



The Scottish Forestry Strategy

Implementation Plan
2007-2008

Introduction

The Scottish Executive's Forestry Strategy was published in October 2006¹. It makes a commitment to the publication of implementation plans, containing delivery milestones aligned to available resources. Ministers have asked Forestry Commission Scotland (FCS) to 'champion' strategy implementation. The Scottish Forestry Forum and Regional Forestry Forums are advising FCS on this process. This is an implementation plan for the whole forestry sector and we have engaged the sector in its preparation and have actively sought a broad ownership of actions. 46 action partners are identified in this Plan.

To maximise alignment with financial and corporate planning processes, implementation plans have been synchronised with the timing of government spending reviews. Hence this first implementation plan will have a one-year duration, with subsequent plans covering three-year periods.

The Implementation Plan identifies SMART (specific, measurable, achievable, realistic, timed) high-level actions that will help deliver the Strategy during the period of the Plan. For this first plan the focus is on areas specifically identified as priorities in the Scottish Forestry Strategy. The Plan does not attempt to capture all that is to be done. Achieving the Scottish Forestry Strategy vision relies on the actions and commitment of thousands of individual woodland owners, managers, community groups and businesses. Much of this Plan is about creating a supportive environment for their activity in delivering public benefits, and providing the co-ordination and direction to help the forestry sector focus clearly on the challenges and opportunities identified in the Strategy.

Actions have been organised around the seven key themes of the Scottish Forestry Strategy. We have also identified additional regional actions through the five Regional Forestry Forums.

A lead organisation has been identified for each action, although many require the co-ordinated activity of a number of stakeholders. A full list of action partners, and a glossary of organisation acronyms is at Annex 1.

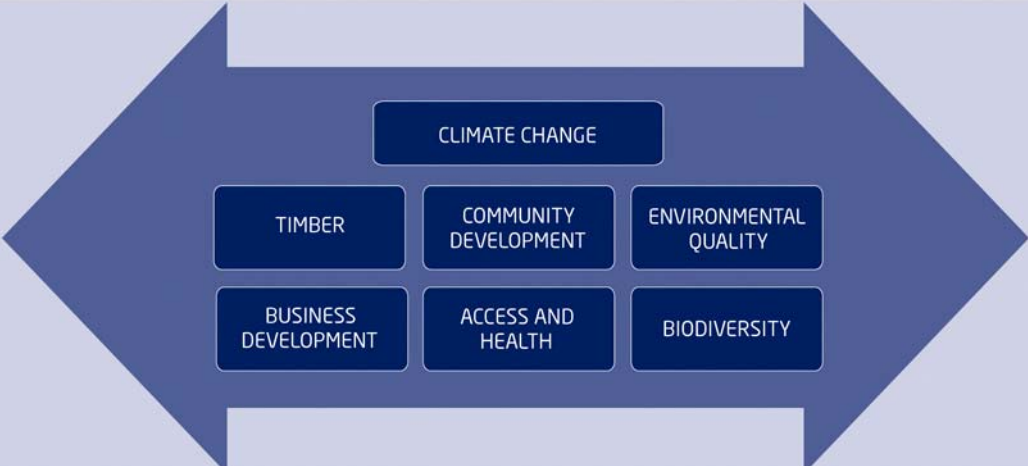
An annual progress report will be prepared for presentation to the Scottish Forestry Forum and publication on the FCS web site. However, the opportunity is taken in this first Implementation Plan to provide a baseline for the Scottish Forestry Strategy indicators where this data is available, and to identify where further work is needed to establish the baseline.

¹ <http://www.forestry.gov.uk/forestry/infd-6aggzw>

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The Scottish Forestry Strategy

The vision, objectives and key themes of Scottish Forestry Strategy are summarised below.

Our vision	<i>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.</i>		
Principles	<ul style="list-style-type: none"> • Sustainable development – underpinned by sustainable forest management. • Social inclusion - through helping to provide opportunities for all, and helping to build stronger communities. • Forestry for and with people. • Integration with other land uses and businesses. 		
Outcomes	Improved health and well-being of people and their communities.	Competitive and innovative businesses contributing to the growth of the Scottish economy.	High quality, robust and adaptable environment.
Objectives	<ul style="list-style-type: none"> • Assist community participation. • Enhance opportunities for health and enjoyment. • Contribute to growth in learning and skills. 	<ul style="list-style-type: none"> • Develop a more efficient and competitive timber supply chain. • Facilitate the development of markets for forest products. • Facilitate rural business diversification and development. • Increase the contribution of forestry to tourism. 	<ul style="list-style-type: none"> • Help to tackle climate change. • Contribute positively to soil, water and air quality. • Contribute to landscape quality. • Protect and promote the historic environment and cultural heritage. • Help to protect and enhance biodiversity.
Key themes			

Key theme 1: Climate change

Context

Climate change is both an opportunity and a threat to forestry. It is a primary consideration for sustainable forest management and the wood-using sectors, and a cross-cutting issue with links to all other Key Themes. The profile of climate change and forestry in Scotland was raised significantly by the 2006 publication of Scotland's Climate Change Programme².

Actions to 'increase awareness' focus on ensuring that the potential contribution of the forestry sector is fully explored and reflected in policy and support measures. At a GB level, the FC has established a Climate Change Communications Group to develop and implement a fact-based communication strategy³. FCS is participating in Scottish Executive's climate change policy development and delivery processes. Further work is needed to develop the evidence base, prepare a forestry sector climate change action plan, and develop policy guidance on issues affecting climate change such as deforestation.

Adapting to climate change requires management of change and uncertainty based on rapidly developing knowledge. Work undertaken by SNIFFER in 2005 on the Impacts of Climate Change on FCS and Possible Strategies for Adaptation provided an initial basis. Current research is modelling potential opportunities for carbon-based woodland expansion as well as adaptive measures for silviculture and biodiversity. The development of forest habitat networks is emerging as a key tool for adaptation. The potential role of forestry in sustainable flood management and wider river basin management is being explored through the River Basin Management Planning process.

Mitigation measures have focused on development of the biomass sector, and raising the profile and innovative use of timber in sustainable construction. The Centre for Timber Engineering (Napier University) and the 'Wood for Good' initiative⁴ have been key developments in recent years, as has FCS's active engagement with the Forum for Renewable Energy Development in Scotland (FREDS) and the recruitment of four Wood Fuel Information Officers. Further carbon saving opportunities are arising in relation to the wider development of renewable energy sources such as wind and hydro-electric, and with measures to reduce timber road miles through the Strategic Timber Transport Scheme.

Expanding the forest area to increase the wider benefits of forestry will also harness its carbon sequestration potential. The development of integrated land use support measures through Land Management Contracts will help ensure this expansion maximises the overall benefits, including carbon management, to Scotland. The long-term retention of carbon stocks in existing woodland and their associated soils is a further area of modelling and policy development.

² www.scotland.gov.uk/Publications/2006/03/30091039/0

³ www.forestry.gov.uk/forestry/infd-6umkar

⁴ www.woodforgood.com/

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FCS will further the forestry sector's contribution to tackling climate change through climate-proofing its wider policies and support measures, and by continuing to take direct and exemplary action on the national forest estate.

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Key theme 1: Climate change

What needs to be done in the first year?

Increasing awareness of the forestry sector's contribution

- Publish a climate change action plan for the forestry sector (FCS).
- Finalise the FC Climate Change Communication Strategy to promote understanding of forestry climate change issues (FC).
- Publish policy and practice guidance on deforestation, including climate change considerations (FCS).
- Establish the baseline for monitoring roundwood timber miles (FR).

Adapting to climate change

- Review and summarise the potential impacts of climate change on silviculture and biodiversity, and produce interim guidance (FCS).
- Complete a pilot study on the development of Forest Habitat Networks as a response to climate change (FR).
- Expand the Forest Research programme on pests and pathogens in a changing climate, including broadleaves (FR).
- Establish an FC Contingency Plan for Serious Pest Outbreaks in British Trees (FC).
- Publish the final report of the Flooding Issues Advisory Committee, including guidance on the positive role of forestry in sustainable flood management (FIAC).

Mitigating climate change

- Allocate £10.5M to carbon saving biomass projects through the Scottish Biomass Support Scheme (SEETLLD).
- Publish a Scottish Executive Biomass Action Plan (SEETLLD).
- Publish a Scottish Executive Renewable Heat Strategy (SEETLLD).
- Publish a Scottish Executive Sustainable Procurement Action Plan (SEFCSD).

Increasing carbon sequestration and retention

- Provide measures to support woodland creation and the introduction of low intensity silvicultural systems through Land Management Contracts (FCS).

Key theme 2: Timber

Context

Scotland's 1.3M hectares of woodland and forest currently produce some 6.8M tonnes of softwood round timber per annum, and this harvest is forecast to rise to some 8-9M tonnes over the next 20 years. Currently over 70% of this timber is processed in Scotland, with the resultant sawn wood and wood products finding ready markets within the UK and abroad. This in turn supports investment by industry, currently over £100M/yr in processing facilities to add value to the raw material, which itself supports over 10,000 people directly employed in forestry, wood processing and allied businesses in Scotland. At the same time the volume of roundwood exported overseas has grown to some 0.5M tonnes per annum.

Despite this growth in supply, the UK will continue to import a very large proportion of its timber and timber product needs, intensifying the constant challenge for our industry to minimise costs and to maximise efficiency if it is to continue to at least retain market share. The goal must be increased profitability through a combination of greater supply chain efficiencies, growth in both the size of the market and in market penetration, and moving into higher margin markets such as construction products.

An informed, vibrant and competitive wood processing sector in Scotland is vital to maximise market opportunities for the growing volume of timber reaching maturity. To sustain continued investment in efficient processing capacity and to realise the carbon benefits from greater use of timber in construction, it is vital that growers produce quantities and qualities of timber that meet market needs and better co-ordinate timber supply with demand to optimise the use of available softwood and hardwood resources.

To develop the role of forests as a carbon sink requires their effective regeneration and, where appropriate, expansion. Forestry is a long-term investment, with growers needing evidence of a market for their timber to engender the confidence to continue planting.

Through the potential replacement of energy intensive construction materials and fossil fuels with sustainable wood products, forestry has a unique role in supporting wider sustainable development, whilst also providing a range of other public benefits.

Timber transport is a major cost to the industry and can have negative impacts on rural communities and fragile rural roads. Accessing isolated timber reserves, achieving an efficient timber supply chain and minimising the impacts of timber transport are high priorities. The Strategic Timber Transport Fund is a key resource for realising the potential of the forestry sector.

The actions taking place to implement this theme seek to ensure that a supportive framework is in place to enable the benefits to be delivered.

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Key theme 2: Timber

What needs to be done in the first year?

Promoting predictable and stable timber supplies

- Trial the incorporation of log quality predictions into the production forecast system to produce a draft updated Scottish forecast for industry consultation (FCS).
- Identify further requirements for refining the accuracy of the forecast, with regard to both quality and quantity of timber (FCS).
- Hold and report on a series of workshops during the year to identify ways of improving the quality of private sector mensurational data to be used in production forecast updates (ConFor).

Encouraging more use of timber

- Support the next phase of the Wood for Good campaign (FC).
- Commission and publish detailed market analysis of trends and threats to use of home grown timber and timber products (FCS).
- Publish a Timber Development Programme to guide FCS support for the timber and timber-using sectors (FCS).
- Publish reports on research into the durability of UK grown spruce and larch for external cladding (FCS).
- Support research into innovative uses of wood for high end value markets (FCS).
- Produce a programme of activities to encourage improvements to the quality of Scotland's timber resource and run two pilot events (FR).

Increase timber supply chain efficiency

- Extend the Timber Transport Forum's project officer post to lead timber transport development work (TTF).
- Run three further rounds of the Strategic Timber Transport Scheme (STTS) (FCS & STTS Advisory Group).
- Identify specific opportunities, actions and action owners to secure and maximise the continuous supply of Scottish timber to the processing sector (ConFor).
- Examine the scale of remaining timber transport challenges on conclusion of the current phase of the Strategic Timber Transport Fund and make recommendations for proposed solutions (TTF).

Develop the hardwood sector

- Assist at least three small-scale hardwood processors towards Chain of Custody Certification (ASHS).
- Complete and publish an initial assessment on the potential to use branding and labelling to assist market competitiveness in the hardwood sector (SFIC).

Key theme 3: Business development

Context

With the change to Scottish Enterprise support for the sector and conclusion of the Scottish Forest Industries Cluster there is strong interest in ensuring that the dedicated business development support and advice built up by the Cluster is not lost. Thus the top priority over the coming year is to consolidate and develop the working partnership between ConFor, the Enterprise Network and FCS's policy team. Close involvement of SEETLLD is also important.

This priority action is complemented by the proposed focus on future timber production issues. This work, linked with the Timber theme will be undertaken jointly with ConFor and will aim to understand and address the needs for better private sector forecasting and production delivery from both public and private sector forests. The work will seek to establish a platform for sustainable and predictable timber production, which will underpin future investment plans for the processing and energy sectors. In addition, approaches to supporting farm business diversification, for example into energy crop supply, will be explored in two regions.

The third priority action to be addressed over this period will be the need to explore ways in which woodland owners can capture direct revenue from tourism. The publication in 2007 of some recently commissioned research into forestry's contribution to tourism will provide the basis for a discussion with the industry and other stakeholders about possible mechanisms or approaches for securing and accruing value from tourism, or tourism related, activities. It is anticipated that this will produce a concerted plan of action for inclusion in subsequent implementation plans.

Key nationally significant recreation facilities are being developed on the national forest estate to help enhance Scotland as a destination for outdoor tourism. Regional and local scale tourism initiatives are being encouraged to promote local economic development.

The sector skills agreement with Lantra will be signed and endorsed over this implementation plan period and Forest Enterprise Scotland will complete the delivery of their first Forestry Apprenticeship Scheme. The important area of engaging schoolchildren's interest in forestry, and the opportunities it represents, will also receive some focus. Actions associated with this area are related to several in the Education and Lifelong Learning purpose of the Community Development theme.

Within the context of this theme there is a major opportunity to increase the business development potential of schemes supporting the emerging bioenergy sector such as the Biomass Support Scheme.

As the commercial potential of non-timber forest products is increasingly recognised, guidelines are needed to ensure their sustainable exploitation.

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Key theme 3: Business development

What needs to be done in the first year?

Realising Economic Potential

- Launch a new suite of rural business development grants within Land Management Contracts (SEERAD).
- Publish sustainable harvesting guidelines for mosses and bulbs (FCS).

Contributing to rural development

- Provide options for farm diversification by integrating forestry grants into Land Management Contracts and supporting farm forestry initiatives (FCS).
- Publish Forest District strategic plans showing how each district intends to contribute to local sustainable development (FCS).
- Deliver the Scottish Executive's Scottish Biomass Support Scheme (SEETLLD).
- Hold a workshop to promote development of woodland crofts (FCS).
- Hold a workshop exploring opportunities for the timber sector within Axis 1 of the Scottish Rural Development Programme (FCS).

Tourism

- Deliver Phase 1 of a project to expand and enhance the visitor experience of Scotland's national forests (FCS).
- Publish research findings on forestry's contribution to tourism (FCS).
- Host the 2007 world downhill mountain biking championship in Fort William and maximise the associated economic benefits (FCS & HIE).

Skills

- Finalise partner support for the Land-based Sector Skills Agreement (Scotland) and publish the Trees and Timber Industry Group Action Plan (Lantra).
- Hold further forest skills roadshows in South Scotland (FEI & Barony College).
- Expand the Forestry Apprenticeship Scheme on the national forest estate (FES).
- Publish best practice guidelines on work experience placements (FCS).
- Establish a one-stop shop for training course information (Lantra).

Key theme 4: Community development

Context

Key actions associated with 'contributing to quality of life' are being delivered through the Woods In and Around Towns (WIAT) initiative⁵ (which is also an important delivery mechanism for the Access and Health theme). The National Forest Land Scheme⁶ (NFLS) is also a significant mechanism for delivery. For the first year the priorities are launching the second phase of WIAT and facilitating uptake of the NFLS.

Other areas need to be taken forward such as interface with the rapidly changing town and country planning process, expanding opportunities for community leasing of national forest land, and providing new support measures for delivery of 'forestry for people' benefits.

Many actions associated with education and lifelong learning are being delivered through the Forest Education Initiative (FEI) and FCS's Education Strategy⁷. The new Curriculum for Excellence represents an opportunity to mainstream outdoor learning and hence engaging with the curriculum development process is a priority. Fuller engagement with secondary and further education, forestry based vocational qualifications, and in the life-long learning agenda is also needed. Much of this work relates to the 'Skills' section of the Business Development theme.

Commitments to Scotland's Year of Highland Culture will be a focus in the first year for 'Helping communities develop their local identity through their cultural setting'. Continued delivery of this action will be through other regional or national cultural events with forestry often part of a wider array of cultural activities.

'Mainstreaming community engagement good practice in forestry' will be supported by the FC community involvement training package. The current package is geared to FC staff and work is needed to make support more widely available. The related action to 'promote training and capacity building among community volunteers' will be supported by the organisations like the CWA and through support measures like LEADER, a Forestry for People Challenge Fund and funding opportunities within Land Management Contracts. FCS is developing its policy on volunteering in parallel with a wider Scottish Executive process (see the volunteering action in the Access and Health theme).

In the first year, 'Highlight the use, value and benefits of trees and woodlands to planners and developers' is to be delivered via development of a spatially based decision support tool. This is one of a suite of planning related actions in the Scottish Forestry Strategy to be delivered via development of a toolkit for FCS staff. Outreach activities will follow.

In the first year, "Encourage entrepreneurial uses of timber", in the "Enhancing engagement with communities" section, will focus on community based woodfuel enterprise. This and other areas of work in Community Development such as the NFLS relate to "Contributing to rural development" in Key Theme 3: Business Development.

⁵ <http://www.forestry.gov.uk/forestry/inf-d-5w2nfz>

⁶ <http://www.forestry.gov.uk/forestry/inf-d-66re5j>

⁷ <http://www.forestry.gov.uk/forestry/inf-d-6cjdgl>

Key theme 4: Community development

What needs to be done in the first year?

Help to improve the quality of life and well-being of people across Scotland

- Launch Woods In and Around Towns second phase (FCS).
- Make the Public Benefit Decision Support Tool available for use by local authorities and other partners involved in planning (FCS).
- Publish an interim report of the Valuation of Forestry for People research (FR).
- Incorporate the opportunity to create woodland crofts into the National Forest Land Scheme when enabled by the forthcoming Crofting Reform Act (FCS).

Develop forestry's role in education and lifelong learning

- Secure a funding package to enable a national programme of support for Forest School and secondary age vocational qualifications (FEI).
- Establish partnerships with at least two secondary schools involved in the Schools of Ambition programme (FCS).
- Increase the number of Project Scotland volunteering opportunities on the national forest estate (FES).
- Deliver a programme of 'Touchwood' events for Scotland's Year of Highland Culture (FCS).
- Establish a demonstration project on forestry's role in sustainable development in Glasgow and Clyde Valley (FCS).

Enhance forestry's engagement with communities

- Refresh the community engagement training package according to recommendations in the evaluation of community partnerships on the national forest estate (FC).
- Expand the breadth of support available to community woodland groups (CWA).
- Launch the Forestry for People Challenge Fund to support delivery of community, health and education benefits from woodlands (FCS).
- Support establishment of at least one community woodfuel enterprise (FCS).

Support community ownership and management on the national forest estate, where this will bring increased benefits

- Complete an accessibility review of the National Forest Land Scheme (FCS).
- Secure time in the legislative programme for amendment of forestry legislation to enable (among other things) lease of national forest estate land for woodland management (FCS).

Key theme 5: Access and health

Context

Woodlands and forests make a positive contribution to people's health and wellbeing and offer access opportunities for the communities that live by, travel through and visit them. They are a place for all types of recreation activity catering for the novice to the international competition. They often provide access routes to hills, lochs and rivers. They host motorised events. Actions in this theme will contribute to the Strategy outcome of 'improved health and well-being of people and their communities'.

FCS involvement in health activity has been taken forward in the delivery of the 'forests for health' programme plan, which recognises the importance of accessibility, localness, appropriate information and delivery in partnership with lead agencies, NGOs and the voluntary sector. The Woods In and Around Towns initiative is another key delivery mechanism and has encouraged new and upgraded access provision and new woodland creation near to communities. Implementation of the access legislation is a further area of activity where the forest sector has been playing an active role. This first year of implementation will focus on making the first steps towards the Scottish Forestry Strategy's long-term vision of:

'Forestry for and with people ...':

- Focus new activity in communities and areas that are recognised as priorities for action by the Executive.
- Encourage and support woodland owners to deliver inclusive access.

'Managed in a culture of consultation and working in partnership ...':

- Delivering in partnership with lead agencies, NGOs and voluntary sector in the piloting of new and innovative health or access projects.
- Continue focus on woodland management and creation with access opportunities near to communities.
- Consult communities about local woodland and working with them to support a broad range of woodland uses.

'A broad recognition of the health and social benefits':

- Improve the knowledge of woodland and greenspace benefits through research and evaluation to guide policy, practice and targeting of resources.
- Provide accessible information about woodland access and health opportunities designed around the needs and preferences of priority groups.

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Key theme 5: Access and health

What needs to be done in the first year?

Making access easier

- Complete Core Path Plan proposals across Scotland (commence Land Reform Scotland Act section 18(1) formal consultation) (SEERAD/Access Authorities).
- Establish baseline data for the number and length of Core Paths in woodland (FCS).
- Complete the first two phases of research on increasing forestry's contribution to inclusive access (FCS).
- Agree actions to provide accessible woodlands in locations not meeting the Space for People standard (FCS).
- Publish research on the barriers that prevent people accessing woodlands for health (FCS).

Helping to improve the nation's health

- Develop a set of long-term indicators for forestry's contribution to health (FCS).
- Launch a Forests for Health Strategy showing how FCS will help increase the contribution of woodlands to the nation's health. (FCS).
- Establish a short-life, working group to look at increasing opportunities for volunteering in forestry and to establish baseline data on woodland related volunteering (FCS).

Enabling people to enjoy woodlands

- Publish a framework for recreation and tourism on the national forest estate (FES).
- Report on the potential for the forestry sector to contribute to the Scottish Executive's priorities on child development through natural play (FCS).
- Establish a baseline and monitoring process for an indicator on user satisfaction with woodland recreation provision (FCS).

Key theme 6: Environmental quality

Context

Protecting water, soil and air resources

FCS is assisting in the implementation of the Water Framework Directive through provision of expert advice, direct corporate action and encouragement of best practice. Forestry considerations are being fed into the national and local River Basin Management processes. Best practice workshops on water issues are planned.

Scotland's soils are vital for their filtering and transforming functions, and for carbon storage. They are also the repository of cultural artefacts, as well as being an archaeological resource in their own right. Protection and enhancement of soils is an important element of sustainable forest management and the revised Forests and Soils Guidelines will outline latest best practice, including conservation of soil carbon.

Contributing to Scotland's landscapes

With the signing and ratification of the European Landscape Convention during 2006, SNH has established the Scottish Landscape Forum (SLF). The Forum has been set up to provide advice to Ministers on how Scotland can further improve its performance across all the Articles of the Convention.

Scotland has established in its forestry culture a new tradition of designing and planning forests and woodlands to a recognised high international standard. The UK signing of the European Landscape Convention provides new impetus for forestry to continue developing its skills in landscape appreciation and forest design planning. The FC is in the process of replacing the current suite of forest landscape design guidelines with a single Forests and the Landscape Guidelines, due for publication in 2008. This will provide foresters with essential direction on integrating forests and woodlands into the landscape. Thought will also be given to the preparation of complementary educational information and training courses and provision of guidance for preparation of Forest Plans.

Managing the historic environment

As stewards of Scottish Ministers' forest estate, FCS is responsible for securing and enhancing the condition of monuments, buildings and designed landscapes in its care. Management and interpretation of this resource will be further enhanced through a memorandum of agreement between FCS and Historic Scotland.

The FC is currently developing the successor to the Forests and Archaeology Guidelines, to be a more inclusive Forests and the Historic Environment Guidelines. The consultation phase will be a valuable opportunity for FCS to develop stronger relationships and a shared understanding with all those with an interest in the historic environment. It will also provide a platform for considering practical measures for developing consistent data, data sharing and access, and support mechanisms for specialist advisory services.

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Key theme 6: Environmental quality

What needs to be done in the first year?

Help to protect Scotland's water, soil and air resource

- Hold workshops to support implementation of the Water Environment (Controlled Activities) Regulations 2005, including action to tackle diffuse pollution (FCS).
- Report research on avoiding acidification from tree planting and harvesting (FR).
- Consult on revised Forests and Soils Guidelines (FC).
- Establish baseline data and monitoring processes for forestry and water quality indicators (SEPA & FCS).

Contribute to Scotland's diverse and attractive landscapes

- Consult on revised Forests and the Landscape Guidelines (FC).
- Incorporate guidance into Forest Plans on SNH Landscape Character Assessments and Historic Scotland/Royal Commission on the Ancient and Historic Monuments of Scotland historic land use assessment identifying forestry-sensitive landscapes (FCS).
- Provide advice to Ministers on the implementation of the European Landscape Convention (Scottish Landscape Forum).
- Introduce Land Management Contract support measures to promote increased diversity in woodlands (FCS & SEERAD).
- Deliver a package of support and training resources to increase the contribution of woodlands in degraded and unsightly environments (FCS).

Help to manage Scotland's historic environment and its interpretation and enjoyment

- Consult on revised Forests and the Historic Environment Guidelines (FC).
- Introduce Land Management Contract support measures to conserve and enhance Designed and Historic Landscapes (FCS & SEERAD)
- Incorporate advice on assessment of the historic environment into forest plans guidance (FCS).
- Clarify mechanisms for securing archaeological advice in relation to forest plans and forestry operations (FCS).
- Prepare and sign a memorandum of agreement on joint HS and FCS action to manage the historic environment on Scottish Ministers' estate (HS & FCS).
- Establish baseline data and monitoring processes for forestry and historic environment indicators (HS & FCS).

Key theme 7: Biodiversity

Context

As well as contributing towards key targets on the ground, the first year of the plan requires a strong focus on developing programmes for private and public forests for delivering the priority actions in the Strategy over the next three years and beyond.

To help reverse biodiversity decline by targeted action a further 3000 hectares of native woodland will be brought into management to improve condition during 2007/8. This will be achieved mainly under existing Scottish Forestry Grants Scheme contracts and will include both designated and undesignated sites.

A programme is urgently needed through joint working by FCS and SNH to target work to help meet the Scottish Executive's targets for achieving favourable condition of designated sites. The programme will focus on sites designated for woodland biodiversity features, but will include action for associated open and freshwater features.

To meet Scottish native woodland Habitat Action Plan targets for improving condition, expansion, and restoration of native woodlands on ancient woodland sites, we need to identify areas of greatest benefit, assisted by forest habitat network planning tools. Guidance for woodland owners to promote Land Management Contract schemes in these targeted areas is also a key early need.

For priority species the initial need is to develop costed programmes for key species that have specific woodland management requirements. A red squirrel costed action plan has already been published and the milestone in 2007/08 will be to select and publish areas to be managed as long-term red squirrel strongholds.

For 'reversing decline by broader actions', a priority is to encourage effective and sustainable collaborative deer management to reduce impacts on biodiversity in woodlands and across wider landscapes.

Forest planning will be boosted by the completion of a set of regional analyses of potential ecological networks covering all of Scotland. These will be published with the GIS planning system BEETLE (Biodiversity and Environmental Evaluation Tools for Landscape Ecology) to help users plan habitat networks to benefit biodiversity.

Action to increase awareness, understanding and enjoyment of woodland biodiversity will largely be achieved through actions under Key Themes 4 and 5, but a specific milestone here is to review current provision across the forestry and conservation sectors and identify and prioritise further needs to enhance biodiversity related benefits.

To improve knowledge for better decision-making and integrate biodiversity into all decision-making, and also to identify priorities and resource needs, FCS will publish its Biodiversity Programme. Other milestones are to complete a sixth of the Native Woodlands Survey of Scotland, and to develop baseline data and monitoring systems to support the full set of biodiversity indicators.

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Key theme 7: Biodiversity

What needs to be done in the first year?

Help reverse biodiversity decline by targeted action

- Bring 3000 hectares of native woodland into management to improve condition (FCS).
- Develop a prioritised programme to improve condition of designated sites with woodland (FCS).
- Develop and publish a regional breakdown of native woodland Habitat Action Plan (HAP) targets and maps of priority areas contributing to habitat networks (FCS).
- Produce guidance on native woodland and designated site management (FCS)
- Publish costed programmes for three key woodland species (red squirrels, black grouse and capercaillie,), including maps of priority areas, plans for action on the national forest estate, guidance and training linked to LMCs (FCS).
- Publish red squirrel stronghold sites as a key part of the red squirrel action plan (SNH).

Reverse biodiversity decline by broader actions

- Introduce LMC measures and guidance for collaborative and pro-active deer management to enhance woodland habitat quality (SEERAD).
- Complete and make available regional Forest Habitat Network analyses and associated planning tools (FR).

Increase awareness of woodland biodiversity

- Publish with partners a report on opportunities to increase the awareness, understanding and enjoyment of woodland biodiversity (FCS).

Improve knowledge for better decision-making

- Publish and implement an FCS Biodiversity Programme including costed priorities for conservation of woodland biodiversity (FCS).
- Establish baseline data and monitoring processes for the biodiversity indicator set (FCS & SNH).
- Complete 120Kha of the Native Woodland Survey for Scotland (NWSS) (FCS).

South Scotland

Context

South Scotland is a predominantly rural area, characterised by small to medium sized market towns. The natural environment is particularly diverse, ranging from montane scrub habitats in the uplands, right through to lowland raised mires and fertile river valleys. The population is widely dispersed, at roughly half the average density of the rest of Scotland. The economy is characterised by low wages, with average wages significantly below the national average.

Community woodland initiatives have a long and successful track record within some areas of the region, most notably in the Borders. However activity in other areas is more limited, and presents an opportunity for further development. Forestry supported recreation and tourism is another characteristic of the region, with the highly successful 7stanes mountain-biking facilities being a notable highlight. Given the widespread and extensive nature of the forest area, further opportunities exist to promote healthy lifestyles, tourism and associated rural diversification.

The area contains about 25% of the total forest resource of Scotland, and also draws significant volumes of timber from surrounding regions such as Argyll and the north of England. This resource supports a sizeable processing sector, with approximately 40% of Scotland's total capacity located within the region. Several other significant processors are located nearby but outside the region itself. As a result the area has become a hub for the forest industries sector and continues to grow, with ongoing investment and new associated developments taking place, in areas such as biomass based renewables. Transport infrastructure within the region is limited with few railway lines. Much of the area is characterised by a network of minor rural roads, where timber transport can have significant impacts in some areas.

What else needs to be done in the first year?

Timber

- Implement the Scottish Borders 'Construction and sustainable development using local timber' project (SBWP).

Business development

- Prepare a human resources action plan responding to the challenges facing the forestry sector within the south of Scotland (SSFIC/SSFEI).

Community development

- Instigate a capacity building project for south of Scotland community woodland initiatives (FCS).

Access and health

- Develop effective links with the health community through Director-level meetings within all the Community Planning Partnership areas, to promote 'forests for health' (SSFF).

Environment

- Produce GIS outputs from a desk-based survey in Scottish Borders and Ayrshire on Historic Gardens and Designed Landscapes of regional significance (SBWP & AAWP).

Central Scotland

Context

Central Scotland is the most populous region of Scotland. Approximately 3 million people live within the Forum area comprising c.60% of Scotland's total population. Most people live within settlements of 1000 people or more, making Central Scotland's population the most urbanised in the country.

Individuals' social circumstances vary enormously across the region from people living in areas of extreme affluence, to areas of extreme deprivation and poverty. The majority of Scotland's most disadvantaged communities lie within the region, many of whom also experience the poorest surroundings.

The environment too has enormous variations across the region. There are very attractive areas with high environmental value, such as the Campsie and Pentland Hills, but also areas of significant environmental blight and degradation in areas associated with former mineral extraction and heavy industries. There are existing woodlands (and open ground habitats) of very high ecological value and potential in the region, in particular ancient woodlands (e.g. Clyde Valley Woodlands). Many of these areas are under significant ongoing threat from development pressure, which can result in the direct loss or fragmentation of habitat. As the most commercially attractive wood energy projects in Scotland will be in large commercial and public sector buildings, such as hotels, hospitals and leisure centres, Central Scotland offers good locations to develop the wood-fuel sector.

Finally, due to its large population, the region provides a unique opportunity to promote forestry's contribution to both urban regeneration and sustainable development.

What else needs to be done in the first year?

Climate Change

- Publish a feasibility study examining the opportunities for developing a woodfuel cluster in Glasgow (FCS).
- Publish a study on the potential for the Glasgow & Clyde Valley Green Network to supply wood fibre to a developing a wood heating sector (GCVGNP).

Community development

- Establish a strategic partnership in Edinburgh and the Lothians to promote green networks to enhance the environmental quality of the area (FCS).
- Deliver a 'forestry for planners' promotional programme to strengthen linkage with the planning system (FCS)
- Publish a Communication Strategy for the region that facilitates future engagement of all stakeholders in the development of the forestry sector (CSFF).
- Launch a Glasgow Forest School Programme (FCS)

Biodiversity

- Publish Integrated Habitat Networks for both Glasgow and the Clyde Valley (GCVGNP) and Falkirk (CSFT).

Perth and Argyll

Context

Perth and Argyll Conservancy covers some of the most diverse range of cultural, historic and natural landscapes in Scotland ranging from the machairs of the Argyll islands to the cities of Stirling and Dundee and the productive farmlands of Perthshire, Angus and Fife. It covers four major Forest Enterprise Districts and includes Loch Lomond and The Trossachs National Park. Around 16% of Scotland's population live within the region, mainly in the east, but the urban population in central Scotland is also close, offering significant opportunities for forest-based tourism, recreation and education.

Some 22% of the area is forested, a reflection of the long history of forest creation and management by traditional estates. Such a tradition encourages new approaches to integrated land use where a diversity of objectives can be delivered by well-targeted public support.

Regional priorities are:

- Fulfilling the potential for woodland around the major population centres of Dundee, Perth, Stirling and Clackmannan.
- Realising the potential for biomass especially in rural areas where timber supply is generally good but transport costs mitigate against viable traditional timber markets.
- Encouraging farmers to realise the potential offered by forestry and woodlands.
- The potential for supporting tourism as an economic activity, and recreation provision for local people.
- Mitigating threats to sites important for biodiversity.

What else needs to be done in the first year?

Timber

- Promote the potential for growing quality hardwoods through the recently published Conservancy report and a Perthshire seminar (P&AFF).

Business Development

- Support development of local woodfuel supply clusters and the establishment of exemplar projects across the region (FCS, SEN & ALIEnergy).
- Launch phase II of Perthshire Big Tree Country Project (the Big Tree Country Partnership).
- Establish a demonstration of agro-forestry integrated into a stock farming system (BIFF).

Access and health

- Launch Stirling and Clackmannanshire Woodlands and Greenspace Initiative (FCS, Stirling & Clackmannanshire Councils).

Biodiversity

- Launch the Argyll Islands Partnership to protect key island woodland habitats (FCS, SNH, NADAIR).
- Launch the Argyll Rhododendron Action Group to co-ordinate control and removal activity (FCS & SNH).

Grampian

Context

Grampian, Scotland's third largest region in terms of both land area and population, has a long history of forestry. The woodlands around Aberdeen, and the towns of Aberdeenshire and Moray are heavily used by local communities and schools and the last 10 years has seen the emergence of several very active community owned woodlands.

The 155,000 ha of woodland produces over 700,000 tonnes of timber and supports a thriving timber industry, contributing to the agriculturally based rural economy. The quality of the land supports a concentration of tree nurseries and offers much scope for integration of farming and forestry. Integration has seen the expansion of farm woodlands under the Grampian Forest, and more recent developments in woodfuel supply and riparian woodland restoration. Farm forestry can contribute significantly to delivery of the rural development, climate change and environmental quality themes of the Scottish Forestry Strategy.

Grampian's woodlands contain large areas of predominately native species, including 30% of Scotland's Scots pine, much of which is managed under low impact silvicultural systems. These are of high biodiversity value, contribute greatly to the landscape of the area and provide habitat for species like red squirrels and capercaillie.

Priorities for Grampian are:

- Improved information on the quantity and quality of timber in Grampian's forests.
- Expansion and active management of farm woodlands that support local businesses and farm diversification with a focus on developing woodfuel.
- Delivering Grampian's contribution to the Active Woods programme.
- Support native woodland expansion and management, helping to deliver regional biodiversity priorities.
- Develop riparian woodland networks for biodiversity and water management benefits.

What else needs to be done in the first year?

Timber

- Complete the first two parts of the Scots pine timber quality in North Scotland project including a survey of current utilisation and timber quality assessment (FCS & FR).

Business Development

- Develop a Grampian Forest Initiative focused on rural economic diversification (FCS).

Access and Health

- Establish two health walks partnerships employing co-ordinators (FCS & NHS Grampian).
- Launch the "Discover Culbin" visitor facilities (FES).

Biodiversity

- Develop a Grampian Forest Habitat Network model (FCS & FR).
- Support creation of 170ha of native woodland and 70ha of riparian woodland (FCS).
- Report on the achievement of Habitat Action Plan targets in Grampian (FCS).

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Highland

Context

This area includes Highland and the Northern and Western Isles. Key area strengths are the quality of the natural environment, access for recreation and all forms of outdoor activity, and widespread active community involvement in forestry. The main challenges are the extreme climate, fragmented native woodlands, rural deprivation and the higher costs of working in remote locations.

Forestry is a major industry in the Highlands with much of the timber used in mills around the Moray Firth, Lochaber and Strathspey. Adding value to timber products, biomass energy and increasing the use of timber in construction all have the potential to deliver significant local benefits. Tourism is the key industry and forests provide high quality opportunities for outdoor access, mountain biking and wildlife watching.

The majority of forestry related 'community buy outs' in Scotland have been in Highland. In addition many communities are working in woodland management partnerships. The Forestry and Rural Development Scheme (structural funding matched by FCS, HIE and SNH) has provided significant additional funding for community forestry groups and the current revision of crofting legislation will open up further opportunities to develop crofter forestry. Forestry provides an important opportunity for farm diversification particularly relating to woodfuel supply chains.

The area contains a high proportion of Scotland's 'Natura' network, more than half of Scotland's native woodlands as well as important Caledonian pine woods, Atlantic oakwoods, active blanket bog and the main populations of capercaillie, red squirrel and freshwater pearl mussel. Sustainable deer management is a major challenge.

What else needs to be done in the first year?

Climate change

- Increase connectivity over 9000 hectares of forest by planting 450 hectares through the Highland Locational Premium (FCS).

Timber

- Identify the distribution of large diameter, quality timber around the Moray Firth with potential to attract a market premium through local use in construction (FCS & Highland Council).
- Collate currently available information on potential woodfuel supply in the Highlands and carry out an inventory of farm woods in Caithness and Sutherland (FCS).

Business development

- Establish a focus group to consider the potential of short rotation forestry to contribute to woodfuel supplies from farms in Highland (FCS).

Community development

- Revise the crofter forestry handbook to reflect the needs of small scale and community forestry, focusing on management of existing forests (FCS, CC & SCF).

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Progress indicators

The Scottish Forestry Strategy laid out a set of indicators for each key theme. In many cases these use existing data sets, but where indicated below, new data or analyses will be required. These indicators will be used to report progress over the intended 10 year life of the current strategy.

Climate change

Indicator	Data source	Last assessed	Value	Reporting interval
Area of new planting	FCS	2005/06	3995ha ⁸	1 year
Annual net carbon savings	FC	2004	10.5MtC ⁹	1 year
Installed capacity of wood energy plant (in megawatt thermal and electrical)	FC	2006 (provisional)	125 MW ^t + 0 MW ^{e10}	1 year
Number of non-domestic, wood fuelled energy systems installed	FC	2006	49 ¹¹	1 year
Area of short rotation coppice grant aided	FCS	2005/06	34 ha	1 year
Index of roundwood road miles	FR	2006 (provisional)	51 miles/t	3 years

Timber

Indicator	Data source	Last assessed	Value	Reporting interval
Actual wood production	FC	2005	6.9Mm ³ OBS ¹²	1 year
Forecast wood availability in the private sector	FC	2006	3.7Mm ³ OBS	5 years
Forecast wood availability from the national forest estate	FC	2006	3.2Mm ³ OBS	5 years
Timber's contribution to Scottish Gross Value Added	FC	2006	£494M (0.6%) ¹³	1 year
Sawmill log consumption	FC	2005	2.4Mm ³	1 year

⁸ 3861ha through grant schemes. 134ha on the national forest estate

⁹ Source – LULUCF 2006 report (<http://www.nbu.ac.uk/ukcarbon/reports.htm>)

¹⁰ Excludes co-firing

¹¹ Source – Woodfuel Consumption in Scotland 2006 – report to FC

¹² Over-bark standing

¹³ Source – Scottish input-output tables 2003 (published December 2006)

(<http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Input-Output>). Includes forestry planting, harvesting, wood and wood products, pulp, paper and paperboard. Scottish grown timber only excludes paper and paperboard products. Revised from £570M (0.7%) 9 May 2007 following improved methodology.

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Sawmill sawnwood output	FC	2005	1.3Mm ³	1 year
Scottish wood's value share of the UK market	FC	2006	4.4%	1 year
Timber use in construction relative to other materials		to be established		
Area of new coniferous woodland	FCS	2005/06	974ha ¹⁴	1 year
Area of new broadleaved woodland where timber production is a significant management objective	FCS	2006	84ha	1 year
Sales of improved nursery stock		to be established		
Volume of certified timber from Scottish forests	FC	2005	5.7Mm ³ OBS	1 year

Business development

Indicator	Data source	Last assessed	Value	Reporting interval
Forestry's contribution to Scottish Gross Value-Added)	FC	2006 (provisional)	£760M ¹⁵	4 years
Employment supported by the forestry related sector	FC	2006 (provisional)	40,000 FTE ¹⁵	4 years
Uptake of Land Management Contracts	FCS	to be established		
Staff turnover rates in the forestry sector		to be established		
Number of structure plans recognising woodland benefits	FCS	to be established		
Numbers of people enrolling or registering for forestry related short courses, qualifications and Modern Apprenticeship programmes	Lantra	to be established		
Numbers of people completing forestry related short courses, qualifications and Modern Apprenticeship programmes	Lantra	to be established		
Forestry's contribution to Scottish tourism Gross Value-Added (Provisional)	FCS	to be established		

¹⁴ 951ha through grant schemes. 23ha on the national forest estate

¹⁵ 15FR (2006) A valuation of the economic and social contribution of forestry for people to Scotland. Figures include contribution of Scottish grown timber production and processing and recreation and tourism visits to Scottish woodland. Interim figures of £1,109M GVA and 53,800FTE jobs revised 9 May 2007 following improved methodology.

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Community development

Indicator	Data source	Last assessed	Value	Reporting interval
Number of schools involved in woodland based learning activities.	FEI	to be established		1 year
Number of community groups involved in owning or managing woodland.	CWA	2002	51	
Number of schools providing vocational courses that include forestry related skills.	Lantra	2006	4	1 year
% adults and/or family members who attended an organised learning activity or event linked with Scottish woodlands in the previous 12 months.	FC	2005	10%	2 years
% adults who have heard or read about Scottish woodlands in the previous 12 months.	FC	2005	26%	2 years
Number of land parcels sold or leased under the National Forest Land Scheme.	FCS	2006/7	17	1 year
Area of land parcels sold or leased under the National Forest Land Scheme.	FCS	2006/7	877 ha	1 year
Independent satisfaction rating of community partnerships on the national forest estate.	CWA	2006	70% ¹⁶	3 year

Access and health

Indicator	Data source	Last assessed	Value	Reporting interval
Proportion of the population with accessible woodland greater than 2 hectares within 500 metres of their home	Woodland Trust Scotland	2006	23%	3 years
Proportion of the population with accessible woodland greater than 20 hectares within 4 kilometres of their home	Woodland Trust Scotland	2006	68%	3 years
Proportion of adults (16 years +)	FC	2006	56%	2 years

¹⁶ Survey question asked was: “[Do the] activities and achievements of the community-FCS partnership meet your organisation’s expectations of the partnership? Yes- completely, No - not at all, Not yet, So far but more to do, No response/ Not Applicable. Indicator is the sum of “Yes – completely” and “So far but more to do”.

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who visited woodland in previous 12 months				
Number of visits to national forests	FCS	2006	10M	3 years
Number and length of Core Paths in woodlands		to be established		3 years
Percentage satisfaction with woodland recreation provision		to be established		3 years
Forests for health indicator		to be established		3 years
Number of formal 'volunteer days' associated with woodland activity	FCS	to be established		3 years

Environmental quality

Indicator	Data source	Last assessed	Value	Reporting interval
Length of rivers in forested catchments for which ecological quality is maintained or enhanced	SEPA	to be established		
Length of rivers affected by acidification where forestry is a significant exacerbating factor	SEPA	to be established		
Number of forestry operations or activities leading to direct pollution of the water environment	SEPA	to be established		
Percentage of woodlands covered by approved forest plans in areas designated for their landscapes	FCS	2006	57%	5 years
Percentage of woodland area managed under low impact silvicultural systems	FCS	2006	0.5% ¹⁷	1 year
Number of agreed Management Plans for Scheduled Ancient Monuments in forests	FCS	to be established		1 year
Number of recorded sites in the National Monuments Record of Scotland included in approved forest plans	FCS	to be established		1 year

¹⁷ Estimated from recipients of low impact silviculture grants, and data from the national forest estate.

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Biodiversity

Indicator	Data source	Last assessed	Value	Reporting interval
Area of native woodland	FCS	2005	392 Kha	1 year
Percentage of woodland SSSIs in favourable or unfavourable recovering condition	SNH	1999-2005 (provisional)	57%	3 years
Progress against Habitat Action Plan targets for native woodland condition	FCS	2005	3.3K ha	1 year
Progress against Habitat Action Plan targets for native woodland restoration	FCS	2005	0.4K ha	1 year
Progress against Habitat Action Plan targets for native woodland expansion	FCS	2005	4.3K ha	1 year
Number of woodland related UK Biodiversity Action Plan species and habitats identified as stable or increasing/recovering or in favourable condition	SNH	2005	74%	
Number of woodland related UK Biodiversity Action Plan species and habitats identified as declining	SNH	2005	26%	3 years
Area of PAWS with a commitment to restoration under long-term plans.	FCS	to be established		3 years
Area of woodland with active, approved deer management plans.	FCS	to be established		1 year
Area of woodland converted to priority open ground habitat	FCS SEERAD	to be established		3 years
Loss of ancient, semi-natural woodland to development.		to be established		
Woodland Bird Index	BTO	to be established		3 years
Woodland structure: mean deadwood volume	FR	1995-1999	4.4m ³ /ha	10 years
Woodland structure and composition: mean understorey shrub layer cover	FR	1995-1999	17%	10 years
Woodland structure and composition: mean no. tree and shrub species within stands ¹⁸	FR	1995-1999	2.2	10 years

¹⁸ Within 0.25ha plots

Annex 1: listing of action leaders

Access Authorities	
Argyll, Lomond and the Islands Energy Agency	ALIEnergy
Association of Scottish Hardwood Sawmillers	ASHS
Ayrshire and Arran Woodland Partnership	AAWP
Barony College	
The Big Tree Country Partnership	
Breadalbane Initiative for Farm Forestry	BIFF
British Trust for Ornithology	BTO
Central Scotland Forest Trust	CSFT
Central Scotland Forestry Forum	CSFF
Clackmannanshire Council	
Community Woodland Association	CWA
Confederation of Forest Industries	ConFor
Crofters Commission	CC
Flooding Issues Advisory Committee	FIAC
Forest Education Initiative	FEI
Forest Enterprise Scotland (an FCS Agency)	FES
Forest Research (an FC Agency)	FR
Forestry Commission	FC
Forestry Commission Scotland	FCS
Glasgow and Clyde Valley Green Network Partnership	GCVGNP
The Highland Council	
Highlands and the Islands Enterprise	HIE
Historic Scotland	HS
Lantra - the sector skills council for the environment and land-based sector	Lantra
The NÀDAIR Trust (Nature and Sustainable Development in the Argyll Atlantic Islands)	NADAIR
NHS Grampian	
Perth and Argyll Forestry Forum	P&AFF
Scotland and Northern Ireland Forum for Environmental Research	SNIFFER
Scottish Borders Woodland Partnership	SBWP

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Scottish Crofting Foundation	SCF
Scottish Enterprise Network	SEN
Scottish Environmental Protection Agency	SEPA
Scottish Executive Development Department	SEDD
Scottish Executive Enterprise Transport and Life Long Learning Department	SEETLLD
Scottish Executive Environment and Rural Affairs Department	SEERAD
Scottish Executive Finance and Central Services Department	SEFCSD
Scottish Forest Industries Cluster	SFIC
Scottish Landscape Forum	
Scottish Natural Heritage	SNH
South Scotland Forest Education Initiative	SSFEI
South Scotland Forest Industries Cluster	SSFIC
South Scotland Forestry Forum	SSFF
Stirling Council	
Strategic Timber Transport Scheme Advisory Group	STTS Advisory Group
Timber Transport Forum	TTF



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

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