

Scotland's Forestry Strategy 2019–2029

A Consultation Draft

September 2018



Scottish Government
Riaghaltas na h-Alba
gov.scot

Ministerial foreword to consultation



The management of forests, woodlands and trees in Scotland over the last one hundred years is a significant success story. But it is a success that too few people have recognised. As Cabinet Secretary responsible for forestry, I have great optimism and ambition for this economically and environmentally crucial land-use. I am particularly pleased that within a year of taking office, the Forestry and Land Management (Scotland) Act 2018 was passed – the first forestry Act passed by the Scottish Parliament. The Act sets the framework for completing the devolution of forestry to Scotland.

This Forestry Strategy is an essential element in supporting delivery of that framework and is a clear commitment in this year's Programme for Government. It will set out our forestry ambitions and our long-term strategic approach to modern, productive, sustainable forestry.

Forestry today is much changed. The practices of 50 years ago have been replaced by the internationally recognised principles of sustainable forest management.

These principles, which underpin every aspect of forestry in Scotland, are also challenging the dated concept of 'competing' land interests and are helping to build a culture of complementary land management to get the best from our land.

This is very much at the heart of our long-term vision for forestry. It is a vision that aims to inspire and stimulate action in a shared national endeavour, to sustainably grow and manage this valuable resource - to make the most of it, to protect it and to enhance it such that it meets our needs and the needs of the Scottish people in future.

As we know, diverse and versatile forests and woodlands are located across Scotland. Serving rural and urban communities, the many and varied benefits they deliver are well documented: they sustain our unique wildlife; make a substantial contribution to the national and local economies; help mitigate the impacts of climate change; improve our quality of life; and stimulate our children to learn and thrive.

It is our collective obligation to ensure that future generations continue to benefit from this sustainable forest resource. That is why we have designed this draft strategy to meet three primary objectives over the next 10 years to: increase forestry's contribution to sustainable and inclusive economic growth; protect and enhance our valuable natural assets to contribute to a healthy and high quality environment; and use our forest and woodland resources to empower more people to improve their health, well-being and life chances.

I am grateful to those who have already contributed to the development of our thinking and I would strongly encourage everyone with an interest in forestry to respond to this consultation. I wish, in advance, to thank you for taking the time to do so.

A handwritten signature in black ink that reads "Fergus Ewing". The signature is written in a cursive style with a large loop under the letter 'F' and another large loop under the letter 'E'.

Fergus Ewing

Cabinet Secretary Rural Economy

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Responding to this consultation

We are inviting responses to this consultation by 29 November 2018.

Please respond to this consultation using the Scottish Government's Consultation Hub (<http://consult.gov.scot>). Access and respond to this consultation online at <https://consult.gov.scot/forestry/scotlands-forestry-strategy-2019-29>. You can save and return to your responses while the consultation is still open. Please ensure that consultation responses are submitted before the closing date of 29 November 2018.

If you are unable to respond online, please complete the Respondent Information Form in Annex C – see also 'Handling your Response' below, and send to:

Forestry Strategy Team
Forestry Commission Scotland
231 Corstorphine Road
Edinburgh
EH12 7AT

Handling your response

If you respond via our online Consultation Hub (<http://consult.scotland.gov.uk/>), you will be directed to the Respondent Information Form. Please indicate how you wish your response to be handled and, in particular, whether you are content for your response to be published.

If you are unable to respond via our online Consultation Hub, please complete and return the Respondent Information Form included in this document (Annex C).

If you ask for your response not to be published, we will regard it as confidential, and we will treat it accordingly.

All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information (Scotland) Act 2002 and would therefore have to consider any request made to it under the Act for information relating to responses made to this consultation exercise.

To find out how we handle your personal data, please see our privacy policy: <https://beta.gov.scot/privacy/>

Next steps in the process

Where respondents have given permission for their response to be made public, and after we have checked that they contain no potentially defamatory material,

responses will be made available to the public at <http://consult.gov.scot>. If you use the Consultation Hub to respond, you will receive a copy of your response via email.

Following the closing date, all responses will be analysed and considered along with any other available evidence to help us. Responses will be published where we have been given permission to do so. An analysis report will also be made available.

Comments and complaints

If you have any comments about how this consultation exercise has been conducted, please send them to the contact address above or to:

forestry.strategy@forestry.gsi.gov.uk.

Scottish Government consultation process

Consultation is an essential part of the policymaking process. It gives us the opportunity to consider your opinion and expertise on a proposed area of work.

You can find all our consultations online: <http://consult.gov.scot>. Each consultation details the issues under consideration, as well as a way for you to give us your views, either online, by email or by post.

Responses will be analysed and used as part of the decision making process, along with a range of other available information and evidence. We will publish a report of this analysis for every consultation. Depending on the nature of the consultation exercise the responses received may:

- indicate the need for policy development or review
- inform the development of a particular policy
- help decisions to be made between alternative policy proposals
- be used to finalise legislation before it is implemented

While details of particular circumstances described in a response to a consultation exercise may usefully inform the policy process, consultation exercises cannot address individual concerns and comments, which should be directed to the relevant public body.

1. Introduction to the draft forestry strategy

This Scottish Government draft Forestry Strategy provides a 10-year framework for action to achieve a 50-year vision for Scotland's woodlands and forests. The content of this draft strategy is fundamental to our ambitions for forestry, and has the principles of sustainable forest management at its core.

It builds on and modernises the approach undertaken in previous forestry strategies; it places forestry at the heart of government, and it drives and underpins the wide variety of forest and woodland activities taking place throughout the country that are delivering, and will continue to deliver, an extensive range of sustainable economic, environmental and social benefits, now and in the future.

Whilst the focus of this draft strategy is to sustain and increase the substantial benefits Scotland derives from the sustainable creation and management of its woodlands and forests; we recognise the important contribution that trees outside of woodlands and forests make in enhancing our rural and urban landscapes, their role in addressing air pollution and their biodiversity and cultural value. The Scottish Government will, therefore, continue to work with a wide range of partners on appropriate implementation of the existing regulatory and policy framework covering these trees (see Annex A).

Through this draft strategy we provide an overview of forestry in Scotland, set out our long-term vision for Scottish forestry within the context of our wider land use ambitions, identify the major issues we need to address to realise this vision and identify clear priorities and policies for delivery.

The draft strategy has been prepared in line with the Forestry and Land Management (Scotland) Act (FLM(S)A) 2018 (see Annex B). Following this consultation, we will review the consultation responses and use them to prepare the final strategy, aiming to lay it, and associated documentation, before the Scottish Parliament in early 2019.

2. Background: Scotland's forests and woodlands

2.1 The history of Scotland's forests and woodlands

Scotland is part of the northern boreal zone, which is characterised by extensive forests, and also includes countries such as Canada and Finland, as well as parts of the USA, Russia and China. Without human intervention, much of Scotland would be covered by tree species of a range of types, including Scots pine and birch in the north and east, and oakwoods in the warm and wetter west.

Ever since the first foresters entered Scotland's ancient wildwood over 6000 years ago, our trees and woodlands have been felled and harvested. However, as Scotland's population grew, more wood from forests was harvested and many forests disappeared, making space for agriculture, people's homes and infrastructure. By the early 20th century, forest cover in Scotland, as well as in the rest of the UK, was reduced to 5%. This chronic lack of trees and timber was recognised as a strategic problem for the country, and so the UK Forestry Act of 1919 was introduced to address the issue.

Given this strategic need to grow more timber, the forests planted in Scotland during the subsequent 100 years were primarily, but not exclusively, designed to optimise timber production, using species from around the world that could thrive in Scotland's relatively favourable growing conditions.

As our understanding of the environment and these new forests has developed, so has the practice of modern Scottish forestry. In particular, over the second half of the 20th century, it became clear that the industrial, intensive, single-purpose forestry that dominated the 1960s, 1970s and early 1980s was not sustainable, and an approach was required that needed to embrace environmental and wider societal interests. This change of focus for forestry policy resulted in the development of comprehensive standards for forest management in the 1990's, drawing on international initiatives stemming from the first Earth Summit in Rio in 1992. More recently the forestry sector has also experienced a shift in terms of the balance of timber production carried out on the Scottish Ministers' owned and managed forests and woodlands, as opposed to that carried out on private land, with the majority of production now taking place on the latter.

2.2 Modern Scottish forestry

From the late 1980s onwards, close working relationships between government, the forestry sector, and environmental and community groups led to the development of a strong consensus around the internationally recognised principles of sustainable forest management. **These are the principles upon which Scotland's modern forestry legislation, practice and related policies are built.**

Promoting Sustainable Forest Management

The principles of Sustainable Forest Management have been agreed internationally. In 1993, Sustainable Forest Management was defined as:

The stewardship and use of forest lands that maintains biodiversity, productivity, regeneration capacity, vitality and potential to fulfil now and in the future relevant ecological, economic and social functions at local, national and global levels and that does not cause damage to other ecosystems”¹.

The Scottish and other governments in the UK have adopted this definition and, along with relevant legislation and other good practice, have incorporated it into the UK Forestry Standard (UKFS).

The UK Forestry Standard – the benchmark for sustainable practice

The UKFS sets out the Government’s approach to sustainable forest management, to help inform forest planning decisions which involve all forests, and to ensure that international agreements and conventions are applied. It is reviewed every five years with the input of forestry sector and environmental stakeholders and it provides the basis for regulating forestry activities, including approvals for felling licences. In addition, payment of government grants for woodland creation and forest management is conditional on meeting the requirements of the UKFS and its supporting guidelines:

- Forests and Biodiversity.
- Forests and Climate Change.
- Forests and Historic Environment.
- Forests and Landscape.
- Forests and People.
- Forests and Soil.
- Forests and Water.

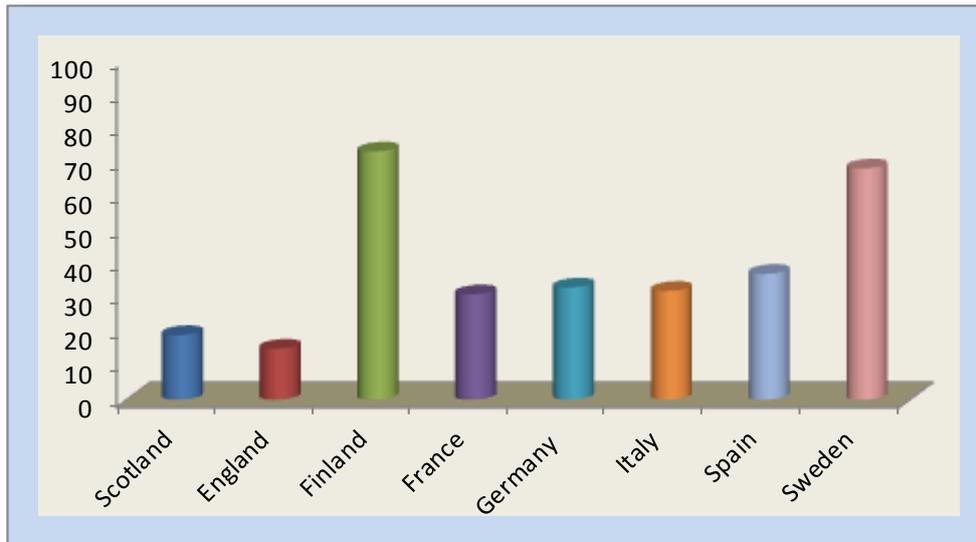
The UKFS also provides the basis for independent certification of woodland management through the internationally recognised Forest Stewardship Council (FSC) system and the Programme for the Endorsement of Forest Certification (PEFC). In Scotland and the rest of the UK, the UK Woodland Assurance Standard (UKWAS) is used to demonstrate compliance with both the FSC and the PEFC; the UKWAS gives consumers confidence that products from certified forests come from sustainably managed sources. In 2018, 58% of Scotland’s forests were certified against the UKWAS.

¹ [Second Ministerial Conference on the Protection of Forests in Europe 16-17 June 1993, Helsinki/Finland.](#)

2.3 Scotland's forest and woodland resource

In the last 100 years, forest and woodland cover in Scotland has increased from around 5% to 19%; this is higher than the rest of the UK but is still well below the European Union average of 38%.

Chart 1 – Forest and woodland cover as a percentage of land area in Scotland



Scotland's forest and woodland area now covers more than 1.4 million hectares (ha), one third of which is owned by Scottish Ministers as part of the existing National Forest Estate. These forests consist of a range of different woodland types and tree species, ranging from the highly productive forests of the Galloway and Tay Forest Parks to traditional mixed Highland estates, and from urban forests in and around our cities to the Atlantic oakwoods in Argyll and the native Caledonian pinewoods in the Highlands.

The benefits we receive from our forests and woodlands

Diverse and versatile forests are located across Scotland and serve both our rural and urban communities; they provide a range of benefits that sustain livelihoods and improve people's quality of life and well-being.

Supporting our economy

Forestry makes a substantial contribution to the economy at both national and local levels. The majority of economic activities associated with woodland creation, management, harvesting, transportation, and a significant part of the processing of wood products, take place in rural areas of the country and therefore, for many rural communities, the forestry sector is very important.

The forestry sector comprises tree nurseries, businesses focused on planting, managing and harvesting, as well as wood fibre processors. These businesses

range in scale, from artisan furniture-makers, family-owned contracting businesses and community-based biomass enterprises, to UK-wide woodland management companies and multi-million pound panel, pulp, paper and sawmills operating internationally. These businesses produce a range of wood products including sawn timber, fence posts, oriented strand board, medium-density fibreboard, particleboard, pallets, biomass chips and pellets, and bark.

In 2015, Scottish forestry contributed almost £1 billion gross valued added (GVA) to the economy, and employed more than 25 000 full-time equivalents (FTE)².

While the forestry and timber-processing sector was responsible for the majority of this contribution, forest-related recreation and tourism also made a noteworthy contribution: forests and woodlands provide valuable venues for revenue-creating activities such as mountain bike hire and tree-top aerial adventure courses. These places also help to attract visitors to Scotland through the unique contribution they make to our impressive Scottish landscape.



Enhancing our environment

Scotland's forests and woodlands provide us with a range of environmental benefits that contribute to improvements in our quality of life. These benefits are often

² [The economic contribution of the forestry sector in Scotland \(2015\)](#)

described as ‘natural capital’ and include our stocks of air, biodiversity, water, soil, geological resources and land.

For example, forests and woodlands help mitigate the impact of climate change by absorbing substantial amounts of carbon: **In 2016, around 12 million tonnes of CO₂e was removed from the atmosphere by Scotland’s woodlands and forests³**. Many wood products also contribute to climate change mitigation by continuing to store captured carbon. Thus, uniquely, the more economic activity in the sector, the more we can replenish and expand our forests, helping to slow the effects of climate change.

The environmental role of sustainably managed, planted forests has been recognised as critical by international environmental organisations, such as the WWF (see the New Generation Plantation platform, which they manage⁴), to help conserve biodiversity and meet society’s needs, whilst also contributing to sustainable economic growth and local livelihoods. Scotland’s forests and woodlands are rich in biodiversity, **providing a home to 172 protected species**, including some of Scotland’s most charismatic and recognisable species, such as the red squirrel, pine marten, twinflower, crested tit, Scottish Crossbill, black grouse and capercaillie.

Forests and woodlands also help to purify our water and air, reduce flood risks, improve slope and riverbank stability, and help to decontaminate soils on post-industrial sites. They are also a key part of Scotland’s iconic landscapes, helping to frame views, adding colour and textures, and marking the passing of the seasons.

Improving people’s lives

Forests and woodlands are a valuable resource for the improvement of people’s lives. In 2014, 63% of adults had visited a forest or woodland in the previous 12 months⁵. We know that forests and woodlands provide hugely restorative environments which have beneficial effects for those suffering from mental health problems such as anxiety and depression. Alongside this, accessible forests and woodlands offer opportunities for people to engage in healthy activities, take more exercise and improve their physical health.

Access to greenspace, woodlands and forests for children, through outdoor play and learning, is positively associated with improved self-esteem, physical health, development of language skills, disposition to learning, and attainment levels. Direct experiences of woodlands and forests as children can help foster adults who, not only are more likely to visit and use woodlands and forests as adults, but also better understand and appreciate the natural world and forestry.

³ [Scottish greenhouse gas emissions 2016](#)

⁴ [New Generation Plantations Platform](#)

⁵ [Scotland’s People and Nature Survey 2013/14](#)

Since 2003, 200 community woodland groups have been established, collectively managing around 100,000 ha of forests and woodlands and other land. Part of the reason for the growth in community woodland groups is a recognition that Scotland's forests and woodlands can play an important role in galvanising and empowering communities: they can provide opportunities for the development of community-based enterprises and, through ownership and participation in management, can foster community cohesion and help people feel they have control over the decisions that shape their lives and the environment in which they live.

Box 1 – Urban forests and woodlands

Scotland's forests and woodlands play an important role in enhancing people's quality of life. In Scotland's towns and cities, our urban forests and woodlands provide a vital greenspace for people to enjoy and use, enhancing their physical health and mental well-being.

Urban forests play a key role in the expansion of green networks across our city regions, providing a landscape framework for sustainable urban development, making our urban communities more attractive places for people to live and work in.

Scottish Ministers' forestry and land assets

Approximately one third of Scotland's forests and woodlands are on public land, owned by Scottish Ministers on behalf of the nation. These forests are currently part of what is known as the National Forest Estate. The Estate also includes a significant area of open ground. It makes a significant contribution to Scotland's economic, social and environmental outcomes, and provides a wide range of benefits to society. These include contributing over **£1 million per day GVA, supporting 11 000 FTEs**, welcoming 10 million visitors annually, as well as hosting nine starter farms and **renewable energy** infrastructure that can produce over 1 GW of energy, **enough to power 500 000 homes** each year. In addition, the Estate is a valuable natural resource, helping to improve the physical, emotional and mental well-being of visitors.

3. A vision for forestry in Scotland

We have inherited this hugely expanded and valuable resource and it needs careful and considered management to ensure that we make the most of it, protect it, and enhance it for the future. Given that forestry is a long-term business and the productive lifespan of trees in Scotland generally ranges from 30–150 years, it is important that our strategy takes a long-term approach so that we grow trees now which will meet the needs of the Scottish people in 2070 and beyond. We have therefore developed an ambitious long-term vision to drive action across the public and private sectors, in a shared national endeavour, to deliver more from Scotland's forests and woodlands.

3.1 Our 50-year vision for forestry in Scotland

Scotland will have more forests and woodlands, which will be sustainably managed as a much greater part of the nation's natural capital, providing a resilient, high quality and growing resource that supports a strong economy, a thriving environment, and healthy and empowered communities.

This vision is based on:

- A long-term commitment to **sustainable modern forestry** as a key land-use in Scotland.
- A sustained programme of **woodland expansion**
- Increasing the already substantial economic, environmental and social benefits of forestry to Scotland **by addressing key challenges and harnessing opportunities**.
- Promoting multi-purpose forestry and the **sustainable management** of Scotland's forests and woodlands.
- A commitment to the principle of **the right tree, in the right place for the right purpose**.
- **Integrating forestry with other land-uses** and businesses.
- Supporting the delivery of the **Scottish Government's purpose** and **National Performance Framework**⁶.

Therefore, this draft strategy focuses on **both** the sustainable management of the forests we have inherited **and** the establishment of new woodlands, which will help realise our long-term vision for forestry in Scotland.

Q1. Do you agree with our long-term vision for forestry in Scotland? Please explain your answer.

⁶ [Scotland's National Performance Framework](#)

Box 2 below gives examples of current government forestry commitments, targets and duties, including an ambition to expand forest and woodland cover, a target to create new native woodlands and a commitment for forests to be managed sustainably to make a greater contribution towards Scotland's natural capital.

Box 2 – Existing government forestry commitments, targets and duties

Climate Change Plan⁷

By 2032 Scotland's woodland cover will increase from around 18% to 21% of the Scottish Land Area.

Further expanding Scotland's forests and woodlands supports the sustainable supply of wood products and the fulfilment of the Scottish Government's commitments on climate change and biodiversity.

As this sustainable woodland resource increases and produces more wood fibre, more timber will be used in construction, consequently storing more sequestered carbon in buildings and providing jobs and investment in the wood products industry.

The focus for delivering this ambition is to:

- increase the annual woodland creation target of 10,000 hectares (ha) per year to 15,000 ha by 2024/25; and
- increase the use of Scottish wood products in construction from 2.2 million m³ to 3.0 million m³ by 2031/32.

By 2050 Scotland's woodland will be delivering a greater level of carbon sequestration and ecosystem services, such as contributing to natural flood management and improving biodiversity. Forests will be making a greater contribution towards Scotland's natural capital stocks, and this renewable natural resource will be sustainably managed for the benefit of future generations.

Scottish Biodiversity Strategy: Route Map 2020⁸

Under *Priority Project 2 – Restoration of native woodland*, the Scottish Government has committed to **improve the condition and extent of existing native woodlands and to further increase new woodland planting**

The associated targets are as follows:

- Increase the amount of native woodland in good condition (upwards from 46% as identified by the *Native Woodland Survey of Scotland*).
- Create 3,000 to 5,000 ha of new native woodland per year.
- Restore approximately 10,000 ha of native woodland into satisfactory condition in partnership with private woodland owners through Deer Management Plans.

Duties

Scottish Ministers also have a number of duties that they must carry out which relate to forestry. Some of the most relevant include:

- Forestry & Land Management Scotland (Act) 2018⁹: **promote Sustainable Forest Management**
- Land Reform (Scotland) Act 2016¹⁰: **promote the principles set out in the Land Rights and Responsibilities Statement¹¹**, to ensure that the full public benefits from land in Scotland are realised.
- Nature Conservation (Scotland) Act 2004¹²: **further the conservation of biodiversity.**

⁷ [Climate Change Plan: The Third Report on Proposals and Policies 2018-2032](#)

⁸ [Scotland's Biodiversity a Route Map to 2020](#)

⁹ [Forestry and Land Management \(Scotland\) Act 2018](#)

¹⁰ [Land Reform \(Scotland\) Act 2016](#)

¹¹ [Scottish Land Rights and Responsibilities Statement](#)

¹² [Nature Conservation \(Scotland\) Act 2004](#)

As a country, we consistently establish the majority of the new woodland created across the UK, making a key contribution to delivering both Scotland's climate change commitments and those of the UK.

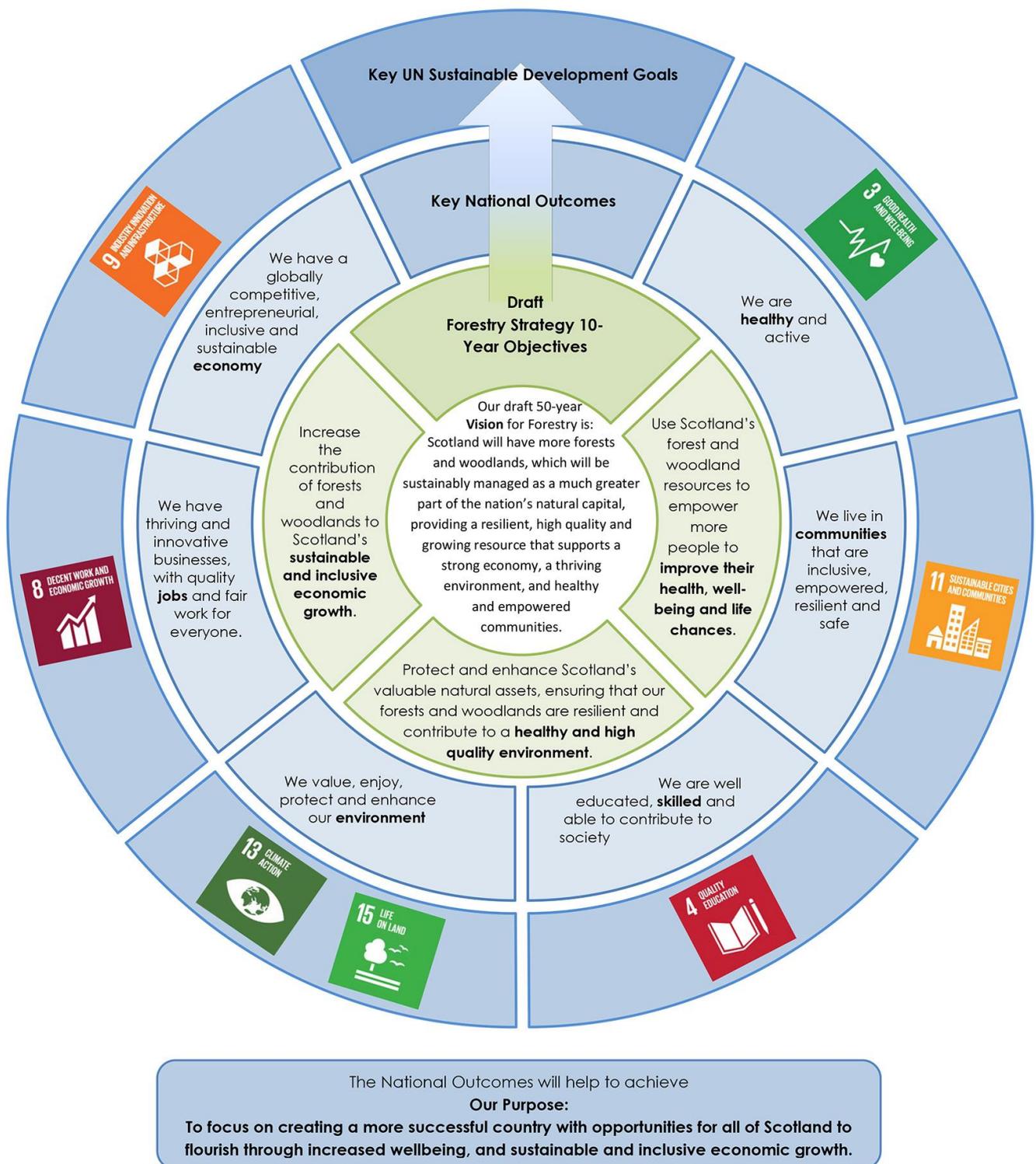
3.2 Our objectives for the next 10 years

To support this 50-year vision, we have identified three primary objectives for this draft strategy to deliver over the next 10 years:

1. Increase the contribution of forests and woodlands to Scotland's **sustainable and inclusive economic growth**.
2. Protect and enhance Scotland's valuable natural assets, ensuring that our forests and woodlands are resilient and contribute to a **healthy and high quality environment**.
3. Use Scotland's forest and woodland resources to empower more people to **improve their health, well-being and life chances**.

The following diagram illustrates the link between these objectives, the Scottish Government's National Outcomes and associated UN Sustainable Development Goals.

Figure 1 – The links between the Scottish Government’s purpose, National Outcomes, the UN Sustainable Development Goals and the draft strategy 10-year objectives.



Q2. Does the strategy identify the right objectives for forestry in Scotland over the next 10 years? Please explain your answer.

4. Realising the vision and achieving the objectives: the major issues to be addressed

To determine the priorities for action in the next 10 years, we have identified the major issues that are likely to have the greatest impact on achieving the draft objectives. In this section we summarise these issues and propose priorities for action to ensure that we make the most of opportunities (e.g. the demand for low-carbon raw materials) while mitigating the threats (e.g. the emergence of new tree diseases).

4.1 Wood fibre supply and demand

Understanding and responding to the balance of supply and demand for Scottish wood fibre and products is fundamental to achieving the objective of increasing the contribution of forestry to sustainable economic growth. This is a particularly important driver of financial value and investment.

Scotland has favourable growing conditions for productive timber species, and a highly efficient timber-processing sector. The main wood fibre produced in Scotland for downstream processing and manufacture is softwood from fast growing and highly productive conifer species. Productive hardwood from our broadleaved forests and woodlands is produced in much less volumes at present, but provides wood fibre for the wood fuel market and high value niche wood products.

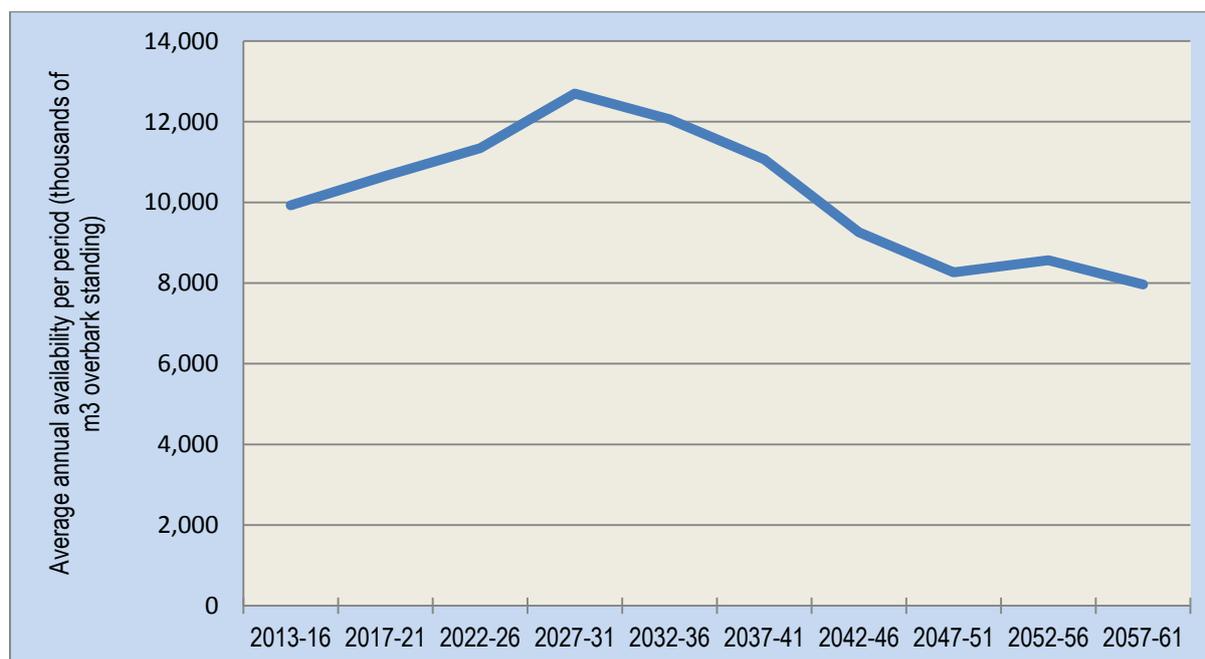
Supply

Scotland is currently a net exporter of wood and wood products and an important supplier to wider UK markets. Regular forecasts of softwood fibre availability from Scotland's forests are currently provided to the timber growing and wood processing sectors. The most recent forecast predicts a steep increase in softwood wood-fibre availability peaking in 2030, then a subsequent decline over the following 20 years in line with the decline in productive planting since the 1980s, and deforestation or permanent woodland loss due to development¹³.

The graph below assumes effective restocking of felled productive areas, which can be a challenge, requiring careful regulation. The replanting (restocking) of harvested areas with suitable tree species is critical in terms of ensuring a sustained supply of wood in the future. As this is a key component of sustainable forest management, it is a requirement under the Scottish Government's Control of Woodland Removal Policy, and will be covered by the revised felling permission regulations under the FLM(S)A 2018.

¹³ [Between 2006–2015, the area of permanent forest and woodland loss in Scotland was ~1700 ha \(~0.12% of the total forest area\).](#)

Chart 2 – 50-year forecast of softwood availability in Scotland



Demand

Globally, the UK is second only to China in terms of net imports of timber and wood products¹⁴. A recent report for the World Wide Fund for Nature (WWF) predicts that by 2050 the UK will be importing about 30% more of its wood and wood products than it is currently (78% compared with 60% today)¹⁵. The report also predicts that by 2050, in order to meet global rising demand for wood products, annually the volume of wood removed worldwide will be three times the volume removed in 2010¹⁶. This will increase the cost of imports and the impact of this may be further exacerbated by fluctuations in exchange rates.

All parts of the UK have ambitious and binding targets for reductions in greenhouse gas emissions. This is driving demand for sustainable construction and infrastructure materials as well as biomass. For example, the UK Government has proposed that, in England, around 300,000 new homes per year will be needed by the mid-2020s¹⁷. In 2016, 83% of new houses built in Scotland were of timber frame construction but in England it was less than 23%¹⁸. New emerging technologies such as bio-based materials from biorefineries may also offer opportunities for adding significant value in the coming years, as well as increasing demand for wood fibre.

¹⁴ [World Bank \(2016\) World wood exports and imports by country](#)

¹⁵ [WWF \(2016\) 100% Sustainable Timber Markets: The economic and business case](#)

¹⁶ [WWF \(2012\) WWF Living Forests Report: Chapter 4: Forests and wood products](#)

¹⁷ [Ministry of Housing, Communities & Local Government & The Rt Hon Sajid Javid MP \(2018\) New housing agency to boost housebuilding: A new national housing agency – Homes England – has been launched](#)

¹⁸ Structural Timber Association (2017) Annual survey of UK structural timber markets.

4.2 Rural land-use, productivity and integration

Forest and woodland management must be considered within the context of wider land-use. Managing woodlands without considering how they interact with surrounding land-uses has been one of the major criticisms of forestry in Scotland over recent decades, resulting in missed opportunities and some badly designed forests. This has partially been a result of thinking in silos in both policy and practice, and, in particular, a failure to take advantage of the many beneficial overlaps between farming and forestry.

With implementation of this strategy we have a significant opportunity to address this issue, and thus realise more of the benefits for the whole of the rural economy.

EU exit and future rural land-use

As a result of the UK's withdrawal from the EU, changes in the rural economy and other land-uses will impact on forests, and *vice versa*. The impact of withdrawal from the EU on Scotland's land-use pattern and rural economy will emerge over the next decade, and the first few years of this strategy will coincide with a critical revisiting of Scotland's approach to rural support. The current primary support regime for forestry, which is part of the EU Common Agricultural Policy, will need to be reviewed and replaced, and there is a key opportunity when designing new policies to ensure a more integrated approach is taken.

Complementary land-uses

Given this dynamic context, there is an opportunity to mainstream integrated land management in line with the principles of our Land Use Strategy¹⁹, ensuring that forestry, farming and other land-uses including recreation, housing, conservation and sporting activities work together to support a strong, productive, rural economy and healthy environment.

This approach is consistent with the recommendation given by the Scottish Government's Agricultural Champions (May 2018) for a single joined-up approach to integrated land management planning, making it simpler for farmers to engage in more diverse activities such as forestry and tourism. It is also consistent with the commitment in the Discussion Paper on Developing an Environment Strategy for Scotland²⁰ (June 2018) to explore opportunities to strengthen our integrated approach to the sustainable management of our land and seas through our future policies on agriculture, forestry and fisheries.

¹⁹ [Getting the best from our land: A Land Use Strategy for Scotland 2016-2021](#), reiterates the established Scottish Government goal "of long-term, well integrated, sustainable land use delivering multiple benefits for all in society"

²⁰ [Developing an Environment Strategy for Scotland: Discussion Paper](#)

As Scotland takes a more integrated approach to the rural economy as a whole, new opportunities are also being identified – particularly with regards to the use of the Scottish Ministers’ forestry and land assets as a catalyst for sustainable economic growth. Examples include opportunities for renewable energy, commercial recreation, tourism and agricultural businesses, as well as the provision of affordable homes.

A particularly important outcome of this integrated approach should be to improve farm viability and enable more farmers to realise the benefits that trees can provide in terms of income from timber, livestock shelter, wildlife habitats, carbon retention, and as a source of biomass energy.

4.3 Economic development: national, regional and local

As we have already noted, Scotland’s forests and woodlands have an important role to play in supporting sustainable economic development at national, regional and local levels. We have seen substantial inward investment in our timber-processing sector and this needs a growing and predictable supply of sustainable wood fibre.

Local enterprise

In addition, the sector can support a wider range of diverse enterprises, from small-scale artisan businesses adding value to local forest products, to forest nursery businesses, and from community-based companies generating income by using forests and woodlands as recreational and tourism destinations, to wood fuel supply businesses.

Supporting rural communities

Over and above direct economic benefits, forests also have the potential to play a wider role in sustaining Scotland’s rural communities through helping address key issues such as providing employment opportunities and supporting the provision of affordable rural housing, all of which can help to attract and retain individuals and families.

Sustainable growth

At the same time, we must also recognise the challenge of ensuring that this economic growth occurs in a sustainable and inclusive manner and ensure that we minimise any potentially negative impacts on local communities and the environment (e.g. from the transportation of timber). There is also the opportunity to build on what has already been achieved locally, regionally and nationally by growing and expanding existing businesses and markets, providing jobs and, through research and innovation, developing new approaches, products and services.

4.4 Innovation and new technology

Innovation and technological advances can be deployed at all stages in the forest cycle and right along the supply chain, stimulating higher efficiency, productivity and value.

Improving efficiencies in the supply chain

International developments in forestry, especially in Scandinavia, demonstrate the huge possibilities for new technology to be adopted in Scottish forestry. For example, advances in remote sensing could allow forests to be monitored more frequently, providing managers and owners with high quality data to support decision-making and providing more accurate forecasts of potential timber availability. This technology could also make it easier to monitor the health of forests, detect areas that are not appropriately restocked, and rapidly identify areas of illegal felling.

Better connectivity could also be used to improve linkages between the forest and the sawmill using real-time information. Other opportunities could include advances from the fields of robotics, automation, telematics and artificial intelligence.

Adding value

New technology and innovation also offers great potential to increase the extent of value-added products that wood fibre can produce. For instance, biorefinery technology could be used to develop new sources of chemicals or products such as cellulosic plastics. These value-added products should drive efficiencies and value back into the forest and the wider economy, with a greater emphasis on sustainably maximising wood-fibre recovery from our forests and woodlands.

4.5 Developing future foresters and upskilling the existing workforce

Developing an interest in forestry in young people

In common with other land-based industries, forestry has an aging workforce, with all parts of the sector experiencing difficulties attracting capable young people.

The provision of outdoor learning and play opportunities, and the use of forests and woodlands as learning venues for children, young people and adults helps to address this, and also supports wider government education and skills ambitions. There is also an opportunity for sustainable forestry to be used as a topic within our 'Learning for Sustainability'²¹ initiative. Evidence shows that for children who are given the opportunity to experience outdoor learning and play, there are often associated improvements in their physical, social and emotional development²², as

²¹ [Learning for sustainability](#)

²² O'Brien, L. & Murray, R. (2007) '[Forest School and its impacts on young children: Case studies in Britain](#)' *Urban Forestry & Urban Greening* 6, pp. 249-265.

well as in their disposition to learning, and their attainment levels²³. There is also some evidence that trees have a particularly positive role, as compared with other types of greenspace²⁴. We also know that if children visit and use woodlands then they are much more likely to do so as adults²⁵ and that through hands-on interactions and educational experiences, an understanding and appreciation of nature can be developed²⁶.

Sector skills

The forestry sector, which is characterised by family-owned small and medium businesses, is growing and thereby increasing its demands for 'forest floor' jobs, as well as diversifying and requiring more varied skills. At the same time, the industry has an ageing workforce and is likely to be impacted by depopulation in parts of rural Scotland.

The challenge we face, therefore, is not only addressing the skills development needs of the existing workforce, but also those required to meet future demands for capacity and capability, in order to support the continued growth of the industry. It is also about attracting a more diverse range of talented people to work in the sector and ensuring that the appropriate qualifications and training opportunities are available.

4.6 Climate change

Adaptation

Projections for Scotland show that over the next 50 years, tree growth rates are likely to increase because of longer and warmer growing seasons, particularly in cooler and wetter areas. At the same time, the threat to trees and forests from pests and pathogens (see below) and from extreme events including wind storms, droughts and wildfires is also expected to rise.

The result of this will be that climate conditions will impact on the suitability of existing tree species on Scottish sites. Selective tree breeding can help to improve resilience, as well as productivity, by developing trees with desirable characteristics such as stem straightness, disease resistance, good height and diameter growth. In particular, a new approach using genomic selection has the potential to provide these benefits even faster.

²³ Groves, L. & McNich, H. (2011) [Natural Play: Making a difference to children's learning and wellbeing](#).

²⁴ Sivarajah, S., Smith, S.M. and Thomas, S.C. (2018) [Tree cover and species composition effects on academic performance of primary school students](#)

²⁵ Ward Thompson, C., Aspinall, P., Bell, S., Findlay, C., Wherrett, J. & Travlou, P. (2002) [Open Space and Social Inclusion: Local Woodland Use in Central Scotland](#).

²⁶ Phenice, L.A. & Griffore, R.J. (2003) 'Young children and the natural world', *Contemporary Issues in Early Childcare* 4, pp. 167-171

Well-designed forests in the right places can also be used to help other sectors adapt to some of the impacts of climate change, for instance through the provision of natural flood management, as well as by offering shade and shelter for livestock.

Mitigation

While the forests themselves may be challenged by climate change, there is also a significant opportunity for forestry to mitigate the impacts of climate change and help meet our statutory climate change targets. The Climate Change (Scotland) Act 2009 introduced a 42% reduction in greenhouse gas emissions by 2020, and an 80% reduction by 2050. The Scottish Government has introduced the Climate Change (Emissions Reduction Targets) (Scotland) Bill into Parliament to increase these statutory targets. The Bill proposes incremental targets rising to a 90% reduction by 2050²⁷. This reduction will mean net-zero carbon dioxide emissions. In other words, Scotland will be carbon-neutral by 2050. As an illustration of the contribution of forestry to this, in 2016, around 12 million tonnes of CO₂e was removed by Scotland's forests and woodlands²⁸. Each additional hectare of new forest increases that by an average of about seven tonnes of CO₂e each year, making the establishment of forests and woodlands a vital part of Scotland's contribution to the global effort to reduce net greenhouse gas emissions.

To realise this contribution, we have already committed to facilitating the planting of the right forests and woodlands in the right places to deliver the 2018-32 Climate Change Plan's annual planting targets, which will increase from 10,000 to 15,000 ha per year by 2025.

In addition to storing carbon in the forest, the production of timber also supports the development of a low-carbon economy by reducing emissions through the greater use of timber and wood products in sectors such as construction. Forestry can also support the development of a low carbon economy through the production and use of wood fuel; biomass currently provides around 90% of renewable heat in Scotland²⁹.

4.7 Tree pests and diseases

The increased threat

Until the mid-1990s, significant pest and disease incursions in the UK were experienced once every decade. However, greater globalisation of trade and travel has resulted in increasing volumes of plants and plant products entering the UK. This, combined with a changing climate, has made some trees more susceptible to

²⁷ [Climate Change \(Emissions Reduction Targets\) \(Scotland\) Bill](#)

²⁸ [Scottish greenhouse gas emissions 2016](#)

²⁹ [Scottish Energy Strategy: The future of energy in Scotland](#)

pest and disease attack, and created an environment where unwelcome organisms can now thrive.

Since 2005, the pace and scale of these challenges have escalated markedly with several pests and diseases becoming more prominent in Scotland, including *Dothistroma* needle blight, *Phytophthora ramorum* and *Chalara* Ash dieback.

The impact of EU exit

The UK withdrawal from the EU may introduce new plant health risks, given possible changes to previously common approaches to biosecurity. However, it also presents opportunities to revise and enhance our approach of working with other UK Governments to ensure we have a system in place that better meets our biosecurity needs

4.8 Wild deer

Wild deer are a part of forest and woodland ecosystems but high numbers of animals can damage trees, which can be a challenge to successful woodland establishment, restricting the natural regeneration of forests and woodlands and increasing costs (e.g. more deer fencing). The sustainable management of wild deer populations is therefore an important aspect of sustainable forest management.

4.9 Enhancing our natural assets and improving their biodiversity value

Improving native forest and woodland condition

All our forests, woodlands and associated open ground habitats provide some biodiversity value but native forests and woodland in good condition are expected to contribute the greatest biodiversity value. The area of Scotland's native forest is expanding and 46% of native forest area is in satisfactory condition for biodiversity³⁰. In March 2017, the percentage of native woodland features in protected areas that was in good condition was 68.1%³¹. However, challenges exist around protecting and improving the ecological condition and habitat quality of these forests and woodlands. The key threats to the condition of our native forests and woodlands are the presence of invasive species, especially rhododendron, and the pressure of herbivore browsing preventing natural regeneration and suppressing the development of natural ground flora.

³⁰ [Scotland's Native Woodlands: Results from the Native Woodland Survey of Scotland](#)

³¹ [The Proportion of Scotland's Sites in Favourable Condition 2017: An Official Statistics Publication for Scotland.](#)

Protecting ancient forests and woodlands

Of our native woodlands, our ancient semi-natural forests usually have the highest ecological values and this is recognised in Scottish Planning Policy. Due to their development over many centuries, their continuous tree cover and their slow pace of change, ancient woodlands and forests have many unique features, including soils that are irreplaceable.

Our challenge, therefore, is to make sure that we preserve and protect our ancient woodlands. Where ancient woodlands have previously been felled and replaced with non-native trees, (plantations on ancient woodland sites – PAWS), the challenge lies in improving their biodiversity value and restoring them in a sensitive manner, replanting native trees where appropriate, and helping associated wildlife to return.

4.10 Environmental and landscape quality

Water quality and soil management

There are also opportunities to manage our forests and woodlands to maximise the environmental benefits and services they provide to society, improve the quality of the environment we live in, and, at the same time, support sustainable economic growth, particularly for fisheries, tourism and other land-based sectors. These are key themes being explored in our discussions on the development of an Environment Strategy for Scotland³².

Well-managed forests and woodlands can help manage water quantity in times of flood, or water scarcity, and also protect and improve water quality by acting as a buffer to reduce the amount of pollutants entering watercourses. They also moderate water temperature through shading, while at the same time, appropriate soil management contributes to slope and river bank stabilisation by reducing soil erosion.

Landscape quality

Scottish woodlands and forests are recognised internationally for their contribution to many of our highly regarded landscapes, and in some places represent a key element of their character. They are also acknowledged for their contribution towards the scenic beauty of Scotland's essentially cultural landscape, a key reason people visit and explore this country. However, poorly planned forests can have negative impacts on a landscape, although these can usually be mitigated by careful design, including when management opportunities arise to restructure an existing forest.

Our challenge is to ensure that the management and steady expansion of woodlands and forests continues to contribute positively to the quality of Scotland's landscapes. There is also the opportunity for future woodlands and forests to mitigate some of the

³² [Developing an Environment Strategy for Scotland: Discussion Paper](#)

environmental and visual effects from physical development, such as urban expansion, transport, power and renewable energy, and contribute towards the creation of new high quality landscapes.

4.11 Well-being

The aesthetic contribution that Scotland's forests and woodlands make to the places we live in and the landscapes we enjoy can also contribute to our sense of well-being and quality of life.

Improving physical health and mental well-being

Scotland's forests and woodlands have a proven track record of delivering a range of social and community benefits. By building on the work that has already been done, we have an opportunity to ensure that our forests and woodlands are used and managed in a way that makes a greater contribution to the Scottish Government's ambitions to ensure people are healthy and active. Numerous studies have demonstrated a positive relationship between green space and population health and evidence is particularly strong in terms of the restorative potential of woodland and forests and the positive impact they can have on mental well-being³³.

The forestry industry's role

By supporting the provision of affordable housing and through the provision of appropriate training opportunities, quality jobs and fair work, the forestry industry can also make a significant contribution, not only to Scotland's economy, but also to the self-esteem and well-being of those working in the sector and the resilience of the communities they live in.

4.12 Equality and empowerment

Through its role in strengthening the viability of rural communities in Scotland, forestry can also help to empower them, providing opportunities for rural areas to flourish. The Scottish Government has also recognised in the Land Rights and Responsibilities Statement that "There should be a more diverse pattern of land ownership and tenure"³⁴.

Community woodland ownership and management

Since 2003, around 200 community woodland groups have been established, collectively managing around 100,000 ha of woodland and other land, more than 10,000 ha of which has been transferred from the National Forest Estate. Through ownership and direct management of forests and woodlands, as well as through

³³ Croucher, K., Meyers, L. and Bretherton, J. (2007). [The links between greenspace and health: a critical literature review](#). Greenspace Scotland, Stirling.

³⁴ [Scottish Land Rights and Responsibilities Statement - Principles](#)

other forms of involvement in forest and woodland management decision-making processes, communities can build a sense of identity and pride and be empowered to become more resilient and have more control over their own lives and their local environment.

4.13 Urban forestry

Health and well-being benefits for urban populations

Over two-thirds of the Scottish population live in urban settlements and 92% of urban Scots feel that it is important to have greenspace nearby³⁵. Urban forestry therefore represents an opportunity to benefit a significant proportion of the Scottish population, providing accessible spaces for active travel, exercise and other forms of recreation, and promoting physical and mental health and well-being. One study found that after £2.5 million per year improvements in Scotland's urban woodlands and forests, the value of the recreation and additional health benefits was £14 million³⁶.

Social inclusion

Urban forests and woodlands can also help improve social inclusion: There is evidence to suggest that people are more likely to engage in social activity in greenspaces than they would in barren ones³⁷. They also provide the opportunity to help reduce health inequalities, allowing people from a range of social groups to participate in outdoor recreational activities³⁸ and experience the benefits that urban forests can offer.

Environmental improvements and challenges

Forests and woodlands in our towns and cities make an important contribution to improving the physical quality of Scotland's urban environments. They mitigate the environmental impacts of increasing urban development through, for example, improving air quality and by reducing both rainfall runoff intensity and flooding. The Scottish Government's National Planning Framework 3 and the Central Scotland Green Network demonstrate how urban forestry can also help to economically regenerate degraded urban landscapes, including vacant, derelict and contaminated sites.

³⁵ Greenspace Scotland (2017) [Greenspace Use and Attitudes Survey 2017](#).

³⁶ [The Urban Forest: How trees and woodlands can improve our lives in and around our towns and cities \(2015\)](#)

³⁷ Sullivan, W. C., Kuo, F. E. and DePooter, S. F. (2004) 'The Fruit of Urban Nature: Vital neighbourhood spaces'. *Environment and Behavior* 36 (5), pp. 678-700

³⁸ O'Brien, Williams, K. & Stewart, A. (2010) [Urban health inequalities and the role of urban forestry in Britain](#). Forest Research

However, there are also challenges to urban forests and woodlands from development and urban expansion, which can result in woodland loss and fragmentation.

Q3. Do you agree with our assessment of the major issues likely to have the greatest impact on the achievement of our objectives? Please explain your answer.

4.14 The relationship between the major issues and the 10-year objectives

Considering these issues in the context of our draft objectives provides an insight into how actions should be prioritised to realise the opportunities and mitigate the risks identified above. The table below summarises the significance of the potential impacts of these issues on the achievement of our draft objectives, illustrating the necessity of adopting a cross-cutting approach in our responses.

Table 1 – The relationship between the major issues and the 10-year objectives

	Objective 1: Economy	Objective 2: Environment	Objective 3: People
Wood fibre supply and demand	High	Low	Low
Rural land-use, productivity and integration	High	Medium	Low
Economic development: national and local	High	Medium	High
Innovation and new technology	High	High	Low
Developing future foresters and upskilling the existing workforce	High	Medium	High
Climate change	High	High	Medium
Tree pests and diseases	High	High	Medium
Wild deer	Medium	Medium	Low
Enhancing our natural assets and improving their biodiversity value	Low	High	Medium
Environmental and landscape quality	Medium	High	Medium
Well-being	Medium	Low	High
Equality and empowerment	Medium	Low	High
Urban forestry	Medium	Medium	High

5. Delivering the vision: priorities for action and policies for delivery

5.1 Priorities for action

Recognising the major issues, and considering what is feasible to deliver, we have identified the following priority areas for action in the next 10 years. These will help to achieve the stated objectives and thus move towards the realisation of our vision.

Many of these priorities require action by people across government, business, academia, the wider public sector and NGOs, and at local, regional and national scales.

All of the priorities for action address more than one objective (see table 2 below) and more than one of the major issues identified (see table 3 below). **The ordering and numbering of the priorities below does not imply any ranking.**

Table 2 – Priorities for action and their relationship with the 10-year objectives

Priority	Objective 1: Economic	Objective 2: Environmental	Objective 3: Social	Rationale
1. Promote and develop the concept of sustainable forest management as it applies to Scotland.	✓	✓	✓	<ul style="list-style-type: none"> This priority for action underpins all the other priorities listed below and delivers the Scottish Ministers' duty to promote Sustainable Forest Management.
2. Sustainably expand the area of all types of woodlands and forests across Scotland and ensure harvested sites are replanted appropriately.	✓	✓	✓	<ul style="list-style-type: none"> Supports delivery of the Scottish Government (SG) Economic Strategy (2015) the SG Climate Change Plan (2018), the biodiversity strategy: It's in Your Hands (2005) and 2020 Challenge for Scotland's Biodiversity (2013), and the Energy Strategy (2017). Supports the delivery of the Scottish Forest Timber Technologies Industry leadership Group (ILG) Roots for Further Growth strategy (in prep.).

Priority	Objective 1: Economic	Objective 2: Environmental	Objective 3: Social	Rationale
3. Ensure wood fibre availability from Scotland's forests is predictable and increases over time.	✓	✓		<ul style="list-style-type: none"> • Supports delivery of the SG Economic Strategy (2015) and the Energy Strategy (2017). • Supports the delivery of the Scottish Forest Timber Technologies Industry leadership Group (ILG) Roots for Further Growth strategy (in prep.).
4. Protect forests and woodlands from damage caused by new or existing pests and diseases, promote the sustainable management of wild deer and build resilience to support adaptation to climate change.	✓	✓		<ul style="list-style-type: none"> • Supports the delivery of the SG Plant Health Strategy (2016) and the Climate Change Plan (2018). • Supports the implementation of Scotland's Wild Deer: A National Approach (2015) and the Code of Practice on Deer Management (2012)
5. Increase community ownership and management of forests and woodlands.	✓		✓	<ul style="list-style-type: none"> • Supports the principles of the SG's Land Rights and Responsibilities Statement (2017) and helps deliver the SG's target of having 1 million acres of land in community ownership by 2020.

Priority	Objective 1: Economic	Objective 2: Environmental	Objective 3: Social	Rationale
6. Increase efficiency, productivity and the value generated from forest products and services and help develop forestry's role in creating a low-carbon economy, by supporting technological innovation, improving the capacity and skills of those working in the sector, and developing existing and new markets.	✓	✓	✓	<ul style="list-style-type: none"> • Supports delivery of the SG Climate Change Plan (2018), the Economic Strategy (2015) and the Energy Strategy (2017). • Supports the delivery of the ILG Roots for Further Growth strategy (in prep.) and the industry-led Biorefinery Roadmap for Scotland (2015).
7. Increase the natural capital value of Scotland's woodlands and forests by improving the condition of native woodlands and forests, and increasing the positive impacts of forest and woodland management on biodiversity, air, water, soils, flood management, landscapes and the historic environment, mitigating the risks of negative impacts.	✓	✓	✓	<ul style="list-style-type: none"> • Supports the delivery of the SG Climate Change Plan (2018), the biodiversity strategy: It's in Your Hands (2005) and 2020 Challenge for Scotland's Biodiversity (2013), the Scottish Soil Framework (2009) and the SG Economic Strategy (2015). • Supports the delivery of the SG's duties under the Flood Risk Management (Scotland) Act 2009 and the Nature Conservation (Scotland) Act 2004. • Supports the delivery of the EU Water Framework Directive.

Priority	Objective 1: Economic	Objective 2: Environmental	Objective 3: Social	Rationale
<p>8. Increase the use of Scotland's forests and woodlands to improve health and well-being, help people better understand forestry, and support wider Scottish Government activity to help children become confident and resilient members of Scottish society.</p>	✓		✓	<ul style="list-style-type: none"> • Supports delivery of the SG's Active Scotland Outcomes Framework (2015) and Mental Health Strategy (2017). • The use of forests and woodlands as learning and play spaces could help meet the SG commitment to expand learning opportunities (A Blueprint for 2020: The Expansion of Early Learning and Childcare in Scotland – 2017-18 Action Plan (2017)). • Supports the SG's subject initiative on 'Sustainability'.
<p>9. Enhance forestry's contribution to sustaining viable rural communities and increase the positive impact of forest and woodland management on other businesses, especially in agriculture and tourism.</p>	✓	✓	✓	<ul style="list-style-type: none"> • Supports the objectives and principles of the SG Land Use Strategy (2016). • Supports delivery of Scottish Planning Policy and the National Planning Framework 3 (2014), the SG Climate Change Plan (2018) and the SG Economic Strategy (2015). • Delivers on the recommendations of the SG Agricultural Champions report (2018).

Priority	Objective 1: Economic	Objective 2: Environmental	Objective 3: Social	Rationale
10. Increase the positive contribution that urban forestry makes in Scotland's towns and cities.	✓	✓	✓	<ul style="list-style-type: none"> Supports delivery of the SG's National Planning Framework 3 (2014), Active Scotland Outcomes Framework (2015), the Mental Health Strategy (2017), the biodiversity strategy: It's in Your Hands (2005) and 2020 Challenge for Scotland's Biodiversity (2013), the Climate Change Plan (2018), and the Economic Strategy (2015).

Table 3 – The relationship between the major issues and the priorities for action

Major issues	Priorities for Action
Wood product supply and demand	1, 2, 3, 4
Rural land-use, productivity and integration	1, 9
Economic development: national and local	1, 2, 3, 4, 5, 6, 7, 9, 10
Innovation and new technology	1, 6
Developing future foresters and upskilling the existing workforce	1, 6, 8
Climate change	1, 2, 3, 4, 6, 7, 9, 10
Tree pests and diseases	1, 2, 3, 4, 7, 8
Wild deer	1, 4, 7
Enhancing our natural assets and improving their biodiversity value	1, 4, 7, 10
Environmental and landscape quality	1, 2, 4, 7, 10
Well-being	1, 2, 5, 6, 7, 8, 9, 10
Equality and empowerment	1, 5, 6, 8, 9, 10
Urban forestry	1, 2, 7, 8, 10

Q4. Do the ten priorities identified in table 2 capture the areas where action is most needed to deliver our objectives and vision? Please explain your answer.

5.2 Policies for delivery

The achievement of our ambitious vision and the delivery of the accompanying objectives and priorities will require action on many fronts across the public, private, community and voluntary sectors. It is therefore vital that the Scottish Government continues to work closely with our many partners.

To support the delivery of the priorities identified above, we may use a number of policies, as detailed below.

Effective and proportionate incentives and regulation

- Forestry receives considerable direct and indirect financial support from the Scottish Government. The administration of this support is currently led by

Forestry Commission Scotland, and will transfer to Scottish Forestry – the new forestry agency of the Scottish Government – in 2019.

- The total budget for forestry in the 2018–19 budget was £62 million.
- The main financial incentive for the sustainable creation and management of forests and woodlands is currently available under the Scotland Rural Development Programme Forestry Grant Scheme 2014-20 and totals £266.8 million. Future incentives will be determined in the context of wider support for land use, following the UK's exit from the EU.
- Other financial incentives from the Scottish Government budget are also available to support delivery, for example, the Timber Transport Scheme and the Forestry Development Programme.
- Fiscal incentives apply to forestry (UK Government)³⁹.

Following the commencement of the Forestry and Land Management (Scotland) Act 2018, felling and restocking will be regulated by the Scottish Government's Scottish Forestry agency. Other relevant regulations include Environmental Impact Assessment, Health and Safety, and the Water Framework Directive.

Partnership working

- We will continue to work with a range of private, public and voluntary sector partners to deliver the priorities of this strategy, for example, the Scottish Forest and Timber Technologies Industry Leadership Group and the Central Scotland Green Network Trust.
- We will continue to collaborate with the UK government and other devolved administrations on a number of areas of common interest that require co-operation across boundaries (see also 'Surveillance, monitoring, research and provision of technical advice' section below).
- Other partners including non-governmental funders such as the Lotteries, Trusts and Foundations are vitally important through their support of a vast range of forestry-related initiatives and projects.

Management of forests and land by Scottish Ministers' under the FLM(S)A 2018

- The forested and non-forested land owned by the Scottish Ministers and managed under the FLM(S)A 2018 is their largest forest and land resource and will remain as a national asset. The principles for its management are outlined in the box below. Scottish Ministers will be a leader in sustainable forest management and sustainable development through their stewardship of these assets.
- Following its establishment on 1 April 2019, the Scottish Government's Forestry and Land Scotland Agency will set out more detailed plans for the sustainable management of these assets in their Corporate Plan.

³⁹ Income from timber sales in the UK is free of income and corporation tax and growing timber is exempt from capital gains tax. After two years of ownership, commercial woodlands qualify for 100% business property relief from inheritance tax.

Box 3 - Managing land under the Forestry and Land Management (Scotland) Act 2018.

Scottish Ministers have a duty to sustainably manage forests and land assets they own and manage under the FLM(S)A 2018. They are also committed to using these assets to deliver the Scottish Government's international commitments and National Performance Framework⁴⁰. These assets will also be managed to contribute to the delivery of the priorities outlined in this strategy. These holdings are comprised of both land that is forested and land that is not. The Act sets out the principles for how these different categories of land are to be managed:

- Forested land: managed to promote sustainable forest management (see section 2.2).
- Non-forested land: managed in order to further the achievement of sustainable development. The United Nations defines this as :

“...development that meets the needs of the present without compromising the ability of future generations to meet their own needs”⁴¹.

Acquisition and disposals

Scottish Ministers have the ability to acquire and dispose of land to support the delivery of these principles, and the objectives and priorities of this strategy. Any funds received as a result of disposing of land will be used solely for the purpose of carrying out Scottish Ministers' functions under the Forestry and Land Management (Scotland) Act 2018.

Forestry and Land Scotland Corporate Plan

Once established, Forestry and Land Scotland will publish a Corporate Plan that will provide details of how these management principles will be delivered on behalf of Scottish Ministers, outline specific actions for supporting the delivery of this strategy, and also describe how these assets will be used to support wider Scottish Government priorities, such as growing a sustainable and inclusive rural economy.

Public sector action

- The delivery of this strategy will require action across Scottish Government, its agencies and by other public authorities, through creating and managing forest and woodland assets, the promotion of sustainable forest management, and through direct and indirect support for sustainable forest management objectives. In particular, the activities of the two new forestry agencies – Scottish forestry and Forestry and Land Scotland – will be aligned and focused on the implementation and delivery of this strategy.

⁴⁰ [Scotland's National Performance Framework](#)
⁴¹ [UN – The Sustainable Development Agenda](#)

- Scotland’s Planning Authorities are also critical in delivering this strategy through their role in the planning system and the implementation of the supportive framework for trees, woodlands and forests (See Annex A).

Joined-up approach

- This strategy complements and supports the delivery of existing Scottish Government policies such as the Land Use Strategy, the Economic Strategy, the Climate Change Plan, the Land Rights and Responsibilities Statement (see Annex B), as well as the forthcoming Environment Strategy for Scotland and Economic Action Plan.
- In the development of future relevant policies, the Scottish Government will identify opportunities for supportive actions to aid the delivery of Scottish Ministers’ forestry ambitions, and also identify where forestry can contribute to the aims and objectives of other policies.

Surveillance, monitoring, research and provision of technical advice

- The Scottish Government will work with the UK Government and other devolved administrations as well as with the forestry sector to ensure that appropriate surveillance and monitoring of Scotland’s forests and woodlands continues. This will inform decision making on the expansion, protection, use and management of the resource.
- The Scottish Government will continue to work with the UK Government and other UK devolved administrations on important cross-border matters such as plant health, science and research, and common codes (e.g. Forest Research, UK Forestry Standard).
- The Scottish Government will continue to support the provision of relevant technical advice, information and guidance and ensure where necessary that it is co-ordinated with other information provided to land owners and managers.

Q5. Can you provide any examples of delivery mechanisms that have previously been effective in delivering similar objectives and priorities?

Q6. For any delivery mechanism examples given in answer to question 5, please explain why they worked well?

6. Monitoring, reporting and reviewing the strategy

6.1 Monitoring and reporting

Following the publication of the strategy the Scottish Government will publish a more detailed monitoring and reporting framework. This will include dates for publication of the statutorily required 3-yearly reports that we will lay before the Scottish Parliament.

We are committed to reporting on the progress made towards delivering the strategy and will develop a focused suite of progress indicators to enable us to track progress against this strategy's 10-year objectives and monitor forestry's contribution towards the Scottish Government's National Outcomes.

Table 4 – Possible progress indicators

Forestry Strategy 10-year objectives	Possible progress indicators
Increase the contribution of forests and woodlands to Scotland's sustainable and inclusive economic growth	<ul style="list-style-type: none"> • Contribution of woodlands, forests and the forest sector to the Scottish economy (GVA and jobs). • Volume of available wood fibre. • Area of woodland and forests. • Area of new woodland and forest creation.
Protect and enhance Scotland's valuable natural assets, ensuring that our forests and woodlands are resilient and contribute to a healthy and high quality environment.	<ul style="list-style-type: none"> • Woodland contribution to Natural Capital Index. • Proportion of protected woodland and forests with natural features in favourable condition. • Area of new native woodland and forest creation.
Use Scotland's forest and woodland resource to empower more people to improve their health, well-being and life chances.	<ul style="list-style-type: none"> • Numbers of visits to forests and woodlands. • Area of forests and woodlands that are owned by communities.

These indicators will complement other forestry data that is already collated and reported on to track progress against our forestry commitments.

Q7. Do you think the proposed progress indicators are the right ones? Please explain your answer.

Q8. Do you have any suggestions for other indicators we could use to measure progress (especially ones which draw on existing data)?

Q9. For any indicators suggested in answer to question Q8, please explain why you think they would be appropriate.

6.2 Reviewing the strategy

Scottish Ministers are required to keep this strategy under review. They must revise it after 9 years, if not before. An update on reviewing the strategy will be included in the planned reporting process (see above).

7. Impact assessments

We are committed to assessing the impact of our proposals. A Strategic Environmental Assessment (SEA) has been undertaken in accordance with the Environmental Assessment (Scotland) Act 2005. The findings of this assessment are outlined in an SEA Environmental Report which is available as a separate document for public comment.

Partial assessments have also been carried out to consider how the draft strategy may impact on equality, the rights and welfare of children, socio-economic disadvantage, business (including third sector) and regulation. These partial assessments are also available as separate documents and this consultation seeks views on whether the partial assessments have identified all areas where there may be an impact. It also invites comments on whether there is a need for any amendments or additions to the draft/partial impact assessments, which we will use to inform the final impact assessments.

Q10. Would you add or change anything in the Equality Impact Assessment (which includes our assessment of the potential impact of the strategy on inequalities caused by socioeconomic disadvantage – Fairer Scotland Duty)?

Q11. Would you add or change anything in the Business and Regulatory Impact Assessment?

Q12. What are your views on the evidence set out in the Environmental Report that has been used to inform the assessment process?

Q13. Should any additional evidence sources be used in the Environmental Report? Please provide details.

Q14. What are your views on the predicted environmental effects as set out in the Environmental Report?

Q15. Do you agree with the conclusions and recommendations set out in the Environmental Report?

Q16. Please provide any other further comments you have on the Environmental Report.

8. Conclusion

Through this consultation, we invite views on our draft Forestry Strategy for Scotland. Consultation responses will inform the content and focus of the final Forestry Strategy, which will be presented to the Scottish Parliament for their consideration.

We value your opinions and welcome your views on our proposals identified in this consultation document.

The questions we would like you to provide answers to have been detailed throughout the text. They are repeated in a questionnaire in Annex C.

Q17. Do you have any other comments you would like to make about the draft strategy for forestry in Scotland?

Glossary

Ancient woodland: An area of woodland that has been in continuous existence since before 1750.

Ancient semi-natural woodland: Ancient woodland comprising mainly locally native trees and shrubs that have naturally regenerated, rather than been planted.

Biorefinery: A biorefinery is a facility that integrates biomass conversion processes and equipment to produce fuels, power, heat, and value-added chemicals from biomass.

Biosecurity: In the content of this strategy, biosecurity refers to a set of preventative measures designed to reduce the risk of transmission of tree pests and diseases.

Cellulosic plastics: Plastics based on cellulose derived from trees and other plants.

Ecosystem services: The variety of goods and services upon which people depend, and that arise from ecosystems.

Forest: Land predominantly covered in trees (defined as land under stands of trees with a canopy cover of at least 20%).

Forestry: The science and art of planting, managing and caring for forests.

Forestry sector: The forestry sector comprises tree nurseries, businesses focused on planting, managing and harvesting, as well as wood fibre processors of all scales.

Full-time equivalent: Is a unit of measurement equal to one employee working a full-time job over a specified time period.

Genomic selection: Is a form of “Selective tree breeding” (see below) that potentially achieves faster, lower cost and more accurate predictions by using all genes (or markers) as predictors of performance, rather than just a few, which has traditionally been the case.

Green network: Functionally connected greenspaces (see below).

Greenspace: Any vegetated land (or water) in, or adjoining, an urban area. Can include: derelict, vacant and contaminated land; natural and semi-natural habitats; green corridors – paths, disused railway lines, rivers and canals; amenity parks, gardens, play areas and outdoor sports facilities; as well as cemeteries, allotments and countryside.

Gross Value Added (GVA): The value of goods and services produced in an area, industry or sector of an economy as calculated by subtracting intermediate consumption from total output.

Low-carbon economy: An economy in which less energy and resources are used.

Native forests and woodlands: Woodland that wholly or mainly comprises species that colonised Scotland after the last Ice Age and before human influence on natural processes became significant.

Natural assets: The individual components that together form natural capital (see below). These features of the natural environment consist of raw materials (timber, minerals, energy sources), biological assets (produced or wild), land and water areas with their ecosystems, subsoil assets and air. “Ecosystem services” can be derived from natural assets.

Natural capital: The environmental resources (e.g. plants, animals, air, water, soils) that combine to yield a flow of benefits to people.

Remote sensing: The practice of obtaining information about objects or areas from a distance, typically from aircraft or satellites.

Selective tree breeding: Is the application of genetic, reproductive biology and economics principles to the genetic improvement and management of trees.

Telematics: Describes the integrated use of communications and information technology to transmit, store and receive information from telecommunications devices to remote objects over a network. Amongst other things, it can be used to control vehicles remotely or track their location.

Urban forestry: The care and management of trees and forests in and around urban areas for the purpose of improving the urban environment for the people and wildlife that live there.

Woodland: See “Forest” above.

Wood fibre: An umbrella term for all of the types of products derived from the woody part of a tree including sawn timber and chips.

Annex A: The regulatory and planning policy framework covering trees, woodlands and forests.

Scottish Planning Policy and its associated regulatory framework supports the delivery of this strategy and the provision for the protection, planting and enhancement of trees, woodlands, and forests with high nature conservation or landscape value, requiring planning authorities to take particular account of the following when considering the future of trees, woodlands and forests locally:

- Section 159 of the Town and Country Planning (Scotland) Act 1997 as amended, places a duty on planning authorities to ensure that, whenever appropriate, planning permissions make adequate provision for the preservation or planting of trees.
- The third National Planning Framework (NPF3) highlights trees, woodlands and forests as economic resources as well as environmental assets.
- In addition, NPF3 reiterates the aim for expansion of woodland over the next 10 years to support emissions reduction targets and wider land use objectives.
- Scottish Planning Policy (SPP) outlines that protection from the adverse impacts of development should be afforded to trees, woodlands and forests (including ancient semi-natural woodland, hedgerows and individual trees) with high nature conservation or landscape value. It also sets out the need for plans to include measures to enhance their condition and resilience to climate change.
- Tree Preservation Orders (TPOs) can be made to protect individual trees, groups of trees or woodlands considered important for amenity or because of their cultural or historic interest. A TPO is made by the Planning Authority, under Section 160 of the Town and Country Planning (Scotland) Act 1997 as amended, and within the procedures set out in the Town and Country Planning (Tree Preservation Order and Trees in Conservation Areas) (Scotland) Regulations 2010.
- SPP also outlines the presumption in favour of protecting woodland and that removal should only be permitted where it would achieve significant and clearly defined additional public benefits. The criteria for determining the acceptability of woodland removal and further information on the implementation of the policy are explained in the Control of Woodland Removal Policy⁴².
- SPP promotes the use of heat mapping to identify the potential for co-locating developments with a high heat demand with sources of heat supply. It includes harvestable woodlands and sawmills producing biomass as examples of heat supply sources.

⁴² [The Scottish Government's Policy on Control of Woodland Removal](#)

- SPP suggests that planning authorities should consider the preparation of local forestry and woodland strategies as supplementary guidance to inform the development and expansion of forests and woodland in their area, pointing to Scottish Government advice set out in *The Right Tree in the Right Place*⁴³.

⁴³ [The right tree in the right place](#)

Annex B: Forestry and Land Management (Scotland) Act 2018 – sections on forestry strategy

3 Duty to prepare a Forestry Strategy

- (1) The Scottish Ministers must prepare a Forestry Strategy.
- (2) The Forestry Strategy—
 - (a) must set out a vision for forestry in Scotland,
 - (b) must set out the Scottish Ministers' objectives, priorities and policies with respect to the promotion of sustainable forest management, and
 - (c) may set out other matters with respect to the promotion of sustainable forest management.
- (3) The Forestry Strategy must include the Scottish Ministers' objectives, priorities and policies with respect to—
 - (a) the creation of woodland,
 - (b) the economic development of forestry,
 - (c) targets for the planting of trees,
 - (d) the conservation and enhancement of the environment by means of sustainable forest management,
 - (e) the realisation of the social benefits of forestry,
 - (f) the acquisition and disposal of land under sections 15 to 17,
 - (g) the production and supply of timber and other forest products.
- (4) The Scottish Ministers—
 - (a) must keep the forestry strategy under review, and
 - (b) may, if they consider it appropriate to do so, revise the strategy.
- (5) If the Scottish Ministers have not revised the forestry strategy under subsection (4)(b) within the period of 9 years beginning with the day on which the strategy was last published, they must revise the strategy.

4 Preparation and revision of the Forestry Strategy

- (1) In preparing or revising the Forestry Strategy, the Scottish Ministers must—
 - (a) publish a draft of the strategy and consult with such bodies as they consider appropriate and also with the general public,
 - (b) have regard to—
 - (i) the land use strategy (prepared under section 57 of the Climate Change (Scotland) Act 2009), and
 - (ii) the land rights and responsibilities statement (prepared under section 1 of the Land Reform (Scotland) Act 2016),
 - (iii) Article 2 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change,
 - (iv) the code of practice on deer management (drawn up under section 5A of the Deer (Scotland) Act 1996),
 - (v) the Scottish Biodiversity Strategy (prepared under section 2 of the Nature Conservation (Scotland) Act 2004).
- (2) The forestry strategy must be prepared and revised with a view to achieving consistency, so far as practicable, between the objectives, priorities and policies set out in the strategy and the Scottish Ministers' other functions.

5 Publication of the Forestry Strategy

- (1) The Scottish Ministers must publish the Forestry Strategy and each revision of it.
- (2) The Scottish Ministers must lay a copy of the Forestry Strategy and each revision of it before the Scottish Parliament.
- (3) When complying with subsection (1), the Scottish Ministers must also publish a report setting out—
 - (a) the consultation process undertaken in order to comply with section 4(1)(a), and
 - (b) the ways in which views expressed during that process have been taken account of in preparing or revising the Forestry Strategy.
- (4) The Scottish Ministers must lay a copy of a report under subsection (3) before the Scottish Parliament.

6 Duty to have regard to the Forestry Strategy

The Scottish Ministers must have regard to the Forestry Strategy when –

- (a) complying with their duty to promote sustainable forest management,
- (b) exercising any of their tree health and silvicultural material testing functions under the Plant Varieties and Seeds Act 1964 and the Plant Health Act 1967 (see Chapter 2),
- (c) managing forested land in accordance with section 11,
- (d) acquiring land under section 18(1) or 19(1),
- (e) disposing of forested land under section 20(1),
- (f) exercising any of the following functions for the purposes of or in connection with the carrying out of a function mentioned in paragraphs (a) to (e) –
 - (i) section 69 (information, research and education etc.)
 - (ii) section 70 (power to form companies etc.),
 - (iii) section 71 (financial assistance),
 - (iv) section 72 (charging).



Annex C: Respondent information form and consultation questionnaire

Scotland's Forestry Strategy 2019-2028 – A Consultation Draft

Respondent information form

Please Note this form **must** be completed and returned with your response.

To find out how we handle your personal data, please see our privacy policy:

<https://beta.gov.scot/privacy/>

Are you responding as an individual or an organisation?

- Individual
 Organisation

Full name or organisation's name

Phone number

Address

Postcode

Email

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

- Publish response with name
 Publish response only (without name)
 Do not publish response

Information for organisations:

The option 'Publish response only (without name)' is available for individual respondents only. If this option is selected, the organisation name will still be published.

If you choose the option 'Do not publish response', your organisation name may still be listed as having responded to the consultation in, for example, the analysis report.

We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

Yes

No

Consultation questionnaire

- Q1. Do you agree with our long-term vision for forestry in Scotland? Please explain your answer.
- Q2. Does the strategy identify the right objectives for forestry in Scotland over the next 10 years? Please explain your answer.
- Q3. Do you agree with our assessment of the major issues likely to have the greatest impact on the achievement of our objectives? Please explain your answer.
- Q4. Do the ten priorities identified in table 2 capture the areas where action is most needed to deliver our objectives and vision? Please explain your answer.
- Q5. Can you provide any examples of delivery mechanisms that have previously been effective in delivering similar objectives and priorities?
- Q6. For any delivery mechanism examples given in answer to question 5, please explain why they worked well?
- Q7. Do you think the proposed progress indicators are the right ones? Please explain your answer.
- Q8. Do you have any suggestions for other indicators we could use to measure progress (especially ones which draw on existing data)?
- Q9. For any indicators suggested in answer to question Q8, please explain why you think they would be appropriate.
- Q10. Would you add or change anything in the Equality Impact Assessment (which includes our assessment of the potential impact of the strategy on inequalities caused by socioeconomic disadvantage – Fairer Scotland Duty)?
- Q11. Would you add or change anything in the Business and Regulatory Impact Assessment
- Q12. What are your views on the evidence set out in the Environmental Report that has been used to inform the assessment process?
- Q13. Should any additional evidence sources be used in the Environmental Report? Please provide details.
- Q14. What are your views on the predicted environmental effects as set out in the Environmental Report?
- Q15. Do you agree with the conclusions and recommendations set out in the Environmental Report?
- Q16. Please provide any other further comments you have on the Environmental Report.
- Q17. Do you have any other comments you would like to make about the draft strategy for forestry in Scotland?



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