

# Timber Development Programme

2007 - 2010



Timber is an environmentally friendly, versatile and cost-effective building material. It is renewable and has a very small carbon footprint



## Introduction

Creating a more successful country, through increasing sustainable economic growth is a major priority of the Scottish Government and Scotland's forestry sector is well placed to help meet the strategic objectives of creating a Scotland which is:

- wealthier and fairer;
- healthier;
- safer and stronger;
- smarter;
- greener;

To maximise the benefits we must strive to increase the production and use of good quality, sustainable, UK (and ideally locally) grown and processed timber and timber products in high net value end markets, particularly construction.

Towards this end, key objectives, priority activities and work programmes have been identified through a process of consultation which seek to address the needs of the sector and to steer actions being taken by Forestry Commission Scotland (FCS), and others.

## Background

*"Timber is an environmentally friendly, versatile and cost-effective building material. It is renewable and has a very small carbon footprint. Climate change and sustainability issues are likely to make these characteristics increasingly valued in the coming decade.*

*Adding value to wood requires a thriving, competitive processing sector. Reliable forecasts of timber availability and timber properties, coupled with reliable and consistent supplies of timber, are required if this is to continue.*

*The current timber industry in Scotland is based overwhelmingly on softwoods, particularly Sitka spruce, yet the increased rate of broadleaved woodland creation.....and management.....provides new opportunities to develop Scotland's hardwood timber sector."*

### **Scottish Forestry Strategy 2006**

**The vision of the Scottish Government's Scottish Forestry Strategy is that:**

*"By the second half of this century, people are benefiting widely from Scotland's trees, woodlands and forests, actively engaging with and looking after them for the use and enjoyment of generations to come. The forestry resource has become a central part of our culture, economy and environment."*

A key outcome is competitive and innovative businesses contributing to the growth of the Scottish economy, delivered through the objectives of:

- developing a more efficient and competitive timber supply chain;
- facilitating the development of markets for forest products;
- facilitating rural business diversification and development;
- increasing the contribution of forestry to tourism.

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The aim of the Timber Development Programme (TDP) is “to contribute to the sustainable development of Scotland’s economy by enabling the timber growing and processing sectors to find the highest value and most appropriate end market for Scotland’s timber.

**To achieve this, there are three key drivers:**

**Timber** – getting the most from Scotland’s increasing and sustainable timber resource, and seeking to improve the quality of the growing stock;

**Business Development** – strengthening forestry through business development to underpin sustainable forest management and support economic growth and employment across Scotland;

**Climate change** - using forestry, adapting forestry practices and increasing the use of timber and timber based products in construction to help reduce the impact of climate change.

**The TDP will help us to:**

- ensure data is available on the resource (both quality and availability) is as accurate as possible to enable effective planning by industry;
- provide a supportive framework which enables the private sector to operate as effectively and be as competitive as possible, growing products which meet market needs;
- fund appropriate basic research on relevant timber properties as well as speculative research and development on new uses for, and enhancing the quality and value of, our timber resource;
- capture accurate data on the role of sustainable timber in reducing the impact of climate change;
- support growth in the proportion of timber used in construction – whilst minimising timber miles in getting there.

Biomass and biofuel issues are being delivered through the Biomass Action Plan for Scotland and through the developing Renewable Heat Strategy, to which FCS will contribute.

## Implementation Plans

An implementation plan, giving actions for each of the strategy key themes and progress indicators, can be found at ([www.forestry.gov.uk/forestry/inf-d-6aggzw](http://www.forestry.gov.uk/forestry/inf-d-6aggzw)). To align this with the timing of government spending reviews the first plan covers 2007-08 only, with subsequent plans covering three-year periods

The actions to be started or completed in each year for the Timber theme within the strategy will be taken from the “tasks” laid out in pages three to eight of this Timber Development Programme. An annual progress report will be prepared and published on the FCS web pages.

## Reference Group

A small group, initially chaired by John Kissock (previously Joint Managing Director of James Jones and Sons Ltd), will assist FCS by reviewing and prioritising actions, steering delivery of the identified tasks then reviewing and proposing revisions, where required, on an annual basis to maintain a rolling three year programme.

# Key Objective A – Promote a predictable and stable timber supply

Priority Activity: i. Ensure a sound knowledge of the quantity and quality of timber growing in Scotland					
Activity Areas	Priority	Task	Delivery Period	Lead	Assisted by
1. Produce a production forecasting system able to give reliable log quality forecasts for softwoods, ideally on a regional basis.	A	a. Integrate log quality predictions into the production forecasting system to produce a draft updated Scottish forecast.	2007-08	FCS	Expert Group on Timber and Trade Statistics, FR (Forest Surveys and Biometrics), FC C&FS, FC OSU, Industry
	A	b. Consult with FES and industry to identify further refinements necessary and produce a revised version of the 2005 forecast to incorporate timber quality predictions.	2007-08		
	A	c. Evaluate new forecast against production data.	2007-08		
	A	d. Hold a series of discussions with the private sector to identify ways of improving the quality of mensurational data to be used in production forecast updates.	2007-08		
	A	e. Produce a new industry production forecast.	2010-11		
2. Have accurate and high quality mensuration data held by the private sector whose managers have taken ownership of, and responsibility for, the accuracy of the private sector production forecast.	A	a. Hold seminars for the private sector to raise awareness of the need for accurate data and efficient processes & systems for production forecasting purposes.	2007-08	FCS	ConFor, Edinburgh University, FC L+D, FR (Forest Surveys and Biometrics), FC C&FS, FC OSU, Industry, Regional Cluster Groups, UKFPA
	A	b. Produce a simplified Yield Class assessment procedure.	2008-09		
	A	c. Complete consultations with private sector on means and opportunities for improving the tools used in the production of timber forecasts.	2008-09		
	A	d. Complete initial consultations with private sector on collecting and providing data into a production forecasting system which is well integrated with LMCs and LTFPs.	2008-09		
	A	e. Complete an assessment of the value of remote sensing approaches to the production forecasting process.	2007-08 - 2008-09		
3. Support the work of FR into stand and/or sawlogs quality assessment prior to harvesting, and if successful promote adoption by industry.	A	Revise system of valuing timber using new technology linked to end market uses and values.	2007-08 - 2009-10	FR	ConFor, FC OSU, Industry, UKFPA
4. Have better yield models and production forecasts available for pure broadleaved stands and "Low Impact Silvicultural Systems" (LISS) with conifers.	B	a. Produce improved inventory data, to incorporate total biomass production from broadleaved stands.	2010-11	FCS	ConFor, Cons, FES, FR Biometrics, FC OSU, Industry
	B	b. Set up new sample plots in recently established areas growing quality broadleaves.	2007-08 - 2010-11	FES	
	B	c. Ensure LISS with conifers is adequately covered in the 2010-11 production forecast.	2008-09 - 2010-11	FCS	
5. Agree the desirability and feasibility of forecasting lop and top availability for biofuel, and produce models for assessment.	A	a. Commission work to determine chip quality and suitability for markets.	2007-08	FCS	FR (Forest Surveys and Biometrics), FC TDB
	A	b. Assess implications for, and costs of, altered harvesting and logistics processes.	2007-08		
	A	c. Develop models and incorporate data into forecasts.	2008-09 - 2010-11		

# Key Objective A – Promote a predictable and stable timber supply

Priority Activity: ii. Seek to maintain regular and stable timber flows from Scotland's forests					
Activity Areas	Priority	Task	Delivery Period	Lead	Assisted by
1. Identify means of reducing the size of the dip in availability of productive softwood post 2026 and obtain support for their implementation.	A	a. Ensure planned levels of thinning in FES woodland are maintained, and promote thinning as part of good silvicultural practice more widely.	2007-08 - 2010-11	FCS	FES
	A	b. Complete scenario planning to assist in smoothing of softwood production to support a national production strategy.	2008-09	FCS	
	A	c. Complete research into the (weather related) impact of climate change on the opportunities for stand intervention.	2007-08	FR	
2. Determine the potential implications of changing weather patterns on future timber production.	A	a. Commission a report to clarify the current state of knowledge, identify relevant ongoing research, knowledge gaps and the need for further work.	2007-08	FR	FC C&FS
	A	b. Complete initial round of scenario planning to consider the impacts of climate change on Scotland's future forest resource.	2008-09	FCS	FC C&FS, FR
3. Determine opportunities for the separation and use of recycled wood with local authorities as part of the Scottish Government developing Waste Strategy.	A	Hold meetings with the lead Scottish Government department to identify appropriate actions for FCS to undertake.	2007-08 - 2009-10	FCS	ConFor, FCS
4. Support the development of improved and, ideally, linked supply relationships between growers and softwood and hardwood timber processors.	A	Develop and promote processes for enabling predictable and robust timber supply.	2007-08 - 2010-11	ConFor	FCS
5. Promote wider adoption of forest certification to private woodland owners.	B	Complete scoping study into the possibility of certification bodies agreeing to a lower cost "light touch" approach to certification where woods are in LTFP's.	2009-10	FCS	ConFor, FCS

# Key Objective B - Encourage more use of timber and timber products

## Priority Activity: i. Inform and enable product innovation, development and use in high value end markets

Activity Areas	Priority	Task	Delivery Period	Lead	Assisted by
1. Commission regular market analysis to understand the drivers for, and relative importance of, the different market segments in the value chain.	A	a. Commission a report on changes in global market situations which could impact on markets and prices for Scottish timber and timber products.	2007-08 & 2009-10	FCS	ConFor, FC C&FS, HIE, SFIC, UKFPA
	A	b. With references to changes in global market situations, commission work to horizon scan for new ideas and products to increase the amount of timber used in construction.	2008-09 & 2010-11		
	A	c. Drawing on the above, with industry and customers, hold a workshop to review progress of current R&D, consider market needs and agree appropriate research needs and other actions to overcome barriers to realising new market opportunities.	2007-08 & 2009-10		ConFor, FC C&FS, FR, Industry, UKFPA
	A	d. Commission, with others as appropriate, required research, drawing funding from a range of Scottish, UK and EU sources.	2007-08 - 2010-11		
2. Enable targeted promotional activity to allow potential end users to fully understand the products on offer.	A	a. Support specific activities where there is a clear market opportunity for home grown timber and timber products eg Highland Housing Fair, relevant Wood for Good activities including conferences, seminars, articles and work towards the 2012 London Olympics and the 2014 Commonwealth Games.	2007-08 - 2010-11	FCS	ConFor, FC C&FS, Industry, UKFPA
	B	b. Support the development and initial population of an over-arching web based forestry, wood utilisation, education, training, careers and information transfer platform for the UK to promote forestry and timber.	2007-08 - 2008-9	tbc	FCS, SFIC
	A	c. Enable the provision of access to information, training, technical advice and support to RSLs seeking to build with UK grown timber and timber products.	2007-08 - 2010-11	FCS	ConFor, UKFPA
	A	d. Support CPET's work on timber sustainability assessment and information provision.	2007-08 - 2009-10	FCS	Defra
3. Seek to ensure mills produce products which fully meet appropriate industry standards and market needs.	A	a. Consider the value of, and benefits from, a review of mills Total Quality Management systems.	2008-09	Industry	ConFor, UKFPA
	A	b. Assist the small scale processing sector in their efforts to maximise the value from using sustainable timber.	2007-08 - 2010-11	FCS	ASHS
4. Ensure the Regional Enterprise Network (REN) understand the value of the forest processing industries in their areas.	B	Produce evidence highlighting the value of this regionally important industry sector and promote this to the REN.	2007-08 - 2010-11	SFIC	HIE, ConFor, UKFPA

# Key Objective B – Encourage more use of timber and timber products

Priority Activity: ii. Assess, enhance and promote the carbon benefits derived from the use of timber in construction					
Activity Areas	Priority	Task	Delivery Period	Lead	Assisted by
1. Determine and publish information on the carbon related impacts of growing, transporting to and using UK timber in the UK market place.	A	a. Commission, with others, and publish work comparing the carbon impact of wood v other high embodied carbon construction materials in use in a range of building types.	2007-08 - 2008-09	FCS	FC C&FS, FR
	A	b. Commission a study into the means of assessing the use of timber in construction, relative to other materials, in Scotland.	2007-08		
	A	c. Produce comprehensive data on the carbon impact of growing and bringing Scottish timber to the market.	2007-08 - 2009-10		
2. Review the comparative amounts of carbon locked within the forest ecosystem using a “low impact silvicultural systems” v “standard clearfell” regime.	C	Commission and publish a report.	2010-11	FCS	FR

# Key Objective C – Enable improvements to timber supply chain efficiency

Priority Activity: i. Minimise total financial & environmental costs of harvesting & transporting timber to primary processors					
Activity Areas	Priority	Task	Delivery Period	Lead	Assisted by
1. ConFor timber transport officer to work with and help co-ordinate efforts and outputs of RTTG's seeking to identify regional issues and develop regionally significant solutions.	A	Support offered for ConFor based project officer.	2007-08 - 2010-11	FCS	Industry, SFIC, TTF
2. Direct and support efforts to optimise the quantity of timber haulage by road and to minimise any related damage to road integrity.	A	a. Investigate efficient and cost effective options of appropriate sea and or rail transportation of timber.	2008-09	TTF	FCE, FCS, Industry
	A	b. Complete process of making £15M of awards from the STTF and manage payments to approved projects.	2007-08 - 2010-11	FCS	
	A	c. Assess achievements of, and benefits from, projects supported through the STTS.	2007-08 - 2010-11	TTF	ConFor, FCS
3. Commission work from relevant experts to determine the important issues & drivers and highlight opportunities to minimise costs in the harvesting & delivery supply chain, in an upland/Scottish context.	A	a. Produce an action plan identifying options.	2008-09	TTF	ConFor, HIE, SFIC, TTF, UKFPA
	A	b. Establish a working group to consider options identified and stimulate activity to take forward appropriate actions.	2008-09 - 2009-10		
	B	c. Evaluate logistics optimisation systems in forestry, and seek to extend the scope within Scotland of any successful models.	2009-10		
4. Identify opportunities for standardisation of data types and expansion of use of electronic recording and control of load movement and electronic trading by industry.	B	Led by industry, expand initial pilot to cover up to another two supply chains.	2008-09 - 2010-11	TTF	Confor, FCS, HIE, SFIC, TTF, UKFPA
5. Identify and support opportunities to enhance skills in the timber supply chain.	A	a. Actively participate in appropriate 2007-13 EU Structural and Inter-regional fund programmes and disseminate information/opportunities to the wider forestry sector.	2007-08 - 2010-11	FCS	ConFor, FCS
	A	b. Seek to promote uptake of existing training opportunities and inform future development of skills programmes	2007-08 - 2010-11	SFIC	

# Key Objective D

## Encourage and enable improvements to the quality of the growing stock

Priority Activity: i. Support efforts to improve the fitness for purpose of timber produced from Scotland's forests					
Activity Areas	Priority	Task	Delivery Period	Lead	Assisted by
1. Identify, prioritise and take action on the key issues to improve the quality and quantity of timber produced from Scotland's forests.	A	a. Produce and take forward a prioritised list of R+D needs, and identify any necessary actions to support better silvicultural practices required for the sustainable management of productive forests and the growing of high quality timber.	2007-08 - 2010-11	FR	CTE-SIRT, FC C&FS, FCS, TQIG
	A	b. Enable delivery of a 3 year programme to provide forest nurseries and timber growers with relevant information on the log quality needs of timber processors and the impact of silvicultural choices on growing for quality v quantity.	2008-09 - 2010-11	FR	ConFor, Cons, FC C&FS, FCS, ICF, RSFS, UKFPA
	A	c. Ensure grant mechanisms provide support for the use of improved stock in the private sector, and promote its use in appropriate locations.	2007-08 - 2010-11	FCS G&L	Cons, FR
	A	d. Switch FES planting of Sitka spruce stock from half sib to full sib cuttings incrementally to 100% by 2012	2010-11	FES	FR
2. Have the main agreed recommendations of the Growing Quality Broadleaves working group implemented.	A	a. Establish a programme of actions.	2007-08 - 2010-11	FCS	ConFor, Cons, FCS G&L, FR, ICF, RSFS, SAC
	A	b. Enable the establishment of broadleaved demonstration plots and broadleaved seed orchards from selected material.	2007-08 - 2010-11	FR	BIHIP, Cons, FES, Industry
	A	c. Carry out monitoring of progress of agreed recommendations.	2008-09 - 2010-11	FCS	ConFor, FR
3. Engage with the farming community to encourage management of farm woodland holdings with the primary objective of producing quality timber, expanding such holdings where appropriate.	B	a. Initiate and/or support programmes of regional events etc to engage with owners of undermanaged farm woods and those in areas most suitable for expansion of productive woodlands.	2009-10 - 2010-11	Cons	FCS G&L, FR, NFUS, SAC
	C	b. Publish written guidance targetted at the small scale forest owner.	2008-09 - 2009-10		

# List of Abbreviations

## List of abbreviations used throughout this publication

ASHS	Association of Scottish Hardwood Sawmillers
BIHIP	British and Irish Hardwood Improvement Programme
ConFor	Confederation of Forest Industries UK
Cons	FCS Conservancies
CPET	Centre for Procurement Expertise on Timber
CTE-SIRT	Napier Centre for Timber Engineering - Strategic Integrated Research on Timber programme
FCE	Forestry Civil Engineering
FCS	Forestry Commission Scotland
FCS G+L	Forestry Commission Scotland Grants and Licences
FES	Forest Enterprise Scotland
FC C&FS	Forestry Commission Corporate and Forestry Support
FC L+D	Forestry Commission Learning and Development (formerly Forestry Training Services)
FC OSU	Forestry Commission Operational Support Unit
FC TDB	Forestry Commission Technical Development Branch
FR	Forest Research
HIE	Highlands and Islands Enterprise
ICF	Institute of Chartered Foresters
LEC's	Local Enterprise Companies
LMC's	Land Management Contracts
LTFP's	Long Term Forest Plans
NFUS	National Farmers Union of Scotland
RSFS	Royal Scottish Forestry Society
RSL's	Registered Social Landlords
RTTGs	Regional Timber Transport Groups
SAC	Scottish Agricultural College
SFIC	Scottish Forest Industries Cluster
STTF	Strategic Timber Transport Fund
TQIG	Timber Quality Improvement Group
TTF	Timber Transport Forum
UKFPA	United Kingdom Forest Products Association

Forestry Commission Scotland serves as the forestry department of the Scottish Government and is responsible to Scottish Ministers

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