



European Pellet Conference 2024

6 March 2024, Wels, Austria

PELLETS – SMART AND SUSTAINABLE
The largest annual pellet event worldwide!

www.wsed.at



European Pellet Conference 2024

Pellets – smart and sustainable!

Programme overview

**Strategy Session**


The new Renewable Energy Directive • Market overview • Acceptance of sustainable bioenergy • New research results • Best practice examples

**Pellet Innovation Session**


Showcasing innovations in products, services, financing and business models • Contribution of pellets to the circular economy

**World of Pellets**

Updates and outlook on European and global markets by international experts

**Young Biomass Researchers Conference**

Presenting the work of young researchers • Best Young Biomass Researcher Award










**Poster Presentation**

Displaying bioenergy projects, innovations and EU project results to an international expert audience

**Pellet tradeshow**

Leading tradeshow on renewable energy and energy efficiency • 78,000 visitors (2023) and over 100 pellet-related exhibitors

- NEW 2024
- New Renewable Directive
 - New narratives for sustainable bioenergy
 - New funding programmes

Timetable World Sustainable Energy Days	Tuesday 5 March	Wednesday 6 March	Thursday 7 March	Friday 8 March
 European Pellet Conference				
 European Energy Efficiency Conference				
 Energy Efficiency Policy Conference				
 Industrial Energy Efficiency Conference				
 Workshop "Cities and regions"				
 Young Energy Researchers Conference				
 Smart E-Mobility Conference				
 Tradeshow				
 Poster Presentation				

WHAT is the European Pellet Conference?

The largest annual pellet event worldwide!

With more than 450 participants each year, it is the meeting place for the global pellet community. Leading international speakers present the latest trends in markets, policies, technologies and innovations – helping you stay on top of developments in the pellet and bioenergy world.

The 2024 Pellet Conference – the largest annual pellet event worldwide – will focus on how the acceptance of pellets as an important element in the clean energy transition can be regained, and how the positive contribution of pellets to forest health and circular economy can be increased. The event is part of the World Sustainable Energy Days (WSED), a leading conference on the energy transition and climate neutrality.

WHY pellets?

The energy price crisis, climate crisis and threats to energy security urge us to act like never before. As a CO₂-neutral fuel, sustainable bioenergy is a key component in climate protection.

WHEN does it take place?

6 March 2024

WHERE does it happen?

In 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. Pellet heating systems have become a standard solution in the region.

HOW to join?

Mark your calendar and register today!
(www.wsed.at)

WHO attends the event?

The entire pellet community – over 450 experts from more than 50 countries each year!

- All business actors across the bioenergy 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)



With the
World Sustainable Energy Days,
Upper Austria – a leader in
the energy transition – is the
meeting place for sustainable energy.

Europe has set itself the ambitious target of becoming the first climate-neutral continent. We present and discuss solutions to practically implement the energy transition quickly. With energy efficiency and renewable energy, we will ensure competitiveness and decrease energy costs!

Markus Achleitner, Regional Minister for Economy and Energy, Upper Austria

European Pellet Conference 2024

6 March 2024

6 March | 09.00

Strategy Session: Pellets – smart and sustainable!

The last year has been challenging for the pellets industry: the sustainability discussions at European level and in some Member States, market fluctuations and supply chain issues were some of the topics. The session will provide updates on policies and markets and an outlook for the next year.

- **Opening and welcome**
Gerhard Dell, OÖ Energiesparverband, Austria
- **The new Renewable Energy Directive**
Biljana Kulišić, European Commission, DG Energy
- **Bioenergy market and policy update**
Irene di Padua, Bioenergy Europe
- **Best Young Biomass Researcher Award**
- **UN initiatives for bioenergy**
Tiziana Pirelli, Food and Agriculture Organization of the United Nations / Global Bioenergy Partnership



6 March | 11.30

How to create positive narratives and acceptance for sustainable bioenergy?

This session focuses on how trust and acceptance for sustainable bioenergy can be restored through positive narratives and how pellets can be positioned as an important element of the energy transition.

- **Narratives as a powerful driver for changes**
Tim Weitzel, University Bamberg, Germany
- **The missing why – narratives and counternarratives**
Christiane Egger, OÖ Energiesparverband, Austria
- **Wood energy and sustainability – a "WinWinWinWin" situation**
Hubert Röder, HSWT / Technical University Munich, Germany
- **About energy and exergy in bioenergy**
Bengt-Erik Löfgren, ÅFAB, Sweden
- **Communicating bioenergy**
Stefan Ortner, ÖkoFEN, Austria

13.00 Lunch and networking

6 March | 14.15

Pellet Innovation Session

In this session, we present new results of R&D projects as well as the latest developments in the pellets and bioenergy sector: technological innovations along the value chain from pellet production, supply and distribution to successful showcases for an accelerated energy transition.

- **International projects with multiple benefits**
 - Werner Granig, Windhager Zentralheizung, Austria
 - Stefan Kopp, Hargassner, Austria
 - Werner Emhofer, Fröling, Austria
- **How raw material properties affect pellet quality**
Michael Finell, Swedish University of Agricultural Sciences, Sweden
- **Shredding and formation of fines in pellet delivery vehicles**
Phil Spatz, Ruhr University Bochum, Germany
- **Pellets in commercial and industrial applications – project examples**
Aavo Isak, Pelltech, Estonia
- **Pellet vending machines**
Luca Cenci, Dab Distributori / Matteo Favero, AIEL, Italy
- **Carbon capture for bioenergy plants**
Ivan Derkink, Bright Renewables, Netherlands / Markus Schranzer, HoSt Bioenergy Solutions, Austria
- **Nova Scotia's Wood Heat Initiative**
Rany Ibrahim, Nova Scotia Department of Natural Resources and Renewables, Canada



6 March | 16.30

World of Pellets Session

Moving forward with pellets! Get up-to-date information on pellet markets around the globe from international experts.

- **Opening**
Gordon Murray, on behalf of the European Pellet Council
- **Spain**
Pablo Rodero Masdemont, AVEBIOM
- **Vietnam**
Kenneth Tran, Ayo Biomass
- **Austria**
Christian Rakos, proPellets Austria
- **Canada**
Gordon Murray, Wood Pellet Association of Canada
- **Turkey**
Özben Kutlu, Ege University
- **China**
Guangqing Liu, Beijing University of Chemical Technology

Chairperson:

Gordon Murray, Wood Pellet Association of Canada

18.00 Conference end

19.00 Evening programme

UPPER AUSTRIA A leader region in the energy transition

Upper Austria is a **leader in the clean energy transition**: Already 33 % of the primary energy is supplied by renewables, more than half of these renewables are clean and sustainable bioenergy. Through a smart combination of energy efficiency and renewable energy, greenhouse gas emissions of the entire buildings sector were reduced by 39 % in the last decade.

The region's strategic approach to the energy transition supported the growth of a **vibrant industry** which successfully exports worldwide.

The **conference organiser** ÖÖ 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, renewables and e-mobility. It provides comprehensive services to households, businesses of all sizes and municipalities. It also supports energy technology companies in the context of the Cleantech-Cluster.



THE REGION OF BIOENERGY INNOVATIONS

The region of Upper Austria, one of Austria's nine regions (population of 1.5 million), holds a leading position in bioenergy heating.

The region is home to leading bioenergy companies: More than 25 % of all modern small-scale bioenergy boilers installed in the EU are manufactured by Upper Austrian companies.

Bioenergy heating systems have become a standard solution in the region and over 32 % of all dwellings are heated by modern bioenergy systems. Stringent emission standards and cutting-edge technologies have contributed to rapid market development.

Over 100 million Euro per year are invested in pellet boilers and pellet fuels. Bioenergy has emerged as an important economic driver for the region and plays a key role in its ambitions in achieving the energy transition.

- 16 % of the primary energy comes from sustainable bioenergy
- over 100 million Euro per year invested in new pellet boilers and fuels
- 32 % of all dwellings heated with clean bioenergy
- over 6,000 jobs in the biomass heating industry
- 39 % reduction of greenhouse gas emissions in the buildings sector
- 2.8 billion Euro invested annually in sustainable energy



Young Biomass Researchers Conference

5 March 2024



5 March | 14.00

This conference presents the work and achievements of young biomass researchers from all over the world.

- **Opening and welcome**
Gerhard Dell / Christiane Egger, OÖ Energiesparverband
- **Evaluation of pellets produced from coffee and biomass residues**
Michalis-Alexandros Kougioumtzis, CERTH / Vasileios Filippou, Energy Community of Karditsa, Greece
- **Catalytic hydropyrolysis of lignocellulosic biomass from Quebec's forests**
Aravind Ganesan, University of Quebec in Trois-Rivières, Canada
- **Photocatalytic hydrogen evolution from biomass**
Münevver Tuna Genç, Selçuk University, Turkey
- **Unlocking lignin's potential as a sustainable biofuel from black liquor**
Matúš Majerčiak / Richard Nadányi, Slovak University of Technology, Slovakia
- **GIS-based biofuel potential from phytoremediation in the Aegean Region**
Benginur Baştabak / Elif Gödekmerdan, Ege University, Turkey
- **Microbial chain elongation for chemical and fuel precursors**
Fabíán Otálora / Andrés Suazo / Jimmy Martínez, Pontifical Catholic University of Valparaíso, Chile
- **Pre-treatment of waste cooking oils for alternative transport fuels**
Ioanna Kosma, Center for Research & Technology Hellas, Greece
- **Improving the coefficient of friction of a biolubricant derived from waste cooking oil**
Rafael Anelić / Mia Gotovuša / Ivan Pucko, University of Zagreb, Croatia
- **Energy productivity and net energy balance of biogas from tofu wastewater**
Selly Ayu Janetasari, University of Miskolc, Hungary
- **Energy from solid household waste in Tashkent: composition, social and thermal aspects**
Islom Karimov / Rakhimjon Kobilov / Alisher Davirov, TIAME, Uzbekistan

- **Hazelnut shell vs miscanthus giganteus: green Qdot efficiency comparison**

Fikret Müge Alptekin / Merve Uyan, Ege University, Turkey

- **Evaluation of groundnut shell biochar for the degradation of toluene**

Arpita Roy, Sharda University, India

- **Legislative perspective on the recovery of Ukraine's energy sector**

Anna Pastukh, Bioenergy Association of Ukraine

- **Decentralised biochar production - European technology survey**

Konstantin Moser, BEST, Austria

- **Thermochemical analysis of a novel form-stable PCM-biochar composite**

Dudul Das, University of Glasgow, UK

- **Comparative study of silicas from cornhusk for methane combustion**

Clement Owusu Prempeh, Deutsches Biomasse-forschungszentrum, Germany

- **CO₂ bioconversion into butyric acid and butanol in microbial electrosynthesis cells**

Meritxell Romans-Casas, University of Girona, Spain

- **Water hyacinth biomass as substrate in microbial fuel cells for electricity generation**

Kalpana Sharma / Ankit Kumar, Sharda University, India

- **Mathematical approach to rank biomass resource types for power generation**

Lala Rukh, University of Galway, Ireland

- **Excel-based tool for calculating CO₂ emissions from biogas**

Melanie Harrer / Alex Bergamo / Micha Gruber, Austrian Energy Agency

Chairperson:

Elisabeth Wopienka, BEST, Austria

19.00 Evening programme



Young Biomass Researchers Conference

5 March 2024

Poster Presentations

- **Biogas production from aquatic biomass sources with scale-down geometry**
Kübra Turgut / Tuğçe Özcan, Selçuk University, Turkey
- **Sustainability assessment of circular bioeconomy implementation in Indonesia**
Dwica Wulandari, Tyndall Center for Climate Change Research, UK
- **New value for biomass - monetizing low emissions exemplified by GHG quota**
Hendrik Etzold, Deutsches Biomasseforschungszentrum, Germany
- **Use of biomass in energy production for the steel industry**
Nathália Balzana Anacleto, Universidade Federal Fluminense, Brasil
- **Algae to energy, wastewater and GHG cleaning to increase value**
Bruna França, National Laboratory of Energy and Geology, Portugal
- **Opportunities, benefits & challenges of biofuels**
Vanessa Wurm, University of Business and Economics Vienna, Austria
- **Hydrothermal liquefaction of microalgae targeting biofuels intermediates**
Dimitrios Liakos, CERTH, Greece
- **Bamboo biomass capability for Pb and Cd removal from aqueous solutions**
Harsh Sable / Vaishali Kumar / Vandana Singh, Sharda University, India
- **A new sustainable aviation**
Ariel Toh, Marcharh Initiative Center for Sustainable Solutions, Singapore
- **Sustainable waste management leading to energy efficiency in Shivaganga**
Naveen Yalagalawadi Somashekaraiah/CatchUrWaste, Ramu Basavaraju / Shivaganga Farmers Producer Company, India



Practical information

Conference venue

Stadthalle Wels, Pollheimerstrasse 1, 4600 Wels, Austria

Conference fees

All fees include entrance to the tradeshow, lunches / dinners and conference documentation.
All fees plus 10 % VAT

- 390 Euro for all WSED conferences (5 - 8 March)
- 230 Euro for the European Pellet Conference (6 March)
- 60 Euro for the Young Energy Researchers Conference (5 March)
- for student fees see www.wsed.at

Conference languages

Simultaneous translation in English and German

The audience – the whole pellet sector!

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

- a wide range of business actors engaged in the energy transition: technology and equipment companies, energy companies, service providers, planners, developers, financing community etc.
- the sustainable energy research community
- representatives from public bodies (e.g. EU institutions, national, regional and local governments, energy agencies)

The pellet tradeshow - product innovation in real life!

Visit a major tradeshow on sustainable energy with a strong focus on pellet-related exhibitors ("Webuild-Energiesparmesse")! The tradeshow (78,000 visitors in 2023) is held in parallel to the conference. Austrian and international companies present their latest product innovations. Seize the opportunity to network in-person, on the tradeshow floor!

The conference organiser OÖ Energiesparverband

The OÖ Energiesparverband (ESV) is the energy agency of Upper Austria. It drives the energy transition by promoting energy efficiency, renewables and e-mobility.



European Pellet Conference 2024

Date

6 March 2024

Venue

Stadthalle Wels, Pollheimerstrasse 1
4600 Wels, Austria

Organiser and conference office

ÖÖ Energiesparverband
Tel. +43/732/7720-14386
office@esv.or.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, etc.
- by car: A1 and A25 motorways
- by air: airports in Linz (17 km from Wels), Vienna (222 km), Salzburg (110 km), Munich (247 km)



Funding by the region of Upper Austria

Federal Ministry
Republic of Austria
Climate Action, Environment,
Energy, Mobility,
Innovation and Technology

