

Woodfuel in Scotland

Dr James Pendlebury
& Rebecca Carr
Forestry Commission
Scotland

- **Energy Policy**
- **Woodfuel markets**
- **Woodfuel development**
- **Delivering a woodfuel market**



- Kyoto Protocol sets binding targets for emissions reductions
 - ↓ came into force 16th February 2005
- European targets
 - ↓ 12% of total energy consumption from renewable energy by 2010
- Security of supply - EU imports 50% of its energy requirements
- Both EC and member states are recognising the opportunity for bioenergy

- approximately 50% of total EU renewable generation capacity comes from woodenergy, providing 3% of total primary energy consumption (PEC)
 - ↳ Finland 20% PEC
 - ↳ UK 0.4% PEC
- around a third of the electricity delivered in Scotland is used for heat
- 80% of the fuel delivered to public buildings is used for heat
- 80-90% efficiency for woodfuel conversion to heat / CHP

Energy Policy

- Focus on renewable electricity generation
 - 18% by 2010
 - 40% by 2020
- Hydro provides around 11% of Scotland's electricity
- Renewable Obligations Certificates only available for electricity generation not heat
- Renewable Obligation Order for Scotland being reviewed to consider redefining energy crops for co-firing to include material from managed woodlands



- Scottish Climate Change Programme
- Securing a Renewable Future: Scotland's Renewable Energy
- FREDs: Forum for Renewable Energy in Scotland
 - woodfuel has the potential to supply 450 MW electricity (heat?)
 - generate 2000 jobs



CHP

- Bioenergy Capital Grants Scheme (under review)
- Scottish Biomass Capital Grants Scheme (under development)

Renewable Energy Installations - Communities

- Scottish Community & Householders Renewables Initiative
- Energy Savings Trust Community Energy Programme (under review)
- Scottish Energy Efficiency Office

Renewable Energy Installations - Business

- Highlands & Islands Woodfuel Development Programme (ends Dec 2005)
- Loan Action Scotland

Suppliers

- Highlands & Islands Woodfuel Development Programme
- DEFRA - Bioenergy Infrastructure Scheme (closed 14th February 2005)

- The wood availability in Scotland is set to double over the next 15-20 years although the majority of this increase will be private sector production
- Many forests are in rural areas, remote from industrial roundwood markets and from mains gas
- Woodfuel contributes to rural development & fuel poverty targets



- Forest Research - **Woodfuel Resource**
(www.woodfuelresource.org.uk)
- FCS Nationwide **Woodfuel Usage Survey** details the current (& proposed) amount of woodfuel use in Scotland in both the domestic and commercial sectors
- FCS / HIE Woodfuel Website - in development
- FCS have provided support for larger scale CHP and energy generation projects, e.g. production forecasts, volume availability and transport solutions
- FCS, Scottish Enterprise & Scottish Executive have secured ERDF support for two further woodfuel information officers

Woodfuel Development Programme for the Highlands & Islands

- providing the support and funding to create new local markets by supporting suppliers and customers get the equipment they need.



- **Northern Woodheat** aims to develop efficient sustainable local supply chains for woodfuel heating systems using the experience and strengths of partners from Scotland, Iceland and Finland. Contact: Highland Birchwoods



- **North Sea Bioenergy** is developing best practice for small scale pellet production. Contact: Highland Birchwoods

- **HIE Community Energy Company** provides grant aid and assistance for the development of small and medium scale community led renewables projects including woodfuel installations, throughout the highlands and islands.

- **Suppliers**
 - ⊕ no one-size fits all model
 - ⊕ level of capital investment
 - ⊕ appropriate equipment
- **Customers**
 - ⊕ capital costs - choosing the right project
 - ⊕ confidence in the market
 - ⊕ finding appropriate expertise

- knowledge and awareness
- market confidence & stability of support mechanisms
- support for capital investment
- coordination of activities