

# World Sustainable Energy Days 2017



1 - 3 March 2017  
1. - 3. März 2017

WELS, AUSTRIA

## CONFERENCES

### **European Energy Efficiency Conference**

*Energy Efficiency Services and Business*

*E-Mobility & Smart Buildings*

*European Research Conference: Buildings*

*European Nearly Zero Energy Buildings Conference*

*Energy Efficiency Watch Conference*

### **European Pellet Conference**

### **Young Researchers Conference**

## INTERACTIVE EVENTS

*Tradeshaw*

*Cooperation Platform*

*Site Visits*

*Poster Presentation*

## KONFERENZEN

### **Europäische Energieeffizienz Konferenz**

*Energieeffizienz-Dienstleistungen*

*E-Mobilität & smarte Gebäude*

*Europäische Forschungskonferenz: Gebäude*

*Europäische Niedrigstenergie-Gebäudekonferenz*

*"Energy Efficiency Watch" Konferenz*

### **Europäische Pelletskonferenz**

### **Young Researchers Conference**

## INTERAKTIVE EVENTS

*Energiesparmesse*

*Kooperationsplattform*

*Fachexkursionen*

*Poster-Präsentation*

# World Sustainable Energy Days 2017

**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 2016, more than 700 experts from 57 countries participated in the conference!

**This global meeting place for the sustainable energy community includes:**

- 8 conferences on energy efficiency, biomass and sustainable buildings
- 4 interactive events (a major tradeshow, cooperation platform, site visits and poster presentation)

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

**You are warmly invited to the World Sustainable Energy Days 2017!**

**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. 2016 verzeichnete die Veranstaltung mehr als 700 Teilnehmer/innen aus 57 Ländern.

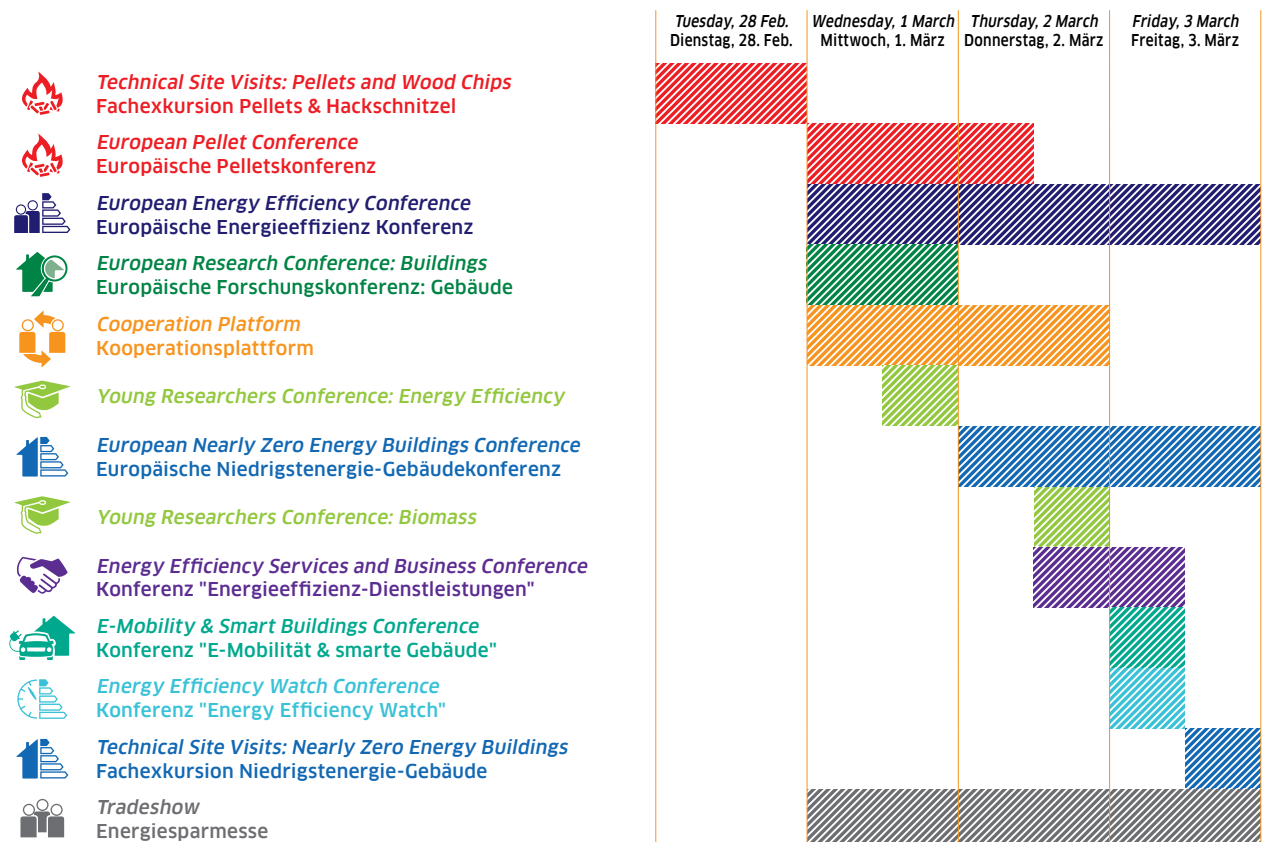
**Das globale Branchentreffen rund um nachhaltige Energie bietet:**

- 8 Konferenzen zu den Themen Energieeffizienz, Biomasse und nachhaltige Gebäude
- 4 interaktive Events (Fachmesse, Kooperationsplattform, Fachexkursionen und Poster-Präsentation)

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

**Wir laden Sie sehr herzlich zu den World Sustainable Energy Days 2017 ein!**

## Timetable / Zeitplan World Sustainable Energy Days 2017



# Programme / Programm



## **European Energy Efficiency Conference**

Policies • Markets • Business models • Research & innovation • Technologies • Financing • Best practice solutions

## **Energy Efficiency Services and Business Conference**

Financing and operational models • Energy Performance Contracting & other integrated services for buildings and industry

## **E-Mobility & Smart Buildings Conference**

Market overview • Building integration, energy management, storage and charging solutions • Best practice examples

## **European Research Conference: Buildings**

New research results on energy-efficient and sustainable buildings

## **European Nearly Zero Energy Buildings Conference**

High efficiency buildings supplied by renewable energy: Technologies • Policies • Financing • Innovative energy services

## **Energy Efficiency Watch Conference**

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

## **European Pellet Conference**

The world's largest annual conference on pellets: Technologies • Markets • Policies • Financing

## **Young Researchers Conference: Biomass + Energy Efficiency**

2 conferences presenting the work and achievements of young researchers, Best Young Researcher Awards

## **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 (energy efficiency and biomass)

## **Technical Site Visits**

Pellets & wood chips (28 February) • Nearly Zero Energy Buildings (3 March)

## **Poster Presentation**

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



## **Europäische Energieeffizienz Konferenz**

Märkte • Geschäftsmodelle • Strategien • Forschung & Innovation • Technologien • Finanzierung • Best Practice Lösungen



## **Konferenz "Energieeffizienz-Dienstleistungen"**

Finanzierungs- und Betreibermodelle • Contracting und andere Dienstleistungen für Gebäude und Industrie



## **Konferenz "E-Mobilität & smarte Gebäude"**

Marktüberblick • Lösungen rund um Gebäudeintegration, Energiemanagement, Speicher und Ladestationen • Best Practice Beispiele



## **Europäische Forschungskonferenz: Gebäude**

Neue Forschungsergebnisse rund um energieeffiziente und nachhaltige Gebäude



## **Europäische Niedrigstenergie-Gebäude Konferenz**

Gebäude mit hohem Effizienzstandard, die mit erneuerbarer Energie versorgt werden: Technologien • Strategien • Finanzierung • Innovative Dienstleistungen



## **Konferenz "Energy Efficiency Watch"**

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



## **Europäische Pelletskonferenz**

Die weltweit größte jährliche Konferenz zum Thema Pellets: Technologien • Märkte • Strategien • Finanzierung



## **Young Researchers Conference: Biomass + Energy Efficiency**

2 Konferenzen zur Präsentation der Arbeiten junger Forscher/innen, Best Young Researcher Awards



## **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 (Energieeffizienz & Biomasse)



## **Fachexkursionen**

Pellets & Hackschnitzel (28. Februar) • Niedrigstenergie-Gebäude (3. März)



## **Poster-Präsentation**

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





*Energy efficiency first: This new approach in European energy policies aims to boost growth in the EU economy, investments and job creation. The European Energy Efficiency Conference encompasses 6 different conferences and addresses policies, markets, business models, financing and research & innovation.*

## 2 March

### 09.00 Energy efficiency policies and markets

#### Opening & welcome

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

#### The new EU energy policy: clean energy for all Europeans

- Paul Hodson, European Commission, DG Energy

#### The IEA Energy Efficiency Market Report 2016

- Tyler Bryant, International Energy Agency

#### The energy transition in view of global megatrends

- Manfred Fishedick, Wuppertal Institute, Germany

#### Financing energy efficiency by the EIB

- Berna Bohrer-Topaloğlu, European Investment Bank

#### Energy efficiency – a key factor in global competitiveness

- Gerhard Dell, Energy Commissioner Upper Austria

**India's energy efficiency programmes: another perspective** ■ Nanda Kumar Janardhanan, Institute for Global Environmental Strategies, India

### Innovation, jobs and profit

#### Making energy efficiency your business

- Harry Verhaar, Philips, The Netherlands

#### Pick the lowest hanging fruit

- Claus Bugge Garn, Rockwool International, Denmark

#### Construction SMEs – key players in energy efficiency

- Riccardo Viaggi, European Builders Confederation

13.00 Lunch break



**Energieeffizienz zuerst:** Diese Neuorientierung der europäischen Energiepolitik zielt darauf ab, Wirtschaft und Investitionen anzukurbeln und Arbeitsplätze zu schaffen. Die Europäische Energieeffizienz Konferenz umfasst 6 Konferenzen und behandelt Strategien, Märkte, Geschäftsmodelle, Finanzierung, Forschung & Innovation.

## 2. März

### 09.00 Energieeffizienz-Strategien und Märkte

#### Eröffnung & Begrüßung

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

#### Nachhaltige Energie für alle EuropäerInnen: Die neue EU Politik

- Paul Hodson, MSc, Europäische Kommission, GD Energie

#### Der IEA "Energy Efficiency Market Report" 2016

- Tyler Bryant, MPP, Internationale Energieagentur

#### Die Energiewende im Kontext von Megatrends

- Univ. Prof. Dr. Manfred Fishedick, Wuppertal Institut, D

#### Europäische Finanzierung von Energie-Effizienzprojekten

- Berna Bohrer-Topaloğlu, Europäische Investitionsbank

#### Energieeffizienz als Standortfaktor im globalen

**Wettbewerb** ■ Dr. Gerhard Dell, Landesenergiebeauftragter Oberösterreich

#### Eine andere Perspektive: Energieeffizienz-Programme

**in Indien** ■ Dr. Nanda Kumar Janardhanan, Institute for Global Environmental Strategies, Indien

### Innovationen, Jobs und Gewinn

#### Energieeffizienz im Zentrum der Unternehmensstrategie

- Harry Verhaar, MSc., Philips, Niederlande

#### Priorität für die wirtschaftlichsten Energieeffizienz-Maßnahmen

- DI Claus Bugge Garn, Rockwool International, Dänemark

#### Bau-KMUs: zentrale Akteure der Energieeffizienz

- Riccardo Viaggi, MA, European Builders Confederation

13.00 Mittagspause



# Energy Efficiency Services and Business Conference European Nearly Zero Energy Buildings Conference



Energy efficiency services are key for the transition of the building and industry sectors. The conference presents business models and financing approaches in Europe.

## 2 March

### 14.30 How to boost the energy efficiency services market

#### Smart financing for smart energy

- Anette Jahn, European Commission, EASME

#### Facilitating the ESCO market

- Christiane Egger, OÖ Energiesparverband, Austria

#### How ready is Europe for the "Smart Building Revolution"?

- Maarten De Groot, Buildings Performance Institute Europe

#### Scaling up deep energy renovation through innovation & industrialisation

- Erica Hope, European Climate Foundation, NL

### Successful examples: Energy efficiency services and business models

#### Energy Performance Contracting (EPC) – the customer focus

- Volker Dragon, Siemens, Switzerland

#### Energy efficiency services for global industries

- Stefan Klepzig, Schneider Electric, Germany

#### The US Federal Energy Management Programme

- Nicolas Baker, U.S. Department of Energy, USA

#### EPC examples from Spain

- Elena González Sánchez, National Association of Energy Services Companies, Spain

#### EPC example for businesses

- Klaus Dorninger, Energie AG Oberösterreich Power Solutions, Austria

#### The "Picardie Pass Rénovation" programme

- Alice Morcrette, Picardie Public Office for Energy Efficiency, France

#### Superhomes – a systematic NZEB retrofit process

- Paul Kenny, Tipperary Energy Agency, Ireland

### 19.00 Evening Programme

# Konferenz "Energieeffizienz-Dienstleistungen" Europäische Niedrigstenergie-Gebäude Konferenz



Energieeffizienz-Dienstleistungen kommt eine Schlüsselrolle bei der Veränderung von Gebäudesektor und Industrie zu. Die Konferenz präsentiert Geschäfts- und Finanzierungsmodelle in Europa.

## 2. März

### 14.30 Märkte für Energieeffizienz-Dienstleistungen ankurbeln

#### Innovative Finanzierung für smarte Energieprojekte

- Anette Jahn, Europäische Kommission, EASME

#### Entwicklung regionaler Contracting-Märkte

- Mag. Christiane Egger, OÖ Energiesparverband, Österreich

#### Ist Europa bereit für die "Smart Building Revolution"?

- Maarten De Groot, MA, Buildings Performance Institute Europe

#### Gebäudesanierungen im großen Stil durch Innovation und Industrialisierung

- Erica Hope, MA, European Climate Foundation, NL

### Energieeffizienz-Dienstleistungen: erfolgreiche Beispiele

#### Energie-Contracting – der Kunde im Fokus

- Dipl.-Betriebswirt Volker Dragon, Siemens, Schweiz

#### Energieeffizienz-Dienstleistungen für die Großindustrie

- Stefan Klepzig, Schneider Electric, Deutschland

#### Das US Bundes-Energiemanagement Programm

- Nicolas Baker, MA, U.S. Department of Energy, USA

#### Energie-Contracting Beispiele aus Spanien

- Elena González Sánchez, MSc., National Association of Energy Services Companies, Spanien

#### Energie-Contracting für Unternehmen

- Klaus Dorninger, MBA, Energie AG Oberösterreich Power Solutions, Österreich

#### Das "Picardie Pass Rénovation" Programm

- Dr. Alice Morcrette, Picardie Public Office for Energy Efficiency, Frankreich

#### Superhomes – Gebäuderenovierung mit System

- Paul Kenny, BE CEng MIEI, Tipperary Energy Agency, Irland

### 19.00 Abendprogramm



# E-Mobility & Smart Buildings Conference European Nearly Zero Energy Buildings Conference



3 March

## 09.00 Towards renewable e-mobility

### **The mobile disruption: How e-mobility changes our society**

- Roel Swierenga, Hansa Green Tours, The Netherlands

### **Vehicle technologies: status quo and perspectives**

- Matthias Busse, Fraunhofer-IFAM, Germany

### **How green and cost efficient are electric vehicles?**

- Joeri van Mierlo, Vrije Universiteit Brussel/MOBI, Belgium

### **Showcase programme e-mobility Germany**

- Bertram Harendt, Deutsches Dialog Institut, Germany

### **Lessons from the world leading e-mobility market**

- Tormod Bergheim, Norsk elbilforening, Norway

## Building, living and charging

### **New building standards for e-mobility**

- Stefan Lösch, AktivPlus, Germany

### **Vehicles to buildings: electric cars as storage systems**

- Cristina Corchero, Catalonia Institut for Research, Spain

### **24 hours of sun**

- Martin Hackl, Fronius International, Austria

### **Commercial buildings: optimising renewables, e-mobility and storage**

- Juan Fraga, Wynnertech, Spain

### **Experience from 25,000 charging stations**

- Gerhard Wimmer, KEBA, Austria

## 13.00 End of the conference

13.30 - 17.45 Site Visit Nearly Zero Energy Buildings

# Konferenz "E-Mobilität & smarte Gebäude" Europäische Niedrigstenergie-Gebäude Konferenz



3. März

## 09.00 E-Mobilität mit erneuerbarer Energie

### **Wie E-Mobilität unsere Gesellschaft verändert**

- Roel Swierenga, MSc, Hansa Green Tours, Niederlande

### **Fahrzeugtechnik: Status quo und Perspektiven**

- Prof. Dr.-Ing. Matthias Busse, Fraunhofer-IFAM, Deutschland

### **Wie umweltfreundlich und wirtschaftlich sind Elektrofahrzeuge?**

- Prof. Dr. Joeri van Mierlo, Vrije Universiteit Brussel/MOBI, Belgien

### **Schaufenster-Programm Elektro-Mobilität Deutschland**

- Dr. Bertram Harendt, Deutsches Dialog Institut, Deutschland

### **Erfahrungen vom führenden Land in Sachen E-Mobilität**

- Tormod Bergheim, MoM, Norsk elbilforening, Norwegen

## Bauen - Wohnen - Laden

### **Neue Haustechnikstandards für Elektro-Mobilität**

- Dr. Stefan Lösch, AktivPlus, Deutschland

### **Elektroautos als Stromspeicher**

- Dr. Cristina Corchero, Catalonia Institut for Research, Spanien

### **24 Stunden Sonne**

- Ing. Martin Hackl, Fronius International, Österreich

### **Nicht-Wohngebäude: Optimierung von erneuerbarer Energie, E-Mobilität und Speichern**

- Dipl.-Ing. Juan Fraga, Wynnertech, Spanien

### **Erfahrungen von 25.000 E-Auto-Ladestationen**

- Gerhard Wimmer, KEBA, Österreich

## 13.00 Konferenzende

13.30 - 17.45 Fachexkursion Niedrigstenergie-Gebäude



# European Energy Efficiency Watch Conference European Nearly Zero Energy Buildings Conference



3 March

## 09.00 Energy efficiency policy workshop (in English only)

### Update on European building policies

- Paul Hodson, European Commission, DG Energy

### Key policy conclusions from the European Energy Efficiency Watch project

- Nils Borg, eceee

### Upskilling the construction sector to reach European energy targets

- Zoe Wildiers, European Commission, EASME

### Implementing European Directives (EED, EPBD)

### Financing energy efficiency in private housing

- Gabriella Azzolini, ENEA, Italy

### Implementing energy audit programmes in Member States

- Anke Brems, DNV GL, The Netherlands

### Smart meter rollout to end consumers

- Francisco Puente, ESCAN, Spain

### Energy advice for deep retrofits

- Catrin Maby, Energy Advice Exchange, UK

### A new approach to energy efficiency services

- Michael Körber, MPW, Germany

### Energy use plans for cities and quarters

- Oliver Zadow, Landeshauptstadt München, Germany

### Indoor environment quality requirements versus energy performance

- Jarek Kurnitski, Tallinn University, Estonia

### The Energy Performance Buildings Standards

- Jaap Hogeling, ISSO, The Netherlands

13.00 End of the conference

13.30 - 17.45 Site Visit Nearly Zero Energy Buildings

The European Energy Efficiency Conference is organised as part of the IEE-project "Energy Efficiency Watch 3" (EEW3): [www.energy-efficiency-watch.org](http://www.energy-efficiency-watch.org)

Die Europäische Energieeffizienz Konferenz findet im Rahmen des IEE-Projektes "Energy Efficiency Watch 3" (EEW3) statt: [www.energy-efficiency-watch.org](http://www.energy-efficiency-watch.org)





## 1 March

### 09.00 Key research issues for buildings & energy (in English only)

#### Opening & welcome

- Christine Öhlinger, OÖ Energiesparverband, Austria

#### Building innovation for new energy systems

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

#### Innovation in building materials and construction

- Klaus Peter Sedlbauer, Fraunhofer-IBP/Fraunhofer Allianz Bau, Germany

#### The "EeB PPP" programme: key instrument of European sustainable building research ■ Emmanuel Forest, European Construction Technology Platform

#### Building Energy Epidemiology: connecting buildings, energy and people

- Ian Hamilton, University College London, UK

#### The next generation of high efficiency buildings

- Hans-Peter Ebert, ZAE, Germany

### Highlights from building and energy research

#### The Intelligent Energy Europe: disseminating building innovation

- Janna Schönfeld, European Commission, EASME

#### BUILDSMART: market-ready building solutions

- Roland Zinkernagel, City of Malmö, Sweden

#### NEED4B: selecting cost-effective technologies in the building design phase ■ María Izquierdo, CIRCE, Spain

#### INSPIRE: a new process for deep energy renovation

- Chiara Dipasquale, EURAC, Italy

#### Turning European shopping malls into beacons of energy efficiency ■ Matthias Haase, SINTEF, Norway

#### Composites from industrial waste - a novel and affordable building material ■ Martha Emilia Poisot, Universidad del Papaloapan, Mexico

#### Lunch break



### 14.00 Parallel Session (in English only)

#### Session 1: Young Researchers Conference: Energy Efficiency (see next page)

#### Session 2: Energy in Time (EiT)

Organised in the context of FP7 project Energy in Time

#### The EiT project: Filling the gap between actual and predicted consumption

- Belén Gómez-Urbarri, Acciona Infraestructuras, Spain

#### EiT integrated solutions for building control Data mining to improve building operation

#### Generating automatic operational plans

- Carlos Fernández, Universidad de Granada, Spain

#### Fault diagnosis and adaptive control of VAV dampers

- Tejaswinee Darure, Université de Lorraine, France

#### Implementing and analysing EiT solutions in four demo sites (Helsinki, Levi, Faro and Bucharest)

- Heikki Rostila, Caverion, Finland

**Chairpersons:** María Izquierdo, CIRCE & Belén Gómez-Urbarri, Acciona Infraestructuras

#### Session 3: Multifunctional ETFE modules

Organised in the context of FP7 project ETFE-MFM

#### Textile-based architecture

- Karsten Moritz, Taiyo Europe, Germany

#### Different active and passive building strategies

- Juan Ramón de las Cuevas, Acciona, Spain

#### Building-integrated PV in architectural textiles

- Ana Rosa Lagunas Alonso, Cener, Spain

#### Development & demonstration of flexible multifunctional ETFE modules ■ Armando Menendez, ITMA, Spain

#### Session 4: TRIBE - Gamification of energy efficiency

Organised in the context of Horizon 2020 project TRIBE

#### The TRIBE project - training behaviour towards energy efficiency: Play it! ■ Eduardo Cembrano, CIRCE, Spain

#### Measures and actions for energy efficiency in public buildings ■ David Zambrana, CIRCE, Spain

#### Achieving behavioural change via gamification

- Patrick Hart, University of Graz, Austria

#### ICT solutions for monitoring and control in public buildings ■ Raquel García, ACCIONA, Spain

#### Designing, implementing and playing - a game for behavioural change

- Erik Einebrant, The Interactive Institute, Sweden

**Chairperson:** Eduardo Cembrano Burgos, CIRCE

#### 19.00 Evening programme



# Young Researchers Conference: Energy Efficiency



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

## 1 March

### 14.00 Opening & welcome

Gerhard Dell/Christiane Egger, OÖ Energiesparverband

#### **Cooling performance of phase change material systems**

- Modar Yasin / Helmut Weinläder / Felix Klinker, ZAE Bayern, Germany

#### **Building envelope optimisation towards overall energy performance improvements**

- Norbert Harmathy, Budapest University of Technology, Hungary

#### **Designing zero net energy residential buildings for different Iranian climate zones**

- Ahmadreza Armaninia, Sharif University of Technology, Iran

#### **Model predictive control for efficient house heating**

- Pierre Vogler-Finck, Aalborg University, Denmark

#### **Flink – a central management system for smart homes**

- Almin Hasandic, International Burch University in Sarajevo, Bosnia and Herzegovina

#### **Mathematical models for analysing the lighting system in a room with blinds**

- Marek Balsky / Zuzana Panska / Jan Zalesak / Jiri Pavlousek, Czech Technical University in Prague, Czech Republic

#### **Multiperiod model for the optimal production planning for technical gases**

- David Fernández Linares / Laureano Jiménez, Universitat Rovira i Virgili, Spain; Rubén Folgado, Messer Ibérica de Gases, Spain

#### **Improved desalination using solar multi-effect distillation in Mediterranean regions**

- Roshan Chandwankar, University of Applied Sciences Upper Austria

#### **Heat pipe heat exchanger for heat recovery applications**

- Maksym Lozovyi, National Technical University of Ukraine

#### **Heat recovery from sewage water: system design and analysis**

- Danijela Kardaš, Faculty of Mechanical Engineering Banja Luka, Bosnia and Herzegovina

#### **Methodology for quality checks for efficient buildings**

- Magdalena Hajdukiewicz / Jamie Goggins / Marcus Keane, National University of Ireland Galway, Ireland

#### **Mapping tools on energy efficiency in buildings for policy-making support**

- Ksenia Petrichenko, Copenhagen Centre on Energy Efficiency, Denmark

#### **The correlation between building marketability, energy efficiency and aesthetics**

- Yusuf Cihat Aydin / Parham Ahranjani Mirzaei, University of Nottingham, UK

#### **Mapping of energy efficiency indicators**

- Aristeidis Tsakiris, Copenhagen Centre on Energy Efficiency, Denmark

#### **Including environmental perspectives in slum rehabilitation in Mumbai, India**

- Ashwini Bhosale / Yogesh Patil, Design Infinity Firm, India

#### **Boosting the NZEB market transition**

- Jonathan Volt, Building Performance Institute Europe

#### **Energy efficient home refurbishment: survey on influencing factors**

- Robert Baumhof / Thomas Decker / Klaus Menrad, Straubing Center of Science, Germany

#### **Assessing the role of digital grids in empowering an energy efficient culture**

- Shu Xian Toh, University of Coimbra, Portugal

#### **Demand side infrastructure for energy security**

- Filippos Anagnostopoulos / Dan Staniaszek, Building Performance Institute Europe

#### **Chairperson:**

Reinhold Priewasser, Johannes Kepler University, Austria



# European Pellet Conference 2017 Europäische Pelletskonferenz 2017



1 March

## 09.00 Pellet policies and markets

### Opening & welcome

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

### Bioenergy in the EU "Clean Energy Package"

- Giulio Volpi, European Commission, DG Energy

### The European pellet market – status quo and outlook

- Gilles Gauthier, AEBIOM

### Effective policy mechanisms for pellets in Europe

- Calliope Panoutsou, Imperial College Centre for Energy Policy & Technology, UK

### Smart bioenergy – the role of pellets in the new energy system

- Volker Lenz, DBFZ (German Biomass Research Centre), Germany

### Pellets for smart buildings

- Christiane Egger, OÖ Energiesparverband, Austria

### The competitive position of biomass

- Ben Moxham, Enviva, USA

### Communicating pellets through social media

- Linda Saulite, Vizeum, Latvia

Lunch break



1. März

## 09.00 Pelletsstrategien und -märkte

### Eröffnung & Begrüßung

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

### Bioenergie im EU "Clean Energy Package"

- Giulio Volpi, MA, Europäische Kommission, GD Energie

### Der europäische Pelletsmarkt – Status quo und Ausblick

- Gilles Gauthier, MSc, AEBIOM

### Wirksame Strategien für Pellets in Europa

- Dr. Calliope Panoutsou, Imperial College Centre for Energy Policy & Technology, Großbritannien

### Smart Bioenergy – die Rolle von Pellets im neuen Energiesystem

- Dr.-Ing. Volker Lenz, DBFZ (Deutsches Biomasseforschungszentrum), Deutschland

### Smart Buildings & Pellets

- Mag. Christiane Egger, OÖ Energiesparverband, Österreich

### Die Positionierung von Biomasse im Wettbewerb

- Ben Moxham, BA, Enviva, USA

### Social Media Kommunikation zu Pellets

- Linda Saulite, MSc, MBA, Vizeum, Lettland

Mittagspause



# European Pellet Conference 2017 Europäische Pelletskonferenz 2017



1 March

## 14.00 Biomass CHP – innovation from Upper Austria

- Ernst Höftberger, bioenergy2020+
- Stefan Ortner, ÖkoFEN
- Anton Hofer, Hargassner
- Wolfgang Aichinger, Fröling
- Hans-Jürgen Brandt, Frauscher Thermal Motors

## World Pellet Business & Technology Forum

### Challenges in pelletising different raw materials

- Werner Sitzmann, Amandus Kahl, Germany

### Material changes during steam explosion of bark

- Peter Björklund, Valmet AB, Sweden

### The range of the pellet quality class A1 – worldwide

- Hans Martin Behr, Deutsches Pelletinstitut, Germany

### Pellets from scrubs

- Pablo Rodero Masdemont, Avebiom, Spain

### Successful bioheat projects in educational and commercial buildings

- Mark Froling, Froling Energy, USA

### Cost-benefit analysis of technologies to reduce fine dust

- Hubert Röder, Wissenschaftszentrum Straubing, Germany

### The gamut of bioenergy: from first nations to the oil industry

- Jamie Stephen, TorchLight Bioresources, Canada

## Pellet Business Cooperation Platform

19.00 Evening programme



1. März

## 14.00 Biomasse KWK – Innovationen aus Oberösterreich

- DI Dr. Ernst Höftberger, bioenergy2020+
- DI (FH) Stefan Ortner, ÖkoFEN
- Ing. Anton Hofer, Hargassner
- Prok. Ing. Wolfgang Aichinger, Fröling
- DI Hans-Jürgen Brandt, Frauscher Thermal Motors

## World Pellet Business & Technology Forum

### Herausforderungen bei der Pelletierung verschiedener Rohmaterialien

- Prof. Dr.-Ing. Werner Sitzmann, Amandus Kahl, Deutschland

### Materialveränderungen von Rinde durch das Dampfexplosionsverfahren

- DI Peter Björklund, Valmet AB, Schweden

### Die Bandbreite der A1 Pelletsqualität – weltweit

- Hans Martin Behr, Deutsches Pelletinstitut, Deutschland

### Pellets aus Unterholz

- Pablo Rodero Masdemont, BSc, Avebiom, Spanien

### Erfolgreiche Biomasse-Projekte in Ausbildungs- und Betriebsgebäuden

- Mark Froling, BA, Froling Energy, USA

### Technologien zur Feinstaubreduktion: Kosten-Nutzen-Analyse

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

### Bioenergieprojekte – von den First Nations bis zur Ölindustrie

- Dr. Jamie Stephen, TorchLight Bioresources, Kanada

## Pellet Business Cooperation Platform

19.00 Abendveranstaltung





## 2 March

### 09.30 New micro- and small-scale biomass CHP technologies (in English only)

#### Introduction ERA-NET project "Small-scale biomass based CHP"

- Ingwald Obernberger, BIOS Bioenergiesysteme, Austria

#### New micro-CHP technology for pellet stoves with a thermoelectric generator

- Gerhard Weiß, BIOS Bioenergiesysteme, Austria

#### New micro-CHP technology for small-scale pellet boilers with an Organic Rankine Cycle

- Paul Roßmann, Technologie- und Förderzentrum, Germany / Jürgen Fernengel, Orca Energy, Germany

#### Small-scale CHP system based on a micro-gas turbine

#### Overall concept

- Sven Hermansson, SP Technical Research Institute of Sweden

#### Numerical modelling and experimental investigation of a high-temperature heat exchanger

- Pawel Bocian, Institute of Power Engineering, Thermal Processes Department, Poland

#### Ash related issues in indirectly-fired gas turbines with biomass fuels

- Marcus Öhman, Luleå University of Technology, Sweden

#### Discussion, conclusions and outlook

- Ingwald Obernberger, BIOS Bioenergiesysteme, Austria

This session is organised as part of the ERA-NET project: "Small-scale BM based CHP" in cooperation with BIOS: [www.minibiochp.eu](http://www.minibiochp.eu)

12.30 End of the session

### 09.30 Pellet Market News Worldwide Updates and outlook on European and global markets (in English only)

#### Austria: initiatives to develop non-domestic use of pellets

- Christian Rakos, proPellets Austria

#### Germany: the energy transition in the heat market

- Martin Bentele, DEPV

#### UK: opportunities and threats

- Mark Lebus, LC Energy

#### Baltic countries: update on Baltic pellet production

- Didzis Palejs, Latvian Biomass Association

#### Norway: challenges of a small pellet market

- Martin Kristensen, Norsk Bioenergiforening

#### Canada: home market and export trends

- Gordon Murray, Wood Pellet Association of Canada

#### South Korea: outlook on price and demand

- Alan Seung-rok Lee, SY ENERGY Group

#### Japan: the dilemma of feed-in tariffs and heat markets

- Kenichiro Kojima, Pellet Club

#### Chile: markets and technologies

- Laura Azócar Ulloa, Universidad de La Frontera

#### Tasmania & Australia: challenges and experiences

- Mervyn Jones, Wood Pellets Tasmania

#### Chairperson:

Gordon Murray, Wood Pellet Association of Canada

13.00 End of the session



# Young Researchers Conference: Biomass



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

## 2 March

### 14.00 Opening and welcome

- Gerhard Dell / Christiane Egger, OÖ Energiesparverband

**Retrofit of gas-fuelled boilers and engines with biomass gasifiers** ■ Federica Carnicelli, European Institute for Energy Research, Germany

**Technical potential of biomass-derived synthetic natural gas production in Ireland** ■ Alessandro Singlitico / Jamie Goggins / Rory F.D. Monaghan, National University of Ireland Galway, Ireland

**Investigation of real life operation of biomass room heating appliances** ■ Marius Wöhler, University of Applied Forest Sciences Rottenburg, Germany

**Design operability and retrofit analysis framework for biomass energy systems** ■ Viknesh Andiappan Muragappan, Taylor's University Malaysia

**Assessing the sustainability of agricultural biomass flows for bioenergy** ■ Oludunsin Tunrayo Arodudu, Leibniz Centre for Agricultural Landscape Research, Germany

**Design and installation of a household anaerobic digester** ■ Omer Salim, Sudan University of Science & Technology, Sudan

**Repeatability in particulate and gaseous emissions from pellet stoves** ■ Rebecca Trojanowski, Brookhaven National Laboratory, USA

**Reproduction of Fe/MgO and Co/Fe catalysts for the production of light alkenes** ■ Jens Schneider, Deutsches Biomasseforschungszentrum, Germany

**Catalytic activity and selectivity of noble metals for HDO of eugenol** ■ Ana Bjelic, National Institute of Chemistry, Slovenia

**Microalgae as a feedstock for bioenergy and carotenoids: a biorefinery approach**

- Nadia Berrejeb / Issam Smaali, National Institute of Applied Sciences and Technology, Carthage University, Tunisia

**Two strategies for sustainable biomass valorisation with ionic liquids**

- Andre M. da Costa Lopes / Rafal Lukasik, National Laboratory for Energy and Geology, Portugal

**Using heavy metal contaminated wastewater in bioethanol production**

- Alica Bartošová / Lenka Blinová, Slovak University of Technology in Bratislava, Slovakia

**Dynamic modelling of the thermal behaviour of a combined biomass-solar system**

- Mohamed Krarouch, Cadi Ayad University, Morocco

**Nutrient removal in willow biomass harvested in Northern New York**

- Daniel De Souza, College of Environmental Sciences and Forestry, State University of New York, USA

**Wood pellet export from Russia to its six main importing countries** ■ Svetlana Proskurina, Lappeenranta University of Technology, Finland

**Comparative analysis of biomass promotion measures of the EU and the Russian Federation**

- Yana Palkina / Irina Malaykina / Anastasiya Kupriyanova, Saint-Petersburg State Economic University, Russia

**A systems perspective on the shift to modern wood heating** ■ Laura Edling, University of Vermont, USA

**Chairperson:** Walter Haslinger, bioenergy2020+, Austria



## Interactive 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: 1 - 2 March**
- **Days for the general public: 3 - 5 March**
- **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, 28 February, 8.30 - 19.00**
- **NZEBs:**  
**Friday, 3 March, 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 international experts.

**Further information:**  
[www.wsed.at/en/poster-presentation](http://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: 1. - 2. März**
- **Publikumstage: 3. - 5. März**
- **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 (nur in Englisch).



### Fachexkursionen

Fachexkursionen mit dem Bus zu interessanten Anlagen in der Umgebung

- **Pellets & Hackschnitzel:**  
**Dienstag, 28. Februar, 8.30 - 19.00**
- **Niedrigstenergie-Gebäude:**  
**Freitag, 3. März, 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-presentation](http://www.wsed.at/poster-presentation)



## 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](http://www.oec-en.at)), the network of 160 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](http://www.esv-en.at), [www.oec-en.at](http://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. It is the leading industry region in Austria. In the field of renewable energy and energy efficiency, Upper Austria also plays a leading role. 36 % of the primary energy consumption in the region are produced from renewable energy sources (mostly biomass, hydro and solar). Energy is also a key issue for Upper Austria as a business location.



## 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](http://www.oec.at)) verantwortlich, dem Netzwerk der 160 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](http://www.energiesparverband.at), [www.oec.at](http://www.oec.at)

### Oberösterreich

Oberösterreich, eines der neun österreichischen Bundesländer, ist eine Region mit 1,4 Millionen EinwohnerInnen und die führende Industrieregion Österreichs. 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 und Solar) gedeckt. Das Energiethema ist auch wichtig für den Wirtschaftsstandort.



# World Sustainable Energy Days 2017



**Date** 1 - 3 March 2017

**Venue** Stadthalle Wels, Pollheimerstrasse 1, 4600 Wels, Austria

**Conference languages**  
English, German  
(simultaneous interpretation)

### Conference fees

- 410 € for all WSED conferences and the Site Visits (28 February - 3 March)
  - 330 € for all WSED conferences (1 - 3 March)
  - 300 € for the European Energy Efficiency Conference (1 - 3 March)
  - 205 € each for the Pellet Conference and the NZEB Conference
  - 100 € each for the following conferences: Young Researchers, Efficiency Watch, Energy Services, E-Mobility, Research
  - For student fees see [www.wsed.at](http://www.wsed.at)
- All fees plus 10 % VAT

### Organisation and conference office

OÖ Energiesparverband  
Landstrasse 45, 4020 Linz, Austria  
Tel. +43/732/7720-14386  
[office@esv.or.at](mailto:office@esv.or.at),  
[www.esv-en.at](http://www.esv-en.at), [www.wsed.at](http://www.wsed.at)  
ZVR171568947, ATU 39283707

### Registration

Please register online at [www.wsed.at](http://www.wsed.at)

### How to reach Wels?

- by railway: direct connections from Vienna, Linz, Salzburg, Munich, 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** 1. - 3. März 2017

**Ort** Stadthalle Wels, Pollheimerstraße 1, 4600 Wels, Österreich

**Sprachen**  
Deutsch, Englisch  
(Simultanübersetzung)

### Konferenzbeiträge

- 410 € für alle WSED Konferenzen und die Fachexkursionen (28.2.-3.3.)
  - 330 € für alle WSED Konferenzen (1.-3.3.)
  - 300 € für die Europäische Energieeffizienz Konferenz (1.-3.3.)
  - 205 € je für die Pelletskonferenz und Niedrigstenergie-Gebäude
  - 100 € je für die folgenden Konferenzen: Young Researchers, Efficiency Watch, Energiedienstleistungen, E-Mobilität, Forschung
  - Tagungsbeiträge für Studierende unter: [www.wsed.at/dt](http://www.wsed.at/dt)
- Alle Beiträge zzgl. 10 % MWSt.

### Organisation und Tagungsbüro

OÖ Energiesparverband  
Landstraße 45, 4020 Linz, Österreich  
Tel. +43/732/7720-14386  
[office@esv.or.at](mailto:office@esv.or.at),  
[www.esv.or.at](http://www.esv.or.at), [www.wsed.at/dt](http://www.wsed.at/dt)  
ZVR171568947, ATU 39283707

### Anmeldung

Bitte verwenden Sie die Online-Anmeldung auf: [www.wsed.at/dt](http://www.wsed.at/dt)

### Wie kommen Sie nach Wels?

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



[WWW.WSED.AT](http://WWW.WSED.AT)



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