

Conference Programme
Gesamt-Konferenzprogramm

World Sustainable Energy Days 2016

24 - 26 February 2016
24. - 26. Februar 2016

WELS, AUSTRIA

6 + 3 = 1

6 Conferences | 6 Konferenzen:

European Pellet Conference
Europäische Pelletskonferenz

European Nearly Zero Energy Buildings Conference
Europäische Niedrigstenergie-Gebäude Konferenz

Energy Efficiency Services Conference
Konferenz "Energieeffizienz-Dienstleistungen"

Young Researchers Conference

Energy Efficiency Watch Conference
Europäische "Energy Efficiency Watch" Konferenz

Smart Facade Materials Conference
Konferenz "Smart Facade Materials"

3 hands-on events | 3 interaktive Events:

Tradeshaw
Energiesparmesse

Cooperation Platform
Kooperationsplattform

Site Visits
Fachexkursionen



WWW.WSED.AT



World Sustainable Energy Days 2016

The World Sustainable Energy Days, one of the largest annual conferences in this field in Europe, offer a unique combination of events on sustainable energy.

For more than 20 years, experts from all over the world have gathered in Upper Austria to attend the events. In 2015, more than 750 experts from 64 countries participated in the conference!

This global meeting place for the sustainable energy community includes:

- 6 conferences (Pellets, Nearly Zero Energy Buildings, Energy Efficiency Watch, Energy Efficiency Services, Smart Facade Materials, Young Researchers)
- 3 hands-on events (a major Tradeshow, Cooperation Platform and Site Visits)

The event offers up-to-date information on technologies, policies and markets and an excellent platform for new contacts and business opportunities.

Welcome to the World Sustainable Energy Days 2016!

Die World Sustainable Energy Days, eine der größten jährlichen Konferenzen in diesem Bereich in Europa, bieten eine einzigartige Kombination von Veranstaltungen zum Thema nachhaltige Energie.

Seit über 20 Jahren versammeln sich einmal im Jahr Expert/innen aus der ganzen Welt in Oberösterreich. 2015 verzeichnete die Veranstaltung mehr als 750 Teilnehmer/innen aus 64 Ländern.

Das globale Branchentreffen rund um nachhaltige Energie bietet:

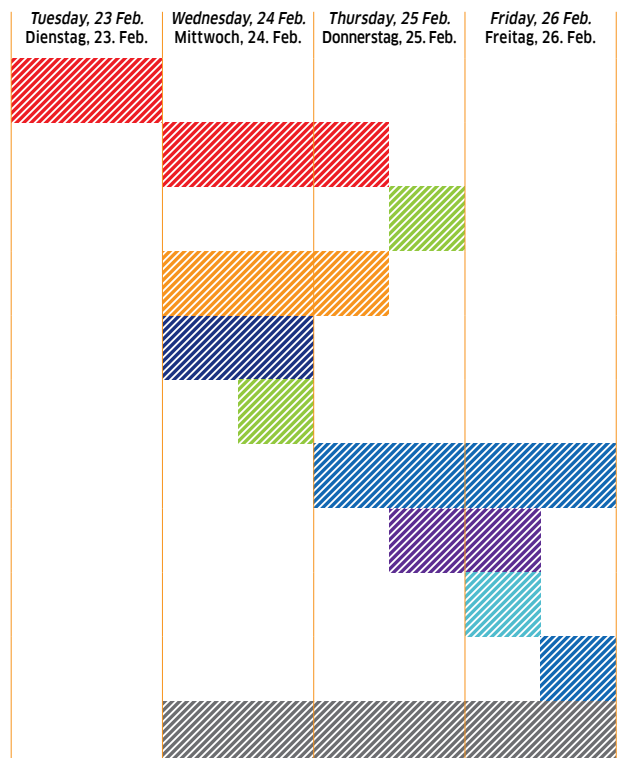
- 6 Konferenzen (Pellets, Niedrigstenergie-Gebäude, Energy Efficiency Watch, Effizienz-Dienstleistungen, Smart Facade Materials, Young Researchers)
- 3 interaktive Events (führende Fachmesse, Kooperationsplattform und Fachexkursionen)

Die Veranstaltung bietet topaktuelle Informationen über Technologien, Märkte und Strategien und eine exzellente Plattform für neue Kooperationen und Geschäftsmöglichkeiten.

Wir laden Sie sehr herzlich zu den World Sustainable Energy Days 2016 ein!

Timetable / Zeitplan World Sustainable Energy Days 2016

-  **Technical Site Visits: Pellets & Wood Chips**
Fachexkursion Pellets & Hackschnitzel
-  **European Pellet Conference**
Europäische Pelletskonferenz
-  **Young Researchers Conference: Biomass**
-  **Cooperation Platform**
Kooperationsplattform
-  **Smart Facade Materials Conference**
Konferenz "Smart Facade Materials"
-  **Young Researchers Conference: Energy Efficiency**
-  **European Nearly Zero Energy Buildings Conference**
Europäische Niedrigstenergie-Gebäude Konferenz
-  **Energy Efficiency Services Conference**
Konferenz "Energieeffizienz-Dienstleistungen"
-  **European Energy Efficiency Watch Conference**
Europäische "Energy Efficiency Watch" Konferenz
-  **Technical Site Visits: Nearly Zero Energy Buildings**
Fachexkursion Niedrigstenergie-Gebäude
-  **Tradeshow**
Energiesparmesse



Programme / Programm



European Pellet Conference

The world's largest annual conference on pellets:
Technologies ♦ Markets ♦ Policies ♦ Financing
♦ "Pellet Tradeshow" (with more than 100
pellet-related exhibitors)

European Nearly Zero Energy Buildings Conference

High efficiency buildings supplied by renewable
energy
Technologies ♦ Policies ♦ Financing ♦ Best practice
examples for new construction and renovation

Energy Efficiency Services Conference

Financing and operational models ♦ Energy
Performance Contracting & other integrated services
for refurbishment of buildings and lighting

European Energy Efficiency Watch Conference

Update on the implementation of the EU energy
efficiency policies ♦ Policy examples

Young Researchers Conference: Biomass + Energy Efficiency

2 conferences presenting the work and achieve-
ments of young researchers
• Awards "Best Young Researcher: Energy Efficiency"
and "Best Young Researcher: Biomass"

Smart Facade Materials Conference

New research results on building facades ♦ Novel
insulation materials ♦ Smart windows ♦ Active
facades ♦ Energy harvesting ♦ Embodied energy of
facade materials

Tradeshow "Energiesparmesse"

Leading tradeshow on renewable energy and
energy efficiency with 100,000 visitors and
1,600 exhibitors annually

Cooperation Platform

Finding new business partners in bilateral meetings
(biomass and energy efficiency)

Technical Site Visits

- Pellets & Wood Chips (23 February)
- Nearly Zero Energy Buildings (26 February)

Poster Presentation

Offers the opportunity to display successful
initiatives and projects on energy efficiency and
renewable energy



Europäische Pelletskonferenz

Die weltweit größte jährliche Konferenz zum Thema
Pellets: Technologien ♦ Märkte ♦ Strategien ♦ Finanzierung
♦ "Pelletsmesse" (über 100 Aussteller im Bereich Pellets
bei der Energiesparmesse)



Europäische Niedrigstenergie-Gebäude Konferenz

Gebäude mit hohem Effizienzstandard, die mit
erneuerbarer Energie versorgt werden
Technologien ♦ Strategien ♦ Finanzierung ♦ Vorzeige-
projekte (Neubau und Renovierung)



Konferenz "Energieeffizienz-Dienstleistungen"

Finanzierungs- und Betreibermodelle ♦ Contracting
und andere Dienstleistungspakete rund um Sanierung
von Gebäuden und Beleuchtung



Europäische "Energy Efficiency Watch" Konferenz

Ein Update zur Umsetzung der EU Energieeffizienz-
Politik ♦ Beispiele für Energiestrategien



Young Researchers Conference: Biomass + Energy Efficiency

2 Konferenzen, bei denen die Arbeiten und
Leistungen junger Forscher/innen vorgestellt werden
• Awards "Best Young Researcher: Energy Efficiency"
und "Best Young Researcher: Biomass"



Konferenz "Smart Facade Materials"

Neue Forschungsergebnisse zu Gebäudefassaden
♦ neuartige Dämm- und andere Fassadenmaterialien
♦ Smart Windows ♦ aktive Fassaden, Energiegewin-
nung ♦ graue Energie von Fassadenmaterialien



Energiesparmesse

Führende Messe im Bereich erneuerbare Energie &
Energieeffizienz mit 100.000 Besucher/innen &
1.600 Ausstellern jährlich



Kooperationsplattform

Neue Geschäftspartner/innen in bilateralen Meetings
finden (Biomasse & Energieeffizienz in Gebäuden)



Fachexkursionen

- Pellets & Hackschnitzel (23. Februar)
- Niedrigstenergie-Gebäude (26. Februar)



Poster-Präsentation

Die Poster-Präsentation bietet die Möglichkeit,
erfolgreiche Ökoenergie- & Energieeffizienz-Projekte
zu präsentieren.



European Pellet Conference 2016 Europäische Pelletskonferenz 2016



24 February

09.00

Pellet policies and markets

Opening & welcome

- Michael Strugl, Regional Minister for Energy, Upper Austria
- Gerhard Dell, OÖ Energiesparverband, Austria

The role of bioenergy in the Energy Union

- Giulio Volpi, European Commission, DG Energy

EU bioenergy - market trends and policies

- Fanny-Pomme Langue, AEBIOM

Ecodesign requirements and labelling for biomass heating

- Alexander Weissinger, Bioenergy 2020+, Austria

The role of bioenergy in the bioeconomy

Global potentials and developments

- Hubert Röder, Wissenschaftszentrum Straubing, Germany

From innovation to market - biomass in Upper Austria

- Christiane Egger, OÖ Energiesparverband, Austria

An effective strategy for regional economic development

- Adam Sherman, Biomass Energy Resource Center, USA

Lunch break

Panel discussion: Pellets - facts vs. fiction

Chairperson: Tim Portz, BBI International

- Gordon Murray, Wood Pellet Association, Canada
- Hans Martin Behr, Deutsches Pelletinstitut, Germany
- Stefan Ortner, ÖkoFEN, Austria
- Francisco Puente, ESCAN, Spain



24. Februar

09.00

Pelletsstrategien und -märkte

Eröffnung & Begrüßung

- LR Dr. Michael Strugl, Energielandesrat Oberösterreich
- Dr. Gerhard Dell, OÖ Energiesparverband, Österreich

Die Rolle der Bioenergie in der Energie Union

- Giulio Volpi, MA, Europäische Kommission, GD Energie

Bioenergie - Märkte und Strategien

- Fanny-Pomme Langue, MSc, AEBIOM

Ökodesign-Anforderungen und das Energie-Label für Biomasseheizungen

- DI Dr. Alexander Weissinger, Bioenergy 2020+, Österreich

Die Rolle der Bioenergie in der Bioökonomie

Globale Potenziale und Entwicklungen

- Prof. Dr. Hubert Röder, Wissenschaftszentrum Straubing, Deutschland

Von der Innovation in die Märkte - Biomasse in Oberösterreich

- Mag. Christiane Egger, OÖ Energiesparverband, Österreich

Eine effektive Strategie für regionale wirtschaftliche Entwicklung

- Adam Sherman, BA, Biomass Energy Resource Center, USA

Mittagspause

Talkrunde: Pellets - Fakten statt Fiktionen

Moderator: Tim Portz, BFA, BBI International

- Gordon Murray, BSc, Wood Pellet Association, Kanada
- Dipl.-Forstw. Hans Martin Behr, Deutsches Pelletinstitut, Deutschland
- DI (FH) Stefan Ortner, ÖkoFEN, Österreich
- Dr. Francisco Puente, ESCAN, Spanien



European Pellet Conference 2016 Europäische Pelletskonferenz 2016



Successful business models

How to improve the profitability of a pellet business

- Henrik Arfwidsson, Agroenergi Neova Pellets, Sweden

Financing and operating pellet facilities in Europe and the US

- José Ignacio Pedrajas, Prodesa North America, USA

Risk management with wood pellet future contracts

- Ulrich von Fürstenberg, Euronext, France

World Pellet Technology Forum

Technology outlook: pellet heating of the future

- Ingwald Obernberger, Bios Bioenergiesysteme, Austria

Comparison of soft and hard wood pellet production

- Peter Lange, CPM Europe, NL

"New" pellet fibers require new technologies

- Gregor Rinke, Rinke Engineering, Germany

Reducing ash content in pellet production

- Ivan Lipovec, PAL, Italy

19.00 Evening programme

Erfolgreiche Geschäftsmodelle

Wie man die Rentabilität eines Pelletsunternehmens steigert ■ Henrik Arfwidsson, MSc, Agroenergi Neova Pellets, Schweden

Finanzierungs- und Betreibermodelle für Pelletsproduktionen in Europa und den USA

- DI José Ignacio Pedrajas, Prodesa North America, USA

Risikoabsicherung mit Pellets-"Future Contracts"

- Ulrich von Fürstenberg, BA, Euronext, Frankreich

World Pellet Technology Forum

Technologie-Ausblick: Pelletsfeuerung der Zukunft

- Univ.-Prof. Dr. Ingwald Obernberger, Bios Bioenergiesysteme, Österreich

Pelletsproduktion aus Hart- und Weichholz - ein Vergleich

- Peter Lange, CPM Europe, Niederlande

Neue Technologien für "neue" Pellets-Rohstoffe

- Dr. Gregor Rinke, Rinke Engineering, Deutschland

Reduzierung des Ascheanteils in der Pelletsproduktion

- Ivan Lipovec, PAL, Italien

19.00 Abendveranstaltung



European Pellet Conference 2016 Europäische Pelletskonferenz 2016



25 February

09.30

Pellet Technology Outlook - a research update (in English only)

Optimisation of cereal straw torrefaction and pelletisation

■ Javier Gil Barnó, CENER, Spain

BRISK: combustion characteristics of "HTC pellets" and "vineyard pruning pellets"

■ Stefan Retschitzegger, Bioenergy 2020+, Austria

BeReal: a test method for pellet stoves reflecting real life operation

■ Hans Hartmann, TFZ Bayern, Germany

EMPYRO: energy and materials from pyrolysis

■ Gerhard Muggen, BTG-BTL, NL

ENERCOM: polygenerating energy, fuels and fertiliser

■ Thorsten Kläs, Soil-Concept, Luxembourg

LogisTEC: innovation in biomass supply chains

■ Michiel C. Carbo, ECN, NL

SECTOR: final results and torrefaction outlook

■ Kay Schaubach, DBFZ, Germany

12.30 End of the session

09.30

Pellet Market News Worldwide (in English only)

Price differences and international trade with household pellets

■ Lukas Kranzl, Energy Economics Group, Vienna University of Technology, Austria

Canada: wood pellet industry update

■ Michele Rebiere, Viridis Energy

US: old challenges, new opportunities

■ Ben Bell-Walker, Biomass Thermal Energy Council

India: increasing opportunities in emerging markets

■ Suhas Patel, Saurashtra Agro Briquettes

Germany: responding to weak markets

■ Martin Bentele, DEPV

UK: boom and bust - the pellet boiler market

■ Neil Harrison, re:heat

Spain: campaign "Biomass in your home"

■ Pablo Rodero Masdemont, AVEBIOM

Romania: potentials for pellets and briquettes

■ Dorin Sfaca, Romanian Pellets and Briquettes Association

Namibia: biomass opportunities

■ Dr. Bruce Brewer, CCF Bush

Chairperson:

Gordon Murray, Wood Pellet Association of Canada

12.30 End of the session



Young Researchers Conference: Biomass



A conference presenting the work of young researchers in the field of biomass (in English only)

25 February

14.00 Opening & welcome

- Gerhard Dell/Christiane Egger, OÖ Energiesparverband

Variation in the wood quality of small-diameter trees

- Mika Aalto, Lappeenranta University of Technology, Finland

Comparing moisture content sampling procedures in forest residues

- Anil Raj Kizha, University of Maine; Han-Sup Han, Humboldt State University, USA

Key elements for sustainable fruitful biomass production on marginal soils

- Moritz Nabel / Hendrik Poorter / Andreas Lücke / Nicolai Jablonowski, Forschungszentrum Jülich; Vicky Temperton, University of Lüneburg, Germany

Influence of gas-solid interactions in a circulating fluidised bed reactor

- Paula Blanco / Xi Yu, Aston University, UK

Lignin processing toward renewable platform chemicals and their further upgrade

- Ana Bjelic, National Institute of Chemistry, Slovenia

Production of clean and durable pellets from empty fruit bunches

- Ilman Nuran Zaini, Tokyo Institute of Technology, Japan

Co-production of hydrogen and nano-carbon from methane

- U.P.M. Ashik / W.M.A. Daud, University of Malaya, Malaysia

Viability of biogas production from nopal

- Laura Vargas, Instituto de Investigaciones Eléctricas, Mexico

Removing impurities with chemically activated carbon from biomass gasification

- Sari Tuomikoski, University of Oulu, Finland

Organic municipal solid waste: dark fermentation and adsorption recovery

- Ahasa Yousuf, Masdar Institute of Science and Technology, United Arab Emirates

Biofuel production through catalytic conversation of lignin ■ Aleš Ház, Slovak University of Technology in Bratislava, Slovakia

Complex analysis of solid biomass combustion for thermal energy production ■ Olha Haidai, National Academy of Science, Ukraine

Impact of the ignition mode and draught conditions on batch-wise wood combustion

- Gabriel Reichert, Bioenergy 2020+, Graz University of Technology, Austria

A polygeneration plant offering reserves for the electricity grid ■ Jens Schneider, Deutsches Biomasse-forschungszentrum, Germany

Kinetic analysis and modelling of three types of biomass under torrefaction conditions

- Marco Brighenti, University of Trento, Italy

Compositional and thermogravimetric characterisation of treated wood

- Maité Huron / Capucine Dupont, CEA Grenoble, France

Review of policies for renewable energy integration & best practices

- Zeineb Abdmouleh, University of Qatar

Integrated approach for electricity generation from renewable energy

- Javier Davila, Universidad Libre, Colombia

Whole systems analysis and optimisation of bioenergy value chains ■ Miao Guo, Imperial College London, UK

Fiscal costs and regional energy benefits of bioheat technology deployment policies

- Derek Wolf, University of Toronto, Canada

Chairperson: Walter Haslinger, Bioenergy 2020+, Austria





Europe is seeing a sharp increase in the market uptake of highly efficient buildings: according to the EU Buildings Directive, all new buildings must be "nearly zero energy buildings" by 2020 (public buildings already by 2018). A "nearly zero energy building" (NZEB) has a very high energy performance, the very low amount of required energy is covered to a very significant extent by renewable energy.

25 February

09.00

Opening & welcome

- Michael Strugl, Regional Minister for Energy, Upper Austria
- Gerhard Dell, OÖ Energiesparverband, Austria

What's new with NZEBs?

- Paul Hodson, European Commission

Energising Europe with energy savings

- Yamina Saheb, Openexp, France

Smart NZEBs in a decentralised energy market

The active role of buildings in transforming the energy market ■ Maarten De Groot, Buildings Performance Institute Europe

The user at the centre of building automation and energy efficiency ■ Werner Jensch, University of Applied Sciences Munich, Germany

Smart cities in Europe

- Theodor Zillner, Federal Ministry for Transport, Innovation & Technology, Austria

Electric cars and smart homes

- Roel Swierenga, Hansa Green Tour, NL

Smart grids pioneer region Upper Austria

- Walter Tenschert, Netz OÖ/Energie AG, Austria

Expert dialogue: what works best to accelerate building renovation?

- Julije Domac, North-West Croatia Regional Energy Agency, Croatia
- Ulrich Nyffenegger, Canton of Bern, Switzerland
- Jaap Hogeling, REHVA
- Fiona Hall, Rockwool International
- Julien Dijol, Cecodhas Housing Europe

Chairperson: Rod Janssen, eceee

13.00 Lunch break



In Europa steigt die Zahl der "Niedrigstenergie-Gebäude" stark: Gemäß der EU-Gebäuderichtlinie müssen spätestens 2020 alle neuen Gebäude "Niedrigstenergie-Gebäude" sein (öffentliche Gebäude schon 2018). "Niedrigstenergie-Gebäude" weisen eine sehr hohe Gesamtenergieeffizienz auf und der sehr geringe Energiebedarf wird zu einem ganz wesentlichen Teil durch erneuerbare Energieträger gedeckt.

25. Februar

09.00

Eröffnung & Begrüßung

- LR Dr. Michael Strugl, Energielandesrat Oberösterreich
- Dr. Gerhard Dell, OÖ Energiesparverband, Österreich

Niedrigstenergie-Gebäude – Wie geht es voran?

- Paul Hodson, Europäische Kommission

Energieeffizienz und erneuerbare Energie – neue Kraft für Europa ■ Dr. Yamina Saheb, Openexp, Frankreich

Niedrigstenergie-Gebäude - Teilstück des dezentralisierten Energiemarktes

Die aktive Rolle des Gebäudesektors im veränderten Energiemarkt ■ Maarten De Groot, MA, Buildings Performance Institute Europe

Der Mensch im Mittelpunkt – Gebäudeautomation und Energieeffizienz ■ Prof. Dr.-Ing. Werner Jensch, Hochschule München, Deutschland

Smart Cities: Intelligente Städte in Europa

- DI Theodor Zillner, BM für Verkehr, Innovation & Technologie, Österreich

Elektroautos und Smart Homes

- Roel Swierenga, MSc, Hansa Green Tour, Niederlande

Smart Grids Pionierregion Oberösterreich

- Dr. Walter Tenschert, Netz OÖ/Energie AG, Österreich

Talkrunde: Wie kann die Gebäude-Sanierungsrate erhöht werden?

- Dr. Julije Domac, North-West Croatia Regional Energy Agency, Kroatien
- DI Ulrich Nyffenegger, Kanton Bern, Schweiz
- Jaap Hogeling, MSc ME, REHVA
- Fiona Hall, BA, Rockwool International
- Julien Dijol, MA, Cecodhas Housing Europe

Moderation: Dr. Rod Janssen, eceee

13.00 Mittagspause



European Nearly Zero Energy Buildings Conference Energy Efficiency Services Conference



Energy efficiency services are key for the transition of the building sector. New financing approaches and operation models support not only sustainable buildings and technology innovation but also create jobs throughout Europe.

25 February

14.30

Business models for sustainable buildings

The IEA Energy Efficiency Market Report

- Tyler Bryant, International Energy Agency (IEA)

How Europe can support energy efficiency services

- Anette Jahn, European Commission, EASME

Business models for energy efficiency

- Wolfram Moritz, MPW Institute, Germany/USA

Energy efficiency services – transforming energy markets ■ Scott Johnstone, Vermont Energy Investment Corporation, USA

Making energy efficiency service markets happen

- Gerhard Dell, OÖ Energiesparverband, Austria

Panorama of successful building energy efficiency services

A mass-scale ESCO project - the REDIBA-project

- Josep Verdaguer Espauella, Barcelona Provincial Council, Spain

Energies POSIT'IF: renovating 3,300 apartments

- Marie-Laure Falque Masset, ARENE Île-de-France, France

Improving the energy performance of existing buildings

- Bertrand Déprez, Schneider Electric, Belgium

From an energy provider to a successful energy service company ■ Miha Valentinčič, Petrol, Slovenia

Lighting as a service

- Kaspars Osis, RCG Lighthouse, Latvia

NZEB Showcase

Examples of realised NZEBs in different countries

This conference is organised as part of the IEE-project "Streetlight-EPC": www.streetlight-epc.eu

19.00 Evening programme



Europäische Niedrigstenergie-Gebäude Konferenz Konferenz "Energieeffizienz-Dienstleistungen"



Energieeffizienz-Dienstleistungen kommt eine Schlüsselrolle bei der Veränderung des Gebäudesektors zu. Neue Finanzierungs- und Betreibermodelle unterstützen nicht nur Nachhaltigkeit und Innovation, sondern schaffen auch tausende Arbeitsplätze in Europa.

25. Februar

14.30

Erfolgreiche Energieeffizienz-Dienstleistungen

Der IEA "Energy Efficiency Market Report"

- Tyler Bryant, MA, Internationale Energieagentur (IEA)

So unterstützt Europa innovative Energieeffizienz-Dienstleistungen ■ Anette Jahn, Europäische Kommission, EASME

Energiedienstleistung – der Markt der Zukunft

- Dipl.-Kfm. Wolfram Moritz, MPW Institute, Deutschland/USA

Mit Energieeffizienz-Dienstleistungen Energiemärkte verändern ■ Scott Johnstone, BSc, Vermont Energy Investment Corporation, USA

Ein Markt für Energieeffizienz-Dienstleistungen

- Dr. Gerhard Dell, OÖ Energiesparverband, Österreich

Panorama erfolgreicher Gebäude-Energieeffizienz-Dienstleistungen

Energie-Contracting als Motor der Bauwirtschaft: das REDIBA Projekt

- Josep Verdaguer Espauella, MSc, Barcelona Provincial Council, Spanien

3.300 Wohnungssanierungen - das "Energies POSIT'IF" Programm

- Marie-Laure Falque Masset, MBA, ARENE Île-de-France, Frankreich

Aktive Energieeffizienz-Systeme in verschiedenen Gebäudetypen

- Bertrand Déprez, MSc, Schneider Electric, Belgien

Vom Energieversorger zum erfolgreichen Energiedienstleister ■ Miha Valentinčič, BEc, Petrol, Slovenien

Beleuchtung als Dienstleistung

- Kaspars Osis, MBA, RCG Lighthouse, Lettland

Niedrigstenergie-Gebäude vor den Vorhang

Beispiele umgesetzter Niedrigstenergie-Gebäude aus verschiedenen Ländern

Die Konferenz findet im Rahmen des IEE-Projektes "Streetlight-EPC" statt: www.streetlight-epc.eu

19.00 Abendprogramm



European Nearly Zero Energy Buildings Conference Energy Efficiency Services Conference



26 February

09.30 Workshop:
How to dynamise energy performance contracting (EPC) markets? (in English only)

Establishing EPC markets in 9 European regions

- Christine Öhlinger, OÖ Energiesparverband

Facilitating EPC markets - experience from European projects

- Anette Jahn, European Commission, EASME

How to increase renovation rates with EPC

- Rüdiger Lohse, Klimaschutz- und Energieagentur Baden-Württemberg, Germany

European funding opportunities for EPC

- Ivan Przulj, North-West Croatia Regional Energy Agency, Croatia

Experience from facilitating EPC markets

- Paddy Phelan, The Carlow Kilkenny Energy Agency, Ireland
- Francisco Puente, ESCAN, Spain

How to implement EPC in a city

- Ingo Fellingner, Stadt Wels, Austria
- Joanna Zbierska, City of Gdansk, Poland

Discussion

Chairperson:

Vlasta Krmelj, Energy Agency of Podravje, Slovenia

13.00 End of the conference

13.30 - 17.45

Site Visit Nearly Zero Energy Buildings



European Energy Efficiency Watch Conference Europäische "Energy Efficiency Watch" Konferenz



The Energy Efficiency Watch Conference presents a panorama of successful policies and programmes that support the realisation of energy efficiency potentials in the EU countries.

26 February

09.00

Energy efficiency in the Energy Union

- Paul Hodson, European Commission

Making Europe number 1 in energy efficiency

- Christiane Egger, OÖ Energiesparverband, Austria
- Daniel Becker, Ecofys, Germany

How to finance energy efficiency, the EU's first fuel

- Susann Bollmann, Deutsche Unternehmensinitiative Energieeffizienz, Germany

Energy efficiency obligation schemes across Europe

- Jan Rosenow, Ricardo Energy and Environment, UK / Vlasis Oikonomou, Joint Implementation Network, NL

Coordinating national, regional and local energy efficiency policies

- Marc Ringel, University of Applied Economics and Environmental Sciences, Germany

White certificates: assessment, measurement, verification ■ Dario di Santo, Federazione Italiana per l'uso Razionale dell'Energia (Fire), Italy

The Estonian loan programme for renovation of apartment buildings ■ Jarek Kurnitski, Tallinn University of Technology, Estonia

The Healthy Homes Programme - tackling fuel poverty

- Ian Watson, Building Research Establishment, UK

13.00 End of the conference

Chairperson: Jan Geiss, Eufores

13.30 - 17.45

Site Visit Nearly Zero Energy Buildings

This conference is organised as part of the IEE-project "Energy Efficiency Watch3" (EEW3):
www.energy-efficiency-watch.org



Die "Energy Efficiency Watch" Konferenz stellt ein Panorama erfolgreicher Strategien und Programme vor, die dazu beitragen, dass die Energieeffizienz-Potenziale in EU-Ländern realisiert werden.

26. Februar

09.00

Energieeffizienz in der Energie-Union

- Paul Hodson, Europäische Kommission

So wird Europa Nummer 1 bei Energieeffizienz

- Mag. Christiane Egger, OÖ Energiesparverband, Österreich
- Dipl.-Vw. Daniel Becker, Ecofys, Deutschland

So kann Energieeffizienz in Europa finanziert werden

- Dipl.-Komm.-Wirt. Susann Bollmann, Deutsche Unternehmensinitiative Energieeffizienz, Deutschland

Energieeffizienz-Verpflichtungssysteme in Europa - aktueller Stand

- Dr. Jan Rosenow, Ricardo Energy & Environment, GB / Vlasis Oikonomou, MSc, Joint Implementation Network, Niederlande

Energieeffizienz-Politik auf nationaler, regionaler und lokaler Ebene

- Prof. Dr. Marc Ringel, Hochschule für Wirtschaft und Umwelt Nürtingen-Geislingen, Deutschland

Weißer Zertifikate: Erfahrungen aus Italien

- DI Dario di Santo, Federazione Italiana per l'uso Razionale dell'Energia (Fire), Italien

Energieeffizienz in Wohnbauprogrammen in Estland

- Prof. Dr. Jarek Kurnitski, Technische Universität Tallinn, Estland

Das "Healthy Homes" Programm gegen Energiearmut

- Ian Watson, Building Research Establishment, GB

13.00 Konferenzende

Moderation: Dr. Jan Geiss, Eufores

13.30 - 17.45

Fachexkursion Niedrigstenergie-Gebäude

Diese Konferenz findet im Rahmen des IEE-Projektes "Energy Efficiency Watch 3" (EEW3) statt:
www.energy-efficiency-watch.org





24 February

9.00 Welcome & opening

- Monique Lévy, European Commission, DG Research and Innovation
- Maria Founti (Coordinator AMANAC), National Technical University of Athens, Greece

Smart facade materials - industrial perspectives

- B. Gangus, 3M, Germany

Smart facades and adaptive building skins

- Brian Cody, Graz Technical University, Austria

Decarbonising construction using biobased materials

- Craig White (ISOBIO, AMANAC), Modcell, UK

Solar smart facades and windows

- Christoph Brabec (I-MEET), University of Erlangen, Germany

FLUIDGLASS: a new concept for adaptive facade systems

- Martin Schröcker (HARWIN, AMANAC), GlassX, Switzerland

Reducing cooling loads in high-rise office buildings by water-flow glazing

- Belén Pérez-Pujazón Millán (InDeWaG), Technical University of Madrid, Spain

Glass materials research for smart building envelopes

- Lothar Wondraczek (LaWin, AMANAC), University Jena, Germany

Lunch break

Parallel Workshops

Workshop 1: New research results on building facades I

Numerical investigation of a dynamic facade sun protection system enhanced with phase change materials ■ Maria Founti (MeeFS), National Technical University of Athens, Greece

Solar heat gain coefficient for water flow glazings

- Juan Antonio Hernandez Ramos (InDeWaG), Technical University of Madrid, Spain

Experimental investigation of "ventilated facade" system performance under fire condition

- Maria Founti (ELISSA, AMANAC), National Technical University of Athens, Greece

Photocatalytic activation of textile reinforced concrete facade panels

- Nelson Silva (H-HOUSE, AMANAC), Swedish Cement and Concrete Research Institute, Sweden

Workshop 2: New research results on building facades II

Numeral validation of a new climate adaptive facade panel

- Agnieszka Łukaszewska (ADAPTIWALL, AMANAC), Pre Fasada, Poland

UHPC-AAC/CLC composite panels with self-cleaning properties

- Lorenzo Miccoli (H-HOUSE, AMANAC), Federal Institute for Materials Research and Testing, Germany

Breakthrough solutions for adaptable envelopes in building refurbishments from the BRESAER project

- Isabel Lacave Azpeitia (BRESAER, AMANAC), ACCIONA Infrastructure, Spain

Designing future-proof facades - methods and technologies

- Fabian Schmid, University of Stuttgart, Germany

Workshop 3: Smart Windows

Autonomous smart building components

- Pierre Sixou (SmartBlind, AMANAC), Polymage, France

Photochromic and electrochromic windows based on tungsten oxide and redox electrolyte

- Andreas Georg (WinSMART, AMANAC), ISE Fraunhofer, Germany

Highly energy-efficient active windows

- Wim Malfait (WinSMART, AMANAC), EMPA Dübendorf, CH

Large Area Fluidic Windows

- Benjamin V. Heiz (LaWin, AMANAC), University Jena, Germany

Workshop 4: Active & energy harvesting facades

Smart building envelopes

- Mirna Bugarin, University of Zagreb, Croatia

Novel active multiple-glazing windows and facades

- Andreas Mader (MEM4WIN, AMANAC), Lisec, Austria

Low embodied energy versus energy harvesting

- Monika Willert-Porada (HARWIN, AMANAC), University of Bayreuth, D

New methodology to select dynamic values of visible transmittance and solar heat gain coefficient in water-flow glazing

- Fernando del Ama Gonzalo, Alfaisal University, Saudi Arabia

Workshop 5: Novel insulation materials

Foam concrete-aerogel composite insulation

- Nelson Silva (SESBE, AMANAC), Swedish Cement and Concrete Research Institute, Sweden

Advanced aerogel composite insulation systems

- Brice Fionrentino (HomeSkin, AMANAC), Enersense, France

Hollow glass sphere-based insulation materials

- Thorsten Gerdes, University of Bayreuth, Germany

Polymer-glass composite insulation materials

- Benedikt Scharfe, Technologieanwenderzentrum Spiegelau, Germany

Concluding Session

- Presentation of the workshop results
- Panel discussion

Chairpersons:

- Monika Willert-Porada, University of Bayreuth, D
- Sanjeev Naik, TWI, UK

19.00 Evening programme

In cooperation with AMANAC



Young Researchers Conference: Energy Efficiency



A conference presenting the work of young researchers in the field of energy efficiency (in English only)

24 February

14.00 Opening & welcome

Gerhard Dell/Christiane Egger, OÖ Energiesparverband

High heat storage concrete with shape-stabilised phase change materials ■ Su-Gwang Jeong / Sumin Kim, Soongsil University, Republic of Korea

Quality analysis of indoor illumination in office buildings

■ Norbert Harmati, University of Novi Sad, Serbia

Achieving buildings transition and energy savings by 2050 through NZEB standards

■ Agne Toleikyte, Energy Economics Group, Vienna University of Technology, Austria

Improving thermal conductivity of phase change materials in building applications

■ Mohammed Ouikhalfan, Cadi Ayyad University, Morocco

Hybrid systems validation based on H₂O

■ Luis Rodriguez / Victor Mora / Edgar Miranda, Galileo University, Guatemala

Minimum-cost and buoyancy-forced vacuum tube collectors for large-scale solar thermal plants

■ Harald Stadlbauer, Sunlumo Technology / University of Applied Sciences Wels, Austria

Do "effort sharing decision" targets drive energy efficiency in buildings? ■ Filippos Anagnostopoulos, Buildings Performance Institute Europe; Robert Harmsen, Utrecht University, NL

Identifying design criteria for energy efficient office buildings ■ Serena Miceli, Institute for Building Services and Energy Design, Braunschweig University of Technology, Germany

Energy modelling and performance assessment of solar heating and cooling systems

■ Igor Shesho, Faculty of Mechanical Engineering Skopje, FYR of Macedonia

Modelling optimal paths to reach NZEB standards for new construction in Europe

■ Delia D'Agostino, Joint Research Centre - European Commission, Italy

A climate neutral building stock in Germany by 2050

■ Tilman Hesse / Veit Bürger, Öko-Institut, Germany

Energy efficiency at Tarachand hospital, India

■ Ar. Priyanka Kulkarni / Ar. Neha Kode, Srujan Research & Planning Foundation; Ar. Ashwini Bhosale, B.N.C.A. College of Architecture, Pune University, India

An integrated energy concept for business parks in Slovenia

■ Peter Bevk / Boris Sučić / Matevž Pušnik, Jozef Stefan Institute - Energy Efficiency Centre, Slovenia

Automated building energy performance simulation at different resolutions

■ Aurelien Bres, Austrian Institute of Technology / Vienna University of Technology, Austria

Retrofit solutions for the Irish building stock: the impact of human behaviour

■ Paul Moran / Jamie Goggins / Magdalena Hajdukiewicz, National University of Ireland; Henrike Rau, Ludwig-Maximilians-Universität München, Germany

Social aspects of multi-family building renovation in Latvia

■ Māra Laizāne / Ilze Vardanjana, Building and Energy Conservation Bureau / University of Latvia

The first energy efficient public building in Turkey

■ Asli Karabacak, United Nations Development Programme; Oguz Kursat Kabakci, Directorate-General for Renewable Energy, Turkey

Chairperson: Reinhold Prieswaller, Johannes Kepler University Linz, Austria

19.00 End of the conference day, evening programme



Hands-on events



Tradeshow "Energiesparmesse"

The Energiesparmesse, a leading tradeshow on energy efficiency and renewable energy, is held in parallel with the conferences. This event attracts around 100,000 visitors and about 1,600 exhibiting companies annually.

- **Visiting days for professionals: 24 - 25 February**
- **Days for the general public: 26 - 28 February**
- **Opening times: 9.00 - 18.00**

Cooperation Platform

The Cooperation Platform offers companies and research organisations the opportunity to meet potential cooperation and business partners from all over the world in individually-planned meetings.

Site Visits

Excursions by bus to interesting sites in the surrounding area

- **Pellets & Wood Chips:**
Tuesday, 23 February, 8.30 - 19.00
- **NZEBs:**
Friday, 26 February, 13.30 - 17.45

Poster Presentation

The Poster Presentation offers the opportunity to display successful sustainable energy initiatives and projects implemented by your company or organisation. It is an opportunity to present results of EU projects to experts from all over the EU.

Further information:
www.wsed.at/en/poster-presentation

Interaktive Events



Energiesparmesse

Die Energiesparmesse, die parallel zur Konferenz stattfindet, ist die führende Messe im Bereich Energieeffizienz und erneuerbare Energie mit mehr als 100.000 Besucher/innen und 1.600 Ausstellern jährlich.

- **Fachbesuchertage: 24. - 25. Februar**
- **Publikumstage: 26. - 28. Februar**
- **Öffnungszeiten: 9.00 - 18.00**



Kooperationsplattform

Die Kooperationsplattform bietet Unternehmen und Forschungseinrichtungen die Möglichkeit neue Kooperationspartner aus der ganzen Welt zu treffen. Die Meetings werden individuell geplant, eine separate Voranmeldung ist erforderlich (nur in Englisch).



Fachexkursion

Fachexkursionen mit dem Bus zu interessanten Anlagen in der Umgebung

- **Pellets & Hackschnitzel:**
Dienstag, 23. Februar, 8.30 - 19.00
- **Niedrigstenergie-Gebäude:**
Freitag, 26. Februar, 13.30 - 17.45



Poster-Präsentation

Bei der Poster-Präsentation haben Sie die Möglichkeit, erfolgreiche Projekte aus dem Bereich nachhaltige Energie zu präsentieren. Sie bietet auch die Gelegenheit, Ergebnisse aus EU-Projekten den internationalen Expert/innen vorzustellen.

Weitere Informationen:
www.wsed.at/poster-praesentation



The conference organiser



The OÖ Energiesparverband

The OÖ Energiesparverband, the organiser of the World Sustainable Energy Days, is the energy agency of Upper Austria. Located in Linz/Austria, it was set up to promote energy efficiency, renewable energy sources and innovative energy technologies. Its main target groups are private households, companies and public bodies.

The OÖ Energiesparverband is also responsible for the management of the Oekoenergie-Cluster (www.oec-en.at), the network of 175 renewable energy and energy efficiency companies in Upper Austria. Together, the partner companies have more than 9,400 employees and a turnover of more than 2.3 billion Euro. Among the OEC companies are European market leaders in biomass boilers and energy efficiency technologies.

Further information on the OÖ Energiesparverband and the Oekoenergie-Cluster at: www.esv-en.at, www.oec-en.at

Upper Austria

The region of Upper Austria is one of Austria's nine regions and has a population of 1.4 million. In the field of renewable energy and energy efficiency, Upper Austria plays a leading role. 36 % of the primary energy consumption in the region are produced from renewable energy sources (mostly biomass, hydro and solar).

Upper Austria has set itself the ambitious target of covering 100 % of its space heat and electricity demand with renewable energy sources by 2030.



Der Konferenzveranstalter



Der OÖ Energiesparverband

Der OÖ Energiesparverband, der Veranstalter der World Sustainable Energy Days, ist eine Einrichtung des Landes Oberösterreich mit dem Ziel, Energieeffizienz und erneuerbare Energieträger zu fördern. Er ist die zentrale Anlaufstelle für Energieinformation und einer der größten Anbieter von Energieberatung in ganz Europa.

Der OÖ Energiesparverband ist auch für das Management des Oekoenergie-Clusters (www.oec.at) verantwortlich, dem Netzwerk der 175 Oekoenergie-Unternehmen Oberösterreichs. Gemeinsam beschäftigen die OEC-Partner über 9.400 Personen und erzielen einen Umsatz von über 2,3 Milliarden Euro. Zu den OEC-Partner-Unternehmen gehören die marktführenden Unternehmen im Bereich Biomasse-Kessel und Energieeffizienztechnologien.

Weitere Informationen über den OÖ Energiesparverband und den Oekoenergie-Cluster: www.energiesparverband.at, www.oec.at

Oberösterreich

Oberösterreich, eines der neun österreichischen Bundesländer, ist eine Region mit 1,4 Millionen Einwohner/innen. Im Bereich der Energieeffizienz und der Nutzung erneuerbarer Energieträger nimmt OÖ eine Vorreiterrolle in Europa ein. 36 % des Energieverbrauchs werden in OÖ durch erneuerbare Energie (v. a. Biomasse, Wasserkraft & Solar) gedeckt.

Oberösterreich hat sich ambitionierte Ziele gesetzt: Bis zum Jahr 2030 sollen Raumwärme- und Stromverbrauch zu 100 % aus erneuerbaren Energien gedeckt werden.



World Sustainable Energy Days 2016



Date 24 - 26 February 2016

Venue Stadthalle Wels, Austria
Pollheimer Strasse 1, 4600 Wels

Conference languages
English, German

Organisation and conference office

OÖ Energiesparverband
Landstrasse 45
4020 Linz, Austria
Tel. +43/732/7720-14386
office@esv.or.at, www.esv.or.at
ZVR171568947, ATU 39283707

Conference fees

320 € for all WSED conferences
(24 - 26 February)
Information on fees for the
different events and for students
at www.wsed.at
All fees plus 10 % VAT

Registration

Please register online at
www.wsed.at

How to reach Wels?

by railway: direct connections from
Vienna, Linz, Salzburg,
Munich, Paris, Brussels, etc.
by road: A1 and A25 motorways
by air: airports in Linz (17 km from
Wels), Vienna (222 km), Salzburg
(110 km), Munich (247 km)

Datum 24. - 26. Februar 2016

Ort Stadthalle Wels, Österreich
Pollheimer Straße 1, 4600 Wels

Sprachen
Deutsch, Englisch

Organisation und Tagungsbüro

OÖ Energiesparverband
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4020 Linz, Österreich
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Konferenzbeiträge

320 € für alle WSED-Konferenzen
(24. - 26. Februar)
Teilnahmebeiträge für die einzelnen
Konferenzen und Studierende siehe
www.wsed.at/dt
Alle Beträge zzgl. 10 % MWSt

Anmeldung

Bitte verwenden Sie die Online-
Anmeldung auf www.wsed.at/dt

Wie kommen Sie nach Wels?

Bahn: direkt von Wien, Linz,
Salzburg, München, Berlin,
Brüssel etc.
PKW: Autobahnen A1 & A25
Flugzeug: Flughäfen Linz (17 km
von Wels), Wien (222 km), Salzburg
(110 km), München (247 km)



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