

**Testing**

No actions needed.

**Certification**

No actions needed.

**Insurance**

No actions needed.

**Others**

No other actions needed.