



EVENT DESCRIPTION

Project partner: ESV

International seminar "Solar Process Heat"

Date & location: 3-4 March 2011, Wels/Upper Austria

Organiser: O.Ö. Energiesparverband

Number of Participants: 180

Summary

The international conference "Solar Process Heat" was held from 3 to 4 March 2011 in Wels and was attended by 180 participants from 35 countries.

The conference programme - which was developed in cooperation with the project partners and included the following main elements:

- introduction & overview session
- session on "technology and examples"
- session "project flash"
- session on "potentials, markets and practical experiences with solar process heat"
- round-table discussion: Developing markets for solar process heat - how to make it happen?
- technical site-visit
- presentations of solar thermal companies at the stand of the trade show

In total, 24 speakers from Europe and beyond presented the technology solutions, market reports and best practice examples.

The audience covered a wide range of actors - from solar companies, HVAC specialists and ESCOs, industrial companies, associations, media, research bodies and representatives of public bodies.

The international seminar was held in the framework of the annual international conference "World Sustainable Energy Days" (2-4 March 2011, www.wsed.at) and was included in all its comprehensive promotional activities (direct mailings per post and e-mail, announcement in technical magazines, dissemination of event folders at relevant other events etc).

The So-Pro project partners actively contributed to the event as speakers and chairpersons and by actively supporting the promotion and dissemination the conference announcements and programmes to their regional stakeholders.

Objective & main programme points

The aim of the first "International Solar Process Heat Conference" was to present the technology solutions, market reports and best practice examples and to discuss strategies how to increase the market for solar process heat in Europe and globally.

The promotion of the event included among others, the following:

- first announcement folder
- a call for papers (deadline 5 October 2010) was organised
- programme folders printed and disseminated to about 3,000 postal addresses
- continuous update of the conference website www.wsed.at
- cooperation in the promotion of the event with solar thermal associations and stakeholders (e.g. ESTIF, Austria Solar)

The conference programme on 3 March started with an introduction by Xavier Noyon, Secretary General, ESTIF and Christiane Egger, co-ordinator of the So-Pro project. The presentations on the first session reflected one of the purposes of the So-Pro projects - bringing together know-how on solar thermal technologies, industrial heat use and regional market development. A technology session as well as project examples from different parts of the Europe and the world concluded the programme of the first day.

The first part of the second conference day was dedicated to an overview on different solar process heat markets (Turkey, China, Tunisia, USA, Germany). Afterwards, a round-table discussion was held dedicated to the question "Developing markets for solar process heat – how to make it happen?" Among others, the following questions were raised by the chairperson:

- The most important immediate action to speed up market development for solar process heat
- Main actors that should be targeted?
- Which tools can be helpful?

The seminar ended with lively discussion among participants.

In the afternoon of the second day, a site-visit was organised. Two sites were visited: a solar thermal district heating installation in Wels and a company which uses solar process heat for the production of concrete components.

Conclusions & lessons learnt

The conference clearly showed that on the one hand that solar process heat is no easy field to tackle and there are still many barriers to be overcome to speed up market development but that on the other hand, it is certainly worth doing it as the potential is very high and appropriate system technology and collectors are available.

A number of examples were presented at the conference which were very encouraging and motivating. However, they made clear how fragmented the market still is and that solar process heat is far from being a standard consideration in the vast majority of planning processes. Many stakeholders confirmed the usefulness of the tools developed within the So-Pro project as nothing similar existed before.

Based on the presentation, the exchange among participants and the round-table discussion, the following conclusions can be summarised:

Economic viability more likely if:

- low temperature process heat is required throughout the year
- no waste heat from other processes can be used
- heating oil is the main fuel
- dedicated funding schemes are available (financial support measures are required, e.g. contracting models, incentives, subsidies)

A wide range of industries

- processes such as cleaning/washing, hot water as "raw material", low temperature baths etc. can be found in a range of industry sectors
- implementation should be combined with energy efficiency measures

Major information gaps

- significant awareness raising, information and training needed (for solar companies, planners, industrial companies)
- especially awareness raising in industry (green products and production)
- training and know-how transfer (for planners, installers, operators)

Need for R&D especially in the following fields:

- mid & high temperature components (> 100°C)
- integration concepts of solar thermal systems into existing heat supply and consumption systems
- advanced control and operation strategies
- increase in efficiency and cost reduction

Annex

The following documents are included in the annex:

- Programme
- Pictures

Programme

03 March 2011

14.00 Introduction & overview

- **Welcome**
Xavier Noyon, Secretary General, ESTIF
- **Process heat: a potential market for the solar thermal industry**
Werner B. Koldehoff, Bundesverband Solarwirtschaft (BSW), Germany
- **Regional market development for solar process heat**
Christiane Egger, O.O. Energiesparverband, Austria
- **Solar process heat - a technology overview**
Matthias Rommel, Institut für Solartechnik SPF, Switzerland
- **Low temperature heat applications in industry**
Friedrich Lettner, ZT Lettner, Austria

Chairperson: Gerald Steinmaurer, ASiC, Austria

Technology and examples

- **Designing solar thermal systems for selected industrial applications**
Stefan Heß, Fraunhofer ISE, Germany
- **Solar process heat in Spain - markets and examples**
Francisco Puente Salve, ESCAN, Spain
- **Practical experiences with solar process heat in Greece**
Costas Travasaros, Greek Solar Industry Association

Project Flash

- **Solar process cooling for a machinery company**
Erich Temper, Gasokol, Austria
- **Compound parabolic solar collectors for solar process heat**
Sudhir Panse, Institute of Chemical Technology, Mumbai/India
- **Solar and biomass in the production of concrete components**
Florian Leitl, Nau, Germany/Austria
- **Application of a hybrid flatplate collector in stainless steel in industry**
Philip EP Bacon, Sertec Energy Ltd., UK
- **Solar air drying - examples from Latin America**
Georg Hubmer, Cona, Austria
- **Linear fresnel collectors for industrial process heat in hot climates**
Andreas Häberle, PSE AG, Germany

Chairperson: Vlasta Krmelj, Energap

18.30 End of session

19.30 Evening programme

Partner presentations

On **Thursday, 3 March**, partner companies of the conference "Solar Process Heat" held short company and product presentations in English on their stands in Hall 20 at the trade show "Energiesparmesse":

- 10.00 Gasokol - stand 150
- 10.30 SOLution - stand 180

04 March 2011

9.30 - 11.00

Potentials, markets and practical experiences with solar process heat

- **Italy:** Riccardo Battisti, Ambiente Italia
- **Turkey:** Figen Kadirgan, Selektif Teknoloji
- **China:** Zhao Yongqiang, Energy Research Institute
- **Tunesia:** Abdelkader Baccouche, National Agency of Energy Conservation
- **USA:** Mark Thornbloom, Kelelo Engineering, Florida
- **Germany:** Harald Drück, ITW/Universität Stuttgart

Chairperson: Roger Hackstock, Austria Solar

11.30 - 12.15

Round-table discussion: Developing markets for solar process heat - how to make it happen?

Chairperson: Christine Öhlinger, O.O. Energiesparverband

13.30 – 17.00

Technical site-visit

- solar district heating
- solar process heat

Pictures

