# European Pellet Conference 2019

27 - 28 February 2019 Wels, Austria

The largest annual pellet event worldwide!







# **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		Tuesday 26 February	Wednesday 27 February	Thursday 28 February	Friday 1 March
	Technical site visits: Pellets and wood chips				
	European Pellet Conference				
	European Energy Efficiency Conference				
	Energy Efficiency Policy Conference				
	Industrial Energy Efficiency Conference				
Ó	Innovation Workshops Energy & Buildings				
	Young Energy Efficiency Researchers Conference				
	Young Biomass Researchers Conference				
چ چ	Smart E-Mobility Conference				
	Technical site visits: Energy efficiency				
iii	Tradeshow				
2	Poster Presentation				

### 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, CO<sub>2</sub>-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

#### 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 vour hotel, finalise vour 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!



# European Pellet Conference 2019

27 - 28 February 2019

# 27 February | 09.00

#### What's next for pellets?

- 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



### 27 February | 11.00

# Leadership panel: Securing the role of pellets in the energy transition

- 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

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**Chairperson:**Gordon Murray, Wood Pellet Association of Canada

#### Lunch break



## 27 February | 14.30

#### **Pellet Innovation Panorama**

 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 Ståhl, Karlstad University, Sweden
- Combined production of second generation ethanol and lignin pellets

  Yavian Durat Péache Épareia Canada

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 (TEZ)

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



# 28 February | 09.30

# 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,
   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, Umea 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 Santamaria 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
- Evaluation of various types of biomass for electricity generation in high altitudes
   Ashma Subedi, Kathmandu University, Nepal
- 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



## 27 February - 3 March





#### A leading European sustainable energy tradeshow

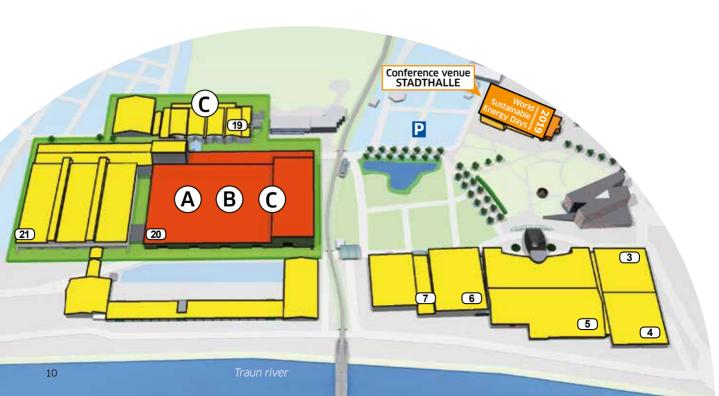
- 1,600 exhibiting companies
- 100,000 visitors, including 30,000 professional visitors
- 100 pellet-related exhibitors, with a focus on pellet stoves, boilers, fuels and related equipment
- Austrian pellet boiler manufacturers present their latest product innovations

#### **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
- (B) 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**

OÖ 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)











