Review: The World Sustainable Energy Days 2011

The international conference World Sustainable Energy Days, held from 2 to 4 March 2011 in Wels/Austria, was a great success with over 750 participants from 56 countries! The World Sustainable Energy Days 2011 offered a unique combination of events:

- European Pellet Conference
- Energy Efficiency Watch "Building Renovation"
- Conference "Solar Process Heat"
- Poster presentation
- Technical site-visits
- Trade show "Energiesparmesse"



Tuesday, 01.03.	Wednesday, 02.03.	Thursday, 03.03.	Friday, 04.03.
Technical site-visits Wood pellets & wood chips	■ Pellet Conference ■ Energiesparmesse	■ EE Watch: Building Renovation	■ EE Watch: Building Renovation
		■ Pellet Conference ■ Energiesparmesse	■ Conference "Solar Process Heat" ■ B2B Meetings
			■ Energiesparmesse
■ Technical site-visits Wood pellets & wood chips	■ Pellet Conference ■ Energiesparmesse	Conference "Solar Process Heat"	■ Technical site-visit "Building Renovation"
		■ EE Watch: Building Renovation	■ Technical site-visit "Solar Heat"
		■ Energiesparmesse	■ B2B Meetings ■ Energiesparmesse

The World Sustainable Energy Days, one of the largest annual conference in this field in Europe, offered a unique combination of events on sustainable energy production and use, covering energy efficiency and renewable energy sources for buildings and industry.

Since 19 years, experts and decision makers from all over the world flock to Upper Austria to attend the events - in the last years, the conference attracted more than 10,000 participants from 98 countries!

European Pellet Conference

The World Sustainable Energy Days 2011 started with the European Pellet Conference, held from 2 - 3 March. Experts from all over the world discussed current and future pellet market trends as well as technical innovations.

The Pellet Conference was opened by Rudi Anschober, Regional Minister for Environment & Energy in Upper Austria, Gerhard Dell, the Energy Commissioner of Upper Austria and Managing Director of O.Ö. Energiesparverband, Paul Rübig, Member of the European Parliament and Heinz Kopetz, European Biomass Association.



Fanny-Pomme Langue of the European Commission gave an overview of "Biomass in the National Renewable Energy Action Plans", followed by "Biomass flows and markets in Europe and world-wide", presented by Christiane Hennig, DBFZ German Biomass Research Centre. The next speaker, Birgit Musil-Schläffer, Bioenergy 2020+, introduced the 25 % top performing pellet boilers and William

Strauss, Biomass Thermal Energy Council/FutureMetrics, USA, presented "25 by 2025" – heating the US Northeast by biomass.

The next session focused on quality assurance in production and logistics chaired by Johannes Jetschgo from the Austrian Broadcasting Company. Martin Behr, Deutsches Pelletinstitut, started the session by presenting the "ENplus" pellet quality certification, followed by Mieke Vandewal, Peterson Control Union Group, The Netherlands speaking about managing safety in the pellet transport and storage and Stephan Herzog, Seeger Engineering, Germany about pellet production facilities – experiences from consultancy. Finally, Karl Stadlober, Holzenergiezentrum, Landforst Knittelfeld, Austria presented requirements for pellet bulk logistics.



Following this, a round table with the a.m. speakers and Gerhard Dell, O.Ö. Energiesparverband, Austria and Steven Walker, New England Wood Pellet, USA was held. The discussion focussed among others on how an effective and at the same cost-efficient quality system could be ensured and how the market actors should co-operate in achieving high quality standards.

In the afternoon, the pellet conference continued with the session "How to develop a pellet market". Valérie Borroni, Rhône-Alpénergie-Environnement, France, started with presenting "Rhône-Alpes: an exemplary wood pellet region", followed by "Sticks, carrots and tambourine for wood pellets" by Christiane Egger, O.Ö. Energiesparverband, Austria. Harry "Dutch" Dresser, MESys, USA, provided information on experiences with developing a pellet heating market.

The next conference session was dedicated to fuel and technology innovation. Presentations were held by Hans Hartmann, Technologie- und Förderzentrum, Germany on user feedback and economics of biomass boilers below 100 kW, by Andreas Schneider, University Siegen, Germany on blending raw materials for pellet fuels and by Jaap Kiel, Energy Research Centre of the Netherlands on "Torrefaction in Europe: current situation & outlook". The speech of Rudolf Rawe, FH Gelsenkirchen, Germany, on "Biomass combustion: influences on particulate matter" closed this session.

The first day of the pellet conference was concluded by the "International Pellet Business Forum". Robert van Muiden, Van Uden Bulk Logistics, The Netherlands, started with the topic "Lean logistics for wood pellets", followed by Andreas Weigle, Andritz Feed & Bioful, Denmark, showing pellet plant design examples. Ladislav Zidek, Biomasa, Slovakia, presented a complete pellet supply chain and Judi W. Wakhungu, Director, ACTS, Kenya, highlighted programmes for sustainable and affordable biomass fuels.

On 3 March, the pellet workshop offered an overview of the current trends on European and international pellet markets with speakers from Germany: Hubert Röder, Pöyry Management Consulting; Sweden: Hampus Mörner, Swedish Bioenergy Association; Bulgaria: Vladimir Tabutov, Hydroenergy Company/Association of Renewable Energy Producers; Russia: Olga S. Rakitova, The Bioenergy International; Canada: Gordon Murray, Wood Pellet Association of Canada; Australia: Andrew Lang, The Wood Energy Group/World Bioenergy Association; and Austria: Christian Rakos, proPellets Austria.

Presentations by conference partners

On Thursday, 3 March, partner companies of the European Pellet Conference (Fröling, Guntamatic, ÖkoFEN, Solarfocus, RIKA, Viessmann) held short company and product presentations in English at their stands in Hall 20 at the trade show "Energiesparmesse".

Technical site-visits pellets & wood chips



On 1 March, a tour of technical site-visits on pellets & wood-chips met with very high interest. Conference participants welcomed the opportunity to visit a number of interesting sites including a one family house with wall-mounted pellet heating system (2 – 7 kW), the production site of Solarfocus - a wood pellet boiler and solar thermal panels producer, a wood chip heating and drying system and an

apartment building with pellet heating system (56 kW).

Conference "Energy Efficiency Watch: Building Renovation"

The conference "Energy Efficiency Watch: Building Renovation" started on Thursday and was opened by Rudi Anschober, Regional Minister for Environment & Energy in Upper Austria, Claude Turmes, Member of the European Parliament and President of Eufores, and Gerhard Dell, O.Ö. Energiesparverband. The first presentation was entitled "Deep renovation of buildings around the globe" and was held by Jens Laustsen, Denmark. Following this, Jan Geiss, Eufores, presented the Energy Efficiency Watch initiative – results and outlook.





The next session of the conference focused on cost optimal levels of building renovation. The first presentation "The recast of the European Buildings Directive" was held by Michaela Holl, European Commission, DG ENER. Nils Borg, eceee, discussed the question "What is the cost-optimum for building renovation?", followed by the presentation on EPBD implementation: optimising towards nearly zero buildings by Gerhard Dell, O.Ö. Energiesparverband. Eberhard Hinz, IWU – Institut Wohnen und Umwelt, presented an analysis of costs of building modernisations.

In the afternoon, the conference continued with programmes and examples for efficient renovation. Alexandra Notay, Urban Land Institute started the session with "LessEN is more: a global initiative for building renovation". Theodor Zillner, Federal Ministry for Transport, Innovation and Technology showed "Smart cities as urban strategies for energy efficiency". Further topics were "From audits to real savings" by Aare Vabamägi, Estonian Climate and Energy Agency and "High-performance building retrofits in the North-East US" by Andrew M. Shapiro, Energy Balance. The session was closed by Seamus Hoyne, Tipperary Institute, who presented "Serve": upgrading 400 buildings.

The final session on Thursday was dedicated to a project flash. Hermann Amecke, Climate Policy Initiative, Germany, presented the role of energy performance certificates in purchasing decisions. Hana Riemer, Technische Universität München, Germany, introduced energy efficiency in architecture competitions and Jean-Luc Sadorge, Pôle Alsace Energivie, France, presented the successful building

renovation programme. Further issues were cost and energy efficient building renovation by Helmut Poppe, Poppe*Prehal, Austria, CFLs for 21 million households by Mohammad Hassan Zarbakhsh, Iran and promoting energy efficiency to the Russian building sector by Ksenia Petrichenko, Central European University, Russia.



Working groups

On Friday, 4 March, the conference continued with three working groups covering different fields of building renovation. The working groups were introduced by short impulse statements and invited the participants to discuss and actively exchange their views.

The first working group entitled "Energy Efficiency Watch – the policy Framework" was chaired by Fiona Hall, Member of the European Parliament and Vice President of Eufores. Casper Tigchelaar, ECN, The Netherlands, started the impulse statements by asking: "Obligations in the existing housing stock: who pays the bill?" followed by Reinhard Haas, Technische Universität Wien, Austria, ith the statement "Integrating renewable heating in building renovation".



The second working group was dedicated to the behaviour and technology, where Sorcha Edwards, Deputy Secretary General, CECODHAS – Housing Europe and coordinator of the project "Power House Europe" was the chairperson. Statements were given by Stefano Carosio, European Construction Technology Platform with the title "A roadmap for energy-efficient renovation" and Andreas

Huber, European Institute for Energy Research with the title "Building renovation – a social-economic analysis in 5 countries".

In the third working group, the focus was on Energy Contracting. Chairperson of this group was Ralf Goldmann, European Investment Bank. As an introduction, Vollrad Kuhn, Jonson Controls provided information by presenting an overview & successful examples and Vladimir Sochor, SEVEn, on energy performance contracting in the Czech Republic.

The Building Renovation Conference was concluded with a site-visit on low energy renovation. Two projects were visited: a social housing building which was refurbished to lowest energy standard in Wels and a retrofitting of a school to passive building standard.



Conference "Solar Process Heat"

The conference "Solar Process Heat" was opened by Christiane Egger, O.Ö. Energiesparverband on Thursday, 3 March. As an introduction, Xavier Noyon, Secretary General, ESTIF gave an overview on market development in Europe. Following this, Matthias Rommel, Institut für Solartechnik SPF, Swiss, presented "Solar process heat – a technology overview" and Friedrich Lettner, ZT Lettner, Austria, spoke about low temperature heat applications in industry.



The next session was dedicated to technologies and examples. the beginning Stefan Heß, Fraunhofer ISE, Germany, spoke about designing solar systems for selected industrial applications. Examples were presented by Francisco Puente Salve, ESCAN, Spain on "solar process heat in Spain - markets and examples" and by Costas Travasaros, Industry Association Greek Solar

practical experiences with solar process heat in Greece.

The conference concluded on Thursday with a project flash session. Erich Temper, Gasokol, Austria, presented solar process cooling for a machinery company. Sudhir Panse, Institute of Chemical Technology, Mumbai/India, introduced compound parabolic solar collectors for solar process heat and Florian Leitl, Nau, Germany/Austria, showed solar and biomass in the production of concrete components. Further presentations were held by Philip EP Bacon, Sertec Energy Ltd., UK, on "Application of a hybrid flatplate collector in stainless steel industry" and by Georg Hubmer, Cona, Austria on "Solar air drying – examples from Latin America". The project flash and conference day was completed by the topic "Linear Fresnel collectors for industrial process heat in hot climates", presented by Andreas Häberle, PSE AG, Germany.



The conference was continued with the session Potentials, markets and practical experiences with solar process heat on Friday, 4 March. The following markets were presented: Turkey (Figen Kadirgan, Selektif Teknoloji), China (Zhao Yongquiang, Energy Research Institute), Tunesia (Abdelkader Baccouche, National Agency of Energy Conservation), USA (Mark Thornbloom, Kelelo Engineering)

and Germany (Harald Drück, ITW/Universität Stuttgart, Germany).

A round-table concluded the session with the question "Developing markets for solar process heat – how to make it happen?" Participants were Christine Öhlinger, O.Ö. Energiesparverband as chairperson, Vlasta Krmelj, Energap, Slovenia, Francisco Puente Salve, ESCAN, Spain, Xavier Noyon, Secretary General, ESTIF, and Harald Drück, ITW/Universität Stuttgart.

The conference was rounded-off by a site-visit on solar heat applications. 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.

On Thursday, 3 March, partner companies of the conference "Solar Process Heat" (Gasokol and SOLution) held short company and product presentations in English at their stands in Hall 20 at the trade show "Energiesparmesse".



Energie-Star 2011



One highlight of the World Sustainable Energy Days 2011 was the award ceremony of the "Energie-Star 2011" - the Upper Austrian award for successful sustainable energy projects - in the evening of 3 March. An overview of the winning projects (in German) is available at: www.energiestar.at

Voting

An interactive element, "the voting", was included in the conference procedure. During the sessions the audience was invited to answer questions on their opinions about the energy future. The results of the voting can be found here.

Poster presentation

During the World Sustainable Energy Days, the poster presentation offered companies and organisations the opportunity to display before a professional audience successful initiatives and projects on energy efficiency and renewable energy sources. About 60 companies and organisations made use of this possibility.

Energiesparmesse

In parallel to the World Sustainable Energy Days, the Energiesparmesse, an exhibition and trade show dedicated to renewable energy sources and energy efficiency, was held from 2 – 6 March. It attracted around 100,000 visitors and about 900 exhibiting companies. The O.Ö. Energiesparverband presented its services at a large exhibition stand where more than 100 energy advisers were available for any information on energy efficiency and renewable energy sources. A special attraction at the exhibition stand of the O.Ö. Energiesparverband was the presentation of a LED-stand, showing latest technologies around LEDs. Furthermore, the O.Ö. Energiesparverband organised in cooperation with Messe Wels a special exhibition on very high energy efficient household appliances (fridges/freezers, washing machines and dish washers). The appliances presented were raffled at a lottery.





"20 years O.Ö. Energiesparverband"

The organisers of the World Sustainable Energy Days, the O.Ö. Energiesparverband, celebrated its 20th anniversary on Saturday, 5 March. Since 1991, among others, the following was achieved:

- more than 100,000 face-to-face energy advice sessions for families were held, more than 5,000 companies participated in energy advice sessions
- staff of the O.Ö. Energiesparverband held more than 1,000 presentations
- more than 200 training seminars were held
- more than 10,000 participants from 98 countries participated in international conferences organised by the O.Ö. Energiesparverband
- the O.Ö. Energiesparverband participated in more than 100 European projects



WSED 2012

The next World Sustainable Energy Days will be held from **29 February to 2 March 2012** in Wels. The deadline for the "call for papers" is **5 October 2011**.

