



WP7 – Report on the cooperation with Southern EU countries

Approach & summary

The project partners implemented a number of activities to involve Southern and South-Eastern EU countries in the SO-PRO project. Besides an agreement with the Greek Solar Industry Association (EBHE), which ensured close cooperation and exchange of know-how and experience, other Southern and South-Eastern EU countries were proactively informed about SO-PRO results.

This included:

- the co-operation with the Greek Solar Industry Association (EBHE) which included meetings, the participation of representatives in So-Pro events as well the distribution of information to their members
- pro-active involvement of market actors from Italy, Bulgaria, Romania and other Southern and South eastern EU countries, e.g. by personal contact to the industry associations, by including them in the targeted mailing of the newsletters and by representation of these countries in the international events of the project.

The objectives of the work programme was achieved and especially the lessons from the early solar process heat programmes implemented in Greece were very useful for the project partners.

Co-operation with the Greek Solar Industry Association

An agreement was made with the "Greek Solar Industry Association" to actively involve them and their members into the project. The following activities were implemented:

- all relevant data concerning the project (including the final working programme, the website, findings of the project up to now) were sent to them and a dissemination of this information was agreed

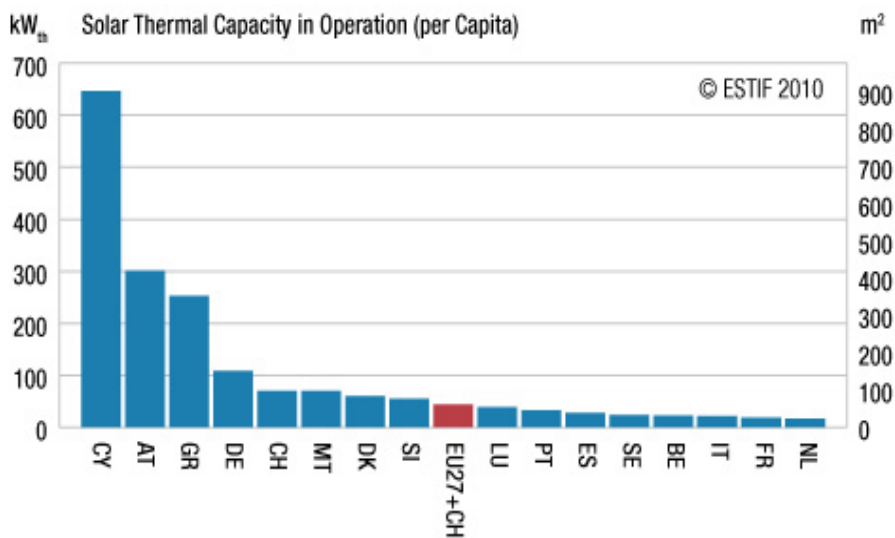
- a representative of the Greek Solar Industry Association in the "round-tables on specific issues" organised in Essen in connection to the third project meeting (Costas Travasaros, 15 April 2010). This allowed for an insight into the experiences with the Greek programmes in this field and a in-depth discussion of what could be learnt from them
- a representative of the Greek Solar Industry Association gave a presentation in the international seminar in Wels ("Practical experiences with solar process heat in Greece", Costas Travasaros, 3 March 2011)
- a representative of the Greek Solar Industry Association gave a presentation in the international training seminar in Munich ("Greek experiences with Solar Thermal Process Heat installations", Michaelis Karagiorgas, 9 June 2011)
- presentation of the SO-PRO project by ISE (Stefan Hess) and ESV (Regina Aufreiter) at a workshop in Greece to the members of the EBHE (6 July 2011)



The main facts from the exchange with the Greek market actors included:

- Greece is a leading solar thermal market (2010: 4,100,000 m² collector area in operation, 2,255,000 MWh energy production, 2,255,000 t CO₂ avoided emissions. Within the So-Pro project, the experiences gained in Greece were presented and discussed at a number of events and conclusions for other Southern European countries were drawn.
- Solar thermal water heater in Greece are about 95% thermosyphon systems used by private customers. Additionally central pump systems are mainly used by professional customers for the following applications: hot water for hotels, industries, hospital, etc., process hot water and solar cooling. Main technologies used are closed loop, electric back up (95%) systems, selective surface and flat plate, compact, roof mounted, heat pipe, vacuum tubes.

- Solar thermal for process heat in Greece is presently used mainly in the following sectors:
 - food industry:
 - dairy products, tinned fruits and vegetables, cold cut and process meat factories, pastry and cake confectioneries, olive oil refineries
 - agriculture:
 - solar drying, horticulture-nursery greenhouses, slaughterhouses, meat processing, livestock landings
 - textiles:
 - tanneries, leather treatment, cloth refineries, textile treatment workshops
 - chemical industry:
 - cosmetics, detergents, wax, pharmaceuticals
 - beverage industry:
 - wineries, liquor and wine distilleries, breweries, fruit juices and soft drinks
- The following measures were suggested by Greek solar thermal experts to trigger further market development:
 - financial incentives
 - implementation of industrial energy standards
 - favourable legislative framework to allow easy integration of solar system



Involvement of other South and South-Eastern European countries

Early in the project, the project partners split the responsibilities for the different countries between them. The following relevant networks/organisations responded positively to the contacts by the So-Pro team:

- Italian Solar Thermal Industry Association
- Hungarian Solar Thermal Association
- Bulgarian Solar Thermal Association
- ICEMENERG, Romania
- Croatian Solar Energy Association
- APISOLAR, Portugal
- ADENE, Portugal

Each of the associations was contacted personally several times during the project (mostly by phone) and received an update on the project activities. They agreed to share this information with their members/relevant contacts in their countries.

They were also included in the targeted mailings of the newsletters (about 10 % of eMails were sent to companies and organisations in Southern Europe).

Additionally, a range of activities carried out in the framework of the European dissemination, also covered Southern Europe (described in the report on European dissemination):

- the co-operation with ESTIF
- the co-operation with Global Solar Thermal
- the information dissemination by ISE to its informed its scientific network

As a result of these efforts, a relevant number of experts from Southern Europe attended the events of the So-Pro as speakers and participants (about 10 % of the participants of the international seminar came from South Europe).

Information was published in relevant media, including an article in the Portuguese magazine MEDIALINE where an article was published.

Several energy agencies, including the Regional Energy Agency of Pazardjik, requested further information.

Information about So-Pro was disseminated at relevant conferences in Southern Europe, for example the conference "Energy and the Environment 2010" in Opatija, Croatia (October 2010).

Conclusions and outlook

On-going cooperation with Southern and South-Eastern EU countries was started and a network of solar process actors throughout Europe was established. As a result of the discussions with actors from Southern and South-Eastern EU countries, the following conclusions can be drawn for solar process heat in Southern countries:

- in order to successfully establish a solar process heat market, a developed solar thermal market is needed. It seems next to impossible to do that in a solar thermal market which is in its early development stage. Therefore, the project generated more interest in countries like Italy or Greece, and less so in countries with "young" solar thermal markets
- even where the solar resources are high (and therefore, economic viability is easier to achieve), the lack of information, commercial and technical skills and pilot projects make difficult to start a market
- some projects carried out earlier with low quality, poor design or executed in the wrong moment/place could have created a negative image for this technology and use.