



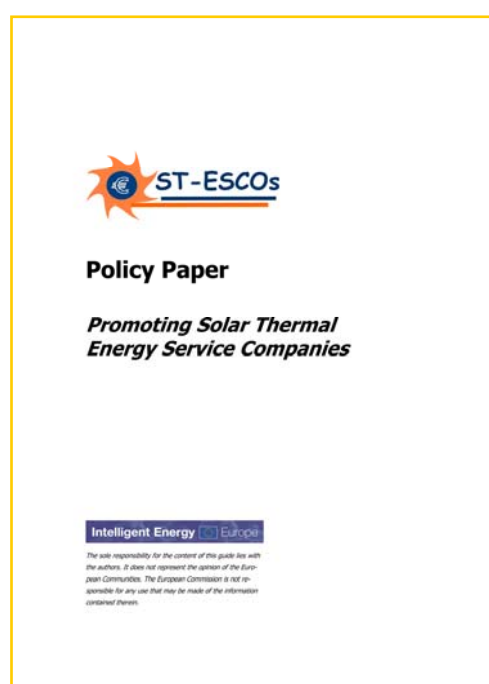
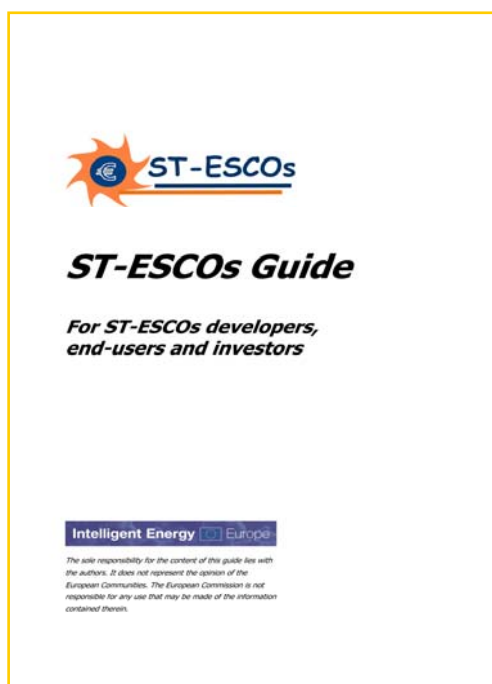
# **ST-ESCOs Project**

## **Project Progress**

### **ST-ESCOs GUIDE and POLICY PAPER final versions**

Two of the main project deliverables, the ST-ESCOs Guide and the ST-ESCOs Policy Paper, are now available for downloading on the project website.

The Guide refers to crucial aspects that have to be taken into account on ST-ESCO contracts and is addressed both to developers and end-users. Financial, contractual, legal, marketing, technical aspects are included along with best practice examples and recommendations.



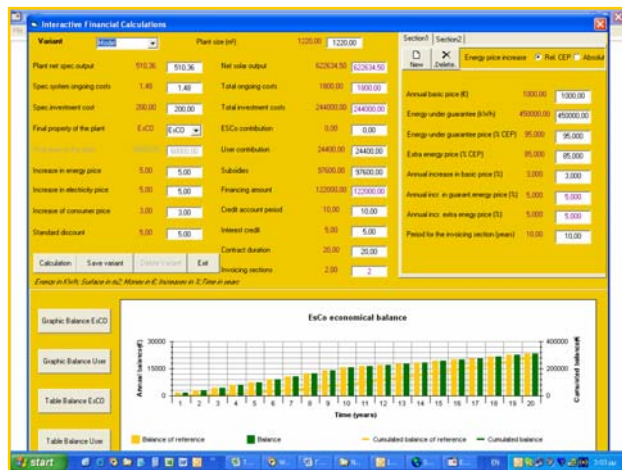
**The Guide is available at:** <http://www.stescos.org/guide.htm>

The Policy Paper includes and analyses current State and European legislation and addresses legislative and financial barriers. The Policy Paper includes concrete suggestions for European measures for the promotion of ST-ESCOs as well as concrete suggestions for necessary state legislation and/or legislation modifications in order to support ST-ESCOs development.

**Download the Policy Paper from:** <http://www.stescos.org/legislation.htm>

## ST-ESCO software is under testing and will be available very soon

Another important deliverable for the ST-ESCOs project is the software tool. The tool has two available modules, the technical and the economical. At the current phase of the software development, partners are validating the software tool in order to study its performance.



The modules work in the English version, while the software is currently translated to German, Italian and Catalanian.

### Spain

#### Pre-agreements for new ST-ESCO projects

ARGEM has reached an agreement with the University of Murcia and Morales Meseguer Hospital for installing solar plants within the scope of ST-ESCO projects.

The first one, which will take place in Morales Meseguer Hospital, is an agreement with public administration. This hospital has a capacity of 450 beds. The solar plant, with almost 200 m<sup>2</sup> of collectors, will cover 46% of the annual hot water needs. The contract will be signed in October 2006 and the ST-ESCO will be ARGEM. At the time being, an energy audit of the hospital is carried out so the heat losses are recorded. Following the audit there are plans for the improvement of insulation.

Murcia University is interested in a ST-ESCO project for heating their semi-Olympic swimming pool. 100 m<sup>2</sup> of solar collectors will cover 50% of the thermal needs. The contract is planned to be signed in November 2006.

### ST-ESCOs Workshop in Barcelona

APERCA organized a meeting in Barcelona on the 19<sup>th</sup> of July 2006. The aim of the meeting was to disseminate the state of progress of the ST-ESCOs project to companies and administrations.

A short presentation was given, presenting the most important objectives of the project along with some successful examples.

Following the presentation, Aiguasol presented the software Transol and EcMo. The attendants showed great interest in the tool and they are willing to use it in order to study the economical benefits of a ST-ESCO project. The tool will be distributed the coming October in a meeting that will be organised by ARGEM.

Immosolar presented a SWOT (Strengths-Weakness-Opportunities-Threatens) analysis of ST-ESCOs initiatives. The main conclusions of this analysis are:

- a successful project is the one that can establish the right financial conditions between the user and the ST-ESCO,
- good knowledge of the solar energy market should be established and many opportunities for success occur within the current legal framework and from the increase of fossil fuel prices.

PASCH, the ST-ESCO in the Sabadell Tennis club project, gave a short brief of the project. The solar thermal collectors deliver the expected amount of energy but the pay back period of the project is very long, resulting in a increased economic risk. Some complaints were also made regarding the lack of collaboration with the local administrations.

GAE Company presented the most promising sectors for initiating ST-ESCO projects. According to GAE these are:

- construction works,
- public administration and
- the industrial sector.

This meeting was a very fruitful one. Some companies expressed their opinion about this kind of business. A general agreement was that one of the most important factors of success is the development of manufacturing technology, in order to reduce the costs of the collectors.

### ST-ESCO Workshop in Murcia

Representatives from the Public Administration and companies from all over Spain, who have expressed their interest in ST-ESCO projects will attend the second ST-ESCO Workshop that will be held in Murcia the coming October.

The hosts aim is to distribute all the tools necessary for the development of ST-ESCO

projects to all the companies that are interested in evolving in such projects. For this, ARGEM will distribute the ST-ESCOs Guide, the software for the technical and economical performance evaluation and model contracts. The main initiatives that ARGEM is undertaking will be further promoted.

A presentation concerning the profitability of solar thermal projects in comparison with photovoltaic projects, which is a well known subject in Spain will be given. The experience so far has shown that the expected economic results of a well studied project are similar for both types.

### **High impact action from CRES side for the reinforcement of the solar thermal sector including ST-ESCOs.**

On June 2006, a Hellenic National Committee for the reinforcement of the solar thermal sector was created with CRES being the coordinator and partners coming from industrial, research and academic institutes (among them the National Research Center Democritos).

The coordination of this committee and the editorial of the proposed actions have been undertaken by CRES's president and the ST-ESCOs project coordinators. The committee has submitted a position paper (that will be annexed to the ST-ESCOs reports) to 5 (five) Greek ministers with concrete proposals for governmental action on the solar thermal sector. The promotion of ST-ESCO (by financing and legislation measures) was one of the proposed actions (while others were: mandatory installation in selected cases, VAT and taxes reduction, subsidies depending on the solar yield, promotion of research and academic activities, new dissemination actions, legislation measures etc.).

### **Additionally...**

At the current phase of the project pre-feasibility studies are already carried out.

An increased interest for participation in the project is shown from both end-users and developers of ST-ESCO projects. It has been agreed that a workshop should be organized in order to bring the two sides together and to advance the project further.

## **More news...**

### **HOSPISOL projects in Castilla y León, Spain**

Castilla y León region is developing the HOSPISOL project. This project concerns the installation of 9000 m<sup>2</sup> of collectors in 5 hospitals of the region that will cover 60% of the total hot water needs. The energy agency of Castilla y León (EREN) will act as the ST-ESCO. The ESCO will maintain and operate all the plants until the end of the pay back period. The total programmed investment has been valued in 4.5 M€.

The expected revenue has been estimated at 105,5 €/year/m<sup>2</sup> of installed solar collectors. Each installation will save between 3500 and 49000 €/year.

The first steps of the project are very encouraging, since one of the plants is operational and its specific production is 20% higher than planned (from 550 kWh/year\*m<sup>2</sup> to 703 kWh/year\*m<sup>2</sup>).

Installations are planned to be finished next year. The calculated energy savings sum up to 79442kWh/year for all five hospitals.

### **CTE came into force on 29<sup>th</sup> Sept. 2006 and makes solar thermal installations in new buildings obligatory**

On the 17<sup>th</sup> of March, the Spanish government approved the new technical Buildings Code (CTE) in order to make new buildings more efficient. On the 29<sup>th</sup> of September 2006 the new regulation was set in force and is currently compulsory for all new buildings and for some type of refurbishments.

The latter part ("Documento Básico HE\_ Ahorro de Energía") includes an obligation to cover 30-70% of the Domestic Hot water (DHW) demand with solar thermal energy. This new regulation applies to any kind of buildings, regardless of their use. Some exceptions are defined in the law; mainly in the case of buildings that either cover their DHW demand by other renewable or by cogeneration or for shaded buildings. The variation of the solar fraction varies from 30-70% and depends on different parameters, mainly the assumed volume of DHW demand and the geographical position of the building. Moreover, large buildings in the tertiary sector (for instance office buildings > 4.000 m<sup>2</sup>) will also be obliged to install PV systems.

With the approval of CTE, it is foreseen that practically the collector area installed per year is expected to multiply ten times.

The new regulation runs in parallel with the targets of ST-ESCOs project, and this represents an important field of opportunities for ST-ESCO companies, as they can overcome the barrier of high initial investment.

### The SOLARGE project

SOLARGE is a European co-operation project to open up markets for large collective solar thermal systems for multi-family buildings, hotels, public and social buildings.

SOLARGE project aims to:

- Support this undertaking with information, training and communication measures.
- Motivate investors, suppliers and decision-makers in politics and administration to use the market potential of large solar thermal installations.
- Produce materials that can be used by interested institutions for their own activities.

The project is funded by the European Commission's *Intelligent Energy – Europe* programme. Eleven partners from eight European countries are working on the project.

Visit: <http://www.solarge.org/>

### Gleisdorf Solar 2006 - the largest solar thermal conference in Europe

370 participants from 27 Nations attended the conference from 6<sup>th</sup> Sept. – 8<sup>th</sup> September 2006. Not only European attendants but also participants from Australia, South Africa and USA visited the conference.

The main topics of the symposium were solar thermal energy for preparation of domestic hot water and space heating, the development in the areas of solar storage technologies, solar cooling, solar process heat and large scale solar plants. Also passive solar energy usage in buildings was an issue at the conference.

The conference provided the framework for contacts with future project partners. National and local authorities took part in the opening of the symposium and acknowledged the high solar thermal market growth in Austria.

Further information about the conference: <http://www.aee-intec.at> (News).

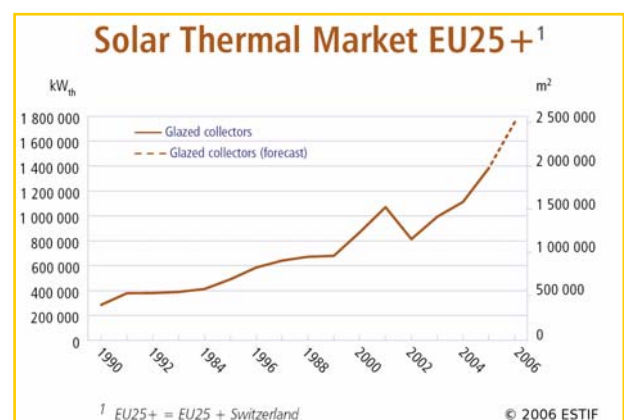
### ESTIF Press Release

European consumers chose solar thermal over gas and oil

Sparked by the high prices for oil and gas, consumers more and more often chose solar thermal for domestic hot water and space heating. In 2005, almost 1.400 MW<sub>th</sub> of solar thermal capacity (2 million m<sup>2</sup> of collector area) were newly installed in Europe – 26% more than in the previous year. New installations more than doubled in France where 85 MW<sub>th</sub> were added in 2006.

“We are very pleased with the development of the European market”, says Uwe Brechlin, Secretary General of the European Solar Thermal Industry Federation (ESTIF). “The traditional lead markets – Germany, Austria and Greece – have all performed well in 2005 and we now see some very good developments in several of the high-potential markets like France and Spain”. At the end of 2005, the total capacity in operation in the EU (plus Switzerland) reached 11.175 MW<sub>th</sub> (15,9 million m<sup>2</sup> of collector area).

Based on recent market feedback, ESTIF estimates that 2006 will finish with another growth rate of 20% or more. It is with great pleasure the association reports that several European governments have introduced new solar thermal support programmes. Spain has gone a step further by introducing an obligation to use solar thermal in nearly all new buildings. With this decision, Spain creates stable framework conditions which are a prerequisite for strong long-term growth of solar thermal. For the heating and cooling sector, ESTIF encourages all governments to support solar thermal in order to minimise the use of conventional fossil fuels.



Source: <http://www.estif.org>

## **Million Solar Roofs Plan in California**

For nearly 10 years, MSR has been working to solarize communities with solar electric, domestic water and pool heating systems. This has been done through true public-private partnership comprised of stakeholders including utilities, the buildings and solar industries, state and local governments, non-profit organisations, the national laboratories and research universities, labour and agriculture. MSR's objectives were to overcome barriers to market entry and support states and local communities in facilitating sustained deployment of solar energy technologies.

Concluding a two-year effort to help make California the nation's leader in solar energy, Gov. Schwarzenegger signed SB 1 (Senate Bill) by Senator Kevin Murray (D-Los Angeles), putting the finishing touches on the Governor's Million Solar Roofs Plan. Million Solar Roofs Plan will provide 3,000 megawatts of additional clean energy and reduce the output of greenhouse gasses by 3 million tons which is like taking one million cars off the road. The plan will lead to one million solar roofs in California by 2018.

Source: <http://gov.ca.gov/index.php/press-release/3588/>

## **Upcoming events**

### **2007 European Renewable Energy Policy Conference**

The 2007 European Renewable Energy Policy Conference will be held in Brussels between 29-31 of January 2007.

The programme of the Conference will be structured around three main themes:

- RES market development and contribution to the Energy Policy for Europe
- RES policies framework – renewable energy roadmap

Looking forward: Outlook on the future

For more information on the Conference visit:

<http://www.erec-renewables.org/events/2007PolicyConference/default.htm>

**For further information** [www.stescos.org](http://www.stescos.org)