

# On the Sustainable Development of Solar Thermal Obligations in Buildings in the Framework of the Portuguese Case

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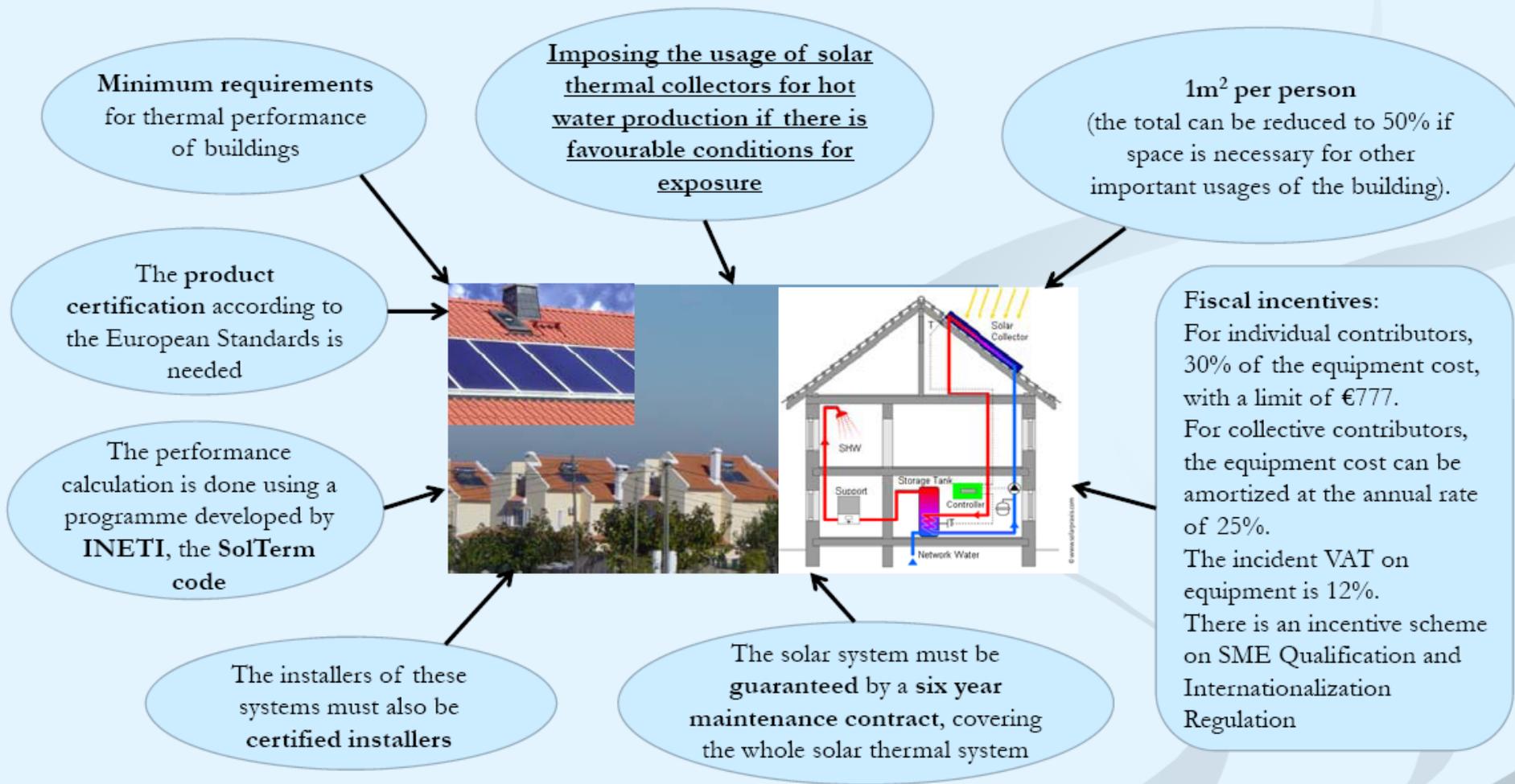
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# Introduction

- European **ALTENER** projects;
- Portuguese Sub Programme “**Solar Hot Water for Portugal**”, 2001;
- European **QUALISOL** project + Technical Committee on Energy, within the Portuguese Professional Certification System, certification scheme for solar systems installers;
- the definition of a **certification scheme for solar thermal collectors and factory made solar thermal systems**;
- the 2002 rules of the “**Incentive Measures for Renewable Energies and Rational Use of Energy**”, applied for **certification schemes to Guarantee the Quality of Solar Thermal Systems**;
- Portuguese Regulations transposing the EU Directive 2002/91/CE (EPBD), namely **Thermal Performance Building Regulation (RCCTE)**, defining first solar thermal obligation in Portugal.

# The Portuguese STO

The Portuguese STO can be synthesized as follow:



# STO implementation main problems

The main questions are of two different types. One type is related with basic questions denoting the **lack of knowledge** of some stakeholders (“what is a solar thermal collector?”, and so on). Other, are related with **requirements which need clarification or have not good criteria.**

**One example** of those that are not good criteria is **the rule of 1 m<sup>2</sup> of solar thermal collector per conventional occupant**, without any reference to the thermal performance of the product.

**Another example** of a requirement which needed clarification is **“what is a significant obstruction?”**.

# Further actions needed

- To improve the approved actions of the **Energy Efficiency National Action Plan** within the following measures: **Micro-production (with the mandatory installation of at least 2 m<sup>2</sup> (on a basis of 1 m<sup>2</sup> per 1 kW installed) of solar thermal collectors)**, **Service Buildings (schools)**, **Solar Thermal (to get a solar thermal market of 175,000 m<sup>2</sup>/year)**, and **Buildings (State buildings, swimming pools, sport parks)**.
- The **STO** must be integrated as a part of a “policy package”.
- **Quality is key:** clear requirements, certification of people, products and components, and maintenance guarantee.

**THANK YOU VERY MUCH!**