

# World Sustainable Energy Days 2023

28 February - 3 March 2023  
Wels, Austria

**2023:**  
**ENERGY**  
**TRANSITION**  
**=**  
**ENERGY**  
**SECURITY!**

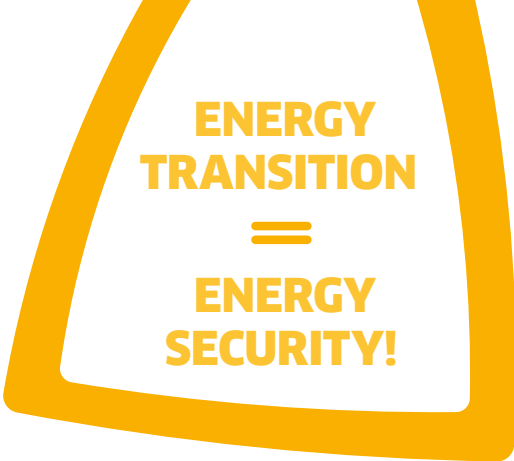
## Conferences:

- Energy Efficiency Policy Conference
- European Pellet Conference
- Young Energy Researchers Conference
- Industrial Energy Efficiency Conference
- Innovation Workshops
- Smart E-Mobility Conference


[www.wsed.at](http://www.wsed.at)












# World Sustainable Energy Days 2023



## Programme overview

- **European Pellet Conference**  
The world's largest annual conference on pellets with a focus on technologies, markets, policies and financing
- **Smart E-Mobility Conference**  
Technology, policy and market updates • Innovations in charging solutions and batteries • Solutions from start-ups
- **European Energy Policy Conference**  
REPowerEU • New EU Directives • EE Markets • Energy Efficiency Watch
- **Young Energy Researchers Conference**  
Presenting the work of young energy researchers • Best Young Energy Researcher Awards
- **Industrial Energy Efficiency Conference**  
Accelerating the industrial energy transition • New regulatory framework • Innovation • Inspiring case studies
- **Poster Presentation**  
Displaying energy projects, products and EU project results to international experts
- **Innovation Workshops**  
New research results on buildings, renewable heating, financing and energy technologie
- **Tradeshow**  
Leading tradeshow (Energiesparmesse – Webuild) on energy and buildings • Austrian & international companies present product innovations • 2022: 70,000 visitors

- REPowerEU
  - Energy transition = Energy security
- NEW 2023**
- New EU directives and funding
  - Networking platform

Timetable World Sustainable Energy Days	Tuesday 28 February	Wednesday 1 March	Thursday 2 March	Friday 3 March
 European Pellet Conference				
 European Energy Efficiency Conference				
 Energy Efficiency Policy Conference				
 Industrial Energy Efficiency Conference				
 Innovation Workshops				
 Young Energy Researchers Conference				
 Smart E-Mobility Conference				
 Tradeshow				
 Poster Presentation				

## **WHAT** are the World Sustainable Energy Days (WSED)?

### **Energy Transition = Energy Security!**

The price crisis, multiplying signs of climate change, and threats to energy security urge us to act like never before. REPowerEU reflects this urgency and provides new momentum for the energy transition.

In 4 days, the leading conference on the energy transition and climate neutrality offers delegates 6 dedicated conferences, including the European Energy Efficiency Policy Conference, the European Pellet Conference, the Industrial Energy Efficiency Conference and the Smart E-Mobility Conference.

## **WHO** attends the event?

**Over 650 experts from more than 60 countries each year!**

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

## **WHEN** does it take place?

28 February – 3 March 2023

## **HOW** to join?

Mark your calendar and register today!  
([www.wsed.at](http://www.wsed.at))

## **WHERE** does it happen?

In Wels/Austria. The region of Upper Austria is an ideal location for this conference: Through significant increases in energy efficiency and renewable energy, GHG emissions from buildings were reduced by 39 % in 10 years. 60 % of all space heating and 33 % of the primary energy in Upper Austria already come from renewables.



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 Green Deal. With highly-efficient and renewable energy systems, we will achieve economic growth, create new jobs and make the energy transition happen!

Markus Achleitner, Regional Minister  
for Economy and Energy  
Upper Austria



# European Pellet Conference 2023

1 March 2023



1 March | 09.00

## Strategy Session: Pellets – clean and climate neutral

How to make the clean energy transition a reality as quickly as possible is presently at the top of the agenda. As a CO<sub>2</sub>-neutral fuel, pellets have a key role to play in decarbonising and securing our energy supply. This session presents the policy and market context for the transformation and provides insights on how to deal with the current challenges.

- **Opening and welcome**  
Gerhard Dell, OÖ Energiesparverband, Austria
- **Update on EU bioenergy policies**  
European Commission, DG Energy
- **The 2022 Pellet Market Report**  
Irene di Padua, Bioenergy Europe
- **Best Young Biomass Researcher Award**
- **Mastering the renewable heat transition**  
Christiane Egger, OÖ Energiesparverband, Austria
- **Facts, not fiction, on bioenergy from wood**  
Dina Bacovsky, IEA Bioenergy

1 March | 11.30

## Panel: The future of wood pellets

Bioenergy from wood is currently under scrutiny. Issues of the debate include forest resilience, risks of deforestation, competing usages of wood residues, price issues, and security of supply. This session tackles these burning topics head on to demystify facts from fiction. Hear fact-based information from leading international experts.

- Gordon Murray, Wood Pellet Association of Canada
- Irene di Padua, Bioenergy Europe
- Hubert Röder, HSWT - University of Applied Sciences, Germany
- Stefan Ortner, ÖkoFEN, Austria

### Chairperson:

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

13.00 Lunch and networking

**1 March | 14.15**

## **Pellet Innovation Session**

Learn about cutting-edge developments and R&D results in the pellets and bioenergy sector: technology innovations, improvements in fuels and system designs, and successful projects that fuel the clean energy transition.

- **Booming markets – growing companies**
  - Werner Emhofer, Fröling, Austria
  - Gottfried Baumann-Leitner, Windhager, Austria
  - Stefan Kopp, Hargassner, Austria
- **Improving the quality of biomass fuels**  
Agnieszka Drobniak, University of Silesia, Poland / Indiana University, USA
- **Reducing CO<sub>2</sub> emissions from lubricants**  
Alain Skrobala, Bathen AG, Switzerland
- **AgroBioHeat: examples from Spain**  
Pablo Rodero Masdemont, AVEBIOM, Spain
- **Successful projects from the US Northeast**  
Mark Froling, Froling Energy, USA
- **Pellet storage – trends and developments**  
Raimon Dörr, Schellinger, Germany
- **Increasing fire safety in pellet plants**  
Anders Bergström, Firefly, Sweden

## **Start-up Session**

Innovative start-ups present what they have in store for the pellet market!

- **N2AIR for stove efficiency**  
Jeremy Hugues Dit Ciles, N2AIR, France
- **MicroCHP with biochar production**  
Fabio Pellegrini, KiRa Technology, Italy
- **Ultrasound measurement – "listening" to combustion**  
Markus Loinig, Senzoro, Austria

**1 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
- **A global look at bioenergy**  
Bharadwaj Kummamuru, World Bioenergy Association
- **Germany**  
Martin Bentele, Deutscher Energieholz- und Pellet-Verband (DEPV)
- **Italy**  
Matteo Favero, AIEL
- **Poland**  
Adam Sarnaszek, BIOCONTROL
- **Malaysia**  
David Wong, Rainbow Pellet

### **Chairperson:**

Gordon Murray, Wood Pellet Association of Canada

**18.00 Conference end**

**19.00 Evening programme**



# Energy Efficiency Policy Conference

2 March 2023



2 March | 09.00

## Mastering the energy crisis, mastering the energy transition!

With the energy crisis, the energy world has taken a profound shift. Multiple new policies are emerging to fast-track the energy transition. This session presents how you can navigate these policies and support a secure, affordable and sustainable energy future.

- **Opening and welcome**  
Markus Achleitner, Regional Minister for Economy and Energy, Upper Austria
- **Accelerating the energy transition globally**  
Gauri Singh, International Renewable Energy Agency (IRENA)
- **The IEA Energy Efficiency Market Report 2022**  
Emma Mooney, International Energy Agency
- **Energy Efficiency to repower the EU**  
Margot Pinault, European Commission, DG Energy
- **Best Young Energy Efficiency Researcher Award**
- **Energy efficiency policies in Austria**  
Heidelinde Adensam, Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology, Austria
- **Electricity price dynamics impacting the energy transition**  
Jan Kostevc, European Union Agency for the Cooperation of Energy Regulators (ACER)
- **From H2020 to LIFE: accelerating the energy transition**  
Anette Jahn, European Commission, CINEA
- **The Energy Efficiency Watch Survey live**  
Christiane Egger, OÖ Energiesparverband, Austria

**2 March | 11.30**

**Power to the people: energy savings  
and Energy Communities**

The current energy crisis poses major challenges for the population, SMEs and municipalities. This session shows how policies support and empower energy consumers by enabling energy efficiency and facilitating the energy sharing economy.

- **Supporting 20,000 energy consumers per year**  
Gerhard Dell, OÖ Energiesparverband/Energy Commissioner Upper Austria
- **80 million citizens: Saving energy together!**  
Steffen Joest, Dena, Germany
- **Energy Communities in Portugal and Spain**  
Lurian Klein, Cleanwatts, Portugal

**Chairperson:** Jan Geiss, Eufores

**13.00 Lunch break**

This conference is organised in the context of the Life project "Energy Efficiency Watch 5": [www.energy-efficiency-watch.org](http://www.energy-efficiency-watch.org)



# Industrial Energy Efficiency Conference

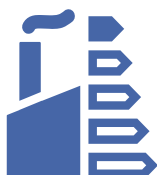
2 March 2023

2 March | 14.00

## Accelerating the industrial transition

The energy crisis is putting industrial production under pressure. Transforming industry quickly is imperative for economic survival. We present policies that support the transition to net-zero industries.

- **EU policies for a climate neutral industry**  
Eric Lecomte, European Commission, DG Energy
- **Programmes for the industrial energy transition**  
Theodor Zillner, Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology, Austria



**2 March | 15.00**

## **Innovation platform for the industrial transition**

The industrial energy transition needs innovation! This session presents pathways and technology options to fast-track the transformation.

- **Zero emissions by 2050 in emission-intensive industries**  
Stefan Lechtenböhmer, Wuppertal Institute, Germany
- **Energy storage supporting the industrial transition**  
Andreas Hauer, Bavarian Center for Applied Energy Research, Germany
- **No-regret hydrogen for industry**  
Paul Münnich, Agora Industry, Germany
- **Industrial DC grids**  
Timm Kuhlmann, Fraunhofer IPA, Germany

**2 March | 16.30**

## **Inspiring examples from and for the industry**

Industry insiders share success stories and show how companies are taking action and leading the way in the industrial energy transition.

- **New Energy for Industry: successful solutions from NEFI**  
Thomas Kienberger, Montanuniversität Leoben, Austria
- **Climate neutrality at the world's largest producer of bricks**  
Johannes Rath, Wienerberger, Austria
- **Energy efficiency first at BMW Steyr**  
Mario Nussbaumer, BMW Steyr, Austria
- **Super-ESCO: unlocking energy efficiency potentials**  
Faisal Ali Al Rashid, Supreme Council of Energy, United Arab Emirates
- **Energy innovations for industry from start-ups**
  - Matthias Huber, OmegaLambdaTec, Germany
  - Angelina Bintoudi, Optimems, Greece

**18.00 Conference end**

**19.00 Evening programme**



# Smart E-Mobility Conference

3 March 2023

3 March | 09.00

## E-Mobility: moving forward!

E-mobility is gaining ground worldwide as it has an important role to play in achieving climate targets. Leading experts offer an overview of policies supporting its expansion and up-to-date information on e-mobility markets around the globe.



- **Opening and welcome**  
Gerhard Dell, ÖÖ Energiesparverband, Austria
- **European policies supporting e-mobility**  
Kai Tullius, European Commission, DG MOVE
- **Global EV Outlook 2022 - Analysis**  
Elizabeth Connolly, International Energy Agency
- **Analysis and forecast of EU e-car market**  
Marc Odinius, Dataforce, Germany



**3 March | 10.30**

## Game changers for e-mobility

Propelling e-mobility to the next level! Innovative solutions for e-mobility are in high demand. This session highlights cutting-edge developments and practical examples in the fields of batteries, flexible grids, PV for EVs, AI and more. Start-ups present their products and solutions for the future of e-mobility.

- **Recent breakthroughs in battery development**  
Maximilian Fichtner, Helmholtz Institute, Germany
- **Super EV ranges up to 2,000 km**  
Peter Visser SALD, Germany
- **Flexpower Amsterdam: getting ready for the EV ramp-up**  
Marisca Zweistra, Elaad, The Netherlands
- **Vehicle-integrated photovoltaics**  
Harry Wirth, Fraunhofer ISE, Germany
- **Trends in public charging: the perspective of an OEM charging service**  
Paul Köhler, Volkswagen Group Charging, Germany
- **Artificial intelligence for EV charging**  
Pedro Moura, University of Coimbra, Portugal
- **Harmonising EVs and renewables with AI**  
David Knight, Terbine, USA
- **Full speed towards the e-mobility future**  
Ronald Lausch, Smatrics, Austria
- **Photovoltaic carports**  
Paul Ablinger, WKA Ökostrom, Austria
- **E-mobility for employees**  
Bernhard Obermayr, Weber Hydraulik, Austria
- **E-Mobility innovations from Start-ups**
  - Simon Seres, Nymea, Austria
  - Andraž Kladnik, Kovina, Slovenia
  - Jesús Huete Cubillo, Bettergy, Spain

**13.00 Conference end**



# Innovation Workshops

3 March 2023

Three workshops present latest results from EU and national funded projects in the fields of buildings, renewable heating, financing and energy technologies.

**3 March | 12.00 – 14.30**

## Supporting EPC and energy efficiency service (EES) providers in decarbonising buildings

Roundtable organised in the context of the H2020 projects REFINE and FinEERGO-Dom



- **Welcome and opening**
  - Paweł Mirowski, NFOSiGW, Poland
  - Klemens Leutgöb, e7, Austria
  - Karolina Loth-Babut, KAPE, Poland
- **The EPC+ priority programme for deep renovation**  
Marta Babicz, NFOSiGW, Poland
- **Multi-source financing to boost deep renovation using EES**  
Jana Szomolányiová and Jaroslav Maroušek, SEVEN, Czech Republic
- **Attitudes, expectations and possibilities of service providers**  
Marek Tobiacelli, KAPE, Poland
- **Lessons learnt for boosting EPC markets**  
Nicholas Stancioff, KAPE, Poland
- **Up-scaling private investments in residential buildings**  
Representative of financial sector
- **Panel discussion: investors' perspective on increasing capital in deep renovation**  
Chairperson: Klemens Leutgöb, e7, Austria



**3 March | 9.00 – 11.30**

**Tackling the energy crisis through data sharing**

Workshop organised in the context of the H2020 project BuiltHub

Boosting the energy efficiency of buildings while energy prices spike is an enormous challenge. Making relevant data available to decision-makers is key for shaping effective energy-related policies and measures. This practical session discusses how to help data sharing communities accelerate the transformation of the European building stock.

**3 March | 14.30 – 16.30**

**Heat Highway: Using decarbonised heat sources via supra-regional heat networks**

Workshop organised in the context of the NEFI project Heat Highway, online only

The use of industrial waste heat is essential for the decarbonisation of heat supply. Interregional heat transmission networks connect urban consumption centres and waste-heat-intensive industrial sites and, in doing so, traverse areas with further heat sources and sinks. The workshop is dedicated to the exchange of experiences with interregional heating networks in Europe.



# Young Energy Efficiency Researchers Conference

28 February 2023



28 February | 9.00

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

- **Opening and welcome**  
Gerhard Dell / Christiane Egger, OÖ Energiesparverband
- **Compressor waste heat utilisation for high-temperature heat pumps**  
Leon Brendel, Eastern Switzerland University of Applied Sciences, Switzerland
- **"Design-build" business model for sustainable industrial facilities**  
Hanna Ivashchyshyn / Pawel Kociolek, M&J LLC, Poland
- **Energy efficiency in the Kenyan manufacturing sector**  
Kenneth Kigundu, Chuka University, Kenya
- **Self-tuning control of energy storage systems in industrial DC grids**  
Raoul Laribi, University of Stuttgart, Germany
- **Performance modelling for non-residential buildings in the UK**  
Jingxuan Yang, University College London, UK
- **Life cycle cost analysis of retrofit scenarios of a residential building**  
Davide Brandolini / Miren Juaristi, EURAC research, Italy



- **Mycelium as building material: status-quo and future perspectives**  
Seyedsina Motamedi, Ecole de technologie supérieure, Canada
  - **Bio-based phase change materials for thermal energy storage in buildings**  
Ecem Sen / Muammer Bali, Ege University, Turkey
  - **Energy efficiency ratio analysis of cooling systems in dry and humid climates**  
María Jesus Romero-Lara, University of Cordoba, Spain
  - **Performance of passive cooling based on natural ventilation**  
Essam Elnagar, University of Liege, Belgium
  - **Evaluating performance improvements of cooled PV panels**  
Misagh Irandoostshahrestani, Ecole de technologie supérieure, Canada
  - **PV-module recycling solutions for increased sustainability**  
Asli Birtürk / Sadik Can Karagöz / Betül Aksoy, Ege University, Turkey
  - **Affordable masonry solar dryer**  
Abhiram Rachamadugu, Mallya Aditi International School, India
  - **The importance of energy storage for solar thermal power plant efficiency**  
Adriana Santamaria Padilla, Universidad Autonoma Metropolitana Iztapalapa, Mexico
  - **Human-centred user interface for energy communities**  
Nico Wollner, Fachhochschule Technikum Wien, Austria
  - **Transition to electric fleets: a Tunisian public utility case study**  
Dimeth Nouicer / Fedy Abdellaoui, Carthage University, Tunisia
  - **Social LCA of fuel cell electric vehicles**  
Sally K. Springer, Forschungszentrum Jülich, Germany
  - **Comparative analysis of green hydrogen potentials in Brazil and Spain**  
Rosane Fukuoka, Nebrija University, Brazil
  - **Sensitivity analysis on green hydrogen as energy storage in the UAE**  
Rahul Rajeevkumar Urs, Khalifa University, UAE
  - **Combating the deterioration of the urban microclimate**  
Balázs Fürtön / Balázs Nagy, Budapest University of Technology and Economics, Hungary
- Chairperson:** Gerald Steinmaurer, University of Applied Sciences Upper Austria

**13.00 Lunch break**



# Young Biomass Researchers Conference

28 February 2023

28 February | 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,  
ÖÖ Energiesparverband
- **Influence of fuel type on the performance of residential wood-chip boilers**  
Rebecca Trojanowski, Brookhaven National Laboratory, USA
- **A GIS-multi criteria decision analysis for biogas site selection in Scotland**  
Rosanna Curtis, University of St Andrews / reheat ltd, UK
- **Evaluation of biochar as anode material in microbial fuel cells**  
Ankit Kumar / Shaily Chauhan, Sharda University, India
- **CO<sub>2</sub> bio-electro reduction for promoting ethanol production**  
Meritxell Romans-Casas, University of Girona, Spain
- **Electrochemical transformation of pyrolysis oil via Kolbe/Hofer Moest reaction**  
Talal Ashraf, University of Twente, NL
- **Novel low-cost biochar as cathode for microbial fuel cells**  
Kalpana Sharma / Ankit Kumar, Sharda University, India
- **CO<sub>2</sub> utilisation via dry methane reforming to syngas**  
Amirah Azzouz / Raiyan AlFarsi, Muscat University/Aston University, Oman
- **Economic and environmental aspects of biomass-based hydrogen production**  
Frank Radosits, TU Wien, Austria
- **Diesel biolubricants - synthesis and characterisation**  
Ivan Pucko / Mia Gotovusa / Fabio Faraguna, University of Zagreb, Croatia
- **Lignin precipitation as a tool for property prediction and adjustment**  
Dominika Rudinská / Zuzana Dyrčíková / Marek Kalanin, Slovak University of Technology in Bratislava, Slovakia



- **Low or zero carbon renewable fuels for achieving 1.5°C net zero emissions by 2050**  
Ogemdi Chinwendu Anika, De Montfort University, UK
- **Biohydrogen production from green market waste**  
Elif Gödekmerdan / Meltem Kūs, GKE Energy R&D Center, Turkey
- **Global techno-economics analysis for offshore green ammonia production**  
Nicholas Salmon, Oxford University, UK
- **Scale-up and LCA of nanocellulose production from waste biomass**  
Jade Müller-Carneiro, University Coimbra, Portugal
- **Techno-economic and social analysis for valorisation of tropical forest fruits**  
Maria Camila García Vallejo / Jhonny Alejandro Poveda Giraldo, Universidad Nacional de Colombia
- **Bioenergy potential of crop residues and municipal solid waste in Cameroon**  
Robinson Tanyi / Romain Akpahou, Kwame Nkrumah University of Science and Technology, Ghana
- **Pre-feasibility and valorisation of annatto and acai in Columbia**  
Jhonny Alejandro Poveda Giraldo, Universidad Nacional de Colombia

**Chairperson:**

Lukas Kranzl, Technical University Vienna, Austria

**19.00 Evening programme**



# Upper Austria – a leader in the clean energy transition

Upper Austria, one of Austria's nine regions (population 1.5 million), is a leader in the clean energy transition. This makes it an ideal location for this conference. Through significant increases in energy efficiency and renewable energy, greenhouse gas emissions from buildings were reduced by 39 % in 10 years.

60 % of all space heating and 33 % of the primary energy in Upper Austria already come from renewables.

- 33 % of the primary energy is supplied by renewables
- 39 % reduction of greenhouse gas emissions in the buildings sector in the last decade
- 2.8 billion Euro invested annually in renewable energies and energy efficiency

# The audience – the whole energy transition sector!

Each year, the European Energy Efficiency Conference attracts over 650 experts from more than 60 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 energy efficiency research community
- representatives from public bodies (e.g. EU institutions, national, regional and local governments, energy agencies)

[www.energyleaders.eu](http://www.energyleaders.eu)



## The tradeshow – energy sustainable product innovations in real life!

Visit a major tradeshow on renewable energy and energy efficiency ("Webuild-Energiesparmesse")! The tradeshow (70,000 visitors in 2022) 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. 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.

## 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

- 370 Euro for all WSED events (28 February – 3 March)
- 330 Euro for the European Energy Efficiency Conference (2 - 3 March)
- 220 Euro for the European Pellet Conference, 1 March
- 110 Euro for the conferences: Industry (2 March); E-Mobility (3 March)
- 55 Euro each for the conferences: Policy (2 March); Innovation Workshops (3 March), Young Energy Researchers Conference (28 Februar)
- for student fees see [www.wsed.at](http://www.wsed.at)

### Conference languages

Simultaneous translation in English and German



# World Sustainable Energy Days 2023



**650**  
participants

**80**  
speakers

**60**  
countries

## Date

28 February – 3 March 2023

## Venue

Stadthalle Wels, Pollheimerstrasse 1  
4600 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](http://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)



   #WSED2023

**WWW.WSED.AT**



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

