

European Energy Efficiency Conference 2019

28 February – 1 March 2019
Wels, Austria

Conferences:

- Energy Efficiency Policy Conference
- Industrial Energy Efficiency Conference
- Innovation Workshops Energy and Buildings
- Smart E-Mobility Conference
- Young Energy Efficiency Researchers Conference

www.wsed.at



European Energy Efficiency Conference 2019

Programme overview



European Energy Policy Conference

The Clean Energy Package is changing Europe's energy markets. The conference presents how the "energy efficiency first" concept is being implemented and what it brings.



Industrial Energy Efficiency Conference

The conference features technologies, financing and best practice examples for the industrial energy transition in energy-intensive and non-energy intensive industries.



Innovation Workshops Energy and Buildings

The 6 workshops present new research results on energy-efficient and sustainable buildings



Smart E-Mobility Conference

E-mobility is on the rise worldwide. The conference gives an update on technological developments and on new economic possibilities.



Young Energy Efficiency Researchers Conference

A conference presenting the work of young energy researchers. Best Young Energy Efficiency Researcher Award



Technical site visits: Energy efficiency

An afternoon trip to energy efficiency projects in the surrounding area



Poster Presentation

An opportunity to display successful energy projects and products as well as results of EU projects to international experts



Tradeshow (Energiesparmesse)

Leading tradeshow on renewable energy and energy efficiency with 100,000 visitors

Timetable World Sustainable Energy Days

	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				
 Innovation Workshops Energy and Buildings				
 Young Energy Efficiency Researchers Conference				
 Young Biomass Researchers Conference				
 Smart E-Mobility Conference				
 Technical site visits: Energy efficiency				
 Tradeshow				
 Poster Presentation				

What is the European Energy Efficiency Conference?

The Clean Energy Package is changing Europe's energy markets. "Energy efficiency first" is at the core of Europe's commitment to a clean energy transition. This requires strong policies, competitive businesses, technology innovation and investments. The European Energy Efficiency Conference addresses policies, innovation and business in specialised conferences and interactive events. It connects people from business, the public sector and research and empowers them to embrace the change. In 2 days, the event offers delegates:

- 5 dedicated conferences, including the Energy Efficiency Policy Conference, Industrial Energy Efficiency Conference and Smart E-Mobility Conference
- technical visits to innovative energy efficiency projects
- a major tradeshow on building efficiency and renewable energy with more than 100,000 visitors and 1,600 exhibiting companies

Who attends the event?

- 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 energy efficiency research community
- representatives from public bodies (e.g. EU institutions, national, regional and local governments, energy agencies)

Over 400 experts each year from more than 50 countries!

When does it take place?

28 February – 1 March 2019

Where does it happen?

Wels/Austria. The region of Upper Austria is an ideal location for this conference: Through significant increases in energy efficiency and renewable energy, greenhouse gas emissions from buildings have been reduced by 43 % in 10 years. Over 60 % of all space heating and 31 % of the primary energy in Upper Austria already come from renewables.

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 Energy Efficiency Conference in Wels!

Value for your time!

In just 2 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 1,600 exhibiting companies
- new business opportunities
- valuable networking possibilities
- Austrian hospitality!

Clean. Competitive. Connected.

Highlights in 2019

- Update Clean Energy Package
- Industrial Energy Efficiency
 - Innovations in building and energy
- Smart E-Mobility



Energy Efficiency Policy Conference

28 February 2019

28 February | 09.00

What's next for energy efficiency?

With the Clean Energy Package, Europe is entering a new era in energy efficiency. The new regulatory framework is changing Europe's energy markets. We present up-to-date information on how the "energy efficiency first" concept is being implemented and what it brings.

- **Welcome and opening**
Markus Achleitner, Regional Minister for Economy and Energy, Upper Austria
- **The Clean Energy Package: What's in for energy efficiency?**
Karlis Goldstein, European Commission, DG Energy
- **The EU energy consumption - recent trends and drivers**
Samuel Thomas, Energy and Climate Economics Consultant, France
- **The new electricity market design and the energy transition**
Wolfgang Urbantschitsch, e-control, Austria
- **Energy efficiency - India vs Europe**
Nanda Kumar Janardhanan, Jawaharlal Nehru University, India
- **Quantifying multiple benefits of energy efficiency**
Dora Fazekas, Cambridge Econometrics, Hungary



28 February | 11.00

Efficiency Expert Forum: Investing in the energy transition

The energy transition is key for climate protection and a thriving economy. How does this connection work in practice? Find out in this session.

- **The business case of energy efficiency**
Anette Jahn, European Commission, EASME
- **The energy transition - the largest growth market of the 21st century**
Theodor Zillner, Federal Ministry for Transport, Innovation & Technology, Austria
- **Innovation and investment: the energy transition in Upper Austria**
Gerhard Dell, OÖ Energiesparverband, Austria
- **Entrepreneurship and education - cornerstones of the energy transition**
Dirk Bessau, KIC InnoEnergy

28 February | 12.00

Energy Efficiency Lab: Tomorrow's solutions

The energy transition offers many opportunities for new products and services. In this session, we present a variety of examples of the direction this can take.

- **Higher energy efficiency and lower business risks**
Ander Romero Amorrrortu, Tecnalia, Spain
- **Energy efficiency for urban regeneration**
Roberto Fedrizzi, EURAC, Italy
- **EU projects supporting EPBD implementation**
Johann Zirngibl, CSTB, France
- **Energy efficient buildings with reused materials**
Barbora Blaškovičová, FENIX TNT, Czech Republic
- **Thermal energy storage: save today, use tomorrow!**
Gabriela Urbanová, FENIX TNT, Czech Republic
- **Combining building efficiency and heat pumps**
Wim Boydens, Boydens Engineering, Belgium



Industrial Energy Efficiency Conference

28 February 2019

28 February | 14.00

Innovation for the energy transition in industry

The energy transition in industry is here! We show how it can succeed, what technologies and innovations are needed and which policies they support.

- **Industrial transformation 2050**
Simon Wolf, European Climate Foundation
- **Leading the industrial energy transition**
Christiane Egger, OÖ Energiesparverband, Austria
- **Innovation for energy-intensive industries**
Mikael Larsson, Swerim, Sweden
- **Industrial energy efficiency - what is economic today**
Peter Radgen, University of Stuttgart, Germany
- **Supporting EU policy making: technology pathways for decarbonisation**
Alessia De Vita, E3Modelling, Greece
- **The Industry Energy Efficiency Barometer**
Stefan Büttner, Fraunhofer IPA / University of Stuttgart, Germany
- **Decision making for energy efficiency in industries**
Werner König, Reutlingen University, Germany



Financing and implementing energy efficiency in industry

We show with real-life examples how investments in the industrial energy transition are possible and economically viable.

- **Industrial energy transition - potentials and costs**
Matthias Schimmel, Ecofys
- **Innovative financing examples and business models**
Dario Di Santo, Fire, Italy
- **International cooperation for industrial energy efficiency**
Oleg Dzioubinski, United Nations Economic Commission for Europe (UNECE)
- **Increasing productivity and profits in manufacturing companies with energy efficiency**
Francisco Puente, ESCAN, Spain

Voices for industrial energy efficiency

Dedicated to energy efficiency and renewable energy in industry

- **Decarbonisation of the steel industry: visions and challenges**
Johann Prammer, voestalpine AG, Austria
- **Achieving energy efficiency in the cement industry**
Erich Frommwald, Kirchdorfer Zementwerk Hofmann, Austria
- **Renewable energy in industry**
Biomass: Siegfried Aigner, Aigner Energie Contracting, Austria
Heat pumps: Thomas Nowak, European Heat Pump Association (EHPA)
- **Energy efficiency in South-East Asia**
Dina Azhgaliyeva, National University of Singapore
- **A global network to support industrial energy efficiency**
Rod Janssen, Energy Efficiency in Industrial Processes (EEIP)

Chairperson: Nils Borg, eceee



Innovation Workshops Energy & Buildings

28 February 2019

6 parallel sessions

28 February | 14.00

Higher energy efficiency and lower business risks

Reducing the energy performance gap in buildings

Organised in the context of the H2020 project MOEEBIUS

- **Modelling energy in buildings for urban sustainability**
Ander Romero Amorrtortu, Tecnalia, Spain
- **Novel business models and new energy market roles**
Ricardo Rato, ISQ, Portugal
- **Improving energy simulation tools**
Pablo de Agustín, Tecnalia, Spain
- **Open and semantically enhanced user software**
Jakub Malanik, Honeywell, Czech Republic
- **Innovative sensing and control devices**
Brendan O'Flynn, Tyndall, Ireland
- **Integrated applications for energy performance optimisation**
Georg Ferdinand Schneider, THN, Germany
- **A replicable and easily transferable framework**
Mircea Bucur, KiWi, UK
- **Panel discussion**

Chairpersons: Ander Romero Amorrtortu, Tecnalia, Spain / Remigiusz Mielczarek, ASM, Poland

Energy efficiency for urban regeneration

Organised in the context of the H2020 project BuildHeat

- **BuildHeat: innovation and approach**
Roberto Fedrizzi, EURAC, Italy
- **Integrating heat pump, ventilation and multi-control inverter technologies**
Giacomo Feltrin, Clivet, Italy
- **Combining water storage and decentralised mechanical ventilation**
Werner Pink, Pink, Austria
- **Financing renovations**
Sergio Olivero, SITI, Italy
- **Round table discussion**

Chairperson: Roberto Fedrizzi, EURAC, Italy



EU projects supporting EPBD implementation

Organised in the context of the H2020 projects ALDREN, CEN-CE and EPB Center

- **Results of EU projects facilitating the implementation of the revised EPBD**
Johann Zirngibl, CSTB, France
 - **Supporting EPB standards at national level**
Jaap Hogeling, EPB Center, The Netherlands
 - **Towards a common EU energy performance certificate**
Jana Bendžalová, ENBEE, Slovakia
 - **Closing the gap between calculated and measured energy demand**
Laurent Socal, SLR, Italy
 - **The ALDREN building renovation passport**
Graziano Salvalai, Politecnico di Milano, Italy
- Chairperson:** Johann Zirngibl, CSTB, France

Energy-efficient buildings with reused materials

Organised in the context of the H2020 projects RE4, VEEP, INNOWEE, GREENINSTRUCT and FISSAC

- **Welcome**
Barbora Blaškovičová, FENIX TNT, Czech Republic
- **RE4: CDW materials in energy-efficient prefabricated elements**
Alessandro Largo, CETMA, Italy
- **VEEP: CDW in prefabricated concrete components**
Anna Paraboschi, RINA Consulting, Italy
- **GREENINSTRUCT: modular refurbishment with a universal building block**
Xiangming Zhou / Gediminas Kastiukas, Brunel University London, UK
- **INNOWEE: economically viable, flexible and modular solutions for CDW**
Adriana Bernardi, CNR-ISAC, Italy
- **FISSAC: sustainability in resource-intensive industry**
Blanca Juez Sanchez, ACCIONA Construcción, Spain
- **Interactive poster session and panel discussion**
Chairperson: Barbora Blaškovičová, FENIX TNT, Czech Republic

Thermal energy storage: save today, use tomorrow!

Organised in the context of the H2020 projects CREATE, HYBUILD, SCORES, TESSE2B, THERMOSS, SUNHORIZON

- **Welcome** Petra Colantonio, FENIX TNT, Czech Republic
- **CREATE: compact thermal energy storage for existing dwellings** Rebekka Koell, AEE, Austria
- **HYBUILD: compact hybrid storage for low energy buildings** Luisa F. Cabeza, Universitat de Lleida, Spain
- **SCORES: increasing self-consumption of renewables with hybrid storage systems**
Christophe Hoegaerts, TNO, The Netherlands
- **TESSE2B: thermal energy storage for energy efficient buildings**
Luís Coelho, Instituto Politecnico de Setubal, Portugal
- **THERMOSS: managing heat demand - from building to district heating level**
Federica Fuligni, Exergy, United Kingdom
- **SUNHORIZON: sun-coupled innovative heat pumps**
Stefano Barberis, RINA Consulting, Italy
- **Interactive poster session and panel discussion**
Chairperson: Petra Colantonio, FENIX TNT, Czech Republic

Geothermal heat pumps and thermally activated buildings

Organised in the context of the H2020 project HybridGeotabs

- **Introduction**
The heat pump market - responsibilities and challenges
Wim Boydens, EHPA/Boydens Engineering, Belgium
- **Decentralised storage: impact on renewable share in grids and buildings** Guy Vekemans, Vito, Belgium
- **Model predictive control for "HybridGeotabs"**
Lukas Ferkl, Energoklastr, Czech Republic
- **Geothermal applications** Hector Cano, Geoter, Spain
- **Heat pump design** Volker Loeffler, ait-deutschland, Germany
- **Designing a "HybridGeotabs" building**
Anne Caminade, Lemon Consult, Switzerland
- **Value propositions of "hybridGEOTABS" buildings**
Suleyman Dag, Uponor, Finland
- **Discussion: Challenges for market deployment and policy support**
Chairperson: Wim Boydens, Boydens Engineering, Belgium

19.00 Evening programme

Smart E-Mobility Conference

1 March 2019

1 March | 09.00

Towards e-mobility worldwide

E-mobility is on the rise worldwide. We offer insights into current developments and shed light on the economic impacts of these trends.

- **Opening and welcome**
Christiane Egger, ÖÖ Energiesparverband, Austria
- **How e-mobility strengthens the economy**
Abrial Gilbert-d'Halluin, European Climate Foundation
- **The world's leading e-mobility market**
Jian Liu, Energy Research Institute, China
- **Energy efficiency paving the way for e-mobility**
Harry Verhaar, Signify (the new name for Philips Lighting), The Netherlands

Innovation Session: batteries and charging

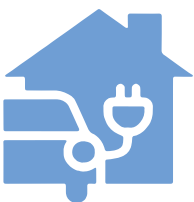
Batteries are at the heart of e-mobility's success. This session presents how far developments are and where we are heading.

- **Technology update from battery research**
Jens Tübke, Fraunhofer Battery Alliance / Fraunhofer ICT, Germany
- **Solid-state batteries – the next battery generation?**
Martin Finsterbusch, Forschungszentrum Jülich, Germany
- **Making vehicle to grid a reality**
Cristina Corchero, Catalonia Institute for Research, Spain
- **Direct solar high-speed charging – an R&D project**
Menno Kardolus, Power Research Electronics, The Netherlands

Rethinking e-mobility: creating new business

Examples from all over Europe showcase successful business models and projects and offer valuable insights from the user's perspective.

- **Showcasing cutting-edge e-mobility solutions**
Roel Swierenga, Hansa Green Tours, The Netherlands
- **E-mobility: the user's perspective**
Morten Edvardsen, The Norwegian Electric Vehicle Association
- **From R&D project to a leading e-mobility service company**
Franz Josef Gotzler, E-WALD, Germany



1 March | 13.30

Technical site visits: Energy Efficiency

- An afternoon trip to energy efficiency projects in the surrounding area.
- An opportunity to gain first-hand information and discuss specific questions on-site with the technology providers, planners and operators
- Learn more about energy efficient technologies, buildings and projects in Upper Austria.
- Bus tour from 13.30 - 18.00 hrs



Young Energy Efficiency Researchers Conference

27 February 2019 | 14.00

- **14.00 Opening and welcome**
Gerhard Dell / Christiane Egger, ÖÖ Energiesparverband
- **Design, development and performance of triple vacuum glazing**
Saim Memon, London South Bank University, UK
- **Design and realisation of a mixed solar cooker**
Jean Materne Ango / Etienne Tchoffo Houdji, University of Maroua, Cameroon
- **Improved energy efficiency in the Iranian brick industry**
Nushin Shahri, Allplan, Austria
- **Evaluating energy efficiency measures for an educational building in Islamabad**
Rafia Akbar, National University of Sciences and Technology, Pakistan
- **Robust building design able to cope with variations in user-behaviour**
Lakshmishree Venu Gopal, Technical University of Munich, Germany
- **Mitigating CO₂ emissions in Finland with seasonal thermal energy storage**
Janne Hirvonen, Aalto University, Finland
- **Cost-effective investments in energy saving measures for residential buildings**
Mattia Baldini, Technical University of Denmark
- **Involving academia in energy efficiency networks**
Javier Sandoval / Ana Ortiz / Juliana Rodriguez, S2G, Mexico
- **Determinants of heat demand in the European residential sector**
Jens Ewald, University of Gothenburg, Sweden
- **Building management systems: case study of the Energy Centre Bračak**
Matija Hrupački, North-West Croatia Regional Agency, Croatia
- **Collecting silences: the role of entrepreneurs in assetising energy efficiency and carbon emission reduction property rights**
Colin Nolden, University of Bristol, UK
- **Community microgrids for future cities: a foresight analysis**
Ariel Toh, SEE University Teknologi Malaysia
- **Cost-effectiveness of energy efficiency measures for systems with a large share of renewables**
Géremi Dranka, University of Minho, Portugal
- **Renewables and e-mobility: key synergy for energy efficiency**
Dražen Balić / Bruno Zidov / Tomislav Cop, Energy Institute Hrvanje Požar, Croatia
- **Stabilised renewable power supply through coupling of solar cells and double layer capacitors (EDLCs)**
Katrin Anneser, Bavarian Center for Applied Energy Research, Germany
- **Analysis of hydrogen fuel cell and battery efficiency**
Aristeidis Tsakiris, Copenhagen Centre on Energy Efficiency, Denmark
- **Mitigating degradation of field-aged PV-modules in India**
Kamlesh Yadav / Shradha Yadav, National Institute of Solar Energy / Banaras Hindu University, India
- **Investigation of two hybrid PV thermal collectors**
Bharat Chhugani / Nils Hupp, Bavarian Center for Applied Energy Research, Germany
- **Performance monitoring of high-efficiency Moxeon PV plant in India**
Rashmi Singh, National Institute of Solar Energy, India
- **Integrating indoor climate indicators in building legislation**
Paraskevi Vivian Dorizas / Jonathan Volt, BPIE

Chairperson: Reinhold Priewasser, Johannes Kepler University, Austria

19.00 Evening programme



27 February – 3 March



Tradeshow

A leading European sustainable energy tradeshow

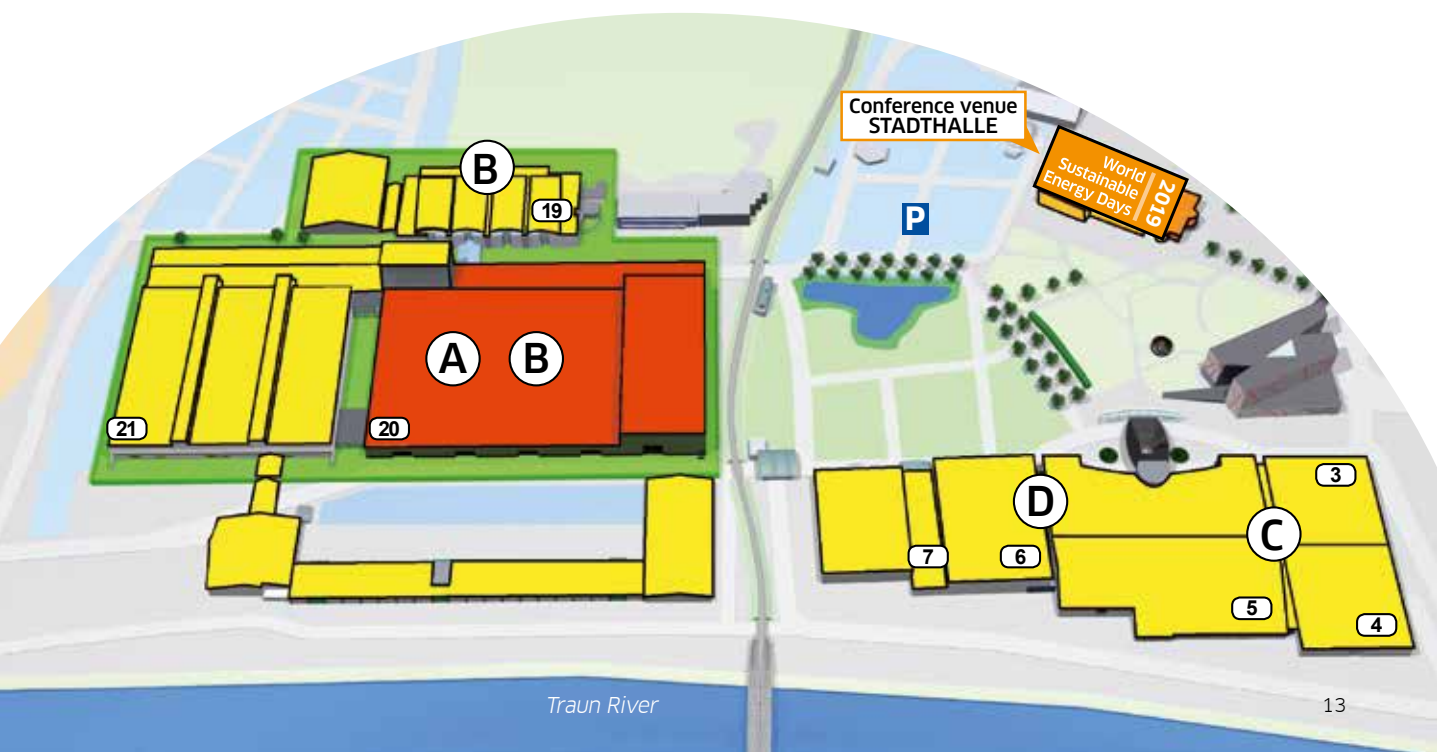
- 1,600 exhibiting companies
- 100,000 visitors, including over 30,000 professional visitors
- strong focus on innovative solutions for sustainable heating and efficient building construction and renovation
- Austrian companies present their latest product innovations

Practical information

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

Tradeshow highlights

- Ⓐ Stand of the OÖ Energiesparverband with comprehensive information for homeowners, businesses and municipalities, the special exhibitions on “Innovative LED-lighting”, “building materials” and “E-Cars & smart home”
- Ⓑ Biomass boilers and stoves, PV, solar thermal, heat pumps, ventilation systems: Halls 19-20
- Ⓒ Insulation materials: Halls 3-5
- Ⓓ Windows: Halls 5-7



The World Sustainable Energy Days 2019

**600 experts,
66 countries,
6 thematic conferences,
1 mission:
the clean energy transition**

www.wsed.at





Upper Austria - a leader in the clean energy transition

Upper Austria, one of Austria's nine regions, is a leader in the clean energy transition: 31 % of the primary energy comes from renewables and over 60 % of the space heating. Greenhouse gas emissions in the building sector were reduced by 43 % in the last ten years. 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 energy efficiency sector!

- 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)
- Over 400 experts each year from more than 50 countries!

Practical information

Conference fees

All fees include entrance to the tradeshow and conference documentation.

- 320 Euro for the European Energy Efficiency Conference (27 February - 1 March)
 - 105 Euro each for the conferences: Young Energy Researchers (27 - 28 February), Innovation Workshops (28 February), Industry (28 February), E-Mobility (1 March)
 - 350 Euro for all WSED conferences (27 February - 1 March)
 - 430 Euro for all WSED conferences and the 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 Energy Efficiency Conference 2019

28 February - 1 March 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)



 Federal Ministry
Republic of Austria
Sustainability and Tourism

 Federal Ministry
Transport, Innovation
and Technology

