



Title: SOPRO training day

Date & location: 17-jun-2010 (9-17h), Madrid, Spain

Organiser(s): ESCAN

Number of Participants: 18

Summary

A training course has organised in the Region of Central Spain, targeting technical experts (mostly engineers) from solar companies and from industrial companies as well as specialised planners, thereby offering networking opportunities for future projects. The aim of the courses is to provide the principle know-how to size and plan solar installations.

Short presentations where the scientific partners ISE and Gertec provided inputs to the training courses and the contents were discussed at the project meetings.

Objective & main programme point

The main objective of the solar training day is the formation of professionals to the thermal solar energy sector.

The courses took the findings from the regional inventories and the energy screenings into account.

The main points of the program were:

- The functioning principle of solar thermal installations.
- Basic information on the 3 selected industrial processes with a special regard to the low temperature heat demands.
- Ways to measure/estimate the heat demand.
- Technical possibilities to integrate solar thermal systems.
- Sizing of solar systems.
- Heat storage and commercial viability of technical concepts.
- Information on relevant public subsidies and innovative financing schemes, such as contracting.
- Information on costs.
- Case studies/practical examples.
- Where possible, a relevant site-visit.



Conclusions & lessons learnt (based on stakeholder input)

The main conclusions of the training day were:

- In Madrid region several renewables have low potencial, e.g. wind power due to big areas of natural parks on the mountains size and also it is forbidden to install solar PV on ground. Therefore, solar thermal for industries, in big installations might of interest to increase the renewables share in central Spain.
- At present, the regional funding for solar thermal installations is up to 260 €/m², causing a good payback for most of the projects analyst. It covers approximately thirty-fourty percent of the investment.
- Inventorian and screening have provided information on the most suitable industries and processes for solar thermal heat. The participants in the training day usually now some industries where solar thermal could apply.
- The companies and organizations where the participants come from often work in many spanish region, not only in central Spain. Then, the proyect tools and results are going to be exported to most spanish region.
- Typically, solar companies have little or no knowledge about process heat needs in the industries. Furthermore, they don't have much experience in data collecting of thermal solar process.
- About the checklist, it is considered that is a very useful tool for a wide dissemination of the minimum requirements to be sent to industries.
- About the data sheet, the professionals find it very useful for both, sending it to the industries directly (e.g. e-mail) and for collecting data by the engineer/planner at the industry.
- Related to the economic aspects, ESCO's (energy service company) provide several solutions depending on the customers requirements. Typically, considering the current economic situation, most customers probably would select a complet pack of services.



Pictures





Programme

The main points of the program are:

Chairperson – Francisco Puente

- Presentation of the current solar situation in the Community of Madrid. Jose Antonio González. C.M.
- Public subsidies. Jose Antonio González. C.M.
- Results of market research (inventorian and screenings). Francisco Puente, ESCAN.
- The tools for the project detection (checklist, data sheet, planning guidelines). Francisco Puente, ESCAN.
- Size of solar installations. Pedro Carrasco, 9REN
- Economic and financial aspects. Banco Santander
- Model of "Sale of energy" (ESCO). D. Mario Prieto, 9REN.



PRESENTATIONS: (attached)

INVITATION:



JORNADA FORMATIVA
INFORMATIVA

ENERGÍA SOLAR TÉRMICA
EN PROCESOS
INDUSTRIALES

17 de Junio de 2010
de 9 a 17 horas

Lugar: C/ Rios Rosas 21. Madrid



Dirigida a:

Empresas industriales que deseen reducir sensiblemente su gasto energético mediante el uso de energía solar térmica, empresas solares térmicas e ingenierías

Las plazas se adjudicarán por riguroso orden de llegada (máximo 25 personas)

Agenda:

Inauguración
Dirección General de Industria, Energía y Minas
Consejería de Economía y Hacienda de la Comunidad de Madrid

Mercado potencial de instalaciones solares térmicas en industrias españolas
D. Juan Fernández / Pascual Polo, ASIT

Instalaciones solares térmicas en industrias: beneficios del proyecto SOPRO
D. Francisco Puente, ESCAN

Dimensionamiento de las instalaciones solares para procesos industriales
D. Pedro Carrasco, 9REN

Comida

El modelo de "Venta de energía" (Empresa de Servicios Energéticos)
D. Mario Prieto, 9REN

Aspectos económicos y financieros. Rentabilidad de las instalaciones solares térmicas.
D. Pablo Escobar, 9REN

Financiación vía leasing.
Banco de Santander

Clausura y Vino Español



Confirmación de Asistencia:
Secretaría técnica proyecto SOPRO
Francisco Puente Salve
escan@escansa.com
(se confirmará inscripción mediante correo electrónico)

En cumplimiento de lo establecido en la Ley Orgánica 15/1999 de 13 de diciembre, le comunicamos que los datos facilitados serán utilizados exclusivamente para la inscripción y actividades del proyecto, en los términos establecidos por la Ley