

# ProSTO

## ”Best practice implementation of Solar Thermal Obligation”

### MAPPING THE LOCAL SITUATION FOR DEVELOPING STOs

**Filled in by:**

Institution	Regione Lazio
Country	Italy

## A Legal and economic framework

### 1. National/regional /local thermal building regulations and/or building energy certification (please provide only the key messages or the paragraphs concerning ST)

At regional level, the following acts have been implemented:

- Regional law n. 18/04 as modified by Financial law 2008 on STOs;
- Regional Law of 14.05.08 (Carapella) on building energy certification

At local level, the following acts have been implemented:

City of Pomezia (55.964 inhabitants) – a Building code within which there are rules concerning the use of ST systems, Energy certification and requirements for Energy saving is currently under discussion in the city Council.

### 2. Existing national/regional/ local solar thermal/renewable ordinances

At regional level, there are framework laws for STOs and energy efficiency. The municipalities have just started up to introduce in their building regulations these rules but the process is proceeding slowly; the reasons of this delay can be resumed: cultural matters in local municipalities, lack of sanctions or incentives.

At local level, the following acts have been implemented:

- Comune di MontePorzio Catone (8.748 inhabitants) – act for the settlement of the municipal building code. We may argue this to be a STO since it rules in a precise and easy way the compulsory adoption for the production of ACS of solar thermal. It is currently under exam of the Planning Committee.
- City of Rome (2.800.000 inhabitants) – A Municipal Decree (Decree 48) has been approved prescribing the minimum cover for ACS from renewable sources.

### 3. Please describe the political process for developing a STO has your community all the necessary rights to introduce a STO? Otherwise: at which administrative level would a STO be decided and managed? What and how can be influenced by the community How much time does such a process last?

The local municipalities are the key actors in implementing the STOs. Locally, in Lazio Region, these public bodies need to be helped to adopt and apply solar obligations because of lack of competences. In the regional context of Lazio it is difficult to find local communities fully aware of solar / thermal obligations and the need to involve politicians in these problems often proves to be necessary in order to raise awareness on such a theme. Moreover, the administrative procedures to introduce STOs aren't so easy. The new rules have to be approved by the Municipality Council in a process that can be very difficult and long.

### 4. Did you have tentative start-ups of similar experience (any type of ordinance) in the past?

The law n. 18/04 tried to introduce STOs but the tentative didn't succeed. Only few municipalities have introduced the rules respecting the deadline indicated. The regional Financial law for 2008 changed the deadline at the 30<sup>th</sup> of April 2008 but, also in this case, only five municipalities have been engaged in this work.

### 5. Are there current information and/or training campaigns/activities going on by which STO

**could be promoted and communicated?**

The Kyoto Office created by the Italian Ministry for environment and Sea is promoting the STOs at local level offering its technical competences and help directly local technicians;

**6. Is your personnel enough to manage a STO? Would a specific training be needed?**

The local authorities need to be trained, especially in the technical and administrative field. In particular, at local level there is a lack of knowledge of technical matters and renewable technologies.

**7. Would you face problems with large exemption categories, e.g. historical buildings or landscape protected areas?**

Yes, in Lazio Region there are lot of historical buildings and protected areas; in this situation it is very difficult to find the right way to introduce STOs because of the national rules that protect the buildings from all structural modifications. The authorities involved in protecting historical and archaeological sites are conducting a restricted policy in allowing RE.

**8. Available subsidies at national/local level**

No at regional level. At national level there are fiscal incentives that allow users to (there's a tax relief of 55% from the cost of solar thermal panels)

**9. Financing mechanisms (please specify which mechanisms are available and towards whom and towards which types of systems they are targeted)**

In Lazio Region there has been in force a financial incentive for solar thermal plant until the 30<sup>th</sup> of May 2008;

**10. Means for monitoring/controlling the STO**

The "network of the renewable cities", created by the Ministry after having organized training activities for local technicians, could be used for monitoring the implementation of STOs

## B Technical framework

### 1. Existing standards for solar thermal systems and components

There are different technical rules set by the UNI (Italian National Body for Unification) that represent the versions of technical norms named EN. Almost all of them are thought for plants over 35 kW or 50 m<sup>2</sup>. It is very popular the "Qualisol" standard, promoted through the homonym European project funded by ALTENER Programme.

### 2. Certification and other quality systems for solar thermal products

The solar thermal products are normally certified by ad-hoc laboratories through following the norms UNI EN 12975 e UNI EN 12976. The marks named SolarKeyMark are also popular.

The Keymark for solar thermal products will assist users to select quality solar collectors and systems. This "Solar Keymark" is the result of a voluntary certification scheme supported by the European Solar Thermal Industry Federation – ESTIF and locally from Assolterm.

The basic elements in the certification scheme are:

- Certificates are delivered by Keymark empowered certification bodies
- Test reports are delivered by accredited test laboratories
- The products are delivered by Keymark licensed manufacturers fulfilling the requirements for factory production control

The CEN certification mark - The Keymark - is a general voluntary mark, developed by the European Committee for Standardisation (CEN). The clear and simple message of The Keymark is that the product complies with the European Standard(s) covering the product.

The Solar Keymark certification scheme has been developed with support from EU-Altener (Solar Keymark - AL/2000/144) and EU-IEE (Solar Keymark II - EIE/05/052/SI2.420194).

The Association Assolterm has even created the voluntary mark named SOLARPASS ([www.solarpass.it](http://www.solarpass.it)) for the quality certification of solar products.

### 3. National/regional /local standards/regulations/guidelines for heating systems design (please mention only the key issues addressing solar thermal systems)

There are no specific regulations at national or local level other than those disseminated through the European project Qualisol and adopted by installers on a voluntary basis. At present, there are drafting by the ISPESL (Superior Institute for Prevention and Safety at Work), technical standards for the safety of solar thermal systems. The document is being draft.

### 4. Common systems and fuels for DHW and space heating

For the production of hot water ACS (DHW) snapshots boilers fired by natural gas or LPG or electric heaters. The systems more often used for heating space environments are the systems with radiators functioning on natural circulation of air. The most used fuels are the methane gas, GPL and diesel.

### 5. Existing certification schemes for installers and planners

The installers in Italy must have the technical requirements in accordance with the Ministerial Decree n.37/2008 (former Law No. 46, 1990). With regard to the solar thermal the Association Assolterm promotes the voluntary mark "SOLARPASS Install", which is specifically targeted for installers. To achieve that mark an enabling course must be followed and a protocol signed (agreement on the quality installation).

**C Market**

**Market**

**1. Installed solar thermal collector capacity at local level**

The state of the market - Lazio Region  
 The solar thermal market: 4.000 m<sup>2</sup> (2,8 MW<sub>th</sub>) yearly  
 Solar thermal capacity in operation: 28.000 m<sup>2</sup> (19,6 MW<sub>th</sub>)  
 Relationship surface (solar collectors) inhabitants : 0,0050 m<sup>2</sup>/capita

**2. Technical/economical potential at national/local level**

The state of the market - Lazio Region  
 The solar thermal market: 16.000 m<sup>2</sup> yearly  
 Solar thermal capacity in operation: 120.000 m<sup>2</sup>  
 Relationship surface (solar collectors) inhabitants : 0,020 m<sup>2</sup>/capita

**3. Voluntary/mandatory national certification systems for installers/planners**

The Association Assolterm promotes the voluntary mark "SOLARPASS Install", which is specifically targeted for installers. To achieve that mark an enabling course must be followed and a protocol signed (agreement on the quality installation).

**4. Are there renewable technologies (apart from solar thermal) which are widely diffused in your city and that can therefore contribute in a renewable heat obligation?**

No

**5. Medium and large scale solar thermal plants**

- presence of companies able to design, install and manage large scale plants
- companies able to supply large amount of collectors

**Market potential**

**1. Reachable installed capacity**

120.000 m<sup>2</sup>

**2. Job creation if such capacity would be reached**

400 jobs to create

**3. Percentage of energy demand to be covered if such capacity would be reached**

80% of DHW production for 120.000 people

**4. Refurbishment activities: please quantify the refurbishment activities in your**

region/municipality with as much detail as possible (e.g. refurbishment rate, costs of refurbishment...)

### STO players

1. **Which are the stakeholders involved in STOs and what is their attitude towards renewables (e.g. are building companies used to renewables)?**

The associations of the construction sector are interested in renewable but still with many doubts. The installers and designers are searching for information and appropriate training.

2. **Which networks are available?**

There following networks are present in the territory: Country of the Sun, Energeticamente, Assolterm