



Case Study: Mitigation - using local timber in construction, Scotland

Inverness

The Forestry Commission Scotland (FCS) district office at Smithton, Inverness showcases the structural, practical and aesthetic advantages of using locally-sourced timber in construction. Key sustainable features include:

- Beams constructed from Douglas fir and harvested from FCS' own forests.
- A 55 kilowatt woodchip boiler which services the under-floor heating system.
- A passive stack ventilation system – natural and energy efficient ventilation.
- Rainwater harvesting. Water is delivered from the roof to an underground storage tank and is used for flushing the toilets.
- All surplus wood from the build was put to good use in the local community.



The building received several awards acknowledging its eco-friendly credentials: an Inverness Civic Trust Award in 2007, the Scottish Architects Award, and the Sustainability prize at the Royal Institute of Chartered Surveyors in Scotland Awards 2008.

Glentress Peel

The new FCS visitor facility based at Glentress forest in the Tweed Valley Forest Park has been designed and built on sustainable principles and demonstrates good practice in the use of timber in construction.

All timber trusses, external cladding and battens, ceiling linking boards and desking were constructed from Glentress Douglas fir, and the linings and skirting were made from Scottish larch and Douglas fir. The window frames are made from Scottish oak and the internal doors from Scottish birch.

Other sustainable features include a rainwater collection facility from the café roof which will provide water for the

bike wash, and a woodfuel boiler which will provide hot water and heat for all of the buildings.

Benefits for our climate

Trees help to address climate change through their ability to sequester carbon by removing it from the atmosphere as they grow. Using local wood in buildings such as our Smithton office and the visitor centre at Glentress is particularly beneficial as it locks the carbon in place over the long-term and is a green substitute for non-renewable materials such as steel and concrete which generate and release carbon dioxide into the atmosphere during their production.

Woodfuel is a sustainable and low carbon source of energy. Using wood from well-managed forests ensures that carbon dioxide released during burning is recaptured by the growth of new crops. The growing demand for woodfuel gives woodland owners an incentive to manage their land productively which in turn improves the conditions for local wildlife.