FORESTRY AND WOOD PROCESSING SECTOR PLAN

October 2020

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Preface

SEPA has a strong track record of regulating to improve the Scottish environment. We are proud of what we have achieved since we were set up just over two decades ago in 1996. We know we need to do more over the next two decades to build on this success. Much more.

The mounting scientific evidence about climate change, plastics in our oceans, air quality, the pressure on our freshwater and more, shows us that humanity must rise to tackle major environmental challenges. This scientific knowledge underpins SEPA's strategy for how we will regulate - One Planet Prosperity. If everyone in the world lived as we do in Scotland, we would need three planets. There is only one.

So, we will regulate to help Scotland prosper within the means of our one planet. Successful businesses in future will be those that use low amounts of water, materials and energy and create little waste. Prosperous societies will be comprised of these businesses. This can be Scotland.

In every sector we regulate, this means we will have two simple aims. We will:

1. ensure that all businesses fully meet their environmental obligations;

2. help as many businesses as possible move beyond their environmental obligations.

This sector plan outlines how we will do this in regulating the forestry and wood processing sector. It recognises the efforts made by the sector over the last 20 years to improve environmental performance in line with the UK Forestry Standard, which sets the benchmark for sustainable forestry management. Our plan outlines how SEPA will use the full scope of our regulatory responsibilities in working with others to regulate, support and influence the forestry and wood processing sector, improve compliance, reduce the number of unlicensed sites and support the Scottish Government to deliver its long-term vision for forestry in Scotland.

Forests can help mitigate climate change, support an inclusive and growing economy, enhance land management and biodiversity outcomes and can achieve many other environmental benefits. As societies attempt to physically build a more viable long-term future, timber can be a source of lower environmental impact material used in everything from small household items through to large infrastructure projects. Forestry and wood processing is delivering a range of significant social, environmental and economic advantages for Scotland. The potential to increase these benefits is huge.

However, poor forestry stewardship and site management can cause environmental harm. That is why this sector plan is so important. We know the Scottish Government has set high ambitions for this sector and that the industry and many other stakeholders share these aims. This plan sets out our ideas for how we can play our role as Scotland's environment protection regulator to ensure that these aspirations are achieved with environmental excellence at the heart of the sector's activities.

Our plan is ambitious. It spells out how we will use traditional environmental protection agency (EPA) regulatory tools, such as permits and enforcement, in clearer and more powerful ways. It sets out how we will build on existing partnerships and ways of working as well as supporting some completely new ways, such as novel partnerships, that we will develop and use to support innovation in this sector.

Terry A'Hearn
SEPA Chief Executive Officer

1. Introduction

SEPA's statutory purpose is to protect and improve the environment in ways that, as far as possible, create health and wellbeing benefits and sustainable economic growth. To help create a prosperous Scotland that lives within the means of our one planet, we need to radically change the way we work. In the past our approach to regulation has been grounded in different sets of environmental legislation to protect the environment. This has helped us to deliver, for example, improvements in water quality. However, it will not enable us to make the transformational changes needed to tackle today's environmental challenges.

Through sector planning we are moving to ground our approach to regulation and partnerships by working across whole sectors. This will allow us to get a much better understanding of the sector; the challenges it faces, the people who work in it, communities impacted by it and its opportunities for sustainable success. In this way we can systematically identify the compliance issues that need to be tackled by the sector. However, compliance and small scale incremental change will not be enough to create a sustainable and prosperous Scotland. We want to help businesses and sectors to implement successful innovation and support them in their ambitions to do more than they are required under their environmental obligations. We call this moving beyond compliance: helping businesses to do more for the environment because it makes sense for them to grow in a sustainable manner.
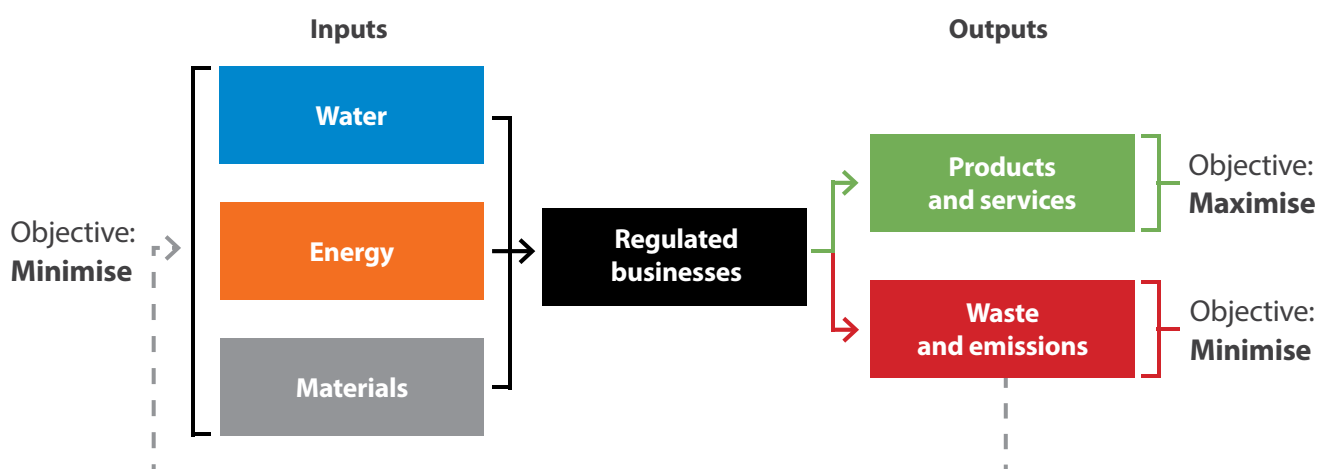
It is important to note that many businesses in the forestry and wood processing sector are already moving beyond compliance, for example through forestry managers meeting the UK Woodland Assurance Standard (UKWAS)[1]. We can also identify where the biggest opportunities are for us to help the sector to go beyond compliance. In both ways this will help regulated businesses operate successfully within the means of one planet.

All businesses that we regulate in a sector use water, energy and raw materials to produce the products and services they sell. In doing so, they also create waste and emissions. We can think of these as environmental flows that need to be managed by the business (Figure 1).

The climate emergency

In April 2019, the First Minister declared a climate emergency: the evidence is irrefutable and people expect action. SEPA is already working to respond to the climate emergency and our regulatory strategy - One Planet Prosperity - and our sector plans provide the framework for our response, making tackling the climate emergency integral to everything we do. Specific actions to tackle the climate emergency are embedded throughout all of our sector plans and delivering these actions will help Scotland to achieve the target of becoming a net zero emitter by 2045.

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[1]. UKWAS is the independent certification standard and audit protocol for verifying sustainable forest management in Scotland

Environmental flows (Figure 1)

Inputs

Outputs

Objective: **Minimise**

Water

Energy

Materials

Regulated businesses

Products and services

Objective: **Maximise**

Waste and emissions

Objective: **Minimise**

We want to help as many businesses as possible to manage these flows effectively. Reducing their use of natural resources (except sustainably sourced wood) and reducing the creation of waste, will enable them to meet their legal obligations, drive further improvements contributing to environment, economic and social success. To facilitate this, we are preparing sector plans for every sector that we regulate.

Compliance and beyond compliance in the forestry and wood processing sector

'Compliance' refers to compliance with environmental obligations for which SEPA has a regulatory remit or statutory influencing role (see Section 5).

'Beyond compliance' means voluntarily choosing to do more for the environment than is required by law. Many businesses and organisations working in the sector already do this, often because using our resources in an efficient way makes good financial and business sense.

Sector plans are at the heart of everything we do, shaping our interactions with every sector and the businesses in them. Through them, businesses will get the relationship that their attitude and performance earns. Those that demonstrate a commitment to good environmental performance and to delivering solid outcomes will receive powerful support through guidance and advice. Those that demonstrate behaviour that leads to significant or chronic non-compliance can expect SEPA to offer clear guidance alongside the most appropriate enforcement tools, where necessary, to bring them into compliance.

Sector plans are strategic documents, their aims and aspirations will evolve over time. Implementation of the plans will take account of opportunities, for example to work across different sectors, improve communications and develop partnerships. SEPA will also consider the relative corporate priority of different work areas.

Scope of the Forestry and wood processing sector plan

This is our plan for the forestry and wood processing sector. It details areas we directly regulate, areas we provide a secondary regulatory role and areas where we can influence the sector in order to protect and improve the environment.

Scottish Forestry is the Scottish Government agency responsible for forestry policy, support and regulation[2]. Although SEPA is not the main regulator in terms of forestry activities, we collaborate with Scottish Forestry to carry out our joint duties and expect full compliance with environmental law.

The plan focuses on:

- forestry and woodland, including planning, planting, management, harvesting operations and transport;
- processing and treatment of wood such as sawmills, paper and pulp mills, timber treatment sites and wood-based panel production;
- re-use and end-of-life.

It explains how we will work directly with businesses and includes ways that we will use our shared influence to improve environmental performance throughout the industry supply chain. Section 4 provides further details on the scope of the plan.

2. Scottish Forestry https://forestry.gov.scot/

2. Our vision for the forestry and wood processing sector

This vision describes how SEPA would like the sector to look and operate in the future to achieve One Planet Prosperity.

- **Scotland continues to develop a resilient, sustainable forestry and wood processing sector that delivers environmental, social and economic success to Scotland's people and businesses.**
- **Scotland's forestry expands its contribution to reducing the effects of climate change and contributing to a low carbon, circular economy.**
- **Strong and effective partnership working with all stakeholders and communities promotes positive relationships, excellent environmental compliance, innovation and collaborative research and development.**
- **Consumers are encouraged to choose locally sourced products where they can credibly be shown they are grown, selected and managed to high environmental standards.**

The Scottish Government has recently published Scotland's Forestry Strategy 2019–2029[3], which sets out a long-term vision for Scotland's forests and woodlands in line with the Forestry and Land Management (Scotland) Act 2018. Our sector plan aligns with the Strategy and supports the realisation of its vision, objectives and priorities. SEPA will work collaboratively with the Scottish Government and the forestry and wood processing sector to deliver the Forestry Strategy and associated implementation plan.

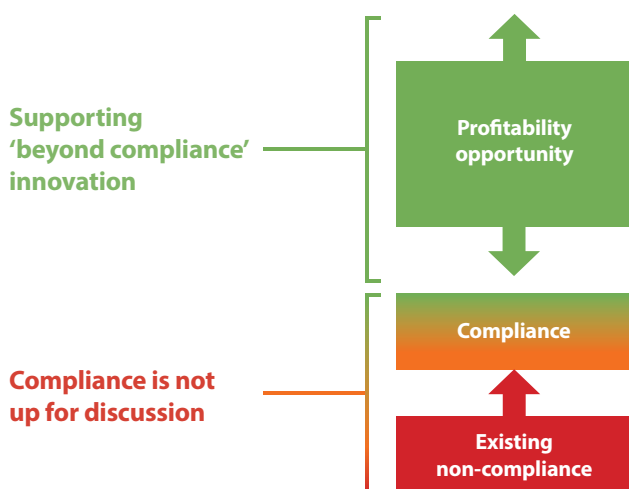**Forestry and wood processing vision characteristics (Figure 2)**

Our objectives

The objectives of the forestry and wood processing sector plan are to:

- ensure that all businesses fully meet their environmental obligations;
- help as many businesses as possible move beyond their environmental obligations.

This is illustrated by the sector roadmap (Figure 3).

Sector roadmap (Figure 3)

Supporting 'beyond compliance' innovation

Profitability opportunity

Compliance

Compliance is not up for discussion

Existing non-compliance

This sector plan sets out how we will work with the forestry and wood processing sector. For our vision, outcomes and objectives to be achieved we will work with partners and facilitate liaison between them and the sector to create opportunities that link business success with environmental success.

As well as helping businesses to reduce their impacts on the environment, SEPA's sector plans will aim to support the ambitions set out in many existing Scottish Government and SEPA policy frameworks and strategies including for example, river basin management plans[4], the Waste to Resources Framework[5], the Energy Framework[6], the Framework for Water and the 14 flood risk management strategies[7]. SEPA's work to tackle Scotland's climate emergency will be underpinned by the actions contained in all our sector plans.

We want to continue to bring together skilled, experienced and innovative people from across the sector to understand key challenges and identify opportunities to create innovative solutions. If we get this right, it will mean that the environment is not seen as a constraint, but a platform on which economic and social success can be built, putting the forestry and wood processing sector on a pathway to becoming a one planet sector.

[3.] Scotland's Forestry Strategy 2019-2029 https://www.gov.scot/publications/scotlands-forestry-strategy-20192029/

[4.] https://www.sepa.org.uk/environment/water/river-basin-management-planning/the-current-plans/

[5.] https://www.sepa.org.uk/media/219528/one-planet-prosperity-a-waste-to-resources-framework.pdf

[6.] https://www.sepa.org.uk/media/383806/sepa_energy_framework.pdf

[7.] http://apps.sepa.org.uk/FRMStrategies/

3. Outcomes

When we achieve the vision we have set out in this plan, we expect that we will:

- **protect and improve the environment, respond to the climate emergency and help the sector to transition to net zero emissions;**
- **help to protect and improve communities by creating health and wellbeing benefits;**
- **further enable businesses to operate effectively and successfully in their markets to promote sustainable economic growth.**

Figure 4 shows the outcomes we would like to help the forestry and wood processing sector achieve and how a better environment, protected communities and stronger businesses are fundamentally dependent upon each other. Each of the actions in this sector plan, which are collated in Section 7, will contribute towards achieving all of these outcomes.

All the actions also contribute towards achieving United Nations (UN) Sustainable Development Goals[8], targets set in the Scottish National Performance Framework[9] and tackling climate emergency.

Outcomes (Figure 4)

Environmental pollution risks are being avoided or controlled at source wherever possible

Better environment

Full compliance and stronger environmental performance is achieved across the sector

One Planet Prosperity

Stakeholders, communities and operators work in partnership for multi-benefit outcomes

Protected communities

Compliant businesses and operators are flourishing and providing opportunities within local communities

Scotland has a resilient, multi-benefit, sustainable forestry and wood processing sector

Stronger business

Going beyond compliance and incorporating circular economy solutions helps deliver business success

8. sustainabledevelopment.un.org/
9. https://nationalperformance.gov.scot/

4. The forestry and wood processing sector

This sector plan covers the full forestry supply chain from planning through to planting, management and harvesting stages, on to processing and creation of wood products and finally, end-of-life considerations (Figure 5).

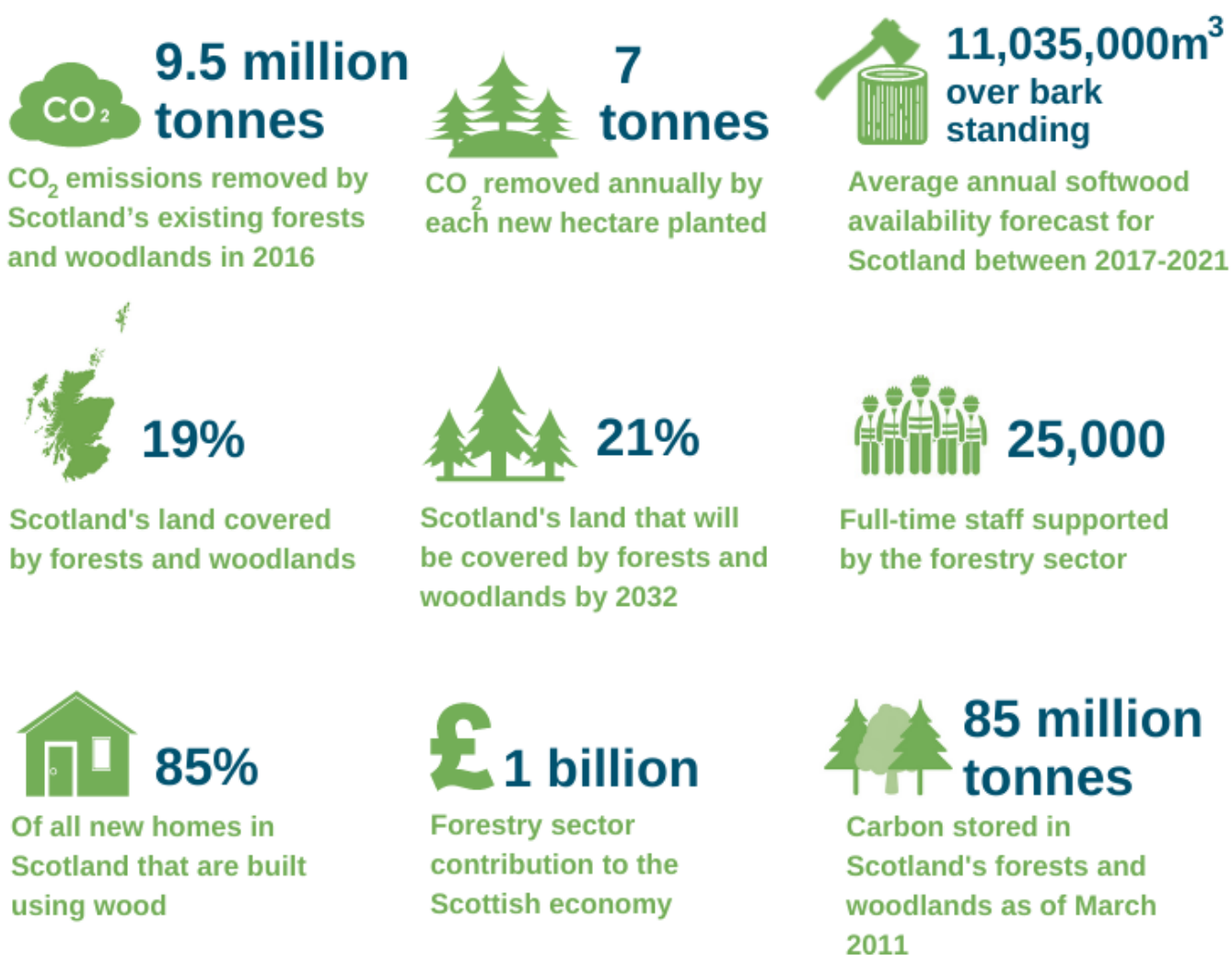**Forestry and wood processing sector plan supply chain (Figure 5)[10]**
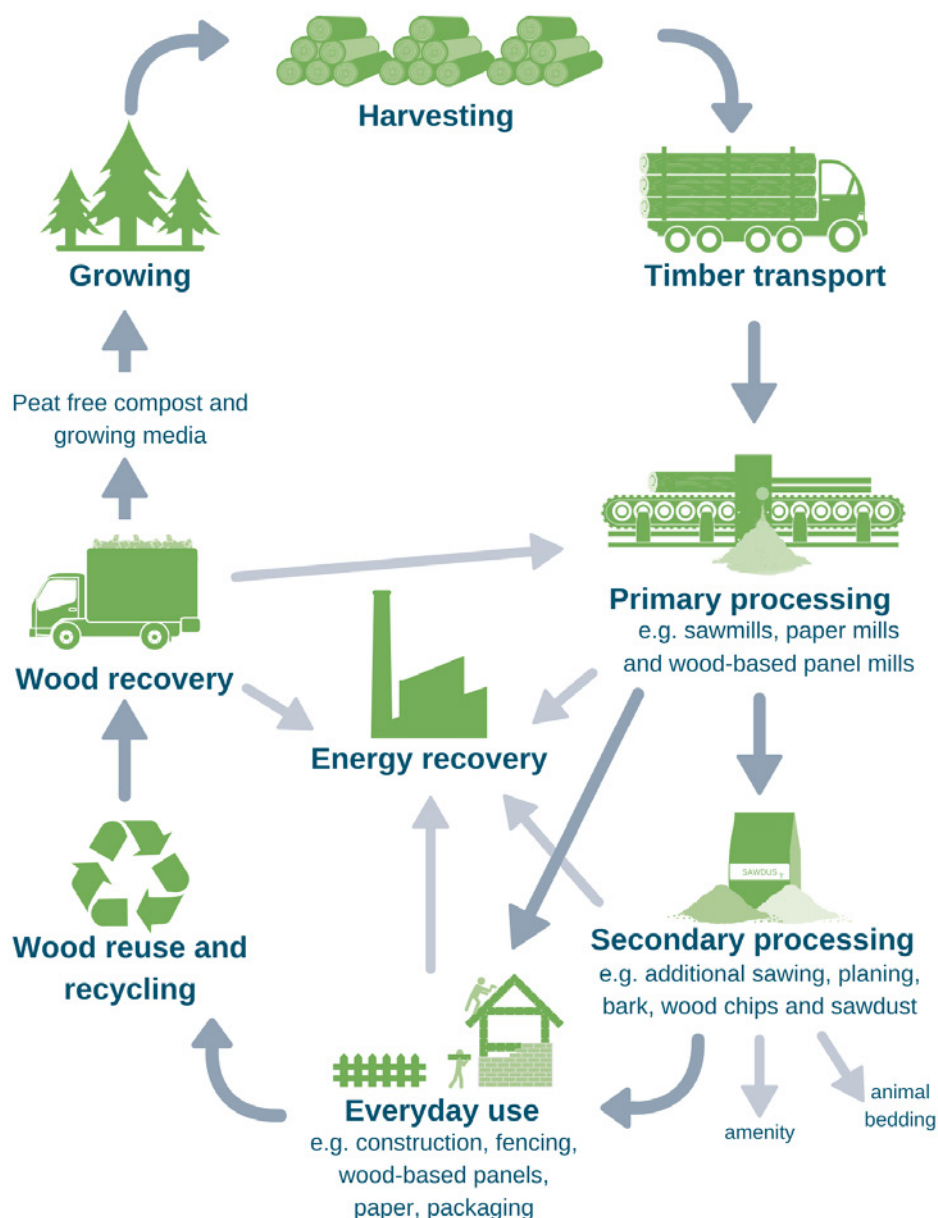
10. Based on A.W. Jenkinson wood cycle diagram

Forest and woodland creation and management

Scotland's forests and woodlands cover over 1.4 million hectares[11], which is almost 19% of the country. These forests and woodlands bring a range of benefits to communities, rural and urban economies, people's health and well-being, and the environment. In 2015, forestry in Scotland contributed almost £1 billion gross value added (GVA) to the economy and employed over 25,000 full time employees[12]. Activities associated with woodland creation, management, harvesting and transport, as well as processing of wood products and forestry-related recreation and tourism, all contribute to these economic benefits.

Facts and figures for the forestry and wood processing sector (Figure 6)

9.5 million tonnes
CO_2 emissions removed by Scotland's existing forests and woodlands in 2016

7 tonnes
CO_2 removed annually by each new hectare planted

11,035,000m^3 over bark standing
Average annual softwood availability forecast for Scotland between 2017-2021

19%
Scotland's land covered by forests and woodlands

21%
Scotland's land that will be covered by forests and woodlands by 2032

25,000
Full-time staff supported by the forestry sector

85%
Of all new homes in Scotland that are built using wood

£1 billion
Forestry sector contribution to the Scottish economy

85 million tonnes
Carbon stored in Scotland's forests and woodlands as of March 2011

11. Forestry Statistics 2019
12. The economic contribution of the forestry sector in Scotland (2015)

Scottish Government proposals and targets for the sector include expanding Scotland's forest and woodlands to help fulfil climate change commitments. This recognises that trees capture and store carbon, mitigating some of the impacts of climate change. The use of wood and wood products in construction is also associated with reduced greenhouse gas emissions compared to emissions in the production of alternatives such as steel and concrete.

Scottish Government targets and policies include:

- increasing the woodland creation target from the current 10,000 hectares a year to 18,000 hectares a year by 2024–2025;

- increasing the use of Scottish wood products in construction from 2.2 million m^3 to 3 million m^3 by 2031–2032;

- increasing the contribution of Scottish forestry, particularly new planting, to addressing climate change via increased carbon storage;

- policies such as the Scottish Government's Woodland Removal Policy, which ensures appropriate replacement of woodlands that have been removed;

- delivering increased ecosystem services through Scotland's woodlands, such as natural flood management and enhanced biodiversity, for example through the aim of creating 3,000–5,000 hectares of new native woodland a year[13,14].

Scotland's Forestry Strategy 2019–2029[15] sets the strategic framework for sustainable modern forestry across the wood fibre supply chain and supports these proposals and targets.

The Strategy's 50-year vision is:

"In 2070, Scotland will have more forests and woodlands, sustainably managed and better integrated with other land uses. These will provide a more resilient, adaptable resource, with greater natural capital value, that supports a strong economy, a thriving environment, and healthy and flourishing communities."

This vision will be realised by delivering the three 10-year objectives set out in the Strategy:

- Increase the contribution of forests and woodlands to Scotland's sustainable and inclusive economic growth.

- Improve the resilience of Scotland's forests and woodlands and increase their contribution to a healthy and high quality environment.

- Increase the use of Scotland's forest and woodlands resources to enable more people to improve their health, well-being and life chances.

To deliver these objectives, six priority areas for action have been identified and will form the framework for co-ordinating Government action and partnership working:

- Ensuring forests and woodlands are sustainably managed.

- Expanding the area of forests and woodlands, recognising wider land-use objectives.

- Improving efficiency and productivity, and developing markets.

- Increasing the adaptability and resilience of forests and woodlands.

- Enhancing the environmental benefits provided by forests and woodlands.

- Engaging more people, communities and businesses in the creation, management and use of forests and woodlands.

13. Climate Change Plan: the third report on proposals and policies 2018-2032 (February 2018)
14. Scotland's Biodiversity: a route map to 2020
15. https://www.gov.scot/publications/scotlands-forestry-strategy-20192029/

This sector plan supports the Scotland's Forestry Strategy and its actions, and through working in partnership across the sector we can help deliver the vision of the strategy and our sector plan.

Transport

Transport is a significant part of the supply chain; moving home-grown and imported timber from forests to sawmills, between processing sites and onto markets.

Scotland harvested over 7 million green tonnes of softwood in 2018[16], over 65% of which came from timber growers in the private sector.

Timber miles and associated emissions, noise and disturbance are an important consideration for the sector, whether in terms of financial costs or environmental impacts, and measures to improve the sustainability of timber transport are led by the Timber Transport Forum[17].

Wood processing

Wood processing begins in the forest. After harvesting, timber (roundwood) is transported to processing facilities, which include sawmills, wood-based panel manufacturing plants and paper mills. Timber can also be taken to biomass plants; this is out of scope for this plan, and is covered in SEPA's forthcoming Electricity and heat production sector plan.

Sawmills produce sawn timber with the principal markets for Scottish softwood being construction, pallets and packaging, fencing and garden products. In addition, the bark, wood chips and sawdust produced during primary processing provide the raw materials for a wide range of other products, including wood-based panel products; animal bedding; soil improvers and mulches; decorative, play and equestrian surfaces. Relatively small volumes of hardwood are processed in Scotland, often for niche markets.

Scottish sawmills produce about two million cubic metres of sawn timber per year and provide around 1,300 jobs[18]. Scottish softwood has significantly increased its share of the UK sawn softwood market in recent years, largely by import substitution.

Wood-based panel manufacturing includes the production of particleboard (wood chipboard), medium density fibreboard (MDF) and oriented strand board (OSB). In addition to the use of virgin wood fibre, this sector also recycles very substantial volumes of recovered waste wood fibre in the manufacture of particleboard.

Biomass plants are often co-located on wood processing sites to provide the heat and energy required to manufacture the wood products. These are in scope of our Electricity and heat production sector plan.

End-of-life

At the end-of-life, there are still opportunities for timber to create value. Separate collections of waste wood from municipal and construction sources are widespread and less waste wood is disposed of to landfill than ever before.

Good quality timber can be recovered from the waste stream and be kept in use for longer through reuse, reclamation and 'upcycling'.

Waste wood can also be put to productive use. For example, high quality woodchip, sawdust and shavings from timber sawmills or woodchip, sawdust and shavings from recycled packing crates and clean white pallets may be suitable for animal bedding and biomass fuel. Other grades are suitable for board manufacturing and energy production at permitted incineration facilities.

16. Table 2.2 and 2.3 Softwood removals Forestry Statistics 2019
17. Timber Transport Forum
18. Forestry Statistics 2018

5. Potential environmental impacts and how they are managed

This section provides an overview of the key potential environmental impacts arising from the forestry and wood processing sector supply chain.

Potential environmental impacts (Figure 7)

Forestry and woodland planning, design, ground preparation, planting, management, harvesting and restocking	- Impacts on water quality and ecology from diffuse pollution sources, carbon loss, soil loss and peat disturbance. - Impacts on water quality, ecology and soil from the management of brash and forestry residues. - Impacts on soil, water quality, ecology and air quality from inappropriate application of pesticides and fertilisers. - Impacts on soil quality, structure and functionality from poor site management. - Impacts on peatland from drainage through ground preparation and road building. - Impacts on biodiversity from poor forest design, poor operational management, harvesting regimes and chemical applications. - Impacts on tree resilience from pests and disease, and spread of invasive non-native species (INNS). - Greenhouse gas emissions and impacts on air quality from forest machinery, peat disturbance, carbon loss and enhanced deposition of atmospheric pollutants to forest soils. - Management of wastes and fuels on site e.g. old equipment and machinery, tyres, containers, bags and refuse. - Impact on communities from noise and air quality through increased forestry vehicle use.
Transport and road construction	- Impacts on soil, water quality and quantity from forest roads due to logging, construction and site traffic. - Impacts on water quality from quarrying activities. - Impacts on drainage, water quality, channel form and fish migration due to channel straightening, poorly designed or maintained culverts and pipe bridges. - Greenhouse gas emissions and impacts on air quality from the production and transport of raw materials and felled timber. - Impact on nearby communities from noise and air quality.

Wood processing	■ Impacts on water quantity and ecology from abstraction of water for use in paper and pulp production.
	■ Impacts on river ecology or groundwater from effluent discharges and accidental spillages.
	■ Impacts on soil and groundwater from on-site contamination.
	■ Greenhouse gas emissions from energy use at processing sites. For example, energy use for drying timber.
	■ Greenhouse gas emissions from product manufacture and transport to market.
	■ Impacts on water, soils and air quality from the use of chemicals.
	■ Impacts on air quality through dust from the sawing, cutting, chipping of timber.
	■ Impact on nearby communities from noise, water quality and air quality.

| **End-of-life management** | ■ Impacts on soil and water quality from treated or contaminated wood being used, burnt or disposed of inappropriately. |
| | ■ Greenhouse gas emissions and air pollution from the burning of wood. |

Forestry, wood processing and wood products have considerable benefits to social and economic aspects of our society as well as our environment, as long as the risks and impacts outlined above are avoided or mitigated.

Environmental benefits associated with the sector

- Forests can help mitigate climate change by reducing the amount of greenhouse gases in the atmosphere. They do this by absorbing carbon dioxide, using the carbon for tree growth and storing it in their leaves, wood and soil around them. Growing more trees will result in more carbon removal from the atmosphere.

- Forestry products represent a considerable carbon stock, and wood products can substitute for other more fossil-fuel intensive materials.

- Forests and woodlands can help society adapt to a changing climate, by reducing the risk of flooding (for example through opportunity mapping and promotion of natural flood management projects), providing shade for humans and wildlife, protecting land from winds and reducing soil erosion.

- Forests have an increasingly important role as havens for wildlife and for the protection of endangered species of plants and animals.

- The continued development of a homegrown resource reduces reliance on the world market so by reducing environmental impacts in other countries and transport impacts such as emissions.

- Well-managed forests protect against soil loss and maximise carbon storage potential.

Forests can also provide a number of social benefits. These include:

- Opportunities for employment in remote areas and promotion of community ownership schemes, helping diversify rural economies.
- Opportunities for physical activity in quiet, traffic-free areas, for example, walking and cycling. Exercise in woodlands has been shown to relieve physical symptoms of high blood pressure and obesity, improved mental health as well as symptoms of stress and depression[19].
- Locations for social and cultural events such as dog walking, forest schools, team-building events, art installations and concerts[19].

Environmental obligations of forestry and wood processing sector

SEPA has a number of regulatory responsibilities[20], for example under the Pollution Prevention and Control (Scotland) Regulations 2012 (PPC Regulations), Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR), the EU Emissions Trading Scheme and duty of care. This regulatory work is supported by SEPA's partnership work, frameworks and by our role as a statutory planning consultee.

The basis for delivering effective environmental regulation begins at the planning stage. Good decision-making at this stage has positive outcomes for the next 40–50 years of a forest's growth cycle. We provide clear planning guidance on regulatory compliance and achievement of beyond compliance objectives, supported by strong and consistent regulatory advice and robust, evidence-based scientific advice. This is achieved by effective partnership working with Scottish Forestry, the local authority planning departments and other statutory bodies such as NatureScot.

Forestry and wood processing

Scottish Forestry is the main regulator for forestry activities - the initial part of this sector plan's supply chain. However, we work in partnership with Scottish Forestry and require full compliance with environmental water and waste regulations.

The UK Forestry Standard (UKFS) sets out the UK government's approach to sustainable forestry and is the industry reference standard for achieving sustainable forest management. It sets out standards and benchmarks for regulation and monitoring to ensure all forestry activities fully comply with the relevant legislation and regulations. If practitioners meet the UKFS requirements it demonstrates that forestry operations and activities are both legally compliant and sustainable. Many of SEPA's regulatory interests for the protection of the water environment are contained within the UKFS.

The UK Woodland Assurance Standard (UKWAS) provides the basis for independent forest certification. It combines UKFS and the requirements of both major international certification schemes used in the UK; the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC). UKWAS is managed by a partnership of organisations, independent of government. Forest owners choose to have their forests certified to provide assurances of high management standards and environmental compliance, allowing access to FSC and PEFC labelling on their wood products.

The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) apply to

19. Forest Research
20. https://www.netregs.org.uk

forestry activities such as cultivation, surface water drainage systems, fertiliser and chemical storage and application, oil storage, and engineering activities. Many of the controls are through General Binding Rules (GBRs)[21] that provide statutory controls over low risk activities. CAR comes under the Water Environment and Water Services (Scotland) Act 2003 (WEWS) as part of the implementation of the European Water Framework Directive, which also requires the production of river basin management plans (RBMP). Both SEPA and Scottish Forestry have a statutory duty under WEWS to secure compliance with the Water Framework Directive.

The waste arising from forestry and wood processing must comply with the Waste Management Licensing (Scotland) Regulations 2011 (WML) and Environment Protection Act 1990 (EPA) to ensure items such as abandoned equipment and machinery, tyres, plastics (including spent tree guards and planting bags), containers and refuse are properly collected and transported to a suitably authorised site.

If we find breaches of environmental controls, we will investigate and take appropriate enforcement action to resolve the issue and report findings to Scottish Forestry. In certain instances, we will carry out joint audit inspections.

Timber transport

For transportation within this sector, the environment is regulated indirectly. Responsibility for the public road network, including bridges and drainage, lies with local authorities under the Roads (Scotland) Act 1984 (trunk roads are covered by Transport Scotland). This gives powers to apply certain regulations, restrictions and limits through Traffic Regulation Orders. Weight limits, for example, can be introduced where there are risks that lorries could damage weak rural roads, causing erosion, silt water runoff and

water quality issues. In addition, the emissions of greenhouse gases and other air pollutants from timber vehicles can be 35% higher on forest roads compared to public roads due to slower speeds, road slope and loaded vehicle fuel performance[22].

The Timber Transport Forum, together with other partners, have put together the Road Haulage of Round Timber Code of Practice[23], which sets standards on legal and technical haulage issues. Although it has no legal status, the Code of Practice promotes good practice and covers a wide range of issues from vehicle specifications, loading and unloading of timber and the road network itself, all to develop and improve efficiency, safety and environmental compliance.

Wood processing

Wood processing sites such as sawmills, pulp and paper mills, wood-based panel mills and timber treatment sites are regulated by SEPA under a number of regimes, such as:

- PPC if specific parameters exceed a certain tonnage, volume, threshold or output;
- Environmental Protection Act 1990 and Waste Management Licensing (Scotland) Regulations 2011, for example where waste wood is bulked up or recycled into new products;
- CAR covers associated water abstraction, treatment and discharges;
- Greenhouse Gas Emissions Trading Scheme Regulations 2012 relate to combustion sources producing carbon dioxide emissions. They allow businesses the flexibility to cut carbon dioxide emissions in the most economical way and promote investment in clean, low carbon technologies;
- Carbon Reduction Commitment (CRC) and the Energy Savings Opportunity Scheme

21. Information on GBRs
22. Understanding the Carbon Footprint of Timber Transport in the UK, 2010
23. Road Haulage Round Timber Code of Practice

Regulations (ESOS) are designed to improve energy efficiency and cut carbon dioxide (CO_2) emissions.

An area of concern within the sector relates to

timber treatment installations and the calculation of daily volumetric treatment capacity for PPC permitting purposes. We have published supporting guidance to provide a clear and consistent message and we will continue our engagement with stakeholders.

EU Exit

Around 80% of environmental legislation in Scotland originates from the European Union. As the UK leaves the EU, environmental legislation is being corrected to make sure the law keeps working as it has been to ensure that the standards of environmental protection we enjoy today, and the principles upon which they are based, are maintained. Therefore, while some of the detail of the legislation we use to regulate may change, our work to protect Scotland's environment will not. Our commitment to tackling non-compliance and to work with as many businesses as possible to help them to go further will not diminish as a result of the UK leaving the EU.

Wider influences on environmental performance of the forestry and wood processing sector

Full compliance with environmental obligations will not, by itself deliver the transformational change required to secure our One Planet Prosperity objectives. The forestry and wood processing sector plan needs to further unlock the potential for businesses to gain strengths in resource efficiency and environmental innovation that will help them to succeed in their markets.
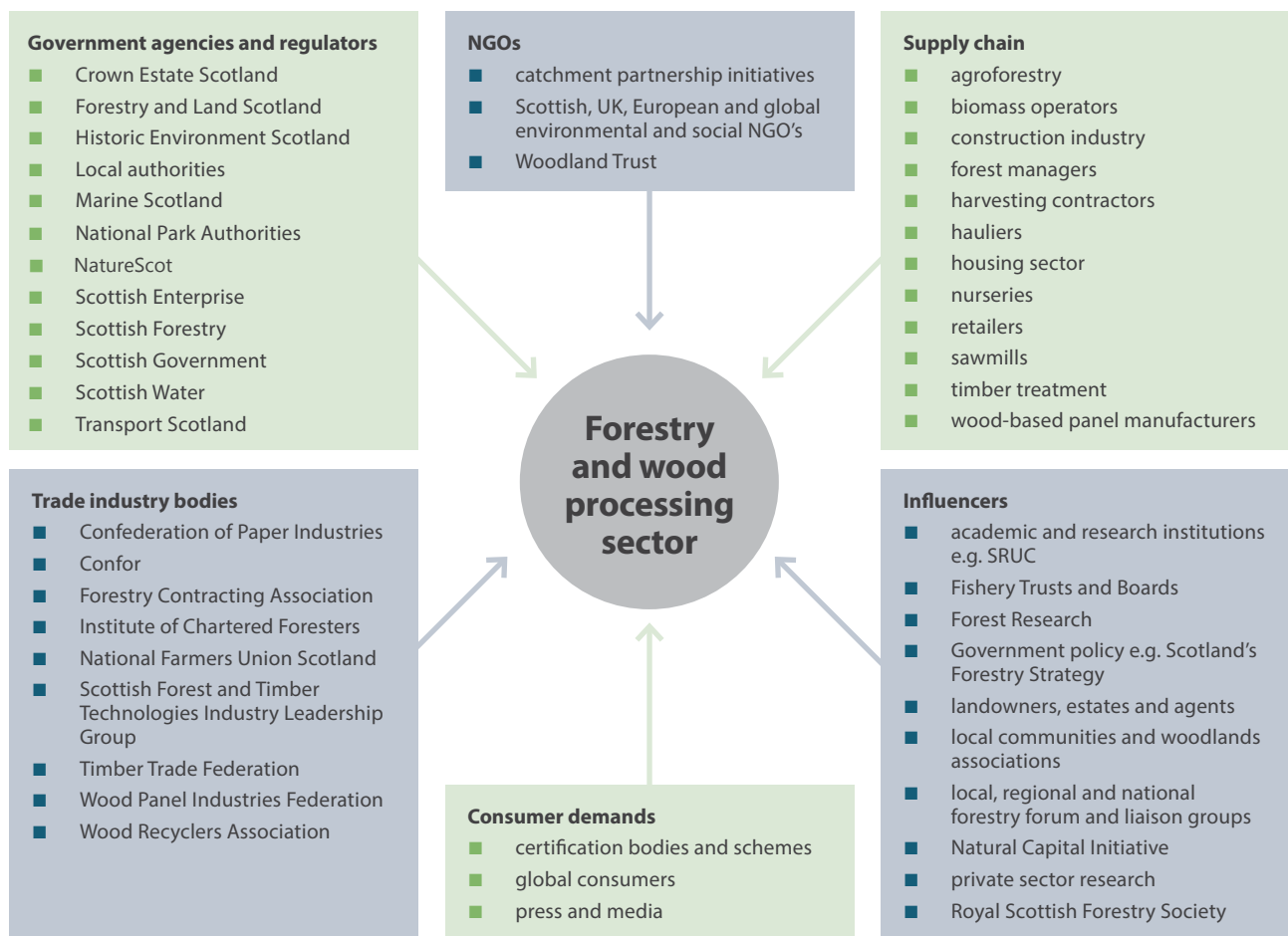
To secure full compliance and help as many businesses as possible to voluntarily move beyond compliance we will develop

our relationships with partners and other stakeholders.

Figure 8 summarises the main stakeholders that influence and are influenced by businesses in the forestry and wood processing sector. It includes some who we already work with and identifies those that we may work with in both the short and longer term. As we implement the plan we will consider the opportunities these relationships provide and how we would like them to develop.

Key influences on the forestry and wood processing sector (Figure 8)

Government agencies and regulators
- Crown Estate Scotland
- Forestry and Land Scotland
- Historic Environment Scotland
- Local authorities
- Marine Scotland
- National Park Authorities
- NatureScot
- Scottish Enterprise
- Scottish Forestry
- Scottish Government
- Scottish Water
- Transport Scotland

NGOs
- catchment partnership initiatives
- Scottish, UK, European and global environmental and social NGO's
- Woodland Trust

Supply chain
- agroforestry
- biomass operators
- construction industry
- forest managers
- harvesting contractors
- hauliers
- housing sector
- nurseries
- retailers
- sawmills
- timber treatment
- wood-based panel manufacturers

Forestry and wood processing sector

Trade industry bodies
- Confederation of Paper Industries
- Confor
- Forestry Contracting Association
- Institute of Chartered Foresters
- National Farmers Union Scotland
- Scottish Forest and Timber Technologies Industry Leadership Group
- Timber Trade Federation
- Wood Panel Industries Federation
- Wood Recyclers Association

Consumer demands
- certification bodies and schemes
- global consumers
- press and media

Influencers
- academic and research institutions e.g. SRUC
- Fishery Trusts and Boards
- Forest Research
- Government policy e.g. Scotland's Forestry Strategy
- landowners, estates and agents
- local communities and woodlands associations
- local, regional and national forestry forum and liaison groups
- Natural Capital Initiative
- private sector research
- Royal Scottish Forestry Society

6. Tackling non-compliance and taking opportunities to go beyond compliance

We wish to be a firm, fair and effective regulator, listening to businesses and the public, and helping to improve and protect Scotland's environment[24]. However, compliance with environmental law is non-negotiable and those with environmental obligations need to comply.

Non-compliant businesses can impact the environment and communities, and undermine legitimate businesses. We will use a variety of regulatory powers and draw from a range of interventions, including advice and guidance. We may use fixed monetary penalties or variable monetary penalties and enforcement undertakings, where appropriate. This will also help responsible compliant businesses by levelling the playing field and making it harder and more expensive for those who persistently fail to comply with their environmental obligations to operate.

The availability of published compliance reports varies for different environmental obligations.

For the Forestry and wood processing sector plan, SEPA reports environmental compliance in the following ways:

- Compliance Assessment Scheme (CAS), which covers some of the regulatory regimes[25] ;
- General Binding Rules (GBR) compliance inspections.
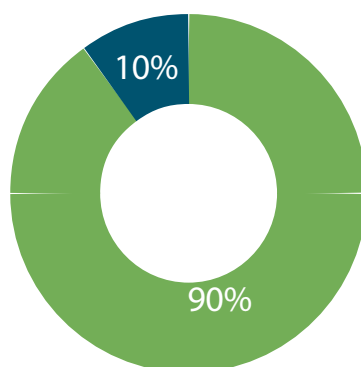
Compliance in the sector

Forest operations : compliance with CAR and GBRs

Comparison of forestry site inspection data between 2014–2015 and 2019 (Figure 9)

2014-2015 Inspection data
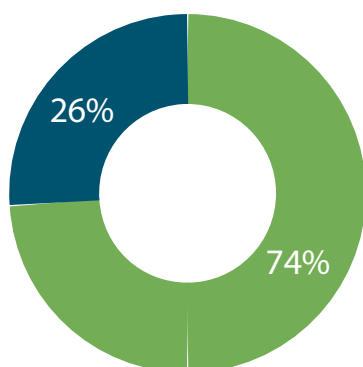
2019 Inspection data snapshot

2014-2015: 26% Non-compliant, 74% Compliant

2019: 10% Non-compliant, 90% Compliant

✔ Compliant
✘ Non-compliant

24. www.sepa.org.uk/regulations/

25. Pollution Prevention and Control (Scotland) Regulations 2012, Part A and Part B; waste management licensing (WML); Water Environment (Controlled Activities)(Scotland) Regulations 2011 (CAR), point source and water resources; the Radioactive Substances Act 1993; Environmental Authorisations (Scotland) Regulations 2018. www.sepa.org.uk/regulations/authorisations-and-permits/compliance-assessment-scheme/

SEPA ran a Forestry Inspection project in south Scotland from 2014–2015 to conduct detailed audit inspections of forestry sites. The project covered audits of harvesting, planting, ground preparation, quarrying, road infrastructure and the waste arising from them to check compliance with UKFS with the focus on CAR and WML requirements[26].

It was found that 74% of the 219 forestry sites that were inspected were fully compliant with the CAR GBRs referenced within the UKFS, with many businesses demonstrating excellent site management beyond compliance. However, 26% were non-compliant with the key issues including:

- poor cultivation – a breach of GBR 20;
- land and road drains carrying pollution to watercourses – a breach of GBR 21;
- forest road runoff causing water quality issues – a breach of GBR 22.

Most non-compliance centred on heavy machinery working on difficult terrain. Often there is limited ground vegetation cover binding the soil which, combined with steep slopes and high rainfall, are factors that increase the risk of silt water runoff to rivers. Heavy vehicle movement along forest tracks also generates silt water runoff into roadside drains directly connected into watercourses.

In February 2019, SEPA ran a follow up survey of 20 forestry sites to gain a 'snapshot picture' of compliance. The survey indicated that 90% of sites were fully compliant with UKFS, while 10% were non-compliant due to waste management issues and poor site pollution mitigation. Despite the small sample number, the improvement in compliance is very encouraging and suggests a marked improvement in environmental management.

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26. We did not include compliance with GBRs for old forestry drains in audited inspections. However pollution events arising from old drains that received no mitigation management during harvesting were included.

How will we work with the forestry sector to address these issues?

Since 2015, we have improved communication and partnership working with Scottish Forestry and many businesses in the forestry sector to promote environmental compliance and ensure the UKFS are met at all sites. This has been achieved through supporting the Forestry and Water Scotland (FWS) Group, which has focussed on developing information tools to improve attitudes and behaviours of contractors, supervisors, managers and landowners that ultimately improve corporate culture and environmental responsibility within those businesses. Such tools include good practice booklets, stickers, videos, factsheets, bulletins and media releases all placed on the FWS web platform for easy access. In addition, extensive workshop style training has been rolled out across Scotland to promote the good forestry practice message.

SEPA will:

- work with Scottish Forestry to update our memorandum of understanding protocol to reflect recent changes to forestry organisations and the content of Scotland's Forestry Strategy 2019–2029, and to clarify roles and responsibilities in achieving and regulating for environmental improvement;

- continue and expand local, regional and national liaison meetings with Scottish Forestry and Forestry and Land Scotland to discuss policy and operational matters;

- identify opportunities to engage regularly with Confor and private sector businesses;

- continue supporting the FWS group to produce simplified guidance on operational issues and deliver good forestry practices;

- provide input to factsheets on key areas such as soil management, chemical applications and management, private water supplies and operational guidance;

- contribute further to information tools such as video productions and Toolbox Talks showcasing good forestry practices;

- promote sustainable forestry and good practice guidance with our partners via roadshows, workshops and open days;

- build on the Tilhill Forestry Initiative to promote good practice and compliance with environmental obligations through focussed operator and management training courses;

- re-run the SEPA Forestry Inspection project to measure the success of the improved guidance, workshops, factsheets and videos in terms of site compliance;

- coordinate regular GBR compliance spot checks to ensure all forestry businesses comply with environmental law;

- work in partnership with the Scottish Forestry and Scottish Government to review the diffuse pollution GBRs and guidance that relate to forestry activities.

- work with Scottish Forestry to identify sections of rivers where physical habitat can be improved to deliver biodiversity and natural flood management benefits, for example through the Water Environment Fund[27];

- provide advice and guidance on good channel and river corridor management.

27. https://www.sepa.org.uk/environment/water/water-environment-fund/

Case study: Tilhill Forestry Initiative

The Tilhill Forestry Initiative was started by Tilhill Forestry and SEPA in 2013 with the aim of rolling out workshop-style training for contractors and managers. To date approximately 800 people have been trained on good environmental practices across the UK (Figure 10). The initiative includes reviewing company staff bulletins, factsheets and assisting in the production of a new information package and training video for company contractors.

This will take workshop training to people based remotely and enable companies to train their staff in the workplace.

SEPA has also assisted government agencies and other private companies deliver similar workshop training events, and attended national symposia and trade events to deliver our environmental compliance message.

The sector has reacted positively to our inspection findings that demonstrate the need to improve forestry practices. The aim of the partnership training approach is to ensure consistency across the sector. This will promote Scottish wood as an environmentally sustainable, quality product grown and felled in compliance with environmental controls.

Forestry training event to date (Figure 10)

Wood processing

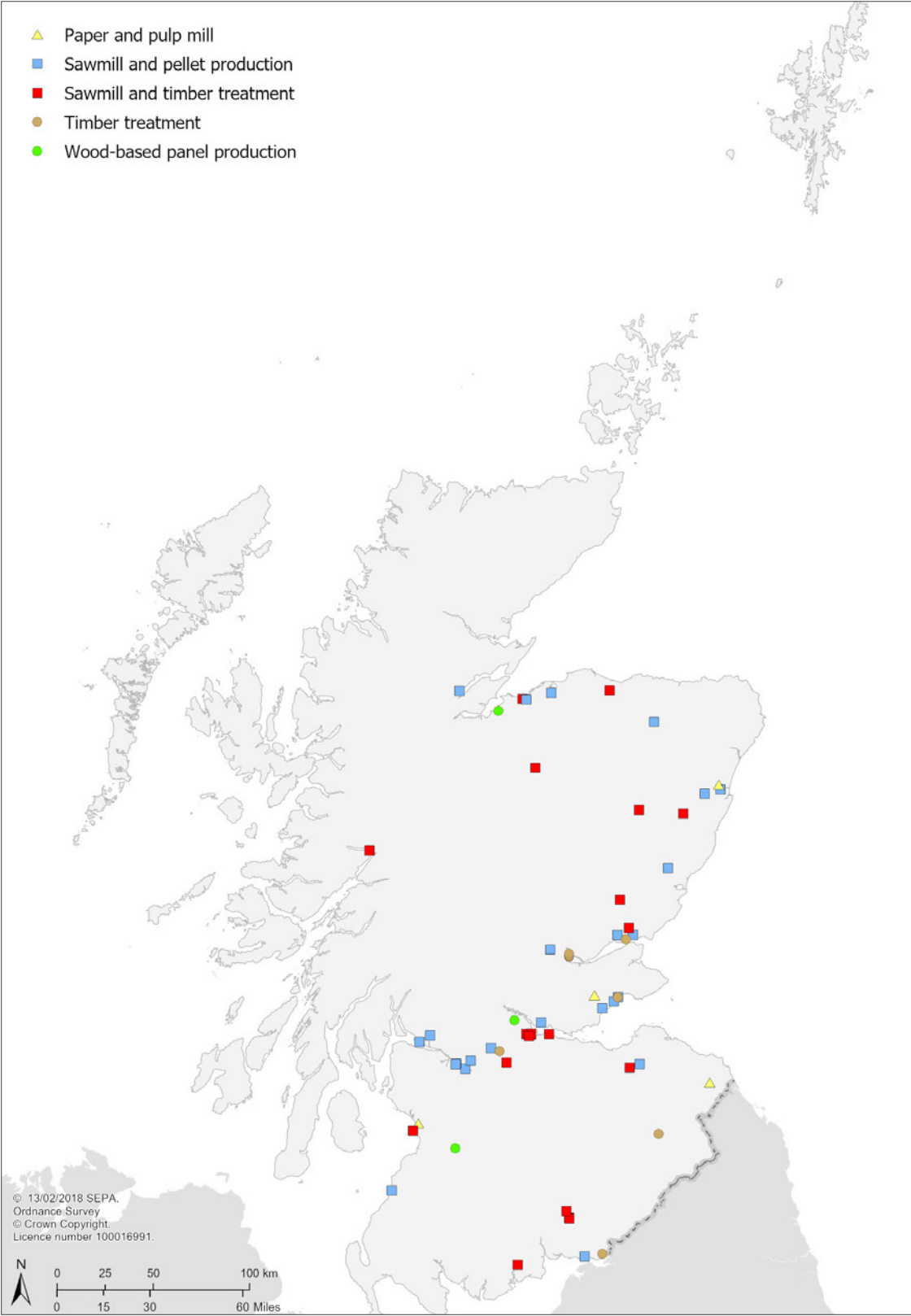Figure 11 shows the location of regulated processing sites across Scotland.

Paper and pulp manufacturing	There are four PPC Part A paper mills. Only one site is an integrated paper mill, utilising Scottish conifer trees to produce pulp to make coated magazine papers.
Sawmills	There are 45 PPC Part B sawmills in Scotland. Most sawmills process coniferous trees and many include processes to reduce the moisture content of the wood (kiln drying). In addition to a range of sawn timber products, sawmills also produce sawdust, wood chips and bark, which are used in the manufacture of other products. A proportion of these sawmill products may be used in on-site biomass installations, with the heat used for kiln drying.
Timber treatment	There are 27 PPC Part A sites that treat timber with a number of chemicals to ensure the product is resistant to decay and insects. The timber is then utilised for a range of uses such as fencing and construction.
Wood-based panel manufacturing	There are three PPC Part A sites for wood-based panel manufacturing in Scotland producing MDF (medium density fibreboard), OSB (orientated strand board) and particleboard (wood chipboard).

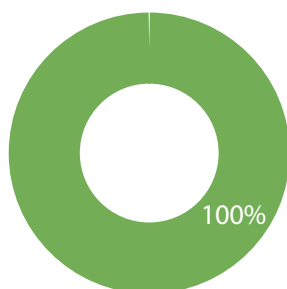Reported compliance for the four wood processing activities is shown in Figure 12.

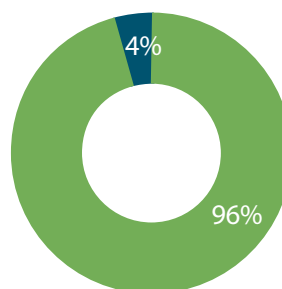# Regulated processing sites across Scotland (Figure 11)

Legend:
- △ Paper and pulp mill
- ■ Sawmill and pellet production
- ■ Sawmill and timber treatment
- ● Timber treatment
- ● Wood-based panel production

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N
0   25   50   100 km
0   15   30   60 Miles

Reported compliance 2018 for wood processing activities (Figure 12)[28]

Pulp/Paper

100%

Sawmills

4%

96%

Non-compliance due to:

- failure to provide staff training and knowledge of PPC permit.

Timber treatment

11%

89%
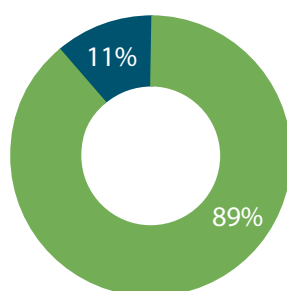
Non-compliance due to failure to comply with permit requirements to:

- site upgrades not implemented;
- implement management systems;
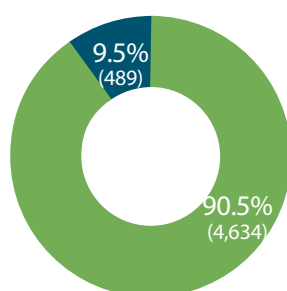- monitor and test equipment;
- submit reports.

Wood-based panels

33%

67%
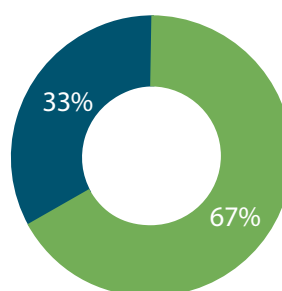
Non-compliance with permit conditions relating due to:

- emissions to air;
- noise disturbance
- effluent discharges

For comparison: CAS 2018 average compliance with all licences SEPA issues

9.5%
(489)

90.5%
(4,634)

✔ Compliant
✘ Non-compliant

How will we work with the wood processing sector to address these issues?

SEPA will:

- target our regulatory effort to bring non-compliant sites up to full compliance as quickly as possible, including taking regulatory action where appropriate;
- engage with senior management at processing sites to help businesses recognise the value of improved compliance and community engagement;
- target specific unlicensed timber treatment sites to verify capacity and assess if a PPC permit is required. For sites needing a permit, we will take appropriate regulatory action and for those that don't, we will ensure compliance with other relevant environmental obligations is being achieved.

28. SEPA average data calculated from across SEPA's Compliance Assessment Scheme

Where are the opportunities to go further?

We believe that those societies and economies that are low resource use, low energy use, low water use and low waste will be the most successful in the 21st century. Beyond compliance is about businesses choosing to go further than the environmental obligations that are placed upon them. These progressive businesses will view environmental excellence as an opportunity, not a problem. This can include looking at suppliers, auditing processes and evaluating buildings, fittings and equipment. SEPA will work with partners to support businesses that choose to implement these types of beyond compliance opportunities and achieve environmental, economic and social benefits. Many actions to reduce impacts on climate change, such as reducing fuel use or switching to alternative fuel sources, are often likely to be cost effective.

In this section we describe opportunities and our aspirations to help businesses do more for the environment by building upon current good practices and choosing to move beyond compliance; because it makes sense for them to grow in a sustainable manner. Many of these opportunities will also help to improve compliance by businesses in the forestry and wood processing sector.

Water

The water environment is essential to all life in Scotland – including the water used for human consumption and to support wildlife. Water is used in every home and business. Its uses include sanitation, heating and cooling, and the production of food and drink. The water environment also sustains places that benefit the health and wellbeing of people, communities and supports tourism.

The climate is changing, placing more pressure on the water environment. We are facing a climate emergency. Nine of the 10 warmest years for the UK have occurred since 2002, and seven of the 10 wettest since 1998. Climate change could see summers in Scotland up to 4.8 degrees warmer and 40% drier. Droughts will become more frequent and we are likely to experience more damaging floods. Scotland's population is also growing, placing increasing demands on land and natural resources as we build more homes and infrastructure, increase water supply, grow more food and produce more waste.

SEPA is in a strong position to help deliver One Planet Prosperity and tackle the climate emergency through our water work. In 2020 SEPA will produce *One Planet Prosperity: A Framework for Water* and *One Planet Prosperity: Our Flooding Strategy*, these will focus and target our work to support the sector and place approach.

Water is essential for forestry to grow high value timber. Appropriate ground preparation techniques tied in with species selection and good soil management allows rainwater to percolate to sapling roots uninhibited; this encourages good tree growth and a healthy crop production. For processing sites, such as pulp and paper mills, a sustainable reliable water supply is essential for production.

Our sector plans aim to ensure we live and prosper within our environmental water limits; maximising the efficiency of its use; reducing the input of waste materials; creating better places for people to thrive and protecting and restoring habitats for wildlife. By doing so, our plans will support and complement the ambitious targets set out in Scotland's river basin management plans (RBMPs) and flood risk management plans (FRMPs). Early and strong links between this sector plan and flooding will strengthen opportunities and necessitate engagement and communication between key partners.

SEPA's aspirations are:

- continue working in partnership with Scottish Forestry, across businesses in the forestry sector to encourage aspects of UKFS that go beyond compliance, actively promoting and encouraging adoption through training and guidance;

- work with the Scottish Government to deliver Scotland's Forestry Strategy priorities including increasing the adaptability and resilience of forests and woodlands and enhancing the environmental benefits provided by forest and woodlands, in particular focusing on protecting and enhancing associated biodiversity;

- work with Scottish Forestry, NatureScot and fisheries trusts to deliver actions laid out in the RBMPs and to identify further opportunities to protect and restore soils, deep peat and the water environment;

- continue to collaborate on current research projects with Forest Research such as forestry mulching practices and application of fertilisers, land use change, land reclamation and restoration and explore other opportunities related to shared goals;

- continue the ongoing work with Scottish Forestry on flood risk management strategies and opportunity mapping to ensure the right tree in the right place for the right reason helps improve water quality, the management of high and low river flows, soil and peatland protection, surface water drainage and the restoration of urban rivers and peatlands;

- regularly review existing concordats between SEPA, NatureScot, Historic Environment Scotland (HES) and Scottish Forestry to provide clarity on roles and responsibilities and further develop our partnership working;

- contribute to the next revision of the UKFS to ensure environmental protection is appropriately addressed;

- review our engagement with the planning system to streamline forestry consultations and ensure we deliver advice and guidance to our partners that supports our vision;

- work in partnership with Scottish Water through our Water supply and waste water sector plan to identify sensitive water supply catchment areas where forestry can protect and enhance the quality of drinking water sources;

- work closely with our Housing and Strategic infrastructure sector plans to explore opportunities and benefits of trees in urban spaces;

- work closely with other SEPA land use sector plans to promote the environmental benefits of trees, for example farm woodlands and agroforestry;

- work in partnership across the supply chain to support the sector in becoming resilient to climatic changes, especially around flood risk and water scarcity issues;

- recognise those processing sites currently delivering world-class practices in water management, and encouraging those that do not, to use water efficiently, recirculate water and reduce wastage.

Case study: Strathard Partnership Initiative

We have facilitated specific partnerships between agencies, landowners and communities in the Strathard catchment that is located within the Loch Lomond and Trossachs National Park. The initiative aimed to improve land, forest and water management decisions using an ecosystems approach. By working in close partnership, multiple land management, community and environmental objectives were achieved. The successes of this regional initiative that showcase the benefits of effective partnership working can be used as an exemplar for rolling out across Scotland.

Strathard - a landscape to live work and play

A collaborative initiative to improve land, forest and water management

Energy

Energy is an essential resource that enables social and economic development and is one of the most important aspects of the essential transition to a sustainable low carbon economy if we are to tackle the climate emergency. However, electricity and heat production, transmission, storage, and use can have significant environmental impacts. SEPA's Energy Framework[29] recognises that how we use and manage our energy resources is central to our ability to live within the resources of our planet and manage our climate impacts. Cost savings and other benefits for businesses can be made by improving energy efficiency and making use of low carbon sources of energy.

SEPA's aspirations are:

- work with Scottish and regional timber transport fora, local authorities, businesses, operators and agencies on research and innovation to reduce the impacts of transport across the sector and promote forestry activities to meet the requirements contained within the Cleaner Air For Scotland (CAFS) Strategy[30] and Climate Change Plan[31];

- understand the key energy requirements within the sector, for example, wood drying and product processing, and support the sector in identifying and implementing energy efficiency opportunities and sourcing alternative low carbon energy sources;

- investigate helping to facilitate cooperation between processing and harvesting hauliers to reduce timber miles;

- promote One Planet Prosperity to encourage innovation and identify energy efficiency opportunities across the whole supply chain;

- continue to offer technical advice and work with partners to identify beyond compliance opportunities associated with the Energy Savings Opportunity Scheme (ESOS) and the Emissions Trading Scheme (ETS);

- in conjunction with our Housing and Strategic infrastructure sector plans, explore improved ways of engaging with partners, operators, businesses and planners to encourage the use of combined heat and power schemes for local district heating schemes and other opportunities such as greenhouse-based agriculture, where appropriate;

- in combination with ongoing emission reduction work, investigate planting trees to offset emissions from SEPA's business mileage.

29. https://www.sepa.org.uk/media/383806/sepa_energy_framework.pdf
30. https://www2.gov.scot/Resource/0048/00488493.pdf
31. https://www.gov.scot/publications/scottish-governments-climate-change-plan-third-report-proposals-policies-2018-9781788516488/

Case study: Timber Transport Forum agreed route maps

The Timber Transport Forum works in partnership with community representatives and the forest and timber industries to promote a vibrant and sustainable timber transport sector. One focus is to minimise the impact of timber transport on the public road network, on local communities and on the environment.

Agreed route maps are at the heart of this partnership approach to timber transport, developed by the Regional Timber Transport Groups at local authority level. Where timber haulage may cause significant impact on the road itself, to communities or to other road users, liaison between forestry interests and the roads authority allows options and solutions to be developed to address any issues. Agreed route maps have been prepared for most of the forested areas of Scotland[32]. These outline roads that are restriction-free, those that have restrictions such as allowable tonnage or timings, and roads that are not permitted for timber transport.

Case study: Alternative Timber Haulage Initiative

One of the largest forestry businesses in the UK, in conjunction with its transport partner, has successfully implemented shipping to transport wood products from north-west Scotland to its hub in Cumbria. As a result of this initiative, road miles have been reduced by 658,000 kilometres and carbon emissions by 668 tonnes per year. Knock-on benefits include local haulage companies being able to return from delivering goods to the Workington port in Cumbria fully loaded with wood products.

Materials

SEPA views the circular economy as a game-changing opportunity to manage resources within planetary limits. Our Waste to Resources Framework[33] recognises that reducing the harms associated with waste management can create economic opportunities. We must dramatically cut waste production across the economy, recover more and dispose of only the very minimum. If waste is produced, we will encourage its productive use within a framework of strong environmental protection. In taking these actions, we will seek out opportunities to tackle the climate emergency. This will reduce the impact of waste management and encourage the use of secondary materials where they can have a positive impact.

Resource efficiency can improve productivity and reduce costs for business. It can also bring environmental improvements and reduce our reliance on virgin raw materials.

SEPA's aspirations are:

- work with businesses to employ the waste hierarchy at all sites so materials are re-used or recycled on harvesting and processing sites. Only when on-site options are exhausted should materials be transported for reuse or recycling off-site. Wood products should be in circulation as long as possible before reaching end-of-life uses;

- work with the sector to increase the volume of sustainable Scottish timber used in construction;

- work with the sector to recognise the value and importance of soil as part of our natural capital, and soil protection to avoid degradation;

- work with the sector to avoid the use of plastic tree protection, use fully biodegradable guards and remove and recycle tubes and stakes as part of a circular economy approach;

- share information between SEPA, certification schemes and bodies to enhance the effectiveness and consistency of regulation and voluntary certification and work with the sector to promote the benefits of certification;

- work in partnership to promote the Natural Capital Protocol[34] within the sector;

- work with timber processing businesses to expand the use of appropriate abatement equipment for collecting and removing dust and reducing noise;

- continue collaborative objective-led research and development between SEPA and Forest Research on fertiliser applications and brash management, land reclamation and remediation and identify further projects and research partners for the future;

- continue to contribute to revising guidance on classification of waste wood with the Environment Agency and Wood Recyclers Association;

- further investigate the use and environmental risks of waste wood for animal bedding, with a view to developing policy and guidance.

33. https://www.sepa.org.uk/media/219528/one-planet-prosperity-a-waste-to-resources-framework.pdf
34. https://naturalcapitalcoalition.org/natural-capital-protocol/forest-products/

Case study: Wood for Good

Wood for Good[35] is the timber industry's campaign to promote the use of wood in design and construction. Wood is nature's most versatile building material and modern engineering methods expand possibilities for its application beyond traditional uses. The objective of Wood for Good is to make wood a first choice material for specifiers and designers by demonstrating the multiple uses of wood.

Case study: Integrated timber processing facility

At Steven's Croft, near Lockerbie in south Scotland, three timber processing companies and one energy company work together to process UKWAS-compliant saw-logs, small roundwood and recycled wood fibre. Utilising the extensive network of strategic timber haulage routes, more than one million tonnes of wood are processed annually and the site is a major employer in the region.

Applying world-class manufacturing technology, 100% of the roundwood is used resulting in zero wood waste. Sawn timber and associated sawmill products (sawdust, wood chips and bark) are produced for a variety of UK markets. Some of the sawmill products are also combusted on-site along with recycled wood fibre, to produce 45MW of green energy that is exported to the grid. Heat produced during combustion is used within a pressurised water heating system to kiln-dry timber, saving around 15,000 tonnes of carbon per annum.

An on-site sustainable drainage system and oil separators help remove pollutants and slow down run-off. These link to an adjacent wetland system that accommodates all site storm water and ensures peak flows are attenuated during storm events.

35. https://woodforgood.com/

7. Summary of actions and aspirations

The following table summarises the actions that we have described in previous sections. These actions address non-compliance in the sector and our aspirations to help businesses voluntarily take opportunities to go beyond compliance. They all also help secure the environmental, communities, business and climate change outcomes that were identified for the forestry and wood processing sector in section 3.

The table combines actions to address compliance and to help achieve beyond compliance. This is because the same action can often both improve compliance and help a business to move beyond compliance. Similarly, some actions that businesses choose to take to move beyond compliance may improve their compliance with environmental obligations.

We will prioritise them alongside those in other sector plans and work them into SEPA's business planning process. In this way, we will progress powerful actions that contribute towards achieving our one planet prosperity goal for Scotland.

Better environment	Actions and aspirations
Environmental pollution risks are being avoided or controlled at source wherever possible.	■ We will review our engagement with the planning system to streamline forestry consultations and ensure we deliver advice and guidance that reflects one planet principles and dovetails with Scotland's Forestry Strategy 2019–2029, UKFS and Scottish Forestry advice and guidance. ■ We will continue to support training and work with Scottish Forestry and others to promote good practice and compliance with regulatory requirements across the forestry sector through training courses, guidance, factsheets, video productions and workshop events. ■ We will continue to support cross-partner working groups, for example the FWS working group with Scottish Forestry, Scottish Government, Confor, Forestry Contracting Association and Scottish Water. ■ We will contribute to ongoing research and innovation e.g. managing chemicals, land reclamation and restoration and the use of brash in soil resource protection. ■ We will offer evidence and advice at all stages in the supply chain to ensure environmental strategies and initiatives are supported. ■ We will continue to work with Scottish Forestry, NatureScot, and fisheries trusts to deliver actions laid out in the river basin management plans (RBMPs).

Better environment	Actions and aspirations
	■ We will contribute to the next revision of UKFS and UK Woodland Assurance Scheme to ensure all environmental protection requirements are appropriately addressed.
	■ We will work with Scottish Forestry to identify sections of rivers whose physical habitat can be improved to deliver biodiversity and natural flood management benefits, for example through the Water Environment Fund.
Full compliance and stronger environmental performance is achieved across the sector and good practice following UKFS guidelines is rewarded.	■ We will target our regulatory effort to bring non-compliant sites up to full compliance as quickly as possible.
	■ We will work in partnership with Scottish Forestry and the Scottish Government to review the diffuse pollution General Binding Rules (GBRs) and guidance that relate to forestry activities.
	■ We will coordinate regular GBR compliance checks to ensure all forestry operators and businesses comply with regulations, starting with a re-run of the Forestry Inspection project.
	■ We will take regulatory action where appropriate to address the lack of soil and groundwater monitoring plans, associated non-reporting of these plans and improvements to dust emissions, noise abatement and effluent discharges at timber treatment sites.
	■ We will explore with others how certification schemes and certification bodies could be used to reward environmental excellence across the supply chain.
	■ We will engage with senior management at processing sites to help businesses recognise the value of improved compliance and community engagement.
	■ By 2020-2021, we will target specific unlicensed timber treatment sites for inspection to verify capacity and assess if a PPC permit is required. For sites needing a permit, we will take appropriate regulatory action and for those that do not, we will ensure compliance with other environmental laws is being achieved.
	■ We will continue to contribute to revising waste wood classification guidance.
	■ We will further investigate the use and associated risks of waste wood for animal bedding with a view to developing policy and guidance.

Stronger business	Actions and aspirations

Scotland has a resilient, multi-benefit, sustainable forestry and woodland sector that plays a significant role in climate change mitigation.	■ We will support, provide specialist evidence and advice and collaborate with Scottish Government, Scottish Forestry, Forest Research, Confor, Scottish Natural Heritage, certification schemes and bodies, trade associations, businesses, local authorities and other organisations in accordance with our vision and Scotland's Forestry Strategy's vision.
	
	■ We will assist Scottish Government to implement Scotland's Forestry Strategy 2019–2029 and its six priority areas for action. This will include supporting the delivery of the Forestry Strategy's implementation plan and assisting with:
	
	  ■ Increasing forest resilience and preparing for future challenges from climate change, pests and diseases;
	
	  ■ Following the **'right tree in the right place for the right reason'** approach alongside integrated land management, opportunity mapping, natural flood management, natural capital considerations, biodiversity improvements, protection of soils, protection and restoration of peatlands, and effective forestry planning.
	
	■ We will work in partnership across the supply chain to support the sector in becoming resilient to climate change, for example to flooding and water scarcity, through efficient use, reduction, reuse and recirculation of resources.
	
	■ We will regularly review our concordats between SEPA, NatureScot, HES and Scottish Forestry to provide clarity on roles and responsibilities and further develop our partnership working.
	
	■ We will work with the construction sector to increase the volume of sustainable Scottish timber used in construction.
	
	■ In combination with ongoing emission reduction work, we will investigate planting trees to offset emissions from SEPA's business mileage.

Stronger business	Actions and aspirations
Going beyond compliance and incorporating circular economy solutions helps deliver business success.	■ We will work with Scottish Government, businesses and operators to develop and enhance circular economy solutions that keep wood products in circulation as long as possible before reaching end-of-life uses. ■ We will work with the sector to promote the benefits of certification to others and will share information between SEPA, certification schemes and bodies to enhance the effectiveness and consistency of regulation and voluntary certification. ■ We will work across the supply chain to minimise transport and associated noise, fuel use and emissions. ■ We will promote technological innovation and efficient use of all resources throughout the supply chain. ■ We will work across the sector to identify further opportunities to minimise environmental impacts associated with water, materials and energy use. ■ We will work closely across our other sector plans to explore mutual benefits, for example the Water supply and waste water, Strategic infrastructure and land use sector plans, and the forthcoming Electricity and heat production sector plan.

Protected communities	Actions and aspirations
Compliant businesses and operators are flourishing and providing opportunities within local communities	■ We will update our memorandum of understanding with Scottish Forestry to reflect recent government organisational changes as set out within the Forest and Land Management (Scotland) Act 2018 and Scotland's Forestry Strategy 2019–2029, to clarify roles and responsibilities in achieving and regulating environmental compliance. ■ We will work with Scottish Forestry and communities to increase the adaptability and resilience of forests and woodlands and enhance the environmental benefits they provide including protecting and enhancing associated biodiversity. ■ We will consider forest and woodland creation opportunities across all SEPA's sector plans and supporting initiatives such as development on vacant and derelict land, promotion of urban forestry, farm woodlands and agroforestry to maximise multiple benefits and opportunities.
Stakeholders, communities, businesses and operators work in partnership for multi-benefit outcomes	■ We will continue working in partnership with communities, stakeholders and operators to encourage involvement and opportunities at all stages in the supply chain for multi-benefit outcomes.