Overview

AIM: Inspire investment in wood-based heat generation from under managed woodlands in England, Croatia and Slovenia drawing on the experience gained in Finland and Austria.

TIMEFRAME: 1 October 2008 to 31st March 2011

Project Partners:

Croatian Forest Extension Service

Forestry Commission of Finland

Slovenian Forestry Institute

Technical Research Centre of Finland

Styrian Chamber of Agriculture and Forestry
Starting point and objectives

**Starting Point:**
- Increasing concerns about climate change and energy security
- Lots of undermanaged woodland
- Restoring sensitive woodland management delivers other benefits too, including jobs and biodiversity

**Objectives:**
- Increase the number of woodheat projects in Slovenia, Croatia and the UK (15MW installed capacity)
- Facilitate the development of 10 major bio-heat projects in Slovenia, Croatia and the UK
- Increase the area of actively managed, privately owned woodland in Slovenia, Croatia and the UK ((4,500 ha)
- Raise the profile of CEN TS/335 standards amongst woodfuel suppliers and end users
- Raise the profile of woodheat projects amongst the general public, public sector decision makers, foresters and farmers
Approach - in a nutshell!

• **Engagement:** Identify and build relationships with key decision makers able to facilitate the establishment of woodheat projects in Croatia, Slovenia and the UK

• **Study tours:** Identify a range of successful woodheat projects in Finland and Austria and use these to host study tours for key decision makers

• **Best Practice:** Develop regional guidance adapted from knowledge and experience gained in Finland and Austria

• **Standards:** Summarise and disseminate CEN TS/335 technical standards and highlight the importance of quality control during woodheat production.

• **Training:** Develop courses and materials for all those potentially involved in the woodheat supply chain
Woodheat in Finland

FIRST IMPRESSIONS!
Everything is managed

- High silvicultural standards
- A ‘can do’ culture
- A long term view
- Community
- Professionalism
Woodfuel reception
Chip store to boiler
Woodfuel harvesting
Drying
Chipping - large scale
Chipping - small scale
Chip delivery
Innovation
Checking chip quality
Lessons from Finland:

- Sell heat if you can
- Build to last
- Consider the long term
- ‘Turn key’ installations
- Innovate
- Use the whole resource
- Use the equipment you’re got
- Don’t burn water
- Engage the local community
Finnish technology in SEE
In Austria

- Hillier!
- More diverse
- More sophisticated
- Less vegetables!
Opportunities at Schools
Advanced chippers!
Drying woodchips
‘Blown’ chips
Fuel Quality

• Don’t burn water!
• Make sure you’re supplying what the customer needs
• Keep it local?
• Don’t mess the woods up!
• We can only establish woodfuel as a mainstream fuel if we pull together as an industry
Achievements so far:

- **Good engagement:** especially with potential buyers: County Councils etc
- **Woodheat Solutions ‘brand’:** developed and established – pack and website [http://www.woodheatsolutions.eu/](http://www.woodheatsolutions.eu/)
- **Finland Study Tour:** a great success, both in knowledge gained and networks established. Of the UK delegates at least 11 are actively considering major installations
- **Austrian Study Tour:** even more so!
- **Links to other programmes** - including:
  - Rural Development Plan support;
  - Councils carbon reduction commitments;
  - Low carbon transition plan; and
  - the evolving woodfuel implementation plan in England
What next?

• Austrian and Finnish experts visit the SE in June to provide technical advice on specific sites;
• Training programme to ‘roll out’ the lessons learnt so far;
• Targeted effort on South Downs and North Downs;
• Promoting best practice;
• Linking suppliers to buyers; and most importantly
• Helping build the market
A typical opportunity?

**Bedgebury office**
(Currently heated by electric storage heaters)
Install:
- wet heating system
- heat meter

**Park House**
(Victorian, no insulation and electric storage heaters)
Install:
- wet heating system;
  two heat matrices - one for residence and one for FC meeting room & nursery
- heat exchanger to provide for domestic hot water - for residence only

**New location for Pinetum Nursery**
(Due next year)

**Heat Main**
(Approx 140m - measured with GIS tool)

**Proposed location for woodfuel boiler**
(Existing shed)
Looking to:
- rebuild shed;
- chip hopper to allow tipping chips into shallow hopper

**Pinetum Nursery**

**Pinetum works yard**