Woodheat Solutions

Austrian Study Tour a huge success!

Suppliers group at Kirchberg am Walde

Delegates from a broad cross section of potential users and potential suppliers of woodfuel and/or heat attended the study tour. All benefited from both the technical knowledge and encouragement of our Styrian hosts.

Buyers at St. Margarethan

Key Lessons learnt:

1. Styria has established a robust, high quality and trusted woodfuel industry: which makes the most of their resources, provides a viable alternative to fossil fuels, provides local jobs and helps combat climate change.

2. There are very real opportunities for farmers, foresters and estate owners: to establish businesses to sell heat or wood (as logs, chips or pellets) to local users from schools and public buildings to domestic users (directly as fuel or through a district heating network).

3. Experience gained over the last 20 years demonstrated how systems can be most effective, for instance:

- use of quality engineers to ensure the best system is installed effectively; and
- use of two different sized boilers and inclusion of solar thermal arrays to optimise flexibility throughout the year.

Volkschule at St Margarethen
Two boilers at St Margarethen supplying both the junior school and the adjacent secondary school

District heating at Straden.

Plant built into hillside to minimise impact and ease of chip delivery. System includes solar thermal panels to provide for summer needs of village

4. Well established systems to produce and supply fuel:

Advanced chipper technology from Komptech includes:

- Systems based on a range of vehicles to suite the user;
- Interchangeable screens to ensure production of high quality chips;
- Conventional 'shute' delivery of chips OR more energy efficient elevator; and
- Integrated log splitter to allow conversion of oversize timber.

Delivery of woodchips to domestic users by 'Wood pump':

Local farmer linked to local Biomass Trade Centre produces and supplies local users

Biomass Trade Centres:

Assure local people that fuel is readily available and of a high quality.

Logs are sold by calorific value:
weight x moisture content (buyer selects several logs from 'rack' which are tested and weight is assessed on weighbridge)

Wood is air dried for a season to bring the moisture content down from 50% to about 35%. If lower moisture content is needed the trade centre has underfloor ventilation (like a grain drying floor) to allow forced air drying.

5. A professional approach to customer service: resulting in high degree of trust between buyers and suppliers.

6. Clear benefits in linking local woods to local needs: which minimises transport overheads, ensures fuel security and circulates finance in the local area.

7. An appreciation of the need for high quality installations: To make best use of resources. For instance the establishment of a Quality Assurance system for all district heating systems and the appreciation of the optimal distances for district heating networks.

More detailed information on sites visited during the study tour will be uploaded to the website shortly.

What next?

Roll out of lessons learnt from the study tours of Finland and Austria:

In South East England the Forestry Commission and Thames Valley Energy, In Slovenia the Forest Institute and in Croatia the Forest Extension Service, will be hosting a series of workshops to update you on how woodfuel use and opportunities are developing in your area and to explain how the lessons learnt in Finland and Austria may help you make best use of wood as a supplier or user. Details of the dates and locations of the workshops will be posted on this website shortly. However, if you are particularly interested or know of an existing event where a presentation would be useful please let us know.

Advice from Finnish and Austrian specialists:

Specialists from Finland and Austria will be visiting South East England, Slovenia and Croatia shortly to offer technical advice on how woodfuel could be best used at several sites across the Region. We are currently seeking sites which could make best use of this advice. If you know of one which might be suitable please let us know.

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Wood: A quality Fuel

Just as your car works best on high quality fuel, woodfuelled boilers work best when they burn the fuel which meets the specification they were designed for. In Austria we saw very efficient boilers being supplied by foresters and farmers who knew how to produce high quality woodfuel.
To help establish an efficient and effective woodheat industry across Europe the European Committee for Standardisation is developing technical standards for woodfuel which will be adopted by all Member States, for solid biofuels these are referred to as **CEN/TC335**.
The publication of the CEN template standards for wood pellets, wood briquettes, woodchips and firewood was planned for January this year but has been delayed. As soon as we learn more we will circulate details and place an update on the WhS website or you can refer directly to the CEN website: http://www.cen.eu/cen/Sectors/TechnicalCommitteesWorkshops/CENTechnicalCommittees/Pages/default.aspx?param=19930&title=CEN/TC%20335
In the interim if you're supplying woodfuel check what the buyer's boiler requires and if you're buying make sure you tell the supplier exactly what you need.

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