

## Solar Obligations instrumental in the RES Directive's implementation

**DIRECTIVE 2009/28/EC positively encourages the use of obligations as a means of increasing the share of renewables as an energy source in buildings.**

According to article 13.4: *"Member States shall introduce in their building regulations and codes appropriate measures in order to increase the share of all kinds of energy from renewable sources in the building sector."*

It also requires each Member State to submit a National Renewable Energy Action Plan (NREAP) to the European Commission by 30 June 2010.

To this effect, on 30 June 2009, the Commission issued its decision to adopt a template for these national renewable energy action plans. This is to ensure that all plans are complete, meet all the requirements laid down in the Directive and can be fairly compared with one another.

To achieve the national targets of 2020 there is a strong emphasis on local, regional and national measures and policies to



Picture courtesy of BATEC

promote the use of renewable in providing energy. Measures such as financial support, which can take the form of capital grants, low interest loans, tax-exemptions, etc, or information, education and awareness-raising campaigns are also mentioned.

Regulation of the building sector is seen as a key element in the potential growth of the solar thermal markets as heating and cooling represent almost half the total European energy demand.

To download the National Renewable Action Plan Template, please click [here](#).

As required by article 24 of the Directive, the European Commission has established a platform, known as "Transparency Platform", for the publication of a whole range of documents related to the implementation of the Directive.

These documents map the implementation process and the relevant deadlines are indicated.

More information available at [http://ec.europa.eu/energy/renewables/transparency\\_platform\\_en.htm](http://ec.europa.eu/energy/renewables/transparency_platform_en.htm)

## Solar building codes around the world

**A comprehensive study about renewable building codes worldwide was published in Sun & Wind Energy 9/2009. You find some conclusions in brief below:**

Building codes are not new; the first one was implemented in Israel almost three decades ago after the end of the second oil crisis at the end the 1970s. As a result, today in Israel solar rooftop heaters provide over 80% of the domestic hot water, this is now considered the norm by most householders.

Solar obligations are thus a powerful tool as they can help:

- ◆ Increase the market penetration
- ◆ Stabilise long-term national markets growth rates
- ◆ Ensure that solar thermal technology is incorporated at the planning stage
- ◆ Open up new market segments

However, from the experience gained so far, for future solar obligations to effective they would need to include:

- ◆ Clear legislation and enforcement measures
- ◆ Quality assurance regulations for installation and performance
- ◆ Official monitoring system in place
- ◆ Training available for both authorities and installers
- ◆ Better motivation all round.

These measures usually fall within the scope of regional

or local authorities and Barcelona was the first city to adopt such a building code in August 2000 subsequently revised in 2006 to include more building types and increase the solar fraction.

Other Spanish local authorities followed this example and the Spanish Government approved the new Technical Building Code (CTE) in March 2006. Other European countries such as Ireland were by then also following this path and now important markets worldwide are adopting some kind of solar or renewable building code, i.e. Germany, India, Brazil and Australia.

An important factor is the level of political authorities in charge of building laws in a particular country, and another major criterion is whether building codes apply only to new buildings or whether they also cover refurbished ones. .

Solar/renewable building codes represent a promising political tool and could be instrumental in the growth of solar thermal markets worldwide but it is worth remembering that:

- ◆ What is mandatory cannot be subsidized
- ◆ Whatever is not checked will not be installed
- ◆ Any obligations will result in non-compliance
- ◆ Implementation bring bureaucracy

Once successfully drafted, implemented and monitored, solar/renewable building codes should boost solar thermal technology market penetration and stabilise the sector's development.

*The whole article 'Building codes Worldwide' by Bärbel Epp published in Sun & Wind Energy 9/2009 can be downloaded at [www.solrico.com](http://www.solrico.com) (news latest project at the home page)*

## Italian Local authorities lead the way towards more efficient buildings

In Italy, the building sector plays a major part in the evolution of the energy legislation and Local Authorities are really leading the way.

Day by day, an ever growing number of local building regulations appear, which include energy efficiency provisions or renewable obligations.

The National Observatory on Energy Saving Building Regulations, promoted by Legambiente and CRESME, in collaboration with the trade fair "Saie Energia", recently published the second issue of its annual report "Energy innovation in Municipal Building Codes".

A summary of the report can be downloaded at

[www.legambiente.eu/scienza/cdoc/schedaDoc.php?id=4925](http://www.legambiente.eu/scienza/cdoc/schedaDoc.php?id=4925)



**GERMANY:****Renewable Heat Law is extended to existing and old buildings.**

Starting from 1st January 2010, house owners in the south-German State of Baden-Württemberg are obliged to integrate renewable energy technologies at the time when the heating system is renewed. For new buildings a renewable heat law already exists since 2008 and has been replaced by the national renewable heat law in January 2009.

Baden-Württemberg is the first German State that includes existing and old buildings in its renewable heat law. Minister for the Environment Tanja Gönner justifies the frontrunner role of Baden-Württemberg by the fact that one third of the CO<sub>2</sub>-emissions are caused by hot water production and heating of buildings. For reaching the state's climate protection goals the energy efficiency of the stock of 2.2 million existing buildings must be definitely improved. More than 50.000 heating systems are renewed every year. But often the opportunity to change to renewable energy technologies is missed.

The law requires to cover 10% of the total heat demand with renewable energies. Solar thermal is considered as first technological choice for fulfilling the obligation, but also other renewable heat technologies and insulation measures are allowed.

The introduction of the law is supported by numerous information services for the citizens. In particular the HVAC installers and energy advisors are asked to inform the house owners about their possibilities and available incentives.

Detailed information on Baden-Württemberg's renewable heat law is presented in the ProSTO Database at <http://www.solarordinances.eu/STODatabase/tabid/60/Default.aspx>.

**ITALY:****Awareness raising campaign launched by the Lazio Region**

In the autumn of 2009, the Italian Region of Lazio launched a Solar Thermal Obligations awareness raising campaign. This took the form of public meetings and info-training days held in different Municipalities.

The objective of these events was to focus citizens' attention on the socio-economic and environmental benefits to be derived from the use of EE and RES, i.e. public health improvement, costs reduction and state financial incentives to purchase solar panels.

Local politicians, municipal technical administrative staff and stakeholders (entrepreneurs, local associations, civil societies) were targeted as they can have a strong influence on the application of solar thermal obligations, either directly as administrators or externally as pressure groups.

The Lazio Region Department for Environment and Cooperation among Peoples organised events in four municipalities (Monte Porzio Catone, Oriolo Romano, Fiumicino and Rieti).

In parallel with these initiatives technical and legal experts have been providing advice to those local authorities intending to draft a STO to be included in their building code.



**PORTUGAL:**

**Visit of solar thermal systems in Lisbon**



On 9 May 2009 Lisboa E-Nova (Lisbon’s Energy-Environment Agency ) organized a technical visit of several thermal systems in Lisbon, in collaboration with LNEG (National Laboratory for Energy and Geology), the City of Lisbon and GEBALIS (Management of Lisbon’s Social Housing Services).

This was to give citizens direct access to some solar installations which ranged from the LNEG’s Research Centre to a basic school where a micro-production system has been installed, with both thermal and photovoltaic panels, a swimming pool with 112 solar thermal collectors installed and GEBALIS – Lisbon Municipal Neighbourhoods Managements office building, also with a micro-production system.

This proved to be a popular event and all the places were taken up by people not only from Lisbon but also from other cities such as Santarém and Porto. Participants were mainly municipalities technicians, architects and engineers and students, also present was Lisbon City

Counsellor responsible for the Environment and Public Parks. Three further visits are planned to other solar installations in Lisbon.

**Solar thermal installation - technical course**

At the end of September 2009, Lisboa E-Nova ran a three-day technical course on solar thermal systems installation in partnership with LNEG (National Laboratory for Energy and Geology), Vulcano (Portuguese company involved in solar thermal systems) and GALP (Portuguese Gas Company). The third day included a visit to the Vulcano factory.

Now that a new national obligation for the installation of solar thermal systems is in force, it is crucial to provide technical support on the basic concepts of solar thermal systems to municipal technicians, as well as to other professionals working in this area,. They will thus have both the competence to check that projects comply with the current STO and be able to pinpoint the incorrect application of the STO.

The course covered not only legal issues but also the technical requirements associated with the STO. Its contents included a description of solar thermal collectors, types of technologies, applications and systems, expected performance and architectural integration.

**Energy Days:**

**Turn your city into a frontrunner of Europe’s energy revolution**

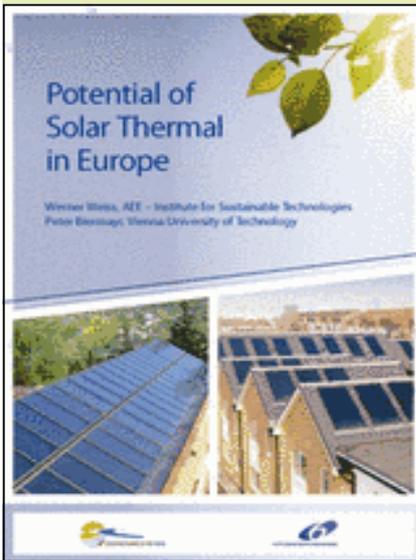
The Sustainable Energy Europe Campaign is gaining momentum.

If you believe in a low-carbon future and want to change the landscape of energy in Europe, you can take an active role in the **EU Sustainable Energy Week** by organising an **Energy Day** in your town or region **between 22 and 26 March 2010** (including weekends before and after).

**Applying is easy!** Check the Sustainable Energy Europe website and submit your entry by early March: [www.eusew.eu](http://www.eusew.eu)



## The potential of solar thermal in Europe revealed in a new study



A study commissioned by ESTIF provides the European Union and its Member States with reliable information on the contribution that solar thermal can make to the 20% renewable energy target set by the RES Directive (2009/28/EC). Five representative countries were surveyed: Austria, Denmark, Germany, Poland, Spain and the information gathered extrapolated to the 27 EU countries. This data was used to calculate the future heating and cooling requirements for 2020, 2030 and 2050, taking into account a reduction of the overall energy demand due to energy efficiency measures. This report represents a useful tool for convincing local authorities about the benefits of solar thermal and its use in building cooling

### “Cities, Towns & Renewables”

A new report from the International Energy Agency aims to inspire city stakeholders by showing how renewable energy systems can benefit citizens and businesses, assist national governments in better appreciating the role that local municipalities might play in meeting national and international objectives, and help accelerate the necessary transition to a sustainable energy future. More information at: [http://www.iea.org/publications/free\\_new\\_Desc.asp?PUBS\\_ID=2183](http://www.iea.org/publications/free_new_Desc.asp?PUBS_ID=2183)

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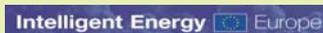
### In the press

- ◆ “Consider solar thermal systems as basic furniture” Sun, Wind & Energy 9/2009
- ◆ “Projecto ProSTO - Como por em prática as obrigações solares térmicas na Europa”, Climatização, Nov/Dec 2009

### Forthcoming events

- ◆ 21-22 January 2010 - Mäder, Austria  
Conference: “Municipalities build the climate”
- ◆ 15-16 March 2010 - Lisbon, Portugal  
ProSTO project meeting
- ◆ 17 March 2010 - Lisbon, Portugal  
Conference: “The dimension of renewable energies in Urban Planning”
- ◆ 1-16 May 2010: European Solar Days ([www.solardays.eu](http://www.solardays.eu))
- ◆ 19-21 May 2010 - Dunkerque, France  
6th European conference on sustainable cities and towns

The ProSTO project is supported by



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## The Consortium

