

# Bioenergy Heating

Market development  
and technologies

## International Training Seminar

28 November - 1 December 2022

Linz/Austria



# International Training Seminar Sustainable Bioenergy Heating – Market development and technologies

28 November – 1 December 2022, Linz/Austria

## The seminar

The price crisis, multiplying signs of climate change, and threats to energy security urge us to act like never before. As a CO<sub>2</sub>-neutral fuel, sustainable bioenergy is a key component in decarbonising and securing our energy supply! Market transformation towards modern, efficient and low-emission bioheat systems presents enormous opportunities for affordable and local energy supply as well as climate and environment protection.

The International Training Seminar focuses on small- to mid-scale projects fuelled by wood pellets and wood chips. It covers solutions for homes, smaller commercial/public buildings and district heating grids (up to a few MW).

The seminar offers interactive learning in an international group, educational site visits and presentations by experts in bioenergy technologies, market development and the sustainability of bioenergy.

## Seminar topics

- Success factors for developing a sustainable regional/local bioheat market
- Technology overview (combustion, emissions), system designs
- Fuel standards, logistics and sustainability issues (wood pellets, wood chips)
- Business and financing models, marketing

As an international training seminar, the programme does not cover country specific information, such as specific legal aspects or funding programmes.

## Target groups

Representatives of businesses, public bodies, institutions, NGOs etc. interested in developing bioheat markets. It is especially targeted to persons from countries where the market for automatic bioenergy heating is in a starting phase.





## Seminar Agenda (subject to change)

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28 November	Arrival, introduction and welcome dinner
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	<b>Technical training sessions</b>
	- Bioenergy policies and programmes, sustainability aspects and market development
29 November	- Technical aspects of bioenergy boilers
	<b>Technical site visits</b>
	- Bioenergy boiler manufacturer
	- Processing & distribution of wood chips
	- Bioenergy district heating installation
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	<b>Technical training sessions</b>
	- Combustion technologies for low emissions & high efficiencies
	- Bioenergy district heating
30 November	- Bioheat contracting (financing and operation model)
	<b>Technical site visits</b>
	- Bioenergy heating plant
	- Solar drying of wood chips, micro grid
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	<b>Technical site visits</b>
1 December	- Pellet distribution chain
	- Pellet boiler manufacturer
	- Farewell dinner

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## What is different to other seminars?

- 🌱 **Learn from the best** and spend three intensive days in the leading sustainable bioheat region!
- 🌱 Get the most **up-to-date knowledge** from bioenergy experts working in businesses, associations, research organisations and public bodies.
- 🌱 Profit from our **hands-on approach**: half of the seminar time is on-site training, the other is "classroom" training.
- 🌱 See the **whole bioheat supply chain** in action: from equipment and fuel manufacturers to biomass logistics and a range of different plants in operation.
- 🌱 Benefit from an enjoyable learning atmosphere and develop long lasting partnerships with bioenergy experts from around the globe.
- 🌱 Enjoy Austrian hospitality!





## Upper Austria – a bioenergy region

Upper Austria is one of Austria's nine federal states/regions and has a population of 1.5 million. It holds a leading position in bioheat: 16 % of primary energy comes from sustainable biomass, 37 % of dwellings are heated with clean bioenergy and there are over 6,000 jobs in the bioheat industry. Upper Austria has one of the highest densities of small-scale automatic bioenergy heating systems in the world.



The region has given political priority to energy efficiency and renewable energy since the mid-90s. Renewables currently cover 33 % of the region's primary energy demand: 16 % bioenergy, 11 % hydropower, and 6 % solar and other renewable energy sources. Over 60 % of all space heating already comes from renewable and waste heat. Strategic decision-making and comprehensive actions in sustainable energy policies have resulted in high-performing markets for clean heating. Bioenergy is an important economic driver for the region and plays a key role in the region's ambitions for achieving climate neutrality. Over 1 billion Euro per year are invested in biomass fuels and equipment.

## The Organiser

The International Training Seminar is organised by the Energy Academy of the OÖ Energiesparverband, the regional energy agency of Upper Austria. OÖ Energiesparverband drives the energy transition by promoting energy efficiency, renewable energy, e-mobility and innovative energy technologies. It provides comprehensive services to citizens, municipalities and businesses of all sizes. It carries out over 10,000 face-to-face energy advice sessions each year. It also supports energy technology companies in the Cleantech-Cluster.

In the context of its Energy Academy, OÖ Energiesparverband holds 30 training courses with more than 1,000 participants each year. It is also the organiser of the European Pellet Conference, the world's largest annual event on wood pellets.

## Cleantech-Cluster

The Cleantech-Cluster (CTC) is the platform for energy and environmental technology companies in Upper Austria. It supports innovation, competitiveness and visibility of its more than 250 partner companies. It contributes to market growth across the entire value chains in the fields of sustainable energy and environmental technologies. In the energy technology sector, partner companies employ over 7,000 people and achieve a combined annual turnover of more than 2.5 billion Euro. More than 25 % of all modern small-scale bioenergy boilers installed in the EU are manufactured by Upper Austrian companies and pellet heating systems have become a standard solution in the region.





## What is sustainable bioheat?



A key piece of the energy transition and energy security! According to the IEA, forest bioenergy is an important part of sustainable energy provision in Europe, particularly for heat production. Over 90 % of biomass used for energy comes from European resources. Sustainably managed forests continue to absorb carbon from the atmosphere. In addition to timber or pulpwood, they provide important amounts of low quality wood resources that can be used for energy. No forests have to be cut down for it. Forest bioenergy comes predominantly from residues and low quality wood resources.

The development of the bioheat market in Austria stands on three quality pillars: sustainable forestry practices, careful fuel production, effective distribution, and efficient and low-emission heating equipment. Bioenergy (mostly pellets and wood chips) comes from CO<sub>2</sub>-neutral and sustainable fuels produced from residues from sustainable forestry and byproducts from the wood industry. The quality and convenience of modern, fully automated, ultra-low emission heating equipment generate consumer trust. Strict criteria ensure that only highly efficient technologies are installed.

## Linz

Linz is the third largest city of Austria and the capital of the region of Upper Austria (Oberösterreich). It is located in the north of Austria, on both sides of the Danube river, approximately 30 km south of the Czech border. The city has a population of 207,000. Named the "Cultural Capital of Europe" in 2009, Linz combines an industrial heritage with modern cultural highlights (e.g. Ars Electronica Center, Lentos Art Museum, modern opera house etc.).



## Participant feedback from previous years

*"All fields of bioheat were covered and were explained with concrete examples."*

*"I very much appreciated the practical orientation of the seminar."*

*"The technical sessions and site visits were well balanced."*

*"The seminar was outstanding; well-designed, broad in scope and informative."*

*"All speakers showed enthusiasm for their subject and the level of technical details was excellent."*

*"I will recommend the seminar to others in the future."*

*"It was one of the most interesting trainings I have ever participated in."*

*The hosts were excellent, and I especially appreciated the attention paid to providing us with a nice atmosphere."*

# International Training Seminar Sustainable Bioenergy Heating – Market development and technologies

## Practical details

<b>Date</b>	28 November - 1 December 2022 (Start: 28 November, 17.30; End: 1 December, 18.00)
<b>Language</b>	The training seminar will be held in English. (Please note that a good command of English is required.)
<b>Fees</b>	960 Euro (plus 10 % VAT) 630 Euro (plus 10 % VAT) for public administrations & energy agencies Fees include the training sessions and documentation, site visits and coffee breaks/meals. Accommodation in nearby hotels in Linz costs about 120 Euro/night (including breakfast and taxes) and is not included in the seminar fees.
<b>Registration</b>	Please register before 7 November 2022 by e-mail to <a href="mailto:office@esv.or.at">office@esv.or.at</a> or online (please note: the number of participants is limited).
<b>Organisation &amp; venue</b>	OÖ Energiesparverband, Energy Academy, Landstrasse 45, 4020 Linz/Austria, T: +43-732-7720-14386, <a href="mailto:office@esv.or.at">office@esv.or.at</a> , <a href="http://www.ctc-energy.at">www.ctc-energy.at</a> , ZVR 171568947

## What does the international seminar offer?

- 3 densely-filled days with information and know-how on the technologies, economics and marketing of bioheat!
- Practical, hands-on time with experienced experts – learn from the best in the field!
- A dynamic mix of seminars, site visits and interactive activities in an international group
- A programme fully focused on small- to mid-scale wood pellet and wood chip projects

## Travel information

**by railway:** direct connections from Vienna, Salzburg, Munich, Paris, Brussels, etc.

**by road:** A1 and A7 motorways

**by air:** airports Linz (14 km from Linz city centre), Vienna (185 km, direct train service from Vienna airport to Linz), Salzburg (135 km), Munich (273 km)



Funding by the region  
of Upper Austria

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