European Pellet Conference 2019

27 – 28 February 2019
Wels, Austria

The largest annual pellet event worldwide!

www.pellets19.eu
European Pellet Conference 2019

Programme overview

- **Plenary sessions and workshops**
  Presentations on policies, technologies, markets, innovation, financing and case studies

- **Pellet Innovation Panorama**
  Presentations on innovations in fuels, combustion, operational models, standards and business models

- **What’s new on the world’s pellet markets**
  Updates and outlook on European and global markets by representatives from all over the world

- **Technical site visits: Pellets and wood chips**
  A full day of technical site visits about fuels, equipment and exemplary installations. Hands-on experience and information directly from technology suppliers and plant operators

- **Young Biomass Researchers Conference**
  A conference presenting the work of young biomass researchers. The best contribution receives the Best Young Biomass Researcher Award.

- **Poster Presentation**
  An opportunity to display successful biomass projects and products as well as results of EU projects to international experts

- **“Pellet tradeshow” (Energiesparmesse)**
  Leading tradeshow on renewable energy and energy efficiency with 100,000 visitors and over 100 pellet-related exhibitors

Meet. Learn. See. Enjoy!

---

**Timetable**

<table>
<thead>
<tr>
<th>Event</th>
<th>Tuesday 26 February</th>
<th>Wednesday 27 February</th>
<th>Thursday 28 February</th>
<th>Friday 1 March</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical site visits: Pellets and wood chips</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Pellet Conference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Energy Efficiency Conference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Efficiency Policy Conference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Energy Efficiency Conference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation Workshops Energy &amp; Buildings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young Energy Efficiency Researchers Conference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young Biomass Researchers Conference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smart E-Mobility Conference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical site visits: Energy efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tradeshow</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poster Presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What is the European Pellet Conference?
With more than 450 participants each year, it is the largest annual pellet event worldwide. This meeting place for the global pellet community offers a great opportunity to get informed about current trends in the pellet and bioenergy world. In just 2.5 days, the event offers delegates:
- a series of sessions delivering the latest news about markets, technologies and policies
- a full-day of technical site visits on fuels, equipment and exemplary installations
- a major tradeshow on renewable energy with over 100 pellet-related exhibitors

Why pellets?
Energy efficiency and renewable energy are at the core of Europe’s commitment to a clean energy transition. Biomass is a cornerstone for the success of the clean energy transition in Europe and globally. Pellets are a clean, CO₂-neutral and convenient fuel with growing market shares worldwide.

Who attends the event?
- All business actors across the biomass value chain: forestry, fuels, logistics, equipment, energy companies, commercial and industrial pellet users, service providers, banks etc.
- the bioenergy research community
- representatives of public bodies (e.g. EU institutions, national, regional and local governments)
Over 450 experts each year from more than 50 countries!

When does it take place?
27 – 28 February 2019

Where does it happen?
Wels/Austria. The region of Upper Austria is an ideal location for this conference: more than 25 % of all automatic biomass boilers sold in the EU are manufactured by Upper Austrian companies and pellet heating systems have become a standard solution in the region.

How to join?
Mark your calendar, register today (www.wsed.at), book your hotel, finalise your travel details and come join us at the European Pellet Conference in Wels!

Value for your time!
In just 2.5 days, you can profit from a comprehensive package:
- up-to-date information on markets, policies, technologies, financing, business models, research and case studies
- hands-on experience through technical site visits
- a tradeshow with over 100 pellet-related exhibitors
- new business opportunities
- valuable networking possibilities
- Austrian hospitality!

What’s new in 2019?
- Leadership Panel
- Session: What’s next for pellets?
- Pellet Innovation Panorama
- Technical workshops on clean combustion
What’s next for pellets?

With the Clean Energy Package, Europe is entering a new era in the energy transition: the new regulatory framework is changing Europe’s energy markets. We show what this means for pellets and where we currently stand.

- Opening and welcome
  Gerhard Dell, OÖ Energiesparverband, Austria

- The “Clean Energy Package”: What’s new for bioenergy?
  Robert Kaukewitsch, European Commission, DG Energy

- Pellets in Europe - market update
  Gilles Gauthier, Bioenergy Europe / European Pellet Council

- Sustainable bioenergy around the globe
  Maria Michela Morese, United Nations (FAO) / Global Bioenergy Partnership

- Other renewables and energy efficiency - friends or competitors of pellets?
  Lukas Kranzl, Technische Universität Vienna, Austria
Leadership panel: Securing the role of pellets in the energy transition

Without biomass, the energy transition will not be possible! Decision-makers from along the pellet supply chain discuss how we can jointly strengthen the role of pellets in this global transformation process.

- Stefan Ortner
  ÖkoFEN, Austria
- Marco Palazzetti
  Gruppo Palazzetti, Italy
- Johan Granath
  Ekman & Co, Sweden
- Helmut Schellinger
  Schellinger KG, Germany
- Adam Sherman
  Biomass Energy Resource Center, USA
- Volker Lenz
  DBFZ (German Biomass Research Centre), Germany
- Gilles Gauthier
  Bioenergy Europe/European Pellet Council
- Christiane Egger
  OÖ Energiesparverband, Austria

Chairperson:
Gordon Murray, Wood Pellet Association of Canada

Lunch break

Pellet Innovation Panorama

The energy transition offers many opportunities for new solutions, products and services – also in the pellet sector. In this session, a variety of examples demonstrate the wide range of possibilities.

- Pellet innovations from Upper Austria applied worldwide
  Werner Emhofer, Fröling, Austria
  Gottfried Baumann-Leitner, Windhager, Austria
- A strategic approach to fibre supply
  Shawn Bells, Operations for Pacific BioEnergy, Canada
- Mobilising wood for bioenergy
  Richard Sikkema, Wageningen University & Research Centre, The Netherlands
- Pea starch as an additive in pellet production
  Magnus Stähli, Karlstad University, Sweden
- Combined production of second generation ethanol and lignin pellets
  Xavier Duret, Résolve Énergie, Canada
- Wood pellet breakage during pneumatic delivery processes
  Julian Jägers, Ruhr University Bochum, Germany
- The new safety and storage standard
  Hans Martin Behr, Deutsches Pelletinstitut, Germany
- Microscale CHP with a fluidised bed stirling engine
  Tanja Schneider, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
- Silometric - a sensor system for pellet silos
  Alexandre Llusera Paredes, MC Systems, Spain
- Mobile pellet heating systems
  Ivo Bucher, Pellet-Mobil, Switzerland
- A “pellet torch”
  Tobias Mücke, Mücke Ambiente, Germany
- Bioflex: combustion of challenging biomass fuels
  Ingwald Obernberger, BIOS Bioenergiesysteme, Austria
- Refawood: ash reduction in waste wood combustion
  Sarah Janhäll, RISE Research Institute of Sweden

19.00 Evening programme
28 February | 09.30

What’s new on European and global pellet markets

- Opening
  Gordon Murray, on behalf of the European Pellet Council

- Baltic countries: update from the North
  Didzis Palejs, Latvian Biomass Association / Bioenergy Europe

- Canada: “Vision Biomasse Québec”
  John W. Arsenault, Quebec Wood Export Bureau / Wood Pellet Association of Canada

- UK: insights into the future pellet market
  Neil Harrison, reheat/Wood Heat Association, UK

- Spain: increasing opportunities
  Pablo Rodero, AVEBIOM, Spain

- China: pellet production and consumption
  Dou Kejun, China National Renewable Energy Center

- Germany: consumer satisfaction from 20 years of pellet use
  Martin Bentele, DEPV, Germany

- Switzerland: new pellet projects
  Martina Caminada, proPellets.ch, Switzerland

- Austria: update on the pellet market
  Christian Rakos, proPellets Austria

- Italy: the world's largest residential pellet user
  Matteo Favero, AIEL, Italy

- Turkey: a market for pellets?
  Tanay Sidki Uyar, World Bioenergy Association, Turkey

- India: pellets from different raw materials
  Tanmay Kotasthane, Trimurti Womens College of Science, India

Chairperson:
Gordon Murray, Wood Pellet Association of Canada

12.30 End of the session

28 February | 09.30

Solutions for the combustion of challenging biomass fuels

- Introduction to the ERA-NET project “BIOFLEX”
  Ingwald Obernberger, BIOS Bioenergiesysteme, Austria

- Fuel design concepts to reduce ash related problems and emissions – experiences from single pellet combustion tests
  Christoffer Boman, Umeå University, Sweden

- Combustion tests with kaolin additivated fuels in residential boilers
  Robert Mack, Technology and Support Centre (TFZ), Germany

- Modeling fixed-bed pellet combustion of fuels of varying ash contents
  Henrik Ström, Chalmers University of Technology, Sweden

- Use of non-wood pellets in adapted small-scale boilers
  Thomas Brunner, BIOS Bioenergiesysteme, Austria

- Burner design for difficult pulverised biomass fuels
  Pawel Bocian, Institute of Power Engineering, Poland

- Guidelines for fuel design
  Christoffer Boman, Umeå University, Sweden

- Guidelines for advanced furnace/boiler design
  Thomas Brunner, BIOS Bioenergiesysteme, Austria

- Discussion, conclusions and outlook
  Ingwald Obernberger, BIOS Bioenergiesysteme, Austria

This session is organised as part of the ERA-NET Bioenergy project “BIOFLEX” in cooperation with BIOS: www.bioflex-eranet.eu

12.30 End of the session
Ash reduction in waste wood combustion

- **REFAWOOD project overview**  
  Susanne Paulrud, RISE Research Institute of Sweden

- **Elemental approaches to additives: mechanisms and dosage**  
  Nils Skoglund, Umeå University, Sweden

- **Impact of additives in small-scale combustion of pelletised low quality wood**  
  Thomas Zeng, Deutsches Biomasseforschungszentrum (DBFZ), Germany

- **Reducing downtime with additives in large-scale biomass combustion**  
  Peter Sommersacher, BIOENERGY 2020+, Austria

- **The effect of additives on boiler corrosion**  
  Martin de Jong, Dekra Solutions, The Netherlands

- **Forest residues and additives in a medium scale CHP-plant – legal framework**  
  Magdalena Sajdak/Wojciech Cichy, Wood Technology Institute, Poland

- **Waste wood combustion: environmental consequences of using low-cost additives**  
  Blanca Corona, Utrecht University, The Netherlands

- **Economic consequences of low cost additives**  
  Alwin Hoogendoorn, Avans University of Applied Sciences, The Netherlands

**Chairperson:**  
Sara Janhäll, RISE Research Institute of Sweden

This session is organised as part of the ERA-NET Bioenergy project “REFAWOOD”: www.refawood.com

**12.30 End of the session**
28 February | 14.00

Young Biomass Researchers Conference

- Opening and welcome
  Gerhard Dell / Christiane Egger, OÖ Energiesparverband

- Characterisation of wheat straw combustion
  Anna Strandberg, Umeå University, Sweden

- Utilising algae waste for biosynthetic petroleum in Indonesia
  Rifai Mardanie Bajuri / Melinda Dwi Lestari / Mochamad Fatchur, Indonesia Defense University

- The impact of lignin precipitation on its properties and use as an adhesive
  Anton Lisý / Petra Strižincová / Zuzana Burčová / František Kreps, Slovak University of Technology Bratislava

- One-pot fractionation of shrimp shells with deep eutectic solvents
  Bojana Bradić, National Institute of Chemistry, Slovenia

- Waste heat recovery from a micro gas turbine: thermodynamic analysis
  Adriana Santamaría Padilla, Universidad Autónoma Metropolitana Iztapalapa, Mexico

- Biomethanation of tannery sludge: optimisation and evaluation of kinetics
  Ashton Mpofu, Cape Peninsula University of Technology, South Africa

- Recovery of valuable by-products from alkaline pulping
  Hemanathan Kumar Kumar, University of Jyväskylä, Finland

- Correlation between particulate matter and O₂ in a wood pellet stove
  Luigi Polonini, Università degli Studi di Brescia, Italy

- Recovering biofuel resources from oilseed sewage sludge
  Wighens Ngoie, Cape Peninsula University of Technology, South Africa

- Biomass valorisation through waste to chemical conversion
  Alessia Borgogna, University of Rome La Sapienza, Italy

- Life cycle GHG and energy analyses of bio-coal production from various feedstocks
  Maryam Akbari, University of Alberta, Canada

- Power grid balancing by biomass CHP in the Ukraine
  Oleksii Epik / Vitalii Zubenko, Institute of Engineering Thermophysics of NASU / Scientific Engineering Centre Biomass, Ukraine

- Techno-economic assessment of an advanced biomass processing depot
  Pierre-Olivier Lemire, Université du Québec à Trois-Rivières, Canada

- Spruce needle extractives as protection against microbial attack
  Petra Strižincová / Anton Lisý / Zuzana Burčová / František Kreps, Slovak University of Technology Bratislava

- Processing groundnut biomass to high-value energy
  Sai Praneeth Thota, Sri Sathya Sai Institute for Higher Learning, India

- Comparison of instrumental methods for biomass fuel analysis
  Josef Farták, University of Chemistry and Technology Prague, Czech Republic

- Mathematical optimisation of an integrated biogas and wastewater treatment system for palm oil mill effluent
  Steve Z.Y. Foong, The University of Nottingham, Malaysia

- Biomass-biogas hybrid energy systems for remote area agricultural applications
  Sonali Goel, Siksha ’O’ Anusandhan, India

- Real-life emissions of domestic wood heating appliances
  Rita Sturmlechner, BIOENERGY 2020+, Austria

- Recovering biofuel resources from oilseed sewage sludge
  Wighens Ngoie, Cape Peninsula University of Technology, South Africa

- The charcoal and wood biomass dilemma in Uganda: What can be done differently?
  Dastan Bamwesigye, Mendel University Brno, Czech Republic

Chairperson:
Walter Haslinger, BIOENERGY 2020+, Austria

19.00 Evening programme
26 February | 08.30

Technical site visits: Pellets and wood chips

- A full day of technical site visits on fuels, equipment and exemplary installations in Upper Austria
- An opportunity to gain first-hand information and to discuss specific questions on-site with the technology providers and project operators
- Learn more about the entire value chain of the pellet and wood chip sector!
- Bus tour from 8.30 - 19.00 hrs
27 February – 3 March

Tradeshow

A leading European sustainable energy tradeshow

- 1,600 exhibiting companies
- 100,000 visitors, including 30,000 professional visitors
- 100 pellet-related exhibitors, with a focus on pellet stoves, boilers, fuels and related equipment
- Austrian pellet boiler manufacturers present their latest product innovations

Practical information

- Wednesday, 27 February to Sunday, 3 March, opening hours: 9.00 - 18.00 hrs
- WSED participants can enter the fairgrounds for free with their WSED name tag during the conference days.

Tradeshow highlights

- Stand of the OÖ Energiesparverband with comprehensive information for homeowners, businesses and public organisations
- Biomass boilers and stoves: Hall 20
- PV, solar thermal, heat pumps: Halls 19-20
**Upper Austria - a leader in the clean energy transition**

The region of Upper Austria, one of Austria’s nine regions, is a leader in the clean energy transition: 31% of the primary energy come from renewables, half of this is clean and sustainable biomass. 35% of all dwellings are heated with biomass. The region’s strategic approach to the energy transition supported the growth of a vibrant industry which successfully exports worldwide.

**The conference organiser**

**OÖ Energiesparverband**

The OÖ Energiesparverband (ESV) is the energy agency of Upper Austria. The agency, which was established by the regional government, drives the energy transition by promoting energy efficiency, renewable energy and innovative energy technologies. It provides comprehensive services to private households, businesses of all sizes and municipalities. It also supports energy technology companies in the context of the Cleantech-Cluster.

**The audience – the whole pellet sector!**

Each year, the European Pellet Conference attracts over 450 experts from over 50 countries including:

- all business actors across the biomass value chain: forestry, fuels, logistics, equipment, energy companies, commercial and industrial pellet users, service providers, banks etc.
- the bioenergy research community
- representatives of public bodies, e.g. EU institutions, national, regional and local governments

**Practical information**

**Conference fees**

All fees include entrance to the tradeshow and conference documentation.

- 310 Euro for the European Pellet Conference and the site visits (26 - 28 February)
- 215 Euro for the European Pellet Conference (27 - 28 February)
- 350 Euro for all WSED conferences (27 February - 1 March)
- 430 Euro for all WSED conferences and site visits (26 February - 1 March)
- for student fees see www.wsed.at

All fees plus 10% VAT

**Conference venue**

Stadthalle Wels, Pollheimerstrasse 1, 4600 Wels, Austria

**Conference languages**

Simultaneous translation in English and German
European Pellet Conference 2019

27 - 28 February 2019
Wels, Austria

Conference office
OO Energiesparverband
Landstrasse 45, 4020 Linz, Austria
Tel. +43/732/7720-14386
office@esv.or.at, www.esv-en.at, www.wsed.at

Registration
Online at www.wsed.at

How to reach Wels?
- by railway: direct connections from Vienna and Vienna airport, 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)