PORTUGAL

Status

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

Regulations

Building Regulation

The official documents are:


It defines hygienic and thermal comfort conditions; it imposes rules for the air conditioning systems efficiency, for its maintenance and for keeping the quality of interior air, to achieve a better global energy efficiency of buildings.

It improves the already existing code, almost duplicating the thermal performance request in the new and renovated buildings and imposing the usage of solar thermal collectors for hot water production if there is favourable conditions for exposure (if the roof or cover runs between SE and SW without significant obstructions) in a base of 1m² per person (the total can be reduced to 50% if space is necessary for other important usages of the building).

For performance calculation of such systems, the certification according to the European Standards is needed.

This performance calculation is done using a programme developed by INETI - Solterm programme.

The installers of these systems must also be certified installers.

The solar system must have a six year guarantee.

As usually, the new codes entered in force, three months after their publication, meaning that in beginning of July 2006, all new projects for buildings had to be in accordance with the new regulations.

Micro power generation Regulation
Recently legislation (Decreto-Lei nº363/2007 DR211 Série I de 2007.11.02) on Micro power generation was also published and also an obligation for installation of at least 2 m² of solar thermal collectors is imposed for approval of private producers with micro power generation (except for the case of cogeneration using biomass).
Subsidies

Presently (November 2007), there are no NATIONAL INCENTIVE PROGRAMMES for solar thermal systems in the continental platform of Portugal.

For individual buyers of a solar thermal system, there is a tax deduction. This tax deduction is up to 30% of system cost if this does not exceed 761 € (value for 2007). Since there is also a deduction in taxes if there is a loan for buying house, the value that can be deducted for the solar thermal system is, in that case, 187 € (value for 2007).

In Azores Island there is a REGIONAL INCENTIVE PROGRAMME. It is a direct incentive to the acquisition of renewable energy systems up to 25% of the system cost and a maximum of 1000 €. For companies, the maximum value of the incentive is 250000€, also up to 25% of system cost.

- The corresponding legislation is PROENERGIA — Sistema de incentivos à produção de energia a partir de fontes renováveis— Decreto Legislativo Regional nº 26/2006/A


Also in Madeira Island there was a REGIONAL INCENTIVE PROGRAMME, for solar thermal systems for hot water production for households, between years 2002 and 2006. This has now stopped. The collector area installed with this incentive was 3200 m². It was an incentive up to 1000€ per apartment or 10000€ per building of apartments and up to 70% of the total investment. The incentive was calculated as a function of the energy delivered by the system.

Testing

INETI is the only accredited test institute in Portugal which performs tests according EN 12975 and EN 12976.

Certification

Product certification: The national certification scheme for solar thermal products was developed by CERTIF with the collaboration of INETI and within the Public Initiative “Solar Hot Water for Portugal”. This was done in 2002/2003. The certification scheme is based on the European Standards and it covers both Collectors and Factory Made Systems. This certification scheme is identical to Solar Keymark scheme.

CERTIF is also an empowered body for Solar Keymark Certification.

Installer certification: A Certification scheme for solar installers was developed. Solar Installers can have a Certificate of Professional Proficiency (CAP), which is given by the General Direction of Energy and Geology. The regulation of this Certification Scheme is the Portuguese regulation – Portaria nº 1451/2004 (26th November).

The development of the different certification schemes (Products and Persons) was made in the frame of the Public Initiative “Solar Hot Water for Portugal” of General Direction of Energy and Geology with the participation of INETI, ADENE (National Energy Agency), SPES (National Section of ISES) and APISOLAR (National Association of Solar Industry).
Certified products (collectors and systems) are listed in the site www.aguaquentesolar.com. Certified installers are also listed in the site www.aguaquentesolar.com.

The procedure for listing of products and installers is managed by ADENE (National Energy Agency). When necessary INETI acts as consultant in this process.

**Insurance**

There are no special insurance schemes for installation of Solar Thermal Systems.

**Others**

In the frame of the Public Initiative “Solar Hot Water for Portugal”, one of the activities was the establishment of a Solar Thermal Observatory. The Observatory, responsibility of ADENE, established and applies a methodology to follow up the installations and installers present in the Solar Thermal Market. It also evaluates the growth of the market and the needs of the users in relation to these products. The reports prepared by the Observatory are available for download in www.aguaquentesolar.com.

**Actions taken in the project period**

The actions taken within the project period for:

- co-ordinating the Portuguese requirements in regulations and subsidy schemes with European standards and Solar Keymark certification
- implementing - with respect to solar thermal systems - the European directives on energy performance of buildings and energy labelling of hot water tanks

are listed below:

**Regulation**

As the final European standard\(^1\) for calculation the influence of solar thermal systems on the energy performance of the buildings is still not published, no action could be taken with respect to this.

**Subsidies**

No NATIONAL INCENTIVE PROGRAMMES are presently in force. No action could be taken with respect to this.

In the present building regulations, the documents\(^2\) prepared for training of experts and designers, clarified the equivalence between the Solar Keymark Certification and the Certification according to the Portuguese Quality System and also to what is stated in the legislation.

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\(^1\) A draft European standard procedure for calculation of the influence of solar thermal systems on the energy performance of buildings (prEN15316-4-3) has been prepared by CEN. A revised version of this draft has now been approved as an EN, publication is expected November 2007.

\(^2\) “Regulamento das Características do Comportamento Térmico dos Edifícios (RCCTE). Manual de apoio à aplicação do RCCTE” (Versão 1.0 Out. 06)

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Editors: Helder Gonçalves, Eduardo Madonado
Tax deduction is not dependent on product certification and for this reason no actions could be taken.

**Testing/Certification**
A Solar Keymark Industry Workshop was held, in Lisbon, November 2006, in parallel with the Solar Energy Iberian Congress.

Information on testing and certification has been given, either in seminars\(^3\) and interviews in magazines\(^4\) and also by daily phone and e-mail contacts received at INETI. Testing and certification based on European Standards is already implemented and several products are already Solar Keymarked.

Information on Certification and Solar Keymarked products is given in the installers training courses at INETI.

**Insurance**
No specific actions were taken due to the fact that insurance of solar thermal products is not an issue in Portugal.

**Others**
A memorandum to General Directorate of Energy and Geology was delivered in the beginning of 2007, proposing the actualization of the site [www.aguaquentesolar.com](http://www.aguaquentesolar.com), considering only lists of certified products. The lists of products which were only tested according to EN standards but not certified should be removed.

This suggestion was accepted and ADENE (manager of site [www.aguaquentesolar.com](http://www.aguaquentesolar.com)) has performed this changes.

Support to ADENE in the insertion of certified products was also given.

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

**Regulation**
The final European standard for calculation of the influence of solar thermal systems on the energy performance of the buildings is still not implemented in the national procedures used for calculating the energy performance of buildings. But it does not constitute a barrier to the consideration of the contribution of solar thermal systems because a national methodology exists.

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\(^3\) Speech – “Solar Thermal Collectors and Systems Certification”, “6as JORNADAS DE CLIMATIZAÇÃO – Ordem dos Engenheiros”, Target group HVAC technicians.
Training courses for experts of the Building Energy Certification Scheme – September/October 2006
Presentation and visit to the Laboratory of students for Architects Course of Lusíada University – 14th July 2006
Seminars in the Faculty of Engineering of Oporto University (Masters Degree) November 2006
Seminars in the Aveiro University (masters Degree) January 2006
Seminars in a joint Master Degree of INETI and Science Faculty of Lisbon University.- November 2007

\(^4\) Interview published in the magazine “Climatização” which covers HVAC systems and is preparing a specific issue on renewable energies.
Subsidies
No barriers to trade related to subsidies.

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.

Action needed to overcome remaining trade barriers

Regulation
Comparison of results between the present national methodology and the final European standard, for calculation of the influence of solar thermal systems on the energy performance of the buildings will be needed. Information to the expert group that follows the application of the national building regulations will also be needed.

Subsidies
Taking into account that the present Building regulations already accept Solar Keymark as the condition for collectors installed within the Solar Thermal Obligation for Hot Water preparation, it is expected that when new National Incentive Programmes are established, there will be also acceptance of Solar Keymark. For this reason no actions will be needed.

Testing
No actions required

Certification
No actions required

Insurance
No actions required

Others
No actions required