



EVENT DESCRIPTION

Project Partner: SAENA

Title of the event: Regional training course "Solar Process Heat"

Date & location: 28th June 2011, Dresden

Organiser(s): Sächsische Energieagentur – SAENA GmbH

Number of Participants: 19

Summary

The training course "Solar process heat" presented exemplary companies, who are already using solar process heat, and showed the participants how to use the So-Pro-planning guide for dimensioning a system for solar process heat. The possibility of remote monitoring and maintenance of heating systems was explained. During a tour to the solar absorption cooling system of the Sächsische Aufbaubank, the participants could take a close look at this technology. The seminar was rated positively by the participants.

Objective & main programme point

The training course aimed to impart the basic knowledge for planning a solar thermal system for generating process heat. Representatives of the solar industry, solar installers and consultants were invited. As introduction, an overview of systems already installed in Germany was presented, for example in breweries, surface treatment plants or laundries.

The main part of the seminar was the training in the design of systems using the So-Pro planning guide. After the explanation of important terms, an exemplary planning procedure in a laundry has been described, in which the importance of thermal load profiles and design nomograms was underlined. Following, 3 typical cases for solar process heat were described: the heating of make-up water, heating of industrial baths or vessels as well as the convective drying with hot air. Afterwards, the participants could apply the newly acquired knowledge in an exercise.

The next presentation showed how heat generation systems can be monitored remotely via internet. A live access to the data of an existing solar system showed the efficiency of the system. Then, the solar absorption cooling system of the Sächsische Aufbaubank (Saxon Development Bank) was presented. During a tour on the roof of the bank building, the newly installed system was examined. This technology could also find application in solar process cooling.

Conclusions & lessons learnt (based on stakeholder input)

The participants expressed positive feedback regarding the training course.

Some participants demanded a better monitoring of solar installations for example. This would make available the load profile which is not known in detail in many companies today, and in the field of solar thermal installations, poorly designed systems could be improved if their weaknesses would be known better. Thus, positive references would be created that would encourage a more rapid dissemination of the technology.

The installation of a solar system requires long-term and foresighted planning. Here, it is important to communicate with the company in advance to determine the objectives to be achieved: cost reduction or image improvement.

Contracting is still regarded with scepticism in the region. In addition, projects can not be acquired with solar contracting because the economic conditions do not allow it.

The planning guide has been perceived positively by the participants and is regarded as a support for their work. A calculation tool was requested that allows the planners to calculate the plant-specific nomograms simply by them.

ANNEX

The following documents are included in the annex:

- programme
- pictures

Programme:

09:30	Come together - Registration, Coffee, Drinks
10:00	Welcome, Report about current status in the project So-Pro, Martin Reiner – SAENA GmbH, Dresden
10:10	Report of installed systems for solar process heat in 8 German enterprises, Stefan Heß – Fraunhofer ISE, Freiburg
10:45	Integration of solar process heat – part 1 (So-Pro planning guideline), Stefan Heß – Fraunhofer ISE, Freiburg
11:30	Coffee break
11:45	Integration of solar process heat – part 2 (So-Pro planning guideline), Stefan Heß – Fraunhofer ISE, Freiburg
13:00	Lunch break
13:30	Integration of solar process heat – exemplary calculations (So-Pro planning guide line), Stefan Heß – Fraunhofer ISE Freiburg
14:00	Monitoring of solar thermal systems, Mr. Dietze - SBW Sachsensolar AG, Dresden
14:30	German federal and Saxon freestate subsidies for solar process heat, Kreditanstalt für Wiederaufbau – KfW – (requested) and Martin Reiner - SAENA GmbH, Dresden
15:00	Solar cooling system of Sächsische Aufbaubank, Mr. Schultz – Klemm Ingenieure Afterwards guided tour to solar cooling system currently being built on the roof of SAB
16:00	End

Pictures

