



Forest Estate Strategic Land Use Plan

2023 – 2050

(Draft for Consultation)

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Foreword

Forestry and Coillte have never been more relevant in the context of the climate emergency. There is an urgent need for Ireland to meet stretching climate action targets and the Irish forestry sector and Coillte have an important role to play in the achievement of these targets.

In April 2022 Coillte launched a new and ambitious strategic vision for our future forest estate, which aims to sustainably balance and deliver the multiple benefits of Ireland's state forests across four strategic pillars: climate, nature, wood and people. Following consultation on our strategic vision, feedback has been considered and incorporated into the design of a more detailed draft Forest Estate Strategic Land Use Plan which is set out in the following document.

This draft Forest Estate Strategic Land Use Plan is firmly grounded in scientific principles and aims to sustainably balance and deliver the multiple benefits of Ireland's state forests.

A Strategic Environmental Assessment (SEA) is also being undertaken on our draft Forest Estate Strategic Land Use Plan. The SEA process, through formal consultation and engagement, facilitates further stakeholder feedback which will be considered and used to inform the development of our final Forest Estate Strategic Land Use Plan.

Coillte's ambition is to create new forests and effectively manage our existing forests for greater carbon capture and provide more habitats to enhance biodiversity. We will support the creation of new homes by delivering sustainable Irish wood products and also aim to increase the number of beautiful forest recreation spaces for everyone to enjoy.

Imelda Hurley

CEO Coillte

1

Introduction

1.1 Overview

This Forest Estate Strategic Land Use Plan (FESLUP or Plan) underpins our Strategic Vision for our forest estate and sets out a framework for the delivery of our ambitions to the year 2050.

Forests have never been more important. They help tackle climate change, supply sustainable wood products to help build our homes, provide valuable habitats for wildlife, and offer places for people to visit and enjoy that add to our health and wellbeing. Coillte, as Ireland's semi-state forestry company, has a key role in shaping the future of forestry in Ireland. **Our Purpose and Mission are:**



In 2022, Coillte published its Strategic Vision for Our Future Forest Estate (hereafter referred to as 'the Strategic Vision'). The Strategic Vision is a statement of our high-level ambitions for our forest estate to 2050. The Strategic Vision aims to balance and deliver multiple benefits from our forests, bring more focus to climate action, biodiversity and recreation, while continuing to deliver for the forest and wood products industry.

We anticipate that it will take many decades for our Strategic Vision to be fully realised. Coillte has prepared this Forest Estate Strategic Land Use Plan 2023-2050 (hereafter referred to as the 'FESLUP' or 'the Plan') to underpin our Strategic Vision and set out a range of objectives which will help us deliver on our ambitions. The FESLUP objectives are representative of the steps we need to take between now and 2050 to achieve our Strategic Vision.

The FESLUP forms part of Coillte's new strategic planning framework for the forest estate for the period 2023 to 2050. Following the Strategic Environmental Assessment (SEA) process, and development and adoption of the FESLUP as appropriate, Coillte will prepare the first Forest Estate Strategic Implementation Plan ('the Implementation Plan') which will drive the delivery of this FESLUP over the shorter term (2026-2035), by taking the strategic objectives of the FESLUP and translating them into a range of implementable, measurable and geographical actions. All actions contained in the Implementation Plan will be consistent with both the FESLUP and the Strategic Vision. It is intended that the Implementation Plan will be updated every ten years.

Coillte's new planning hierarchy is illustrated in Figure 1.

Figure 1 | Coillte's planning hierarchy with the FESLUP serving as the bridge between the Strategic Vision and the Implementation Plan



1.2 About Coillte

1.2.1 Overview

Coillte is the largest forestry company in Ireland and plays a key role in producing sustainably grown wood products, providing amenity spaces and recreation destinations for the public, protecting and enhancing biodiversity, and contributing to a climate resilient economy. Coillte was established as a commercial semi-state company in 1989 with an estate of approximately 396,000 ha. Today we manage approximately 440,000 ha of land, equivalent to 7% of the total land area of the country. The estate accounts for approximately half of Ireland's forests and consists of a varied tapestry of different habitats, ranging from conifer forests and mixed or broadleaved forests to open upland bogs and heathlands, lakes and rivers.

Who we are

Coillte, Ireland's semi-state forestry company, is responsible for managing 440,000 hectares (ha) of primarily forested land, making it Ireland's largest forest manager and largest provider of outdoor recreation.

Coillte also develops green energy projects, produces panel board, and delivers nature conservation projects of scale. We are focused on delivering multiple benefits from our forests and land for climate, wood, nature and people.

What we do



We provide **sustainable materials** to build homes and workplaces



We provide **healthy spaces** for us all to enjoy



We **protect and enhance** the environment



We **invest in the rural communities** in which we are rooted



We deliver **multiple benefits** from our forests and land for climate, wood, nature and people

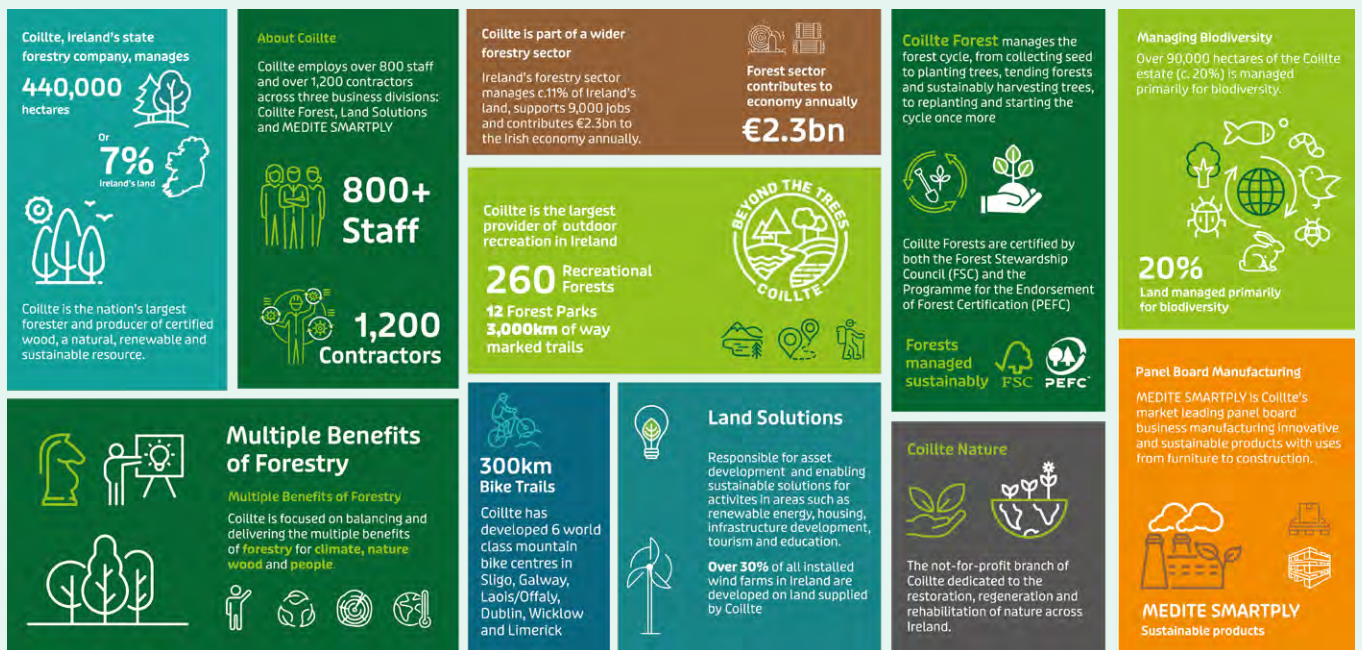


We develop **green energy** to power homes and businesses

1. INTRODUCTION

Over the last 30 years, Coillte has provided a wide range of benefits to society including recreational facilities, biodiversity restoration services, and critical infrastructure, such as telecoms and wind energy. The forestry sector supports around 9,000 direct jobs, mostly in rural Ireland. Coillte's forestry business underpins a thriving export-led forest products sector which supports circa €2.3 billion of economic activity annually. This is achieved despite Ireland having the lowest forest cover in Europe at just 11.6% compared to a European average of 38.3%.¹ Coillte employs 840 staff and approximately 1,200 direct contractors across Ireland, and is comprised of three divisions, Coillte Forest, Land Solutions and MEDITE SMARTPLY, who work with our partners and stakeholders to deliver multiple benefits to society as shown in the graphic below:

Coillte facts & figures



In the 1990's, Coillte, along with the wider forestry sector, was in a development phase as it created new forests through significant levels of afforestation. We also pursued innovation through the establishment of SMARTPLY, one of the first Oriented Strand Board (OSB) factories in Europe.²

In the 2000's, Coillte invested in sustainable growth through wood harvesting and processing technology and diversified the business by creating new enterprises on the estate, including Telecoms and Renewable Energy developments and the acquisition of MEDITE.

In more recent years Coillte has continued to support the development of a vibrant forest-based bioeconomy and responded to changing societal expectations for forestry. This was achieved by investing in recreation, enhancing and restoring biodiversity, and increasing our contribution to mitigating climate change through our sustainable wood products and the development of renewable energy.

¹ Forest Statistics Ireland 2023, DAFM: Department of Agriculture, Food & the Marine (published 22/08/23)

² Coillte, 2022. Strategic Vision for Our Future Forest Estate, s.l.: Coillte.

1.2.2 Coillte Forest

Our forest division sustainably manages approximately 440,000 ha in a way that delivers multiple benefits to society. Our forest estate has both Forest Stewardship Council (FSC®)³ and Programme for the Endorsement of Forest Certification (PEFC)⁴ certification, which certifies that our forests are managed sustainably.

Coillte is the leading supplier of roundwood to the vibrant Irish wood processing sector. Over 3 million cubic metres of roundwood is produced by Coillte's harvesting operations each year, the majority of which is processed by the sawmill sector to produce construction timber to build our homes, pallets to move our goods and materials, and fencing for our farms and gardens. Small-diameter roundwood is mainly used by wood-based panel mills (see MEDITE SMARTPLY, below) and, to a lesser extent, for bioenergy.

Coillte is the leading provider of outdoor recreational activities, offering open public access to circa 6,000 forest properties throughout Ireland, 3,000 km of way-marked trails, 12 forest parks, 6 mountain-bike trails, and over 250 recreational sites. Forest recreation is very important to people's wellbeing, and Coillte's 'Woodlands for Health' programme helps to provide mental health support.

Approximately 90,000 ha of the estate (c. 20%) is managed primarily for biodiversity. These biodiversity areas occur throughout the estate and contain a wide variety of habitats of high biodiversity value including native forest, mixed and conifer forests, blanket bog, raised bog, wet and dry heath. Coillte has developed a science-based approach called 'BioClass', which classifies the ecological value of the biodiversity areas in the estate. This allows Coillte to develop ecological and silvicultural plans to enhance and/or restore these sites to improve their biodiversity value. Work to restore habitats and enhance biodiversity in biodiversity areas is ongoing across the estate. For example, more than 6,000 ha of native forest and blanket bogs have already been restored in major projects and further work is ongoing.

1.2.3 Land Solutions

Coillte's Land Solutions division is responsible for building and growing opportunities that create a more sustainable future for Ireland. The division works across a portfolio of businesses that can add significant value to our stakeholders through a combination of our people and forests. This portfolio includes asset development and providing innovative and sustainable solutions to activities in areas such as renewable energy, housing, infrastructure development, tourism and education.

FuturEnergy Ireland is an example of one opportunity in this portfolio. As part of Coillte's vision to generate 1 Gigawatt (GW) of renewable energy, it has partnered with the ESB through FuturEnergy Ireland with the aim to develop best-in-class wind farms with the support of local communities, thereby enabling Ireland and its people to combat climate change and contribute to more sustainable living. Coillte also continues to work with other developers outside of this joint venture in supporting the development of renewable energy.

As part of the on-going management of the estate, Land Solutions is also responsible for acquiring new land and forests and for land sales that support local and national needs. These sales can range from local housing needs to significant infrastructure developments in Ireland, for example Center Parcs in Longford, was developed on land which was originally owned by Coillte.

In June 2019, Coillte established the not-for-profit, Coillte Nature, which seeks to deliver significant climate and nature solutions through innovative projects-of-scale including:

- Afforestation of land to create new native woodland.
- Restoration of important biodiversity habitats at selected flagship sites.
- Regeneration of urban forests.
- Rehabilitation of critical ecosystem services.

³ FSC licence code: FSC®-C005714

⁴ PEFC licence code: PEFC/17-23-042

1. INTRODUCTION

Since January 2020, work has been ongoing on initiatives such as the Dublin Mountains Makeover, Midlands Native Woodlands, Wild Western Peatlands and Hazelwood Restoration projects. In 2021 a new not-for-profit social enterprise called The Nature Trust was established with Forestry Partners to deliver native woodland afforestation at scale.

MEDITE SMARTPLY – produces engineered wood-based construction panels and is committed to manufacturing products that contribute to eco-friendly building solutions. Its manufacturing mills in Clonmel and Waterford deliver high quality MDF (Medium Density Fibreboard) and OSB (Orientated Strand Board) panels. With a market presence in over 20 countries the products are widely used in furniture manufacture and construction respectively. The mills utilise small-dimension pine and spruce logs and residues from sawmilling as raw materials with all of the panel products certified by the FSC® and PEFC.

1.3 Scope and Structure of the Plan

The purpose of the Plan is to support the implementation of the Strategic Vision by setting out a framework for the delivery of our ambitions to 2050. The FESLUP sets out the objectives for Coillte’s forest estate over the period 2023-2050 to aid the realisation of our eleven high-level ambitions.

Coillte manages approximately 440,000 ha of land, of which approximately 364,000 ha (or c. 84%) are forested and 76,000 ha non-forested land⁵, as illustrated in Figure 2. The scope of this Plan includes all activities or operations managed within Coillte’s Forest and Land Solutions divisions, necessary for the delivery of our strategic ambitions. The activities of MEDITE SMARTPLY are not included in the scope of this FESLUP.

The FESLUP is structured into 5 Sections, as illustrated in Figure 3. Both our Strategic Vision and this FESLUP are underpinned by four strategic pillars: Forests for Climate, Forests for Nature, Forests for Wood and Forests for People, and you will see these pillars throughout this document.

Figure 2 | Map showing Coillte’s Forest Estate

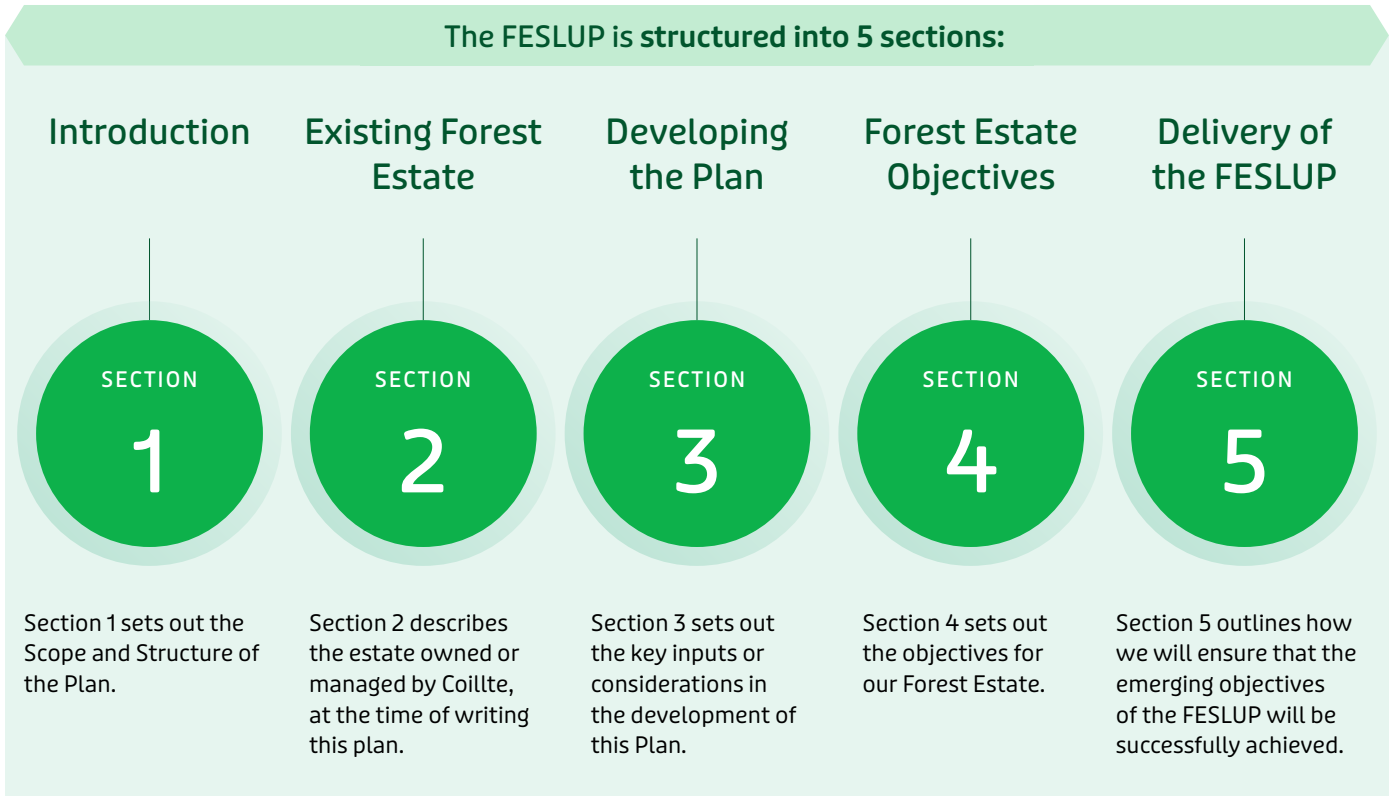
- Forested
- Non-Forested



⁵ The non-forested lands consists of a range of land-cover types, unsuitable for afforestation, these include upland heaths and bogs, lakes, ponds and swamps and are generally maintained in their current state.

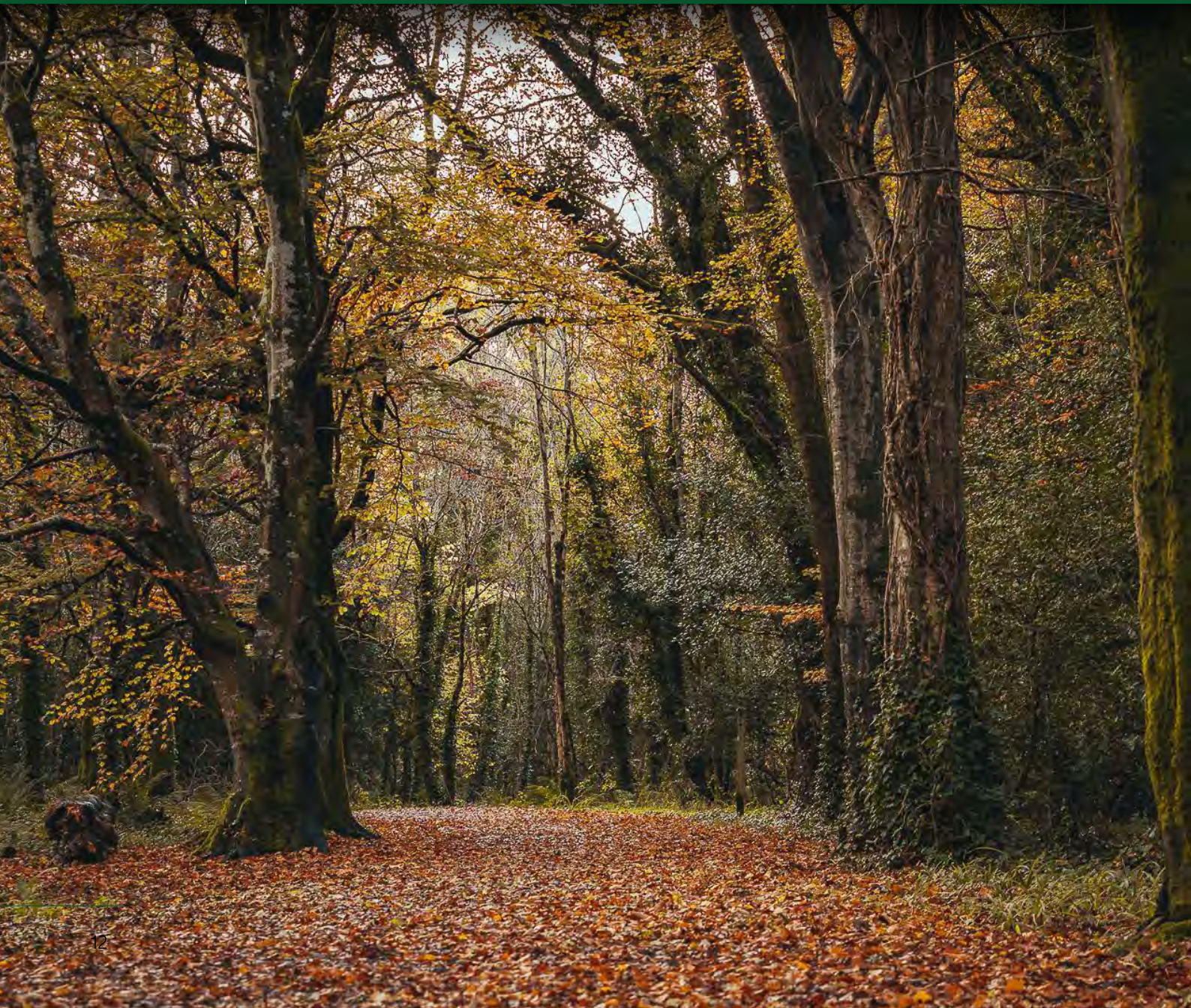
Figure 3 | The structure of the FESLUP visually represented by its five pillars

FESLUP Structure



2

The Existing Forest Estate



2.1 Overview

In order to determine the level of change required, and the type of objectives needed to achieve the Strategic Vision, we must understand the historical developments that have shaped our forest estate of today.

Coillte's strategic ambitions are framed and informed by:

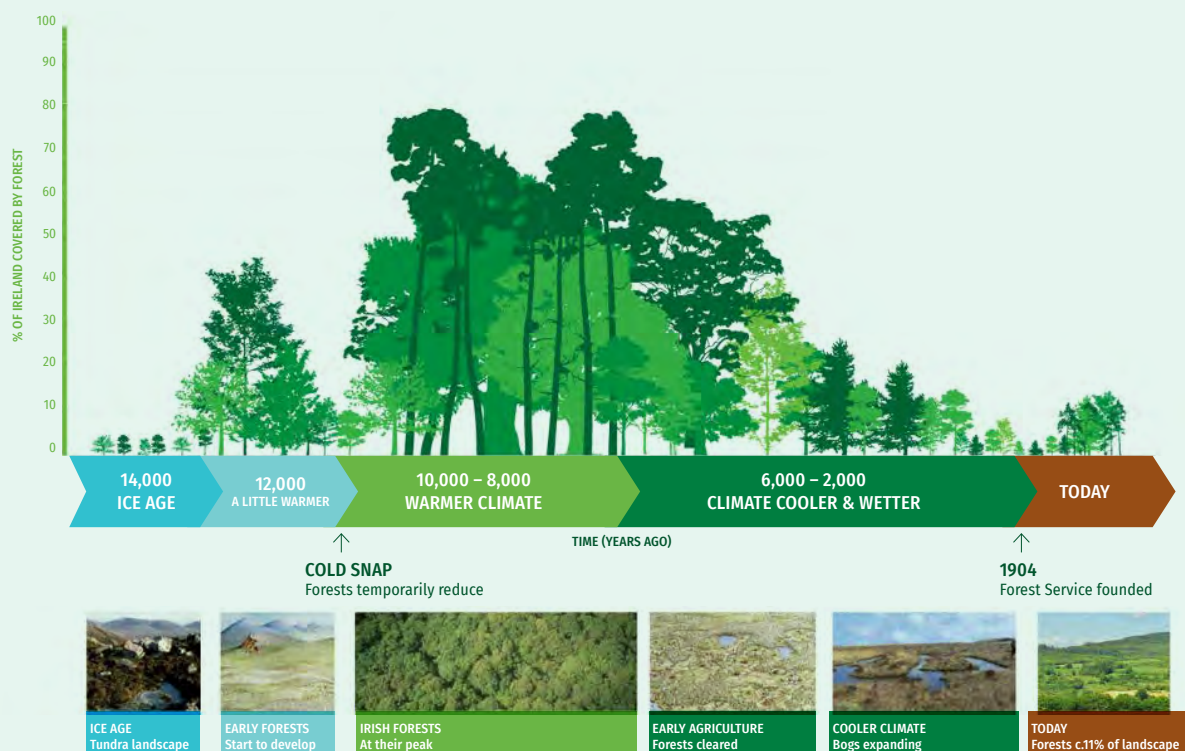
- The history of forests in Ireland / section 2.2
- The nature of the Coillte estate today / section 2.3
- Analysis of the current and potential multiple benefits offered by the Coillte estate / section 2.4

2.2 Historical Context

The landscape of Ireland was once extensively forested. Primeval forests of oak, ash, Scots pine, birch, alder and yew once extended across much of the Irish landscape. Over thousands of years, these primeval forests were almost totally lost as land was cleared for agriculture to feed a growing population. In addition to this, the climate became cooler and wetter. This prevented trees growing back on cleared sites and resulted in the development of treeless landscapes dominated by blanket peats. Figure 4 presents a schematic diagram of changes in Ireland's forest cover over thousands of years since the last Ice Age.

As a result, many parts of Ireland have been treeless for several thousand years, and this fact has an important bearing both on the current biodiversity value of our forests and open habitats in the Irish landscape, as well as the prospects for enhancing their biodiversity value in future. The environmental characteristics of our modern forests, soils and landscapes are very different to those of pre-history and as a result, the forests and open habitats of the future will be different to those that existed thousands of years ago.

Figure 4 | The percentage (%) change in Ireland's forest cover since the Ice Age



2. THE EXISTING FOREST ESTATE

The final chapter in the loss of Ireland's remnant forests was largely influenced by legislation in the latter part of the 19th century. The Land Acts resulted in many of the old estates being divided and redistributed among different landowners, leading to the removal, of much of their forest cover. By the early 20th century, it is estimated that approximately 1% of Ireland was forested.

To address the issue of low forest cover, the state pursued a national forestry programme during the 20th century, with the objective of creating a sustainable forest resource that would provide the basis for a vibrant forestry sector. The state afforestation programme gave much-needed employment and sustained rural communities in areas where farming was difficult and emigration rife.

During the 20th century, incredible efforts by previous generations of foresters were undertaken to re-establish forestry in Ireland. The fruition of this work was the creation of a significant and valuable national asset, which provides us today with benefits in terms of climate, wood, nature and people. Outstanding recreation sites were developed on this estate which continue to be enjoyed today. The development of the forest asset supported the creation of a world-class sawmilling and wood products sector in Ireland, which also supports our bioeconomy.

Most of Ireland's modern forests were established or planted on open, unforested land. The policy at the time was to convert lands that were seen as unproductive to better use, producing timber to meet national needs and reduce reliance on imported timber. Sometimes, plantations were established on bogs that today are seen to have significant nature conservation value. Likewise, the policy of converting old forests to more productive conifer forests in some cases led to the modification of ecologically valuable native forests.

Ultimately, in comparison with the natural forests of prehistory, all of Ireland's forests today have heavy human influences. They have been significantly influenced, over thousands of years, by human activities, such as felling trees for timber and fuel, planting trees and grazing animals.

Most of the modern forests were originally planted for timber production, but they also sequester carbon, provide recreational spaces for the public and provide valuable habitat for plants and animals. Coillte's forests span a broad spectrum of forest habitat types, which are typical of the forests found in the wider Irish landscape.

With the passing of decades, the character of Ireland's forests is changing. As the modern plantation forests become more naturalised in the landscape, they are maturing from blocks of young, even-aged conifer stands to more diverse stands with a mixture of tree species and a more diverse stand structure. Consequently, the value of plantation forests, as they mature and improve for timber production, will also become more valuable for biodiversity and recreation.

2.3 The Coillte Estate Today

Coillte manages approximately 440,000 ha of land, equivalent to 7% of the total land area of the country. Of this land, approximately 364,000 ha (or c.84%) are forested land and 76,000 ha non-forested land. Conifer species form the majority of the forested area with 320,000 ha (73% of the total estate) with the remaining 44,000 ha of forested land evenly spread between broadleaved and mixed forests. As the estate was established over many decades which saw large fluxes in land acquisition and planting, the age class distribution of the forested estate is quite uneven. This, together with the expansion of the estate in the 1990's, has resulted in a relatively young forest, with over 60% of our conifers being less than 30 years of age.

The principal conifer species of the estate is Sitka spruce (covering 240,000 ha or 55%), followed by Lodgepole pine, Japanese larch, Norway spruce and Douglas fir. The broadleaf composition of the estate consists mostly of established forests of oak, beech, sycamore and ash. Many of the older broadleaved forests originated as old estate plantations but there are also younger broadleaf plantations. Some of Coillte's broadleaved forests are native, semi-natural forests, composed of a range of native tree (primarily oak and ash) and shrub species with a diverse structure and ground flora of typical forest plants. The non-forested lands of our estate consists of a range of land-cover types including upland heaths and bogs, lakes, ponds and swamps and are generally maintained in their current state.

The tapestry of soils within the forest estate comprises of podzols, brown earths, gleys and a variety of peat soils. The term “peatlands” refers to usually wet, boggy habitats with peat soils. Approximately 174,000 ha (40%) of our estate is on deep peat soils, of which 137,000 ha is forested, making Coillte the largest owner of peatlands in Ireland. The estate includes some unplanted blanket bog and raised bog habitats that were never planted. Many of these are in very good ecological condition. The majority of Coillte’s peatland habitats are conifer forests, which were planted on peat soils during the 20th century.

2.4 The Multiple Benefits of the Forest Estate Today

The multiple benefits of our forests and forest activities can be summarised under the four strategic pillars - Forests for Climate, Forests for Nature, Forests for Wood and Forests for People. It is important to note that these four forest pillars are intrinsically linked, as are many of the potential benefits.

2.4.1 Forests for Climate



Coillte manages approximately 440,000 ha of land, with our forests generating the triple benefit for climate by acting as Sink, Store or Substitute. These contribute to the global carbon cycle and helps to mitigate climate change.

Sink – Forests act as a carbon sink by absorbing atmospheric carbon dioxide (CO₂) through the process of photosynthesis. Conifers grow very well in Ireland and sink CO₂ at a faster rate than broadleaved trees.⁶ This difference can be attributed to the faster growth rate of conifers, when compared to those of broadleaved trees.⁷

Store – The carbon that is captured and stored in the biomass of trees and plants remains locked in their trunks, branches, roots, and leaves throughout their lifetime. Wood products derived from our forest logs also provide long term storage. Currently, Ireland’s forests capture and store 1.7 Mt of CO₂ annually,¹ and Ireland’s National Forest Accounting Plan 2021-2025 estimates that the total carbon store in Irish forests is approximately 312 Mt between trees, leaf litter and soils.

Substitute – Forests also provide a sustainable source of timber and other wood products, contributing to the mitigation of carbon emissions from non-renewable materials as harvested wood products store carbon for the duration of their use, further extending the carbon storage potential.⁸ Recognising the significance of wood as a renewable resource and the importance of the displacement effect (i.e. when a wood-based product is used instead of another product to provide the same function), Coillte has been actively promoting the use of wood products. In 2019 this led to an estimated displacement effect amounting to 3.7 Mt of CO₂ equivalent, which corresponds to 6% of the total emissions reported for the Republic of Ireland.⁹

6 Conifers sink CO₂ at a rate of c. 6.9 tCO₂ eq. ha/year. Broadleaves sink CO₂ more slowly at a rate of c. 2.6 tCO₂ eq. ha/year. COFORD, 2022. Forests and wood products, and their importance in climate mitigation: A series of COFORD statements., s.l.: COFORD.

7 Conifers also retain their needles all year round, which allows them to photosynthesize, and thus sequester carbon, for a longer portion of the year compared to deciduous broadleaved trees which lose their leaves during the winter months. Stephenson, N. et al., 2014. Rate of tree carbon accumulation increases continuously with tree size. Nature, Issue 507, pp. 90-93.

8 When trees die, a portion of this stored carbon is transferred to the forest soil and other organic matter. Alternatively, when a tree is harvested, the stored carbon remains within the timber. If this harvested wood is used as a substitute for carbon heavy products such as steel and concrete, the carbon remains sequestered in these wood products, effectively transferring the carbon storage from the forest to the built environment.

9 Holmgren, P., 2021. Fossil displacement and value chain emissions related to primary wood-based products in Ireland, s.l.: Coillte.

2. THE EXISTING FOREST ESTATE

In 2022 Coillte commissioned a report entitled “Carbon Modelling of the Coillte Estate” highlights the fact that Coillte’s forests act as a net sequester for the period of the plan.¹⁰ The reason for a transition to potential net emitter after this date can be attributed to increased harvesting, a decline in biomass growth, and ongoing emissions from drained organic soils such as deep peat (which currently exist approximately 174,000 ha of Coillte’s estate).

The Wild Western Peatlands is a project funded by the Department of Agriculture, Food and the Marine to restore approximately 2,100 ha of Atlantic blanket bog and wet heath which is currently planted with spruce and pine forests. Coillte’s ambition to redesign 30,000 ha of peatland forests by 2050 through rewetting or rewilding aligns with the Nature Restoration law, a component of the EU Biodiversity Strategy.

Coillte has started surveying and planning work on a Wild Western Peatlands pilot site at Derryclare in Co. Galway and we expect to select several other large sites across the western seaboard as the project progresses. The Coillte property at Derryclare lies to the west of Lough Inagh and Derryclare Lough in Connemara. This iconic site is surrounded by the Twelve Bens/Garraun Complex Special Area of Conservation and contains areas of high biodiversity value, therefore offering great potential for redesign and restoration.

2.4.2 Forests for Nature



There is a growing global recognition of the need to protect and enhance biodiversity. In Ireland, the Coillte estate represents a significant resource, and is an important habitat for native plants and animals. The Coillte estate consists of a varied tapestry of different habitats, ranging from conifer forests, mixed and broadleaved forests to open bogs and heathlands, to lakes and rivers.

Coillte commenced the process of mapping biodiversity areas in 2000. Currently, approx. 90,000 ha of Coillte land (approx. 20% of the estate) is mapped and managed primarily for nature. This 90,000 ha is comprised of:

- 70,000 ha of ‘biodiversity areas’: more than 2,300 Coillte sites that have been mapped and identified by independent ecologists as having particular ecological value,
- 20,000 ha of ‘biodiversity features’ (mapped features <2ha e.g., scrub, open habitats, small wetlands) and ‘riparian buffer strips’ along rivers and streams.

A key element of Coillte’s approach to biodiversity and nature conservation has been to identify the best of these habitats, and map them as biodiversity areas, in which the protection and/or enhancement of biodiversity is a primary management objective.

¹⁰ Black, K., Byrne, K., McInerney, D. & Landy, J., 2022. Report on Carbon Modelling of the Coillte Estate, s.l.: Coillte.

It is estimated that about 20% of Ireland's plant species, 28% of breeding birds and 50% of invertebrates are forest-dwelling species in the broadest sense,¹¹ which means that they make use of forest habitats to find food and shelter, and perhaps to breed.

Many of these wild species utilise conifer and mixed forests, particularly in areas where native forests do not exist, and a number of species have benefited from the increase in forest cover. For example, national surveys of pine marten in the 2000s^{12,13} found that the national population had increased since a previous survey in 1978-1980, during which time afforestation and maturation of the national forests had brought about an increase in available forest habitat. Furthermore, subsequent studies have demonstrated that the increase in pine marten numbers has positively affected red squirrel populations in some parts of the country, apparently due to a complex predator-prey interaction between pine marten and the introduced grey squirrel.¹⁴

As a step towards identifying forests with best value for nature, Coillte has mapped old woodland sites on its estate. These are sites that have been apparently forested since the 1830's, when the earliest Ordnance Survey maps were prepared. Old woodland sites account for approx. 6% of the total area of the Coillte estate and are very variable in character: some have plentiful semi-natural characteristics, while others have few or none.

Forests are selected as biodiversity areas based on their character and the quality of natural values present, for example ground flora, diverse stand structure and presence of rare native forest habitats. To date, biodiversity areas include some old woodland sites and some 20th century conifer forests. Forest biodiversity areas are managed in a way that enhances their semi-natural characteristics. Sometimes these sites lend themselves to restoration to native forest. For others, the best approach is to manage using low impact silvicultural systems.

Through our Strategic Vision and associated FESLUP, we will continue to assess and map forest biodiversity areas and explore ways to scale up our management of forests for nature.

Over 70,000ha of the Coillte estate consists of open habitat that was never afforested. The majority of this unplanted land is upland heath and bog, but it also includes lowland blanket bog and raised bog habitats, many of which are in very good ecological condition. The best of these habitats have features such as good cover of *Sphagnum* moss, pool systems and/or a hydrological connection to active bog habitat.

The biodiversity value of blanket bogs and raised bogs is well known.¹⁵ Coillte continues to engage with the National Parks and Wildlife Service (NPWS) to identify forested peatland habitats on the estate that are intrinsically linked to ecologically important peatland habitats.

We are committed to continuing this work, and we are also exploring wider options for managing peatland forests for the benefit of both climate and nature.

The Coillte estate spans most of Ireland's subcatchments and is criss-crossed by many watercourses of all sizes. The standard approach to protecting watercourses is to create a strip of vegetated ground along the watercourse by removing trees and not replanting but allowing the ground to revegetate naturally. Over time, heath, grassland and scrub vegetation develops, providing dappled shade along streams and creating corridors of natural habitat through the forests.

Coillte forests situated in particularly sensitive locations with respect to water quality are mapped as biodiversity areas. Part of our intention, in developing the FESLUP, is to step up engagement with a view to improving the management of sensitive catchment locations on the estate.

11 Cross, J. (2012). Ireland's Woodland Heritage: A Guide to Ireland's Native Woodlands. National Parks and Wildlife Service, Dublin.

12 O'Mahony, D., O'Reilly, C. and Turner, P. (2005). National Pine Marten Survey of Ireland 2005. COFORD Connects, Environment No. 7; COFORD The National Council for Forest Research and Development, Dublin

13 O'Mahony, D.T., Powell, C., Power, J., Hanniffy, R., Turner, P. and O' Reilly, C. (2017). National pine marten population assessment 2016. Irish Wildlife Manuals, No. 97. National Parks and Wildlife Service, Department of the Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Ireland.

14 Lawton C., Hanniffy, R., Mollay, V., Guilfoyle, C., Stinson, M. & Reilly, E. (2020) All-Ireland Squirrel and Pine Marten Survey 2019. Irish Wildlife Manuals, No. 121. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

15 Renou-Wilson, F., Bolger T., Bullock C., Convery F., Curry J., Ward S., Wilson D. and Muller C. (2011). BOGLAND: Sustainable Management of Peatlands in Ireland. Environmental Protection Agency, Ireland. http://www.epa.ie/pubs/reports/research/land/STRIVE_75_web_SC.pdf

In 2018, Coillte launched BioClass, which is a procedure for assessing and classifying biodiversity areas on the estate. BioClass applies a ranking system to forests, bogs and other open habitats based on a set of defined criteria. This enables us to identify habitats, rank their importance and prioritise them for management and biodiversity enhancement.

Following assessment and mapping, Coillte's BIOForest programme is developing and implementing site-specific management plans for biodiversity areas. The management plans are developed by ecologists and foresters working together, which ensures that nature conservation objectives are considered and reviewed in light of silvicultural practice and site conditions. The plans cover a variety of measures such as species control, continuous cover forestry management, selective felling, maintenance of peatland habitats and monitoring. BioClass and BIOForest are integral to the Strategic Vision's goal of increasing the areas managed primarily for nature.

Since 2000, Coillte has actively participated in several major habitat restoration projects and continues to do so. To date, habitat restoration works have been completed on more than 6,000 ha of native forest, blanket bog and raised bog habitats in biodiversity areas of the highest ecological value. The work was completed in several major restoration projects and the habitats selected for these projects are significant at national and international level. Maintenance of those sites is ongoing, and they continue to contribute significantly to national nature conservation objectives.

Beyond biodiversity areas and across the entire estate, protection of biodiversity features and riparian buffers contribute to biodiversity protection at both a regional and local scale.

Approximately 96,000 ha of the estate are included within sites that are legally designated for nature conservation by the NPWS. These statutory designations comprise of Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Natural Heritage Areas (NHAs), and proposed Natural Heritage Areas (pNHAs).

Coillte regularly engages with the relevant statutory agencies to deliver the appropriate protection and management measures for these sites. We will seek to improve these engagements through our Strategic Vision and associated FESLUP.

A wealth of rare and threatened species occur across the Coillte estate, many of which are recorded on the Irish Red Lists,¹⁶ the Birds of Conservation Concern in Ireland¹⁷ and on the Habitats and Birds Directives. Coillte interacts with statutory bodies and knowledge-holders regarding the protection of the many protected species relevant to the estate. There are ongoing efforts by Coillte and our partners to better understand the requirements of protected bird species, such as hen harrier and merlin, and to develop targeted plans for their protection.

The history of habitat management by Coillte is reflected in the cooperative partnerships on projects such as bog and woodland restoration projects and protected species projects such as the lesser horseshoe bat. Coillte will seek to build upon these experiences in habitat restoration and species protection through our Strategic Vision and associated FESLUP.

¹⁶ Nelson, B., Cummins, S., Fay, L., Jeffrey, R., Kelly, S., Kingston, N., Lockhart, N., Marnell, F., Tierney, D. and Wyse Jackson, M. (2019) Checklists of protected and threatened species in Ireland. Irish Wildlife Manuals, No. 116. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland

¹⁷ <https://birdwatchireland.ie/birds-of-conservation-concern-in-ireland/>

2.4.3 Forests for Wood



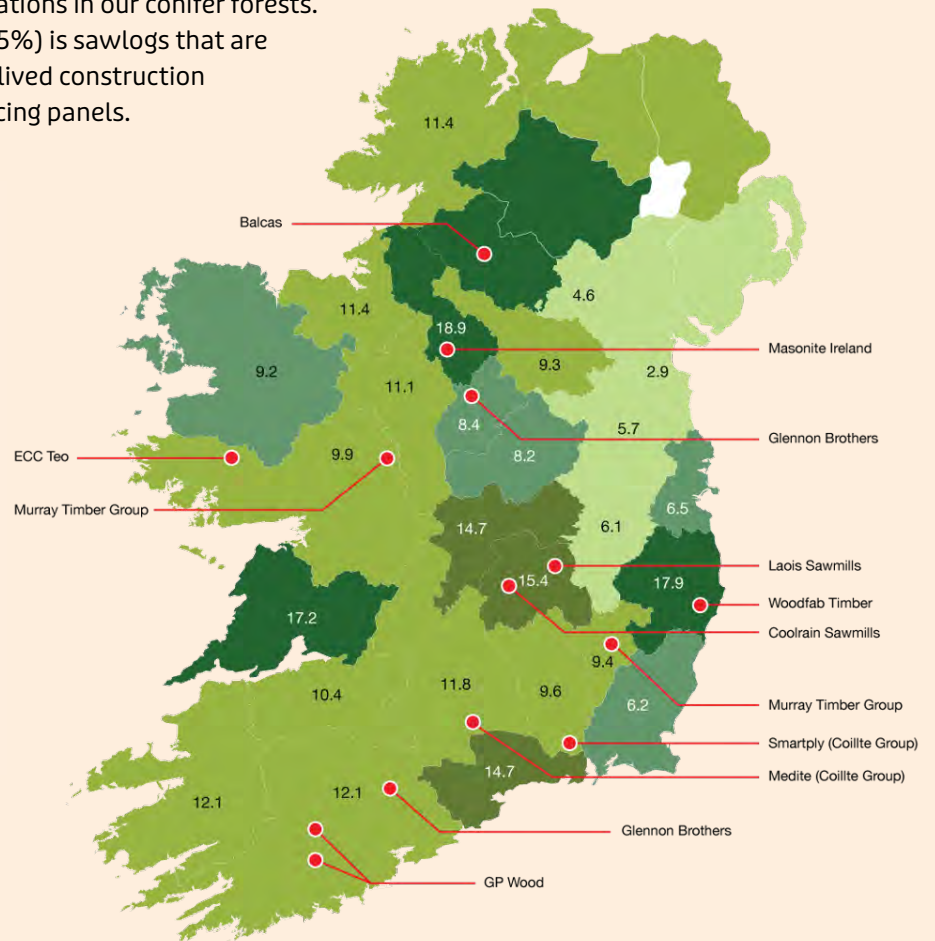
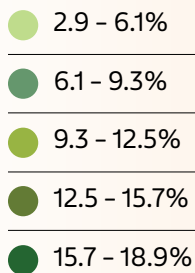
Coillte's economic sustainability is underpinned by its successful wood and wood products business which enables it to invest in public goods such as nature restoration and recreation.

Coillte is Ireland's largest producer and supplier of certified roundwood to the domestic wood processing sector (Figure 5). From 70% of our estate, (300,000 ha), we produce approximately 3 million cubic metres of roundwood annually from felling and thinning operations in our conifer forests. The majority of Coillte roundwood (c. 65%) is sawlogs that are processed by sawmills mainly for long-lived construction products, and for pallet boards and fencing panels.

Figure 5

Key players in our industry¹⁸

% forest cover by county:



Ireland's wood-processing sector is recognised as a European market leader. With annual export sales of over €500 million, the sector has invested significantly over the last decade. A cumulative investment of more than €300 million has been made 'by the sector' to develop modern, state-of-the-art processing facilities with the projected capacity to process the forecast increase in roundwood supply. These investments have been in process efficiency, machining and grading accuracy, and kiln drying technology enabling our sawmills to compete internationally.

¹⁸ Forest Industries Ireland, 2023. Timber Spec CPD. [Online] Available at: <https://timberspec.ie/>

Wood products from Coillte’s sustainably managed forests have a significant role to play in climate change mitigation. Not only do our living trees sequester carbon, but the harvested wood continues to store this carbon in a variety of long-life wood products resulting in a positive environmental impact as represented in Figure 6. These long-life wood products will build the low carbon homes of the future and underpin Ireland’s ambition of decarbonising the built environment to achieve ‘net zero’ by 2050.

Figure 6 | Salient features of wood products



The Programme for Government (Department of the Taoiseach, 2020) identifies an underlying demand for 33,000 new homes annually.¹⁹ Modern methods of construction offer a valuable solution to several issues facing housing delivery in Ireland – increasing the speed of delivery, delivering more sustainable homes, and reducing the need for scarce onsite labour. Growing Ireland’s capacity to build more with timber through the greater use of timber frame, glulam and mass timber buildings could significantly increase the overall capacity to build homes in the State and will help the delivery of the Governments housing programme. It will also drive demand for wood, which Ireland is well-placed to meet.

Recent supply chain disruptions and their impact on global trade reinforce the need to become self-sufficient and to have a continuous long-term supply of locally produced sustainable wood products. Ireland’s climate creates an excellent environment for growing trees.

It is estimated that investment in afforestation in recent decades will lead to a doubling of supply to almost 8 million cubic metres by 2035. With the vast bulk of this growth coming from privately-owned conifer forests, the majority of roundwood supply will come from non-Coillte sources.

This increased supply presents a need and offers significant opportunity to develop and create new markets for Irish wood, both domestically and overseas (primarily the UK).

¹⁹ Department of the Taoiseach, 2021. Programme for Government: Our Shared Future, s.l.: Government of Ireland.

2.4.4 Forests for People



Outdoor recreation plays a vital role in Ireland, bringing benefits to society by contributing to a wide range of areas, including physical and mental health, social inclusion, nature connectedness, community cohesion, environmental protection and rural and economic development.

Coillte is Ireland's leading provider of outdoor recreational activities nationally, with over 3,000 km of way- marked trails, six mountain biking facilities, 12 forest parks with seven family cycle trails and over 250 recreational sites. In addition, there are approximately 8,000 km of forest roads across circa. 6,000 properties. Over 60% of Fáilte Ireland national looped trails are on Coillte land.

It is estimated that there are c. 18 million visits to our forests each year.²⁰ In recent years, the use of forests as recreational facilities has dramatically increased across the country. In 2021, overall visits to our most popular forests²¹ were 3.2 million. Coillte's most popular forest, Ticknock experienced 1,000 visits per day in 2021.

Coillte has an open forest policy which means all walkers are free to visit any of our forests according to the Leave No Trace principles. Each forest encapsulates a unique landscape character and recreational opportunities.

Coillte has strategic partnerships in place with both Fáilte Ireland and the Department of Rural and Community Development to deliver recreational facilities that support increased tourism and economic activity in rural areas. 'Beyond the Trees Avondale', Coillte's flagship recreational offering, showcases the evolution of Irish forestry with features including the Treetop Walk, a 38m high viewing tower, and the longest slide in Ireland. The world class visitor destination was unveiled in June 2022 and has been recognised as Ireland's first age-friendly tourist destination. It was awarded the *Tourism and Hospitality Project of the Year* at the Irish Building and Design Awards in October 2022.

In many locations, Coillte provides a platform for other businesses to operate successfully, with examples such as bike hire businesses at Ballyhoura (Limerick), Ticknock (Dublin) and Ballinastoe (Wicklow). Cafés have been established at Ards (Donegal), Curragh Chase (Limerick) and Donadea (Kildare) Forest Parks. Many other licensees operate outdoor recreational activities, including the provision of outdoor pursuits and training on Coillte lands.

Tourism and business opportunities associated with forest-related recreational activities is a key contributing factor to the economic and social success of rural communities. The value of this recreation service provided to the Irish public is in the order of €97 million and generates in excess of €270 million in recreation related economic activities in rural communities.²⁰

Ireland's forestry sector contributes €2.3bn to the economy and supports c.9,000 jobs predominantly in rural Ireland.² These jobs currently include foresters, ecologists, engineers and others employed directly by Coillte, and contractors and operatives with traditional forestry skills. The growth in the wider forestry sector, and Coillte's ambitions to diversify our activities and the offering from our estate means that we will need to attract both greater numbers and new and wider skillsets to work in Irish forestry.

²⁰ Department of Rural and Community Development, 2021. Provision and Management of Recreation Facilities and Infrastructure 2020, s.l.: s.n.

²¹ Based on 48 sites where 12 are forest parks, six mountain bike trail forests and the remaining, high use recreation forests. Source: Visitor Trend Report Q4 2021.

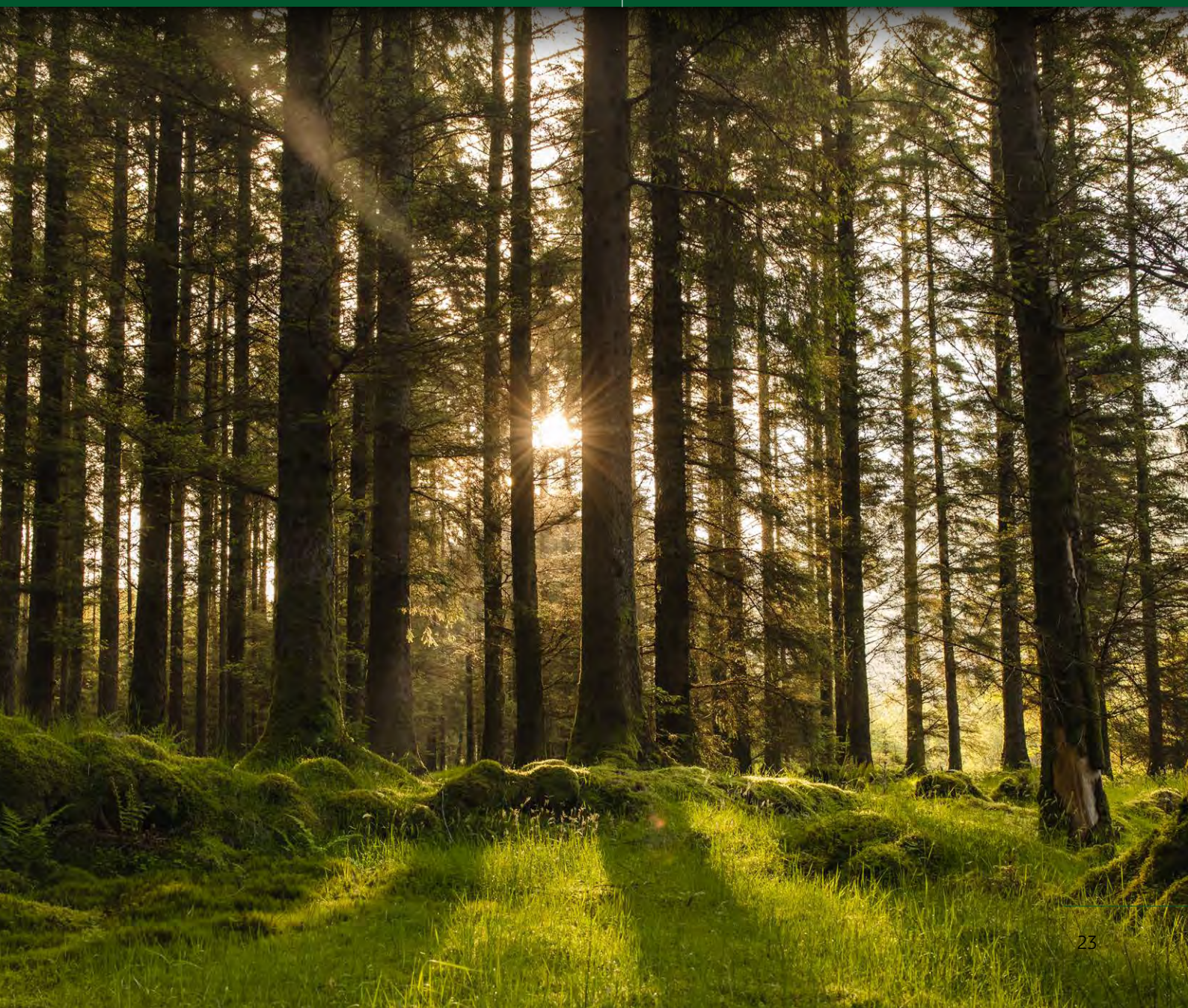
Figure 7 | Outdoor recreation in Ireland

(Reproduced from National Outdoor Recreation Strategy 2023-2027)



3

Developing the FESLUP



3. Developing the FESLUP

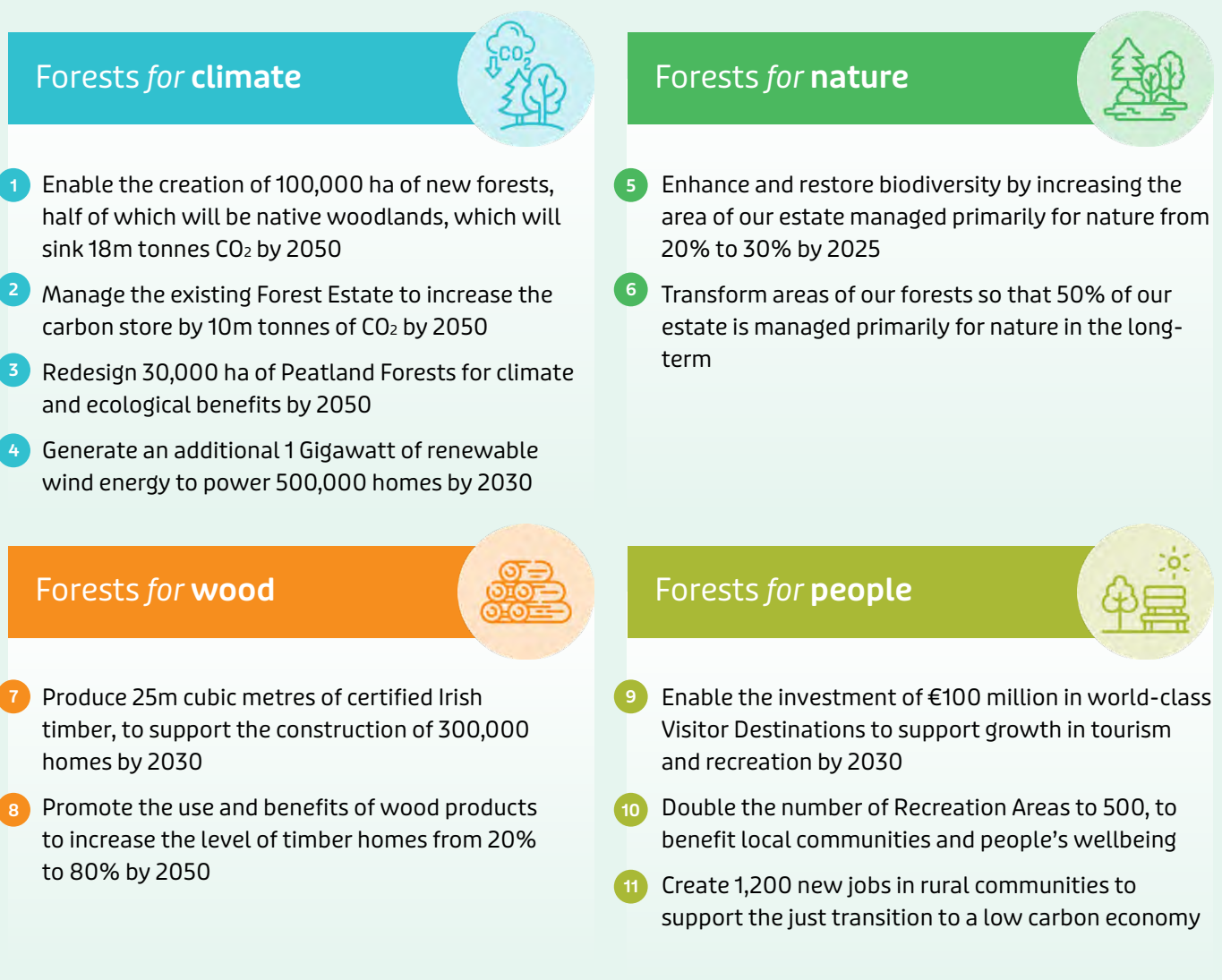
3.1 Overview

This section sets out the key inputs and considerations that informed the development of this plan.

3.2 Ambitions of the Strategic Vision

The purpose of this FESLUP is to set out how the ambitions of the Strategic Vision will be realised by outlining the objectives for our forest estate to be realised over the period 2023-2050. The strategic vision outlines how forestry delivers multiple values and benefits that support 9 of the 17 United Nations Strategic Development Goals. There are 11 ambitions of the Strategic Vision, set out under the four strategic pillars as illustrated in Figure 8 below:

Figure 8 | Eleven ambitions across the four strategic pillars



Through workshops, multi-disciplinary discussions and land-use modelling scenarios we were able to identify the steps needed to make each ambition a reality within the lifetime of this Plan. Once these steps were understood, they were translated into a range of plan objectives, using the approach relevant to each pillar:

- Our approach to **Forests for Climate** was to consider the ways we can manage and grow our estate to fulfil our ambition of sinking and storing more carbon by 2050. In approaching this, we collaborated with leading climate, carbon, and soils experts to understand the carbon profile of our estate, including peatland forestry, and have further developed our carbon and tree growth model to identify a suite of climate objectives.
- Our approach to **Forests for Nature** involved working with our ecology, hydrology, and silviculture experts to identify the steps required for the realisation of our ambitions for 2050, as they relate to nature. This allowed us to establish a suite of objectives for the identification, mapping, enhancement and/or restoration of habitats of ecological value in our existing estate, while also extending the area of the estate managed primarily for biodiversity.
- Our approach to **Forests for Wood** was to utilise our in-house strategic forecasting expertise, combined with our extensive forest inventory and timber planning optimisation tools to identify a suite of objectives which will enable us to realise our ambitions to produce a sustainable supply of roundwood, and to promote the use and benefits of wood products.
- Our approach to **Forests for People** was to leverage our recreation and land-use planning expertise, our locally based foresters' knowledge, along with geospatial tools to identify the steps required to realise our ambitions to increase the recreational and tourism value of our forests, while creating new jobs.

As part of this work, we were also cognisant of the Forest Estate Strategic Implementation Plan, to be developed subsequent to the completion of this FESLUP, and that will underpin its delivery. As such, the objectives of the FESLUP will give rise to a range of actions in the Implementation Plan. These actions will need to be implementable, measurable and geographical in nature.

3.3 Balancing the Four Pillars

Inherent in our overall approach was the need to consider how best to balance the multiple pillars: **Forests for Climate, Forests for Nature, Forests for Wood and Forests for People**, and how to balance the objectives within those pillars as shown in Figure 9 below.

Figure 9 | A visual representation of the link between multiple pillars



3. DEVELOPING THE FESLUP

The four pillars are intrinsically linked, as are many of the potential complementary benefits. Forests can deliver a wide range of economic, environmental, and social benefits.

For example, a narrow focus on the Forests for Nature pillar has the potential to result in negative ramifications on the Forests for Wood and Forests for Climate pillars. Too large an increase in forests managed primarily for nature may directly impact the supply of certified roundwood. This could have significant negative consequences for the wood processing sector and the availability of home-grown sawn wood for construction. This, in turn, may necessitate importing unsustainable timber and contribute to carbon leakage effects at the global level, i.e., the shift in carbon emissions from one country to another. Equally too narrow a focus on wood production in certain areas can impact on biodiversity or recreation.

Due to the ever-changing forest life cycle and evolving demands and societal expectations, forest pillars can at times be complementary and at other times can conflict where 'trade offs' are needed to achieve the best overall balance.

We recognise that it may not be realistic or appropriate to deliver all forest pillars equally in all forest locations. Ultimately, objectives must be balanced across pillars including carbon sequestration, recreation, species diversification, and a sustainable supply of certified roundwood products. Thus, the balancing of multiple pillars adopted in the Strategic Vision, flows through to the development of this FESLUP.

Financial sustainability and self-sufficiency are essential for delivering on the multiple benefits of forests.

3.4 Evidence Informing Action

This FESLUP has been informed by the outputs from our land-use modelling.

Coillte's balanced approach to land-use planning utilises industry leading land-use modelling tools. In order to inform the preparation of the FESLUP and its strategic objectives, we modelled a simulation of the primary activities undertaken in the forest estate, e.g. felling & replanting, thinning, restoration. This shows the implication of these activities on the makeup of the estate, e.g. species composition, land use type, age profile, standing roundwood volumes estimates.

While this modelling work is ongoing, in line with updates to the growing forest inventory, it has played a vital role in our understanding of the steps needed to fully realise our Strategic Vision and has particularly helped us to understand the importance of balancing the four pillars: Forests for Climate, Forests for Nature, Forests for Wood and Forests for People.

3.5 Public Consultation

In 2022, Coillte conducted public consultation and stakeholder engagement on its forestry Strategic Vision. We asked the public's view to help shape the vision and the subsequent development of our strategic plan. A total of 599 responses were collected via the online questionnaire with data analysis subsequently undertaken independently by RED C.

Separately, in June 2022, RED C conducted research on behalf of Coillte into public attitudes to Coillte's new forestry strategic vision among a nationally representative sample of adults living in the Republic of Ireland. The combined results of both surveys were published on the Coillte website in October 2022.

Highlights of the key findings of the consultation and public attitudes survey are shown in Figure 10.

The public responses to the consultation were analysed in detail and have been an important consideration in the development of this FESLUP.

Figure 10 | Key findings of the consultation and public attitudes survey

Forests for climate



- There is an almost universal view that Irish forests are important in helping to address the climate crisis and there is a strong degree of support for more tree planting and increased forest cover.
- There is overwhelming support for broadleaf planting. Strong support for more conifers is also expressed by the general public, while opinions on conifers are more polarised in the online public consultation.
- The majority agree with redesigning (rewetting or rewildering) peatland forests when they present a significant carbon emission risk.

Forests for nature



- An overwhelming majority believe that Irish forests are important for nature and biodiversity and there is almost unanimous agreement that Coillte has a role to play in addressing the biodiversity crisis.
- Views on Coillte's ambition to ensure that half of the 100,000 ha of new forests will be native woodlands diverge. The majority of respondents to the public consultation believe this is too little, while 51% of adults from the general public attitudes survey agreed this ambition is just about right.

Forests for wood



- The majority of people believe that Irish forests are important in supporting the construction of sustainable homes and there are high levels of support for more timber frame houses being built in preference to ones using concrete or steel.
- There is almost unanimous agreement that Ireland should be self-sufficient in its timber requirements from certified sources and that Coillte should innovate and promote wood products.

Forests for people



- Forests are seen as hugely important as a provider of spaces for both outdoor physical activity and for mental health and wellbeing.
- A strong majority agree with the plans for more recreation sites and three quarters believe that new recreational forests should be located near population centres as well as in rural areas.
- A strong majority endorse Coillte's ambition to enable investment in visitor destinations to support growth in tourism and recreation.

Balancing the Multiple Benefits of Forests

More than 80% agreed that balancing the benefits of Coillte's forests across the four pillars of Climate, Nature, Wood and People is important. Almost half of those who took part in the public consultation believed that Coillte's ambitions were appropriately balanced, while almost a third disagreed and a quarter had a neutral viewpoint.

3. DEVELOPING THE FESLUP

The public consultation and public attitudes survey demonstrated an almost universal view that Irish forests are important in helping to address the climate and biodiversity crises and the strong support for more tree planting and increased forest cover. Similarly, most people believe that Irish forests are important in supporting the construction of sustainable homes, and that Ireland should be self-sufficient for certified timber. The importance of forests for health and wellbeing was also strongly reflected, with many people agreeing with our ambition to double our recreation areas and enable investment in visitor destinations.

The importance of balancing the multiple benefits of forests across climate, nature, wood and people was also clear, with the highest proportion of respondents agreeing that Coillte's ambitions were appropriately balanced.

It is also noted however, that while there was overwhelming support for broadleaf planting as a long-term store for carbon to mitigate climate change, and strong support for planting conifers expressed in the public attitudes survey, opinions on conifers were more polarised in the public consultation. Similarly, in relation to our forests for climate and forests for nature ambitions, a significant proportion of the public consultation respondents felt that both the afforestation target and nature ambitions didn't go far enough. There were also varying considerations expressed as to how we should manage our forests, to enhance their potential climate and nature benefits.

The Strategic Vision Ambitions developed by Coillte are considered to be representative of a balanced approach to the four pillars: Forests for Climate, Forests for Nature, Forests for Wood and Forests for People (section 3.3). They seek to expand the existing estate by planting both coniferous and broadleaf plant species, and by continuing to actively manage the forest including a continuation of existing afforestation and harvesting practices, as well as increasing the area of the estate managed primarily for nature using appropriate silvicultural management techniques. The balanced Ambitions will sustain and grow the economy, deliver carbon benefits in terms of sink, store, and substitution, deliver nature and biodiversity benefits and deliver health, wellbeing, employment and social benefits to people.

Actively managing our forest estate is also important as it mitigates the potential climate risks of pests and disease from an unmanaged forest estate, provides wood products that store carbon and substitute carbon intensive alternative building materials, mitigates against the importation of timber from unsustainable sources, and contributes to a growing bioeconomy that supports employment throughout Ireland.

The responses and feedback received from both the public consultation and public attitudes survey undertaken during 2022 on Coillte's Strategic Vision, has been considered, in so far as practicable, in the development of the FESLUP objectives. Further detail on how the public feedback was considered is included in Section 7 of the accompanying Strategic Environmental Assessment.

3.6 Responding to Legacy Environmental Challenges

In order to determine the level of change required, and the type of objectives needed to achieve the Strategic Vision, we must first understand what we need to do differently. From the outset we endeavoured to identify and understand the existing and legacy challenges facing our forest estate and consider ways that we can overcome them. These challenges include, but are not limited to:

- **Species composition:** Broadleaved forests represent less than 27% of the forested area of the estate. It is our ambition to enable the creation of 100,000 ha of new forests, half of which will be native woodlands (broadleaf species), and to enhance, transform and restore our existing forests by substantially increasing the area of our estate managed primarily for biodiversity. This FESLUP sets out a range of objectives which will facilitate this transformation.
- **Water quality:** Forests can and should have a positive impact on water quality. However, forest operations can put pressure on water catchments and need to be carefully managed. Degradation of water quality and aquatic ecosystems from forest-based sources of sediments and nutrients, and arising from changes in hydrological patterns. This FESLUP introduces a range of objectives and measures which will seek to offset any potential negative effects on water quality.

- **Freshwater Pearl Mussel:** Forestry on upland peatlands is a key pressure across the 27 catchments where the keystone species, freshwater pearl mussel is found. This FESLUP introduces a range of objectives and measures aimed at offsetting potential negative effects on species of conservation importance.
- **Peatlands:** The negative environmental impacts of afforestation of virgin peatlands is now widely recognised. As evident in our Strategic Vision, it is an Ambition of Coillte to redesign 30,000 ha of Peatland Forests for climate and ecological benefits by 2050. Objectives which will enable this are set out in this FESLUP.

Practical challenges also exist, for example, in relation to unsustainably high deer populations in many parts of the country, the supply of appropriate native planting material and the danger of new or existing pests and diseases. In addition, the arrival and spread of the Ash Dieback Disease in Ireland over recent years has removed ash from the list of suitable species for afforestation, thereby ruling out the planting of this native tree species as a commercial broadleaf or as part of a native woodland mix. All of these known challenges have been responded to through the objectives of this Plan.

3.7 Environmental Considerations

Strategic Environmental Assessment (SEA)

Strategic Environmental Assessment (SEA) is a process by which environmental considerations are integrated into the preparation of plans and programmes prior to their completion. The process provides for a high level of protection of the environment and promotes sustainable development by contributing to the integration of environmental considerations into the preparation and adoption of specified plans and programmes. It provides a systematic process for evaluating the environmental consequences of a plan to ensure that they are addressed at the earliest appropriate stage and inform strategic decision making.

The requirement for SEA derives from Directive 2001/42/EEC which has been transposed into Irish law through the European Communities Environmental Assessment of Certain Plans and Programmes Regulations (S.I. 435 of 2004 as amended by S.I. 200 of 2011) and the Planning and Development (Strategic Environmental Assessment) Regulations (S.I. 436 of 2004 as amended by S.I. 201 of 2011).

The FESLUP falls under the remit of S.I. 435 of 2004. A screening of the draft FESLUP for SEA was undertaken by Arup (selected thorough a public procurement process) for Coillte and it was determined that an SEA would be carried out.

In recognition of this, the SEA process was applied to the development of the Plan and an Environmental Report has been prepared to further inform the development of the Plan for the purposes of consultation.

The SEA process has helped to shape the Plan in the following ways:

- A multi-disciplinary team in Arup was commissioned to carry out the SEA of the FESLUP, and to assist Coillte in writing the FESLUP, from its inception. This helped to ensure that environmental considerations were considered in all aspects of the plan-making process, in particular the development of the FESLUP objectives. The objectives of the FESLUP were drafted and reviewed by SEA specialists and wording was refined, removed or added through an iterative process with Coillte, to ensure there would be no likely significant environmental effects emanating from the plan implementation.
- Through SEA Scoping consultation, a range of recommendations were made by statutory consultees pertaining to the SEA process, but also on what the consultees would like to see contained or reflected in the Plan. For example, the statutory consultees recommended the FESLUP reflect on some of the legacy issues of forestry in Ireland and set out measures to overcome these issues. This has been included in Section 2.2 and 3.6 of the FESLUP.
- As part of the SEA process, and as documented in the SEA Environmental Report, a range of measures have been proposed, which aim to mitigate against any potential negative environmental effects arising from the implementation of this Plan. The SEA mitigation measures, to which Coillte fully commits, are set out in Appendix A of this Plan.

Appropriate Assessment (AA)

The EU Habitats Directive (92/43/EEC) places strict legal obligations on member states to ensure the protection, conservation and management of the habitats and species of conservation interest in all European Sites which include Special Areas of Conservation, designated under the Habitats Directive and Special Protection Areas, designated under the EU Birds Directive (2009/147/EC). The provisions of the EU Habitats Directive (92/43/EEC) have been transposed into Irish law through the Birds and Natural Habitats Regulations, 2011 (S.I. 477 of 2011).

Article 6 of the Habitats Directive obliges member states to undertake an ‘appropriate assessment’ (AA) for any plan or project which may have a likely significant effect on any European Site in view of the conservation objectives of the site. A screening of the FESLUP for AA was undertaken by Coillte and concluded that full AA is required. In recognition of this, a Natura Impact Statement (NIS) has been prepared to further inform the development of the FESLUP for the purposes of consultation.

The AA process has helped shape the Plan in a similar way to the SEA process:

- The objectives of the FESLUP were drafted and reviewed by AA specialists in Arup and wording was refined, removed or added through an iterative process with Coillte, to ensure there would be no likely significant effects on any designated site.
- As part of the AA process, and as documented in the NIS, a range of measures have been proposed, which aim to mitigate against any adverse effects arising from the implementation of this Plan. The NIS mitigation measures, to which Coillte fully commits, are set out in Appendix B of this Plan.

3.8 Review of Policy and Legislation

This FESLUP has been informed by a review of key policy and legislation which include, but are not limited to, national policies such as the Climate Action Plan 2023 (CAP23) and overarching European legislation such as the Land Use, Land Use Change & Forestry (LULUCF) Regulation. The review has guided the development of the objectives of this FESLUP.

We are also cognisant that there is likely to be significant changes in the policy environment over the timeframe of the FESLUP which will alter the context in which it operates. For example, revised national climate action plans may give rise to higher afforestation targets, greater demand for wood products and/or changes to forest management practices. The Plan does not, therefore, preclude the need to address emerging priorities as they are identified. For example, Coillte are acutely aware of the emerging Nature Restoration Law and the effects that this might have on the forest estate.

Table 1 | List of key policy and legislation considerations which inform the FESLUP

Policy / Strategy	Consideration
Climate Action and Low Carbon Development Act 2021, including the Climate Action Plan 2023 (CAP23) ²²	Commits Ireland to a 51% reduction in GHG emissions by 2030 and a net-zero target by 2050. Emission reductions will be realised in the Land Use, Land Use Change & Forestry (LULUCF) sector through the action to ‘develop, assess, and adopt as appropriate Coillte’s Strategic Vision which aims to capture additional carbon dioxide in its forests, soils and wood products by 2050’. Coillte is fully dedicated to supporting the delivery of CAP23, which commits Ireland to a 51% reduction in GHG emissions by 2030 and a net-zero target by 2050.
National Retrofit Plan	Commits Ireland to have 500,000 homes retrofitted to a Building Energy Rating of B2/cost optimal or carbon equivalent by 2030. Energy efficient timber products can play a role in meeting these targets.
National Outdoor Recreation Strategy 2023-2027	Provides a strategic, collaborative framework to facilitate the consolidation and sustainable growth of the outdoor recreation sector.
EU’s Land Use, Land Use Change & Forestry (LULUCF) Regulation ²³	Mandates that each member state absorbs as much CO ₂ as they emit. Ireland, having consistently contributed to GHG emissions between 1990 and 2021, needs to increase its afforestation rate and improve land management to become a carbon sink.
EU Forest Strategy and the EU Adaptation Strategy	Encourage natural adaptive measures, such as sustainable forest management and integrating climate change adaptation into forestry practices. They consider future changes like rising CO ₂ levels and temperatures, shifting pest patterns, increased risk of forest fires, changing water availability, and changing storm patterns affecting forestry operations.
EU Biodiversity Strategy 2030 ²⁴	<i>‘Aims to put Europe’s biodiversity on path to recovery by 2030 for the benefit of people, climate and the planet’</i> and outlines actions such as halting and reversing the decline of pollinators, reducing the use and risk of pesticides and planting 3 billion trees by 2030.

22 Government of Ireland, 2023. Climate Action plan CAP23, s.l.: s.n.

23 European Union, 2018. Regulation (EU) 2018/841 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, s.l.: s.n.

24 Climate Ireland, 2023. Forestry. [Online]

4

Forest Estate Objectives



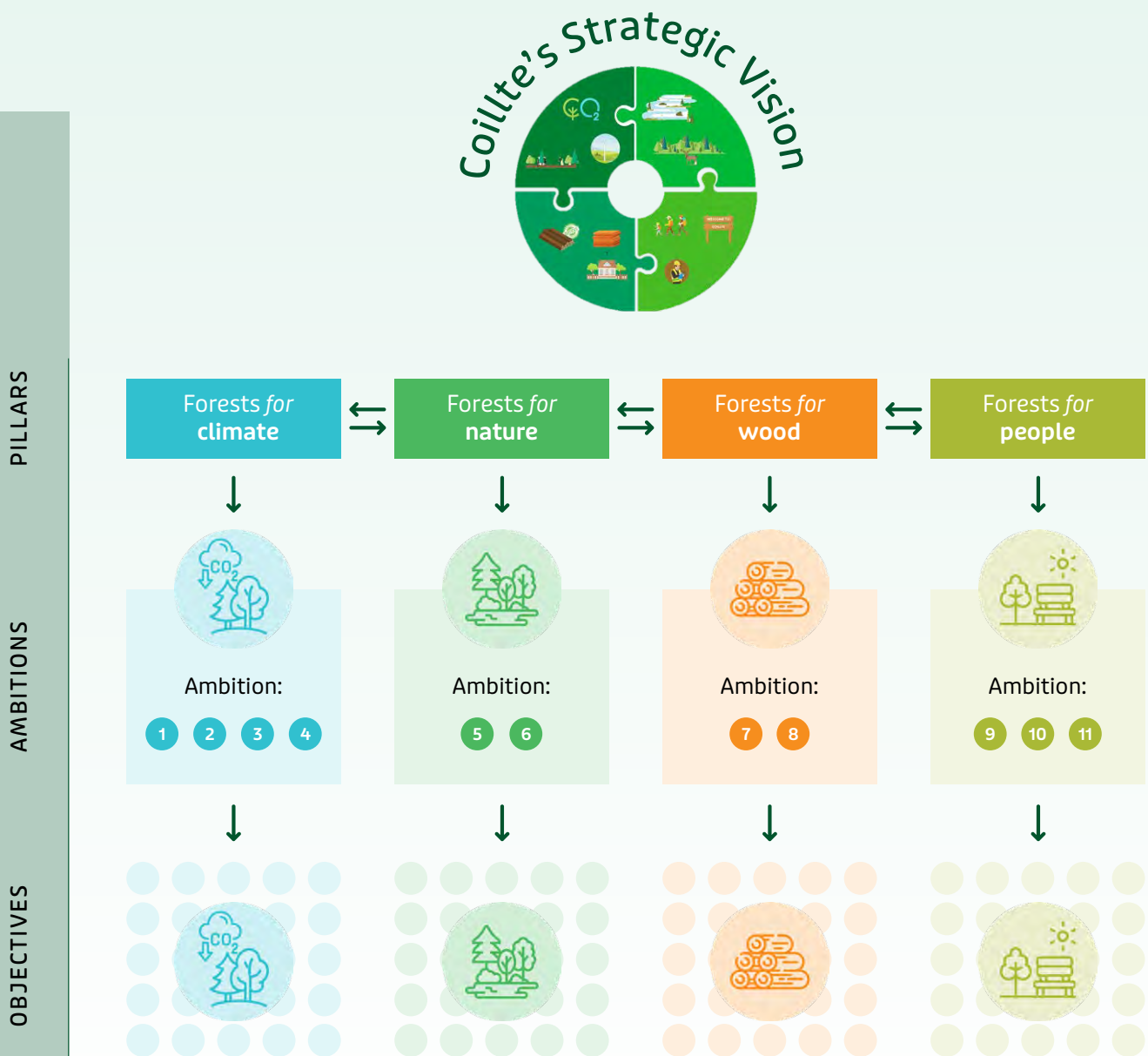
4. Forest Estate Objectives

4.1 Overview

This Section is structured under the four strategic pillars: Forests for Climate, Forests for Nature, Forests for Wood and Forests for People. Within each pillar, the objectives of the FESLUP are set out under the Ambition to which they relate.

Through the lens of each of our four pillars we will directly achieve our (11) ambitions through identified objectives.

Figure 11 | An overarching view of how the Objectives are aligned with the Strategic Vision



4.2 Forest Estate Objectives

4.2.1 Forests for Climate | Objectives



Coillte recognises the urgency of the global climate crisis and acknowledges the need to improve and expand our existing carbon sequestration and climate mitigation measures. Ireland's 2020 Climate Status Report²⁵ revealed the profound impact of climate change on Ireland, with observable effects such as rising temperatures, decreasing frost days, and rising sea levels. Future predictions point to changes in rainfall patterns and wind patterns, which pose a threat to water supplies and increase the risk of flooding.²⁵ Climate impacts and risks on a global scale are evident in the Intergovernmental Panel on Climate Change (IPCC) reports.

Coillte, as Ireland's semi-state forestry company, recognises that we have a key part to play in responding to the climate crisis. Through this FESLUP, we've identified a range of climate objectives that will seek to increase the amount of carbon that we are sinking and storing in our forest estate.

Afforestation plays an important role in extending carbon sink and storage and as such, it is an objective of Coillte to enable the creation of 100,000 ha over the lifetime of this plan, by identifying land resource availability and through seeking various afforestation opportunities. With respect to afforestation ambitions, land use change resulting from the creation of new forests will need to be planned and undertaken with care to ensure benefits can be maximised and to avoid potential negative impacts on protected habitats and species (such as peatlands²⁶, merlin²⁷ and freshwater pearl mussel.²⁸)

Additionally, we must conserve the carbon store of our forest estate through the promotion of sustainable forest management practices, as well as through the maintenance and enhancement, as appropriate, of all the carbon sink and store. Coillte is committed to managing the age profile of our forest estate to allow for greater carbon sequestration potential, as well as redesigning our peatland forests where appropriate in an effort to reduce CO₂ over the lifetime of the plan.

Aligned to our afforestation and carbon management initiatives, is the need to greatly expand the use of wood products in the built environment as the use of long-lived wood products is a valuable carbon store. We commit to further promoting timber as a sustainable construction material.

The need to improve existing knowledge around the relationship between the forest estate, carbon cycle and climate change is also recognised. We commit to continue to invest in research and science to further extend our understanding of forest design and management as well as refining our understanding of how we manage carbon in forests.

We also recognise the risks that climate change presents to our forest estate in terms of species suitability, productivity, and biotic and abiotic threats such as pests and disease and wind and fire. Consequently, we will work to better understand how we can manage and diversify our estate to ensure that our forests are more resilient to a changing climate.

²⁵ EPA, 2020. Climate Status Report for Ireland 2020, s.l.: Government of Ireland.

²⁶ NPWS, 2019. The Status of EU Protected Habitats and Species in Ireland, s.l.: NPWS.

²⁷ Lusby, J., Fernández-Bellón, D., Norriss, D. & Lauder, A., 2011. Assessing the effectiveness of monitoring methods for Merlin Falco columbarius in Ireland: the Pilot Merlin Survey 2010, s.l.: s.n.

²⁸ Kelly-Quinn, M. et al., 2016. Research 169: HYDROFOR: Assessment of the Impacts of Forest Operations on the Ecological Quality of Water, s.l.: EPA.

Ambition 1 of the Strategic Vision

1 Enable the creation of 100,000 ha of new forests, half of which will be native woodlands, which will sink 18m tonnes CO₂ by 2050.



We have identified the following objectives to deliver on Ambition 1:

C01	Undertake a review to understand Land Use policy implications for Commercial & Native afforestation to assess land resource availability and the impact of alternative agricultural schemes.
C02	Engage with government and other key regulatory bodies to ensure that the policy and regulatory framework supports Coillte's Climate ambitions.
C03	Support Local and National Government to develop afforestation opportunities on suitable publicly owned lands.
C04	Collaborate with key stakeholders to explore options for farmer led afforestation.
C05	Secure the necessary investment to achieve Coillte's Climate ambitions by exploring all sources of available funding.

Ambition 2 of the Strategic Vision

2 Redesign 30,000 ha of Peatland Forests for climate and ecological benefits by 2050.



We have identified the following objectives to deliver on Ambition 2:

C06	Synthesise existing information to identify potential location(s) for the redesign of peatlands at scale.
C07	Continuously develop guidelines for the redesign of peatlands based on best Irish and international practice.
C08	Establish monitoring and management frameworks for redesigned peatlands.

Ambition 3 of the Strategic Vision

3 Manage the existing Forest Estate to increase the carbon store by 10m tonnes of CO₂ by 2050.



We have identified the following objectives to deliver on Ambition 3:

C09	Utilise land use planning models to deliver balanced carbon mitigation management options to achieve the 10m tonnes of CO ₂ storage target.
C010	Undertake continued refinement and analysis of the impact of forest management and mitigation measures to improve forest productivity, including managing the age profile to achieve our climate ambitions.
C011	Identify and quantify the impacts of climate change and develop measures to make Coillte's estate more climate resilient.
C012	Develop evidence and understanding of carbon management within the forest and across the forestry supply chain, and pilot new decision-making tools.
C013	Deepen our understanding of the potential of product substitution from harvested wood and undertake additional analysis related to fossil fuel displacement and value chain emissions.

Ambition 4 of the Strategic Vision

4 Generate an additional 1 Gigawatt of renewable wind energy to power 500,000 homes by 2030.



We have identified the following objectives to deliver on Ambition 4:

C014	Support FuturEnergy Ireland and 3 rd party renewable energy developers in their current and future renewable energy endeavours.
C015	Engage with Government and other key stakeholders to ensure that the policy and regulatory framework can effectively deliver the approval and granting of permissions for renewable energy projects including a correctly structured, timely and well-resourced planning process.
C016	Develop a clear policy and explore opportunities for both onshore and offshore grid infrastructure, rollout and services to support ongoing development.

4.2.2 Forests for Nature | Objectives



Despite ongoing conservation and restoration efforts, Ireland's biodiversity is in a state of crisis²⁹ with a national Biodiversity Emergency declared by the State in 2019. The degrading status of Ireland's biodiversity is a primary concern of Coillte and has been a key consideration of the development of this FESLUP.

The nature ambitions of our Strategic Vision set out the need to increase the area of our estate managed primarily for biodiversity.

Gaining a greater understanding of the current biodiversity within our forestry estate will be a first step in achieving our ambitions for 2050. This will require us to continue to conduct ecological assessments of habitats within our estate such as forests, uplands and peatlands. We will invest further in the identification and mapping of biodiversity, broaden our ecological expertise and collaborate with strategic partners, such as NPWS, EPA, eNGOs and academic institutions, to achieve our ambitions. Given our experience in developing BioClass and BIOForest, we have the capacity to identify and prioritise areas for conservation and to develop Biodiversity Area Management Plans to identify appropriate management actions. Defining the habitats within our forest estate will be key for successful management and a code to establish habitat type will be integral here.

We will set goals for habitat management, enhancement and restoration and create a monitoring programme to determine progress towards these goals. We need to increase our knowledge of the status of rare, threatened and protected species and ensure that these findings inform future decisions in managing the forest estate.

Our nature ambitions require the implementation of actions such as implementing Continuous Cover Forestry (CCF) and increasing tree species diversity in forests of ecological value, rewetting suitable peatlands, managing invasive and/or problematic species and creating new native forest or scrub (for example, near riparian habitat).

Coillte is a key player in the restoration of natural ecosystems. We can seek to improve upon our experience and knowledge gained from our former³⁰ and current³¹ restoration and management projects to support the future ambition of increasing our areas managed primarily for biodiversity. We will also reflect on our experience managing uncontrolled population expansion of certain species, including deer, and seek to play an integral role in the development and implementation of the national deer strategy for Ireland. Coillte's skilled and knowledgeable staff and contractors will be vital in ensuring a successful transition towards enhanced management for nature. This will also require the continuous development of new practices and techniques to achieve desired outcomes. We commit to this ongoing development, and to the provision of training and support to those undertaking tasks in support of our nature ambitions.

Through our Forests for Nature ambitions and objectives, Coillte will respond to these biodiversity opportunities and challenges.

29 DHLGH, 2022. Ireland's 4th National Biodiversity Action Plan. Draft for Public Consultation., s.l.: Department of Housing, Local Government and Heritage.

30 <https://www.millenniumforests.com/>; <https://www.irishbogrestorationproject.ie/>; <https://www.raisedbogrestoration.ie/>; <https://www.woodlandrestoration.ie/>

31 <https://www.coillte.ie/coillte-nature/ourprojects/wildwesternpeatlands/>; <https://www.coillte.ie/coillte-nature/ourprojects/dublinmountainsmakeover/>

Ambition 5 of the Strategic Vision

5 Enhance and restore biodiversity by increasing the area of our estate managed primarily for nature from 20% to 30% by 2025.



We have identified the following objectives to deliver on Ambition 5:

N01	Classify additional biodiversity areas on the estate, focusing on habitats of the best ecological quality, and/or which have the best habitat restoration potential.
N02	Continue the process of producing and implementing management plans for biodiversity areas, combining both ecological and forestry perspective and expertise.
N03	Create a framework for the selection, appropriate restoration and conservation of ancient and long-established woodland, and engage with key regulatory bodies to promote the approach.

Ambition 6 of the Strategic Vision

6 Transform areas of our forests so that 50% of our estate is managed primarily for nature in the long-term.



We have identified the following objectives to deliver on Ambition 6:

N04	Continue to increase the implementation of alternative silvicultural systems including continuous cover forestry (CCF) in forests of ecological value.
N05	Develop metrics, set targets and develop an effective regime to monitor and report on key environmental parameters on the Coillte estate; including valuable habitats / species and the ecological benefits of biodiversity management actions.
N06	Continue to identify portions of the estate with potential to make a greater contribution to biodiversity and explore opportunities to transform them to improve their nature conservation value.
N07	Engage with key regulatory and other bodies to develop a common vision for how these sites (ref N06) should be managed.
N08	Develop protocols for managing these sites (ref N06), appropriate to their scale, habitat connectivity and site type, that will improve their nature conservation value.

Additional Nature Objectives

The following objectives are not explicitly linked to any Ambitions of the Strategic Vision, but are overarching nature objectives relating to all pillars:

N09	Review and update, as appropriate, Environmental Risk Assessment (ERA) standards and procedures to inform planning and operations, in line with ongoing and emerging best practice.
N010	Identify and implement ways of improving the advance planning of biodiversity management actions and integration into business planning, where appropriate and feasible.
N011	Identify and implement methods to improve inventory processes and data-gathering, to expand our knowledge of nature on the estate and our reporting capacity.
N012	Review and improve methods for how biodiversity features and other important environmental features are recorded across the estate.
N013	Enhance guidance for the management of habitats and species relevant to Coillte's estate and activities.
N014	Engage with the relevant regulatory agencies on the measures required to move statutory designated sites to favourable conservation status.
N015	Engage with relevant agencies to improve a science-based understanding of the interaction between forests and water.
N016	Engage with relevant agencies and stakeholders to explore how Coillte can play a role in delivering programmes and measures aimed at enhancing water quality in catchments.
N017	Collaborate with relevant stakeholders to develop national strategies towards the management of invasive species.
N018	Collaborate and engage as a key partner with the ongoing preparation of the Deer Management Strategy and seek to implement once published, in so far as possible and appropriate.
N019	Identify and target appropriate funding mechanisms that will enable the implementation of conservation and protection measures at scale.

4.2.3 Forests for Wood | Objectives



Coillte intends to continue to maintain a sustainable supply of certified roundwood to the wood processing sector in Ireland for the lifetime of this plan. Our ambition is to produce 25 million cubic metres of roundwood by 2030, sufficient to support the construction of 300,000 homes. We also aim to promote the greater use and benefits of wood products. In order to achieve these ambitions, we need to maintain our capacity to harvest roundwood sustainably at current levels and to devise measures to encourage and support the increased use of timber as a primary product in construction.

Fundamentally, we need to ensure that an appropriately sized and skilled contractor base is in place to meet our demand for harvesting, haulage, replanting and associated operations, supported by our own staff of skilled forestry professionals. To achieve this we will need to put in place contractual arrangements that encourage contractors to re-invest, support the continuous up-skilling of those currently working in forestry and to attract a diverse range of ambitious, talented, and motivated people to join the forestry workforce in the years and decades ahead.

In a tight labour market, there will always be significant scope to benefit from greater efficiency and so we will continue with technology and data led innovation of the roundwood supply chain.

It is vital also that the regulatory environment for forestry supports the productive use of our forests and the production of roundwood.

We also need to provide the wood processing sector with the confidence to continue to re-invest in the sector. To this end, we will work with our customers and with other suppliers to provide regularly updated forecasts of future roundwood production.

Coillte is fully committed to supporting initiatives to increase timber usage, particularly in the built environment in Ireland. These initiatives will include changes to building regulations that limit the use of wood, promoting the multiple environmental benefits of wood products in terms of construction pollution and carbon footprint reduction, and supporting engineers and specifiers to choose wood.

Through our ambitions and objectives relating to Forests for Wood, we can respond to these opportunities and challenges.

Ambition 7 of the Strategic Vision

7

Produce 25m cubic metres of certified Irish timber, to support the construction of 300,000 homes by 2030.



We have identified the following objectives to deliver on Ambition 7:

W01	Maintain production capacity to harvest and supply certified roundwood to support the wood processing industry.
W02	Maintain independent environmental certification of Coillte-managed forests.
W03	Work with other contributors to produce a medium-term all-Ireland roundwood forecast on a regular basis.
W04	Introduce a three-year rolling plan for roundwood supply that addresses all the short-term and medium planning requirements to make roundwood available in each planned year of operations.
W05	Report annually to the wood processing sector on the available supply of roundwood for the year ahead and the actual supply that materialised in the previous year.
W06	Ensure that access to the Forest Estate for the purpose of Roundwood removals is maintained through Forest Industry Transport Group collaboration with the partners and stakeholders.
W07	Monitor forest health and condition to detect and mitigate against the potential impact of pests and diseases and guide management interventions to ensure that the estate can continue to deliver under the pillars of Climate, Nature, Wood and People.
W08	Maintain timber security measures including the geofencing of all forests and tracking of roundwood removals from the Coillte Estate.
W09	Support innovation and the adoption of new technologies and practices to enhance the efficiency of the roundwood supply chain, including mechanisms for monitoring roundwood stocks in the forest.
W010	Support government and other stakeholders to expedite the approval and granting of forestry licences to ensure that sufficient and consistent volumes of roundwood supply are available.
W011	Promote initiatives aimed at increasing public awareness regarding the importance of forests in delivering the wood supply needed to meet Irish housing demand.

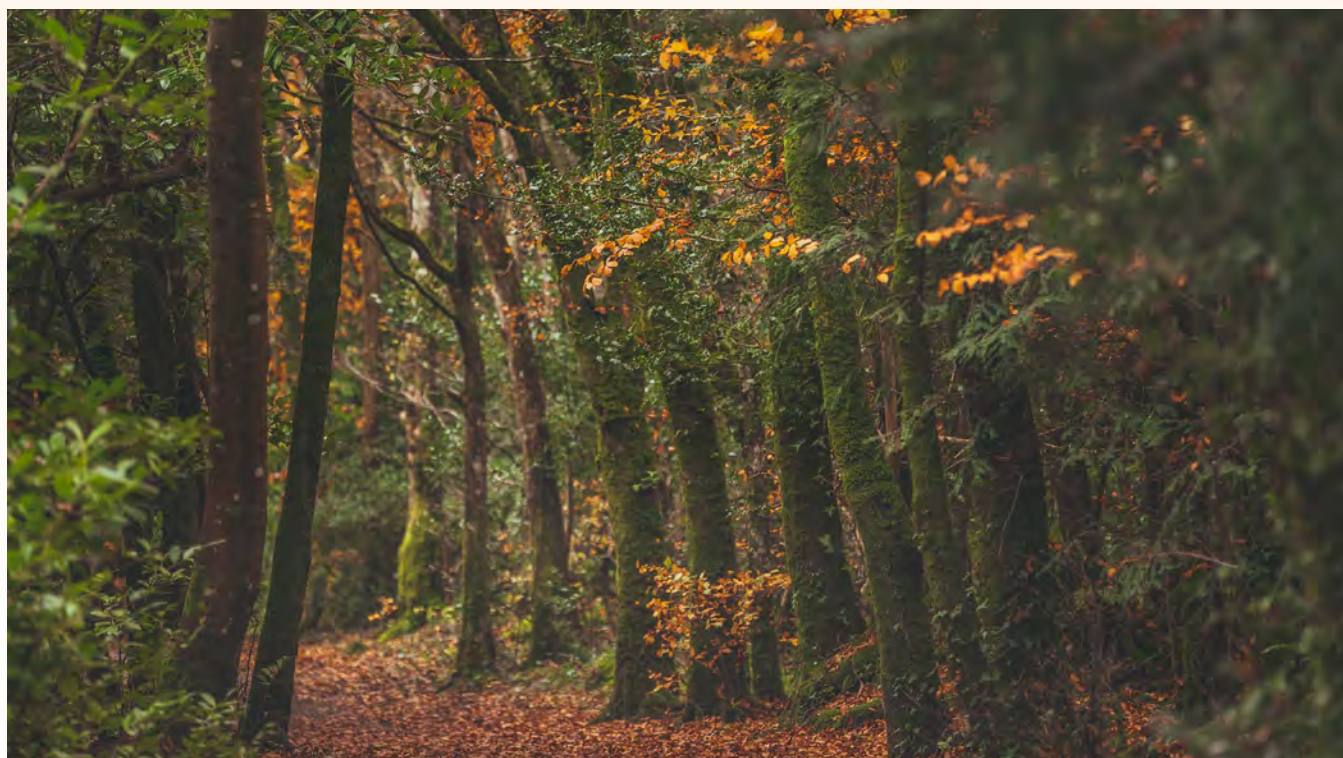
Ambition 8 of the Strategic Vision

8 Promote the use and benefits of wood products to increase the level of timber homes from 20% to 80% by 2050.



We have identified the following objectives to deliver on Ambition 8:

W012	Develop comprehensive evidence on the benefits delivered by the forestry sector, (to the circular and bioeconomy) and on the benefits of using home grown sawnwood in construction.
W013	Engage with government and relevant bodies to revise regulations concerning the use of wood in construction.
W014	Engage with government and relevant bodies to introduce green procurement guidelines for new public buildings and to introduce sustainability mechanisms in construction to reduce the carbon footprint of new builds.
W015	Support the demonstration of new forms of timber-based construction in Ireland.
W016	Assist in the development of design guidance for practitioners and educational courses in timber building systems including the use of mass timber and timber frame construction in Ireland.



4.2.4 Forests for People | Objectives



The demand for outdoor recreation has grown significantly in Ireland over the last number of years. Indeed, the COVID-19 pandemic accelerated the demand to visit the outdoors, presenting an unprecedented opportunity for outdoor recreation in Ireland. During the COVID-19 pandemic, visitor numbers to some of Coillte's most popular recreational forests doubled (and in some cases, tripled) with forests experiencing a 42% increase from 2019 to 2021 and an overall increase by 65% over the past five years. Statistics from Fáilte Ireland show that the tourism demand is also very strong for outdoor recreation. Some 2.7 million visitors to Ireland from overseas markets took part in outdoor activities in 2019. This national trend is reflected in the forestry sector, and in recent years the use of forests for recreational purposes has dramatically increased across the country. As visitor numbers increase, so too does the demand for suitable, high-quality infrastructure that supports engaging visitor experiences and recreational opportunities throughout the estate.

We are fully committed to playing a key role in providing extensive access to the outdoors through our recreation infrastructure and to unlock the benefits of forests for the public. We will enable investment in world-class visitor destinations, and double the number of recreational sites across our forest estate to 500 by 2050, both of which will support the creation of new jobs.

Enabling the continued creation of world class visitor destinations within our forest estate will require us to focus on strengthening our collaboration, engagement, and partnerships with key stakeholders. We also need to identify priority site locations and develop site masterplans, to identify our priority areas for future visitor destinations.

It is an ambition of Coillte to expand the provision of inclusive, accessible, and high-quality recreational services across our estate. In order to do this, we need to identify potential locations for future recreational areas, identify the emerging social and recreational needs and provide meaningful opportunities for local communities to support the development of new recreational areas. This FESLUP sets out a range of objectives that will help us achieve our Ambitions relating to investment in visitor destinations and an enhancement of our recreational offering.

Tourism and business opportunities associated with forest-related recreational activities is a key contributing factor to the economic and social success of rural communities. In order to enable our growing estate offering, we need to ensure there are enough people employed in the tourism and recreation business to facilitate the changes which will come following the realisation of our related ambitions and objectives. We are also cognisant of the growing demand for forest contractors to support the other objectives set out in this plan. In recent years there has been an evident decline in those seeking to work in the forestry sector- an issue which we are keenly committed to overcoming.

Increasing regulation, the felling licensing crisis, rapidly rising inflation levels and acute labour shortages have severely damaged forest contractor market confidence. This loss of confidence has resulted in the exit and contraction of critical contractor capacity and infrastructure at a time when the industry should be diversifying,

innovating, and gearing up to meet future opportunities within the sector. Labour force analysis conducted by Coillte in 2022 concludes that the industry will need to create over 1,000 jobs over the next decade to meet the increasing levels of planting and timber production.

We commit to the creation of 1,200 new jobs in rural communities to support the just transition to a low carbon economy. Through the implementation of this FESLUP, Coillte will aim to support businesses and operational contractors to develop, grow and diversify. We are also committed to supporting the provision of appropriate education and skills training to encourage wider participation in forest and woodland-related employment.

Ambition 9 of the Strategic Vision

9 Enable the investment of €100 million in world-class Visitor Destinations to support growth in tourism and recreation by 2030.



We have identified the following objectives to deliver on Ambition 9:

P01	Identify priority site locations and develop masterplans for future Visitor Destinations.
P02	Strengthen our strategic partnership for the delivery of Visitor Destinations with Fáilte Ireland to support shared objectives.
P03	Engage with Local Authorities to identify opportunities to create recreational projects of scale, in line with local and national development plans.
P04	Monitor visitor numbers and measure impact, to protect the environment and enhance customer experience.
P05	Develop commercial partnerships that support investment to deliver Outstanding Visitor Destinations.

Ambition 10 of the Strategic Vision

10 Double the number of Recreational Areas to 500, to benefit local communities and people’s wellbeing.



We have identified the following objectives to deliver on Ambition 10:

P06	Create a system of classification for Recreation Areas, setting out the offer and facilities to be provided for each category.
P07	Develop assessment criteria to identify locations for future Recreational Areas.

P08	Develop a community model to enable public and local authority involvement in the development of Recreation Areas.
P09	Develop methods to measure and quantify the social and wellbeing benefits of outdoor recreation.

Ambition 11 of the Strategic Vision

11

Create 1,200 new jobs in rural communities to support the just transition to a low carbon economy



We have identified the following objectives to deliver on Ambition 11:

P010	Support businesses of different types and scales to develop and grow markets for value-added wood products, forest tourism and recreation opportunities.
P011	Support the operational contractor base to grow and diversify, so that it has the capacity to deliver Coillte's afforestation, peatland redesign and nature ambitions.
P012	Enhance operational guidance for staff and contractors regarding biodiversity management and peatland redesign.
P013	Support the provision of education and training to attract new entrants to the sector and enhance skills in new and emerging areas.
P014	Support the enhancement of the curriculum in tertiary education and the development of apprentices to attract new forestry and related professionals to the sector.
P015	Support and continue to engage with Government and other stakeholders towards the inclusion of forestry skills on the Critical Skills List.

Additional People Objectives: Human wellbeing & health

The following objectives are not explicitly linked to any Ambitions of the Strategic Vision, but are overarching objectives relating to Forests for People:

P016	Maintain occupational health and safety across the Coillte estate.
P017	Expand the Woodlands for Health programme.

5

Delivery & Governance



5. Delivery of the FESLUP

The long-term delivery of Coillte’s ambitions and objectives will require appropriate internal governance arrangements to be in place. To enable the successful implementation of this FESLUP there is an important need to build external relationships and strengthen our partnerships, across the wider forestry-sector, value partners, stakeholders and across Government.

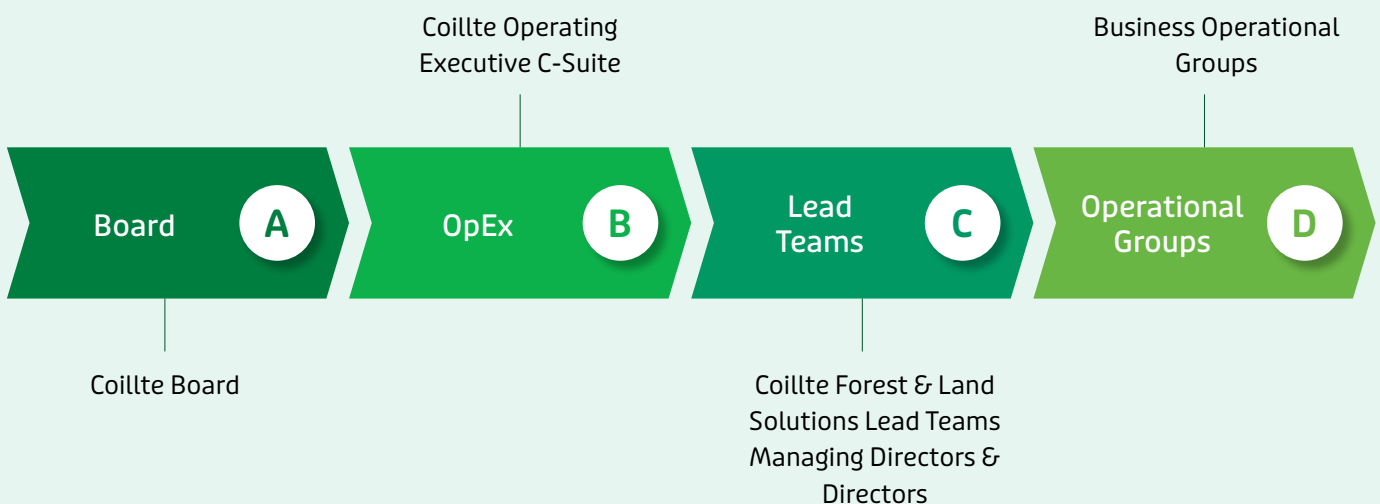
This section sets out Coillte’s approach to the governance and delivery of the FESLUP, including the requirements for internal governance, external engagement and ongoing monitoring and review of the Plan. This section also describes some of the strategic enablers of the FESLUP.

5.1 Internal Governance

Delivering the FESLUP will require a robust and collaborative internal governance to ensure that there is a successful approach to realising the objectives. The FESLUP has been developed with input from Coillte’s business and functional areas, and a shared cross ownership of the plan exists. This will help ensure that Coillte can fully embed the importance of realising the planned deliverables across the whole organisation.

Overall responsibility for the FESLUP, and implementing the plan objectives, belongs to the Coillte Operating Executive. The Coillte Operating Executive reports to the Coillte Board and is supported by internal Business Leadership Executive Teams in Forest and Land Solutions with their associated business unit resources. Figure 12 sets out Coillte’s existing internal governance structure.

Figure 12 | Coillte’s existing internal governance structure



The FESLUP objectives will be delivered, primarily through incorporating the associated activities into the annual operational plans and normal day to day business delivery, within the respective business area. Other more focused initiatives will be delivered through cross functional strategic projects. The decision on how each objective are delivered will be made by members of the Coillte Operating Executive.

5.2 External Engagement

Externally, Coillte will continue to work collaboratively with shareholders, regulators and key stakeholders including through public consultations. Many of the forest operational activities associated with delivery of the objectives require licencing, DAFM as the main regulator will ensure governance on these activities. Coillte will also engage with the wider forestry sector, valued partners and stakeholders, and the wider community to deliver this FESLUP, as set out in the objectives.

Ongoing sustainable forestry accreditation, through external certifying bodies, is a key objective for Coillte. Maintaining this accreditation, requires ongoing assessment of all forestry related activities in line with the Irish Forestry Standard, including evidence of robust external engagement with Stakeholders on plans.

Across the forest industry, Coillte regularly consults with external stakeholders including customers, partners, policy experts, landowners, industry groups, and environmental groups. Existing channels for external engagement are well established. Successful implementation of the FESLUP, will require leveraging and building on existing channels of communication and collaboration on the delivery.

Given increasing public interest in the future of forests and Coillte's Strategic Vision, information on FESLUP progress will be reported upon throughout the plan period within the Strategic Implementation Plan and within the Coillte annual reports.

5.3 Monitoring and Review

This section sets out provisions for how we propose to review and monitor the FESLUP.

Strong and effective monitoring and reporting structures will be put in place to oversee, guide and track the implementation and success of the Plan. The Coillte Forest and Land Solutions Executive teams will oversee monitoring of the Plan and track progress towards achieving strategic objectives and reaching the ambitions.

The FESLUP will undergo a formal review on a regular basis, in line with the development cycle for future Strategic Implementation Plans. This will enable Coillte to benchmark progress, realign our ambitions and objectives, if required, and determine if there are new opportunities that will accelerate the journey to a sustainable future aligned to the Coillte Vision. Coillte will ensure its reviews reflect a dynamic and flexible process that is adaptive to organisational and environmental changes over time. Any updates to the FESLUP will also be reflected in corresponding changes to future Strategic Implementation Plans throughout the period.

Coillte is cognisant that there are likely to be significant changes in the policy environment over the timeframe of the FESLUP, and these may alter the context in which the business operates. For example, revised national climate action plans may give rise to higher afforestation targets, greater demand for wood products and/or changes to forest management practices. Our commitment to reviewing and updating the Plan, as required, provides us with an opportunity to respond and adapt to any key policy and legislative changes as they arise.

5.4 Strategic Enablers

Strategic enablers are capacities and resources that contribute to the effectiveness of the organisation to execute the strategic plan. The key enablers to realising the objectives of this Plan include, but are not limited to, funding, research and innovation, education, skills and careers.

5.4.1 Funding

Overall, financial sustainability and an economically strong and sustainable wood sector is essential for delivering the multiple benefits of forests. Long-range planning and strong financial stability, balanced across all areas, are key to ensuring Coillte has the resources needed to deliver the FESLUP objectives.

Financial stability is integral to Coillte achieving its Strategic Vision and to deliver on the multiple benefits of our forests for society. It is critical that Coillte takes a balanced approach to deliver on these ambitions, so that the company remains financially sustainable and can continue to reinvest to provide a broad range of services to society.

Coillte's FESLUP is an ambitious plan and will require significant investment for management of the estate, afforestation, infrastructure, forest redesign and provision of recreational areas. Coillte estimates the proposals will cost approximately €2 billion, so it is essential that Coillte is financially strong and economically sustainable.

Funding of Coillte's objectives will require a multifaceted approach, primarily that Coillte remains profitable with good cashflow to allow reinvestment into the business. Achieving this requires optimised log supply, while also maintaining a sustainable cost base. This is critical given the impact the delivery of the FESLUP objectives will have on the company's cost base.

Debt financing is another important factor, maintaining support from financial institutions for debt financing will enable CapEx investment at a reasonable cost. This FESLUP also provides opportunities to also avail of more favourable Green Loans and Sustainability Linked Loans.

Third party funding through private investments from both Commercial and Impact (ESG) Investors will also be necessary. To date, Coillte has a strong track record in attracting investors including FEI JV, Avondale Beyond the Trees, and engaging with others in relation to the Nature Trust and the Irish Strategic Forestry Fund. Current state-aid challenges mean that Government funding to Coillte is limited. However, public investment from Government will be continually explored, and presently there is some financial support for forest redesign and recreational ambitions.

As part of the Strategic Implementation Planning cycle, a review of the funding and investment for the period will take place to ensure funding is in place.

5.4.2 Research and Innovation

Timely research undertaken by Coillte with robust evidential outcomes, will be required to enable the successful implementation of the FESLUP. Many of the objectives are partially or fully dependant on the real time conditions as they prevail; from the impacts of climate change to saw wood markets. Understanding of these conditions will therefore evolve throughout the period of the plan.

The FESLUP and its objectives will continuously evolve to account for new research and analysis, and to facilitate emerging opportunities and challenges. Continued investment in cross-governmental collaborative research and innovation will support delivery of the plan. Continuing and enhancing our existing research partnerships will allow Coillte to create alliances and enhance exposure to research and innovation opportunities and insight.

5.4.3 Education, Skills and Careers

The successful implementation of the objectives set out in this FESLUP requires skill, technical knowledge, and people to put those into practice. Coillte recognises that the forestry sector is diversifying and requires more varied skills. The sector has an ageing workforce and must develop new approaches to attract and retain young people.

To meet future demands and ensure success of a multifaceted Strategic Vision to 2050 and the objectives associated with the FESLUP, Coillte will seek to address the skill requirements and expertise of the existing workforce, while also attracting a more diverse range of talented people to work in the sector.

The FESLUP delivery will ensure 'capacity building' objectives are achieved, to enable career pathways and skilled workforce creation among communities. Coillte's support for apprenticeships, and other technical training routes in the forestry sector, coupled with improved links to further education institutions and knowledge transfer groups, are key to developing sustainable long-term employment within the forestry sector.



5.5 Next Steps

This Forest Estate Strategic Land Use Plan underpins our Strategic Vision for our forest estate and sets out a framework for the delivery of our ambitions, to the year 2050. Coillte is committed to swiftly establishing and operationalising the necessary governance, stakeholder engagement, communication structures and funding mechanisms needed to achieve the objectives of the FESLUP.

Associated with this, Coillte will commence, by the beginning of 2024, the preparation of the Forest Estate Strategic Implementation Plan which will drive the delivery of the FESLUP objectives for the subsequent 10-year period. The Strategic Implementation Planning will take the strategic objectives and translate these into a range of implementable, measurable, actions across specific geographical locations. Once this new strategic planning framework is in place, with all strategic ambitions, objectives and actions identified, the associated refined timelines and milestones to monitor delivery of the Plans, will become known.

Whilst Coillte recognises the size of the task outlined in this FESLUP, to enable the delivery of the Vision, we are also aware that there is an extraordinary opportunity for us to build a more resilient organisation and forest estate to manage. This is also the time for the organisation to demonstrate balanced leadership across the core pillars of Forests for Climate, Forests for Nature, Forests for Wood and Forests for People, shaping a brighter and more sustainable forest estate for everyone.

Appendix A

- SEA Mitigation Measures

Mitigation measures are measures envisaged and designed to prevent, reduce and as fully as possible offset any significant adverse impacts on the environment of implementing the draft FESLUP. All mitigation measures have been developed by Arup and agreed with Coillte as part of the SEA iterative process. The primary mitigation measure is the development of the draft Plan which ensures the sustainable and appropriate development of the Plan area without compromising the integrity of the natural and built environment.

However, potential impacts will be more adequately identified and mitigated at project and possible EIA level. In general terms, all proposals for development arising from the draft FESLUP will be required to have due regard to environmental considerations outlined in this SEA ER and the associated AA.

As outlined in Table 8.2 of the SEA ER, the majority of objectives are predicted to have a positive environmental impact. However, a number of objectives are proposed that may have a negative environmental impact, particularly those relating to wind energy development where Biodiversity (BIO), Land & Soils (L&S), Water (WAT) and Landscape and Visual (L&V) impacts may arise. In addition, the development of recreational areas may result in negative environmental impacts particularly relating to BIO, L&S and WAT, and where increased afforestation is facilitated negative impacts may particularly be likely for L&S and WAT.

The approach to the development of mitigation is two pronged:

- Reliance of published guidance and policy related to the forestry and wind energy sectors and
- Description of specific mitigation measures that may be implemented depending on the scale, location and nature of the development arising from the draft FESLUP.

It should be noted that a suite of guidance and policy documents have been developed and published by the DAFM and Coillte over a period of time to minimise the environmental impact of forestry operations. Coillte has an Environmental Management System in place which contains a suite of policies and standard operating procedures which guides the environmental management of its operations, e.g., policies relating to Old Woodland and the disturbance to birds during forestry operations.

In addition, Coillte implements its operational activities in accordance with its Environmental Risk Assessment standard operating procedure. This procedure applies to the assessment of the risk of environmental impact of operational activities. Coillte categorises the environmental risk assessment and management in terms of potential environmental impacts on five receptors, i.e.:

1. People & Material Assets
2. Biodiversity
3. Water & Soils
4. Landscape and
5. Archaeology & Cultural Heritage.

The list of current mandatory DAFM documents which shall continue to be complied with are listed below. It should be noted that any future variations or amendments to these documents (or other new guidance/policies of relevance that may be adopted), will be reviewed and complied with, as appropriate, prior to the implementation of any of the measures or actions set out in the draft FESLUP:

- Department of Agriculture, Food and the Marine - Guidance Documents
- Aerial Fertilisation Requirements. Forest Service (2015) Department of Agriculture, Food and the Marine

APPENDIX A - SEA MITIGATION MEASURES

- Environmental Requirements for Afforestation. Forest Service (2016). Department of Agriculture, Food and the Marine
- Forest Protection Guidelines. Forest Service (2000) Department of the Marine and Natural Resources
- Forest Recreation in Ireland A Guide for Forest Owners and Managers (2006) Forest Service, Department of Agriculture and Food
- Forestry & Freshwater Pearl Mussel Requirements: Site Assessment and Mitigation Measures Forest Service (2000) Department of the Marine and Natural Resources
- Forestry & Kerry Slug Guidelines. Forest Service (2000) Department of the Marine and Natural Resources
- Forestry & Otter Guidelines Forest Service (2000) Department of the Marine and Natural Resources
- Forestry and Landscape Guidelines Forest Service (2000) Department of the Marine and Natural Resources
- Forestry and Water Quality Guidelines. Forest Service (2000) Department of the Marine and Natural Resources
- Forestry Biodiversity Guidelines. Forest Service (2000) Department of the Marine and Natural Resources
- Forestry & Archaeology Guidelines. Forest Service (2000) Department of the Marine and Natural Resources
- Forest Harvesting & the Environment Guidelines. Forest Service (2000) Department of the Marine and Natural Resources
- Forestry Standards Manual. Department of Agriculture, Food and the Marine Forest Service (2015)
- Forest Road Manual: Guidelines for the Design, Construction & Management of Forest Roads (Ryan, T., Phillips, H., Ramsay, J. and Dempsey, J. 2004. Forest Road Manual)
- Guidelines for the design, construction and management of forest roads. COFORD, Dublin
- Forests & Water – Achieving Objectives under Ireland’s River Basin Management Plan 2018-2021 Department of Agriculture, Food and the Marine (2018)
- Land Types for Afforestation. Forest Service (2015) Department of Agriculture, Food and the Marine
- Native Woodland Establishment GPC9 & GPC10 Silvicultural Standards Forest Service (2015) Department of Agriculture, Food and the Marine
- Standards for Felling and Reforestation, (2019), Department of Agriculture, Food and the Marine and
- Woodland for Water: Creating new native woodlands to protect and enhance Ireland’s waters. Forest Service (2018) Department of Agriculture, Food and the Marine.
- In addition, the following wind energy guidance will be employed as mitigation, where relevant.
- Wind Energy Development Guidelines (2006), Department of Housing, Local Government and Heritage (DHLGH)
- Best Practice Guidelines for the Irish Wind Energy Industry (2012), Wind Energy Ireland (WEI);
- WEI Health and Safety Series - Best Practice Guidelines for Operation of Wind Farm High Voltage Electrical Installations (2021), WEI
- Irish Wind Energy Association (IWEA) Community Engagement Strategy (2018), IWEA and
- Good Neighbour IWEA Best Practice Principles in Community Engagement & Community Commitment (2013), IWEA.

Under each environmental aspect in Table 9.1 of the SEA ER, those guidance/policy documents from the list above that are particularly relevant, are identified. In addition, specific mitigation measures are also identified where relevant with additional focus on those aspects where potential significant adverse impacts are identified, as outlined earlier.

Further an AA Screening and NIS Report have also been prepared in respect of the FESLUP. The Mitigation Measures set out in the accompanying NIS are included in Table 7 of the NIS and should be read in conjunction with those set out in Table 9.1 of the ER.

Table 9.1 of the SEA ER Reproduced- SEA Mitigation Measures

Aspect
General
Mitigation
Adherence to all of the mandatory requirements set out in the full suite of DAFM documents, the relevant policies/guidance contained in the Coillte Environmental Management Plan and other relevant guidance/policy. Any new Projects or Plans arising from the implementation of the draft FESLUP shall be subject to appropriate feasibility, options and environmental assessments (e.g., Environmental Impact Assessment, AA where required).
Relevant Objectives to which the mitigation applies:
All Objectives.

Aspect
Population and Human Health (P&HH)
Mitigation
Any new Projects or Plans arising from the implementation of the draft FESLUP shall adhere to recreation-specific mitigation such as Coillte’s recreation and cycling policies, National Outdoor Recreation Strategy and the EU Forest Strategy for 2030. The following are examples of specific mitigation measures that shall be implemented depending on the scale, nature and location of development arising from the draft FESLUP:
<ul style="list-style-type: none"> • Where redesign or development is planned within the Coillte forest estate it should be ensured that it does not impede recreational activity and public access to the forest estate; • Minimise disturbance to people and avoid blocking access to properties during works; • New public access routes shall be provided where existing access routes are removed during felling and/or afforestation; • Appropriate communications plans will be implemented as necessary. The communications plans will provide a mechanism for members of the public to communicate with Coillte and for Coillte to communicate important information to the public, for example, timely communication to local communities on the planned works activities, timings and traffic management.
Other specific population and human health mitigation may be identified during the development and assessment of Plans and Projects arising from the implementation of the draft FESLUP. All such mitigation identified will be implemented in full.
Relevant Objectives to which the mitigation applies:
N/A as only positive or neutral impacts have been identified in relation to Population & Human Health.

Aspect**Biodiversity (BIO)** – including Flora and Fauna**Mitigation**

Any new Projects or Plans arising from the implementation of draft FESLUP shall adhere to the following guidance/policies that are of specific relevance to BIO:

- Draft Plan for Forests & Freshwater Pearl Mussel in Ireland Requirements (2021)
- Forestry & Kerry Slug Guidelines. Forest Service (2000) Department of the Marine and Natural Resources
- Forestry & Otter Guidelines Forest Service (2000) Department of the Marine and Natural Resources
- Forestry Biodiversity Guidelines. Forest Service (2000) Department of the Marine and Natural Resources
- Forest Harvesting & the Environment Guidelines. Forest Service (2000) Department of the Marine and Natural Resources
- Woodland for Water: Creating new native woodlands to protect and enhance Ireland's waters. Forest Service (2018) DAFM
- The Forest Service Circular 04/2013 banning Ash tree planting
- Environmental Requirements for Afforestation (DAFM, 2016)
- Land Types for Afforestation (DAFM, 2015)
- Forestry Standards Manual (DAFM, 2015)
- Standards for Felling and Reforestation (DAFM, 2019)
- Wind Energy Development Guidelines (2006), Department of Housing, Local Government and Heritage (DHLGH).

The following are examples of specific mitigation measures that shall be implemented depending on the scale, nature and location of development arising from the draft FESLUP:

- Planning applications for development arising from the implementation of the draft FESLUP must balance or outweigh any potential impacts on biodiversity
- Development arising from the implementation of the draft FESLUP should seek to ensure that there is no likely increase in nitrogen deposition at ecological sites sensitive to nitrogen
- AA shall be carried out in relation to Works, Plans and Projects arising from the implementation of the draft FESLUP, likely to impact on European sites (SACs and SPAs), whether directly or indirectly or in combination with any other Plan(s) or Project(s)
- Works, Plans and Projects arising from the implementation of the draft FESLUP shall seek to recognise and afford appropriate protection to any existing, new, or modified SPAs or SACs within the Plan area.
- Works, Plans and Projects arising from the implementation of the draft FESLUP shall seek to actively promote the conservation and protection of areas designated as an NHA (including proposed sites) and to only consider proposals for development within or affecting an NHA where it can be clearly demonstrated that the proposed development will not have a significant adverse effect on the NHA or pNHA
- Adherence to best practice guidance in relation to the control of non-native invasive species, including adherence of all relevant DAFM and Coillte policies and documents.

Adherence to best practice guidance with regard to the control and management measures for avoiding, preventing, or reducing any significant adverse impacts on the surface water environment during the construction of such works and projects.

Other specific biodiversity mitigation may be identified during the development and assessment of Plans and Projects arising from the implementation of the draft FESLUP.

Relevant Objectives to which the mitigation applies:

C01, C03, C05, C07, C014, C016, N02, N08 , N13, P04, P010

Aspect

Land and Soils (L&S)

Mitigation

Any new Projects or Plans arising from the implementation of draft FESLUP shall adhere to the following guidance/policies that are of specific relevance to L&S (including peatlands):

- Aerial Fertilisation Requirements. Forest Service (2015) Department of Agriculture, Food and the Marine;
- Environmental Requirements for Afforestation. \ (2016). Department of Agriculture, Food and the Marine;
- Forest Protection Guidelines. Forest Service (2000) Department of the Marine and Natural Resources;
- Forestry and Water Quality Guidelines. Forest Service (2000) Department of the Marine and Natural Resources;
- Forest Harvesting & the Environment Guidelines. Forest Service (20000 Department of the Marine and Natural Resources;
- Forestry Standards Manual. Department of Agriculture, Food and the Marine Forest Service (2015);
- Forest Road Manual: Guidelines for the Design, Construction & Management of Forest Roads (Ryan, T., Phillips, H., Ramsay, J. and Dempsey, J. 2004. Forest Road Manual);
- Guidelines for the design, construction and management of forest roads. COFORD, Dublin;
- Forests & Water – Achieving Objectives under Ireland’s River Basin Management Plan 2018-2021 Department of Agriculture, Food and the Marine (2018); and
- Land Types for Afforestation. Forest Service (2015) Department of Agriculture, Food and the Marine.

The following are examples of specific mitigation measures that shall be implemented depending on the scale, nature and location of development arising from the draft FESLUP:

- For any new tree planting projects a soils assessment should be undertaken where necessary and relevant to ensure the correct tree species is planted for the soil characteristics;
- The importance of Geological Heritage Sites will be recognised and appropriate measures implemented to protect the character and integrity of these sites, where relevant;
- Sediment control and management measures will be implemented, where required;
- Procedures of Environmental Risk Assessment shall be complied with in the event of an environmental emergency. It will address containment measures, emergency discharge routes, a list of appropriate equipment and clean-up materials and notification procedures to inform the relevant environmental protection authority;

Other specific land and soils mitigation measures may be identified during the development and assessment of Plans and Projects arising from the implementation of the draft FESLUP.

Relevant Objectives to which the mitigation applies:

C01, C03, C05, C07, C014, C016, N02, N08 , N13, P04, P010

Aspect

Water (Wat)

Mitigation

Any new Projects or Plans arising from the implementation of draft FESLUP shall adhere to the following guidance/policies that are of specific relevance to WAT:

- Aerial Fertilisation Requirements. Forest Service (2015) Department of Agriculture, Food and the Marine;
- Environmental Requirements for Afforestation. Forest Service (2016). Department of Agriculture, Food and the Marine;
- Forest Protection Guidelines. Forest Service (2000) Department of the Marine and Natural Resources;
- Forestry & Freshwater Pearl Mussel Requirements: Site Assessment and Mitigation Measures Forest Service (2000) Department of the Marine and Natural Resources;
- Forestry & Otter Guidelines Forest Service (2000) Department of the Marine and Natural Resources;
- Forestry and Water Quality Guidelines. Forest Service (2000) Department of the Marine and Natural Resources;
- Forestry Biodiversity Guidelines. Forest Service (2000) Department of the Marine and Natural Resources;
- Forests & Water – Achieving Objectives under Ireland’s River Basin Management Plan 2018-2021 Department of Agriculture, Food and the Marine (2018); and
- Woodland for Water: Creating new native woodlands to protect and enhance Ireland’s waters. Forest Service (2018) Department of Agriculture, Food and the Marine.

The following are examples of specific mitigation measures that shall be implemented depending on the scale, nature and location of development arising from the draft FESLUP:

- All forest operations within areas of high-water sensitivity (such as Freshwater Pearl Mussel catchments and high-status objective waterbodies) be planned and managed with a particular regard to the protection of water quality, aquatic ecosystems and species;
- Implementation of best practice sediment and spill control and management measures, where required;
- Setback distances from sensitive watercourses will be applied where relevant and will vary depending on soil type, slope and the presence of site conditions such as complex hydrology and uniformly wet ground conditions and the particular sensitivity of the watercourse.

Other specific water protection mitigation may be identified during the development and assessment of Plans and Projects arising from the implementation of the draft FESLUP.

Relevant Objectives to which the mitigation applies:

CO1, CO3, CO5, CO7, CO14, CO16, NO2, NO8 , N13, PO4, PO10

Aspect

Air Quality and Climate (AQ&C) – including noise

Mitigation

Any new Projects or Plans arising from the implementation of the draft FESLUP shall adhere to the following guidance/policies that are of specific relevance to AQ&C:

- Aerial Fertilisation Requirements. Forest Service (2015) Department of Agriculture, Food and the Marine;
- Environmental Requirements for Afforestation. Forest Service (2016). Department of Agriculture, Food and the Marine;
- Forestry Biodiversity Guidelines. Forest Service (2000) Department of the Marine and Natural Resources;

- Forest Harvesting & the Environment Guidelines. Forest Service (2000) Department of the Marine and Natural Resources;
- Forestry Standards Manual. Department of Agriculture, Food and the Marine Forest Service (2015);
- Forest Road Manual: Guidelines for the Design, Construction & Management of Forest Roads (Ryan, T., Phillips, H., Ramsay, J. and Dempsey, J. 2004. Forest Road Manual);
- Guidelines for the design, construction and management of forest roads. COFORD, Dublin;
- Wind Energy Development Guidelines (2006), Department of Housing, Local Government and Heritage (DHLGH).

The following are examples of specific mitigation measures that shall be implemented depending on the scale, nature and location of development arising from the draft FESLUP:

- Where practicable, the transport of timber by rail and water rather than road;
- Nitrogen deposition at ecological areas that are sensitive to nitrogen is not increased;
- Ensure that machinery used in forest operations is managed so as to minimise the potential for any offsite air, noise or vibration impacts.
- Minimise dust and noise nuisance off site.

Other specific air quality and climate mitigation may be identified during the development and assessment of Plans and Projects arising from the implementation of the draft FESLUP.

Relevant Objectives to which the mitigation applies:

C01, C03, C05, C07, C014, C016, N02, N08 , N13, P04, P010

Aspect

Archaeology, Architectural and Cultural Heritage (AA&CH)

Mitigation

Any new Projects or Plans arising from the implementation of the draft FESLUP shall adhere to the following guidance/policies that are of specific relevance to AA&CH:

- Environmental Requirements for Afforestation. Forest Service (2016). Department of Agriculture, Food and the Marine; and
- Forestry & Archaeology Guidelines. Forest Service (2000) Department of the Marine and Natural Resources.

The following are examples of specific mitigation measures that shall be implemented depending on the scale, nature and location of development arising from the draft FESLUP:

- Ensure protection, where practicable of structures, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social, or technical interest and to safeguard sites, features and objects of archaeological interest generally;
- Secure the preservation (i.e., preservation in situ or in exceptional cases preservation by record) of all archaeological monuments included in the Record of Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act, 1994, and of sites, features and objects of archaeological and historical interest generally;
- Trees within archaeological exclusion zones should only be felled following the preparation by an archaeologist or other suitably qualified environmental professional, in conjunction with a forester or arborist, of a plan outlining the most appropriate means to fell and remove trees from on or around the monument.

Other specific archaeology, architectural and cultural heritage mitigation may be identified during the development and assessment of Plans and Projects arising from the implementation of the draft FESLUP. All such mitigation identified will be implemented in full.

Relevant Objectives to which the mitigation applies:

C01, C03, C05, C07, C014, C016, N02, N08 , N13, P04, P010

Aspect

Landscape and Visual (L&V)

Mitigation

Any new Projects or Plans arising from the implementation of draft FESLUP shall adhere to the following guidance/policies that are of specific relevance to L&V:

- Environmental Requirements for Afforestation. Forest Service (2016). Department of Agriculture, Food and the Marine;
- Forestry and Landscape Guidelines Forest Service (2000) Department of the Marine and Natural Resources;
- Forestry Biodiversity Guidelines. Forest Service (2000) Department of the Marine and Natural Resources;
- Native Woodland Establishment GPC9 & GPC10 Silvicultural Standards Forest Service (2015) Department of Agriculture, Food and the Marine;
- Standards for Felling and Reforestation, (2019), Department of Agriculture, Food and the Marine;
- Wind Energy Development Guidelines (2006), Department of Housing, Local Government and Heritage (DHLGH).

The following are examples of specific mitigation measures that shall be implemented depending on the scale, nature and location of development arising from the draft FESLUP:

- Any new Projects or Plans arising from the implementation of the draft FESLUP shall seek to protect sensitive areas from inappropriate development while providing for development and change that will benefit the rural community.
- Any new Projects or Plans arising from the implementation of the draft FESLUP shall be cognisant of the character of the landscape by reviewing the local landscape character assessment prior to the acquisition of new land/ development of land for afforestation.
- Any new Projects or Plans arising from the implementation of the draft FESLUP shall carry out appropriate monitoring to ensure the successful establishment of forest edge planting and environmental setback planting (where undertaken) and maintain trees as appropriate (e.g., vegetation management, replacement of mortalities, adjustment and eventual removal of tree shelters) until the trees are established and free of vegetation competition or browsing pressure.

Other specific landscape and visual mitigation may be identified during the development and assessment of Plans and Projects arising from the implementation of the draft FESLUP. All such mitigation identified will be implemented in full.

Relevant Objectives to which the mitigation applies:

C01, C03, C05, C07, C014, C016, N02, N08 , N13, P04, P010

Aspect

Material Assets (MA)

Mitigation

Any new Projects or Plans arising from the implementation of the draft FESLUP shall adhere to the following guidance/policies that are of specific relevance to MA:

- Environmental Requirements for Afforestation. Forest Service (2016). Department of Agriculture, Food and the Marine;
- Forest Recreation in Ireland A Guide for Forest Owners and Managers (2006) Forest Service, Department of Agriculture and Food;
- Forestry Standards Manual. Department of Agriculture, Food and the Marine Forest Service (2015); and
- Forest Road Manual: Guidelines for the Design, Construction & Management of Forest Roads (Ryan, T., Phillips, H., Ramsay, J. and Dempsey, J. 2004. Forest Road Manual).

The following are examples of specific mitigation measures that shall be implemented depending on the scale, nature and location of development arising from the draft FESLUP:

- Any Onshore and Offshore wind development and associated infrastructure such as landing sites, cable routes, substations, etc., shall be subject to appropriate feasibility, options and environmental assessments (e.g., Environmental Impact Assessment, AA where required).

Other specific material assets mitigation may be identified during the development and assessment of Plans and Projects arising from the implementation of the draft FESLUP.

Relevant Objectives to which the mitigation applies:

CO1, CO3, CO5, CO7, CO14, CO16, NO2, NO8 , N13, P04, P010

Appendix B

- AA Mitigation Measures

Where the AA has identified the potential for significant adverse effects from the implementation of any of the 16 objectives subject to AA, or where doubt exists, mitigation measures have been proposed. This mitigation will eliminate or render insignificant any possible adverse effects on any potentially impacted relevant QIs and SCIs.

Proposed text changes have been proposed to each of the objectives brought forward to AA shown in italicised red text below in Table 7 of the NIS. Following publication on the draft Plan and associated environmental reports, it is proposed that the finalised and adopted FESLUP will incorporate some if not all of these proposed text changes.

In addition to the mandatory mitigation that is required for licensed forestry activities, and in cognisance of the pathways for effect on receptors, mitigation measures have been recommended for the objectives determined to have potential for likely significant effects in the absence of mitigation. The recommended mitigation is provided for the objectives in order to avoid the potential for likely significant effects.

Table 7 of the NIS Reproduced: Recommended mitigation to negate the risk of adverse effects on the integrity of European sites

Objective	Recommended Mitigation and Proposed text changes to draft objectives
<p>C07. Continuously develop guidelines for the redesign of peatlands based on best Irish and international practice.</p>	<p>It is recommended that during the development of the guidelines for the redesign of peatlands, guidance and input from suitably qualified professionals including environmental managers and specialist ecologists shall be incorporated. The guidelines should take full account of environmental constraints and opportunities, including protection of European sites, and shall be developed with ecological professionals, as necessary.</p> <p>Proposed text change to C07: <i>Continuously develop guidelines for the redesign of peatlands based on best Irish and international practice and informed by suitably qualified professionals.</i></p>
<p>C08. Establish monitoring and management frameworks for redesigned peatlands.</p>	<p>It is recommended that monitoring and management frameworks are designed by suitably qualified professionals including environmental managers and specialist ecologists. Monitoring and management frameworks should take full account of environmental constraints and opportunities, including protection of European sites, and shall be developed with ecological professionals, as necessary.</p> <p>Proposed text change to C08: <i>Establish monitoring and management frameworks for redesigned peatlands. Such monitoring and management frameworks shall be designed by suitably qualified multidisciplinary professionals.</i></p>
<p>C011. Identify and quantify the impacts of climate change and develop measures to make Coillte's estate more climate resilient</p>	<p>It is recommended that the development of any measures to make Coillte's estate more climate resilient integrates input from suitably qualified professionals including environmental managers and specialist ecologists. The measures should take full account of environmental constraints and opportunities, including protection of European sites, and shall be developed with ecological professionals, as necessary.</p> <p>No proposed text change to C011.</p>

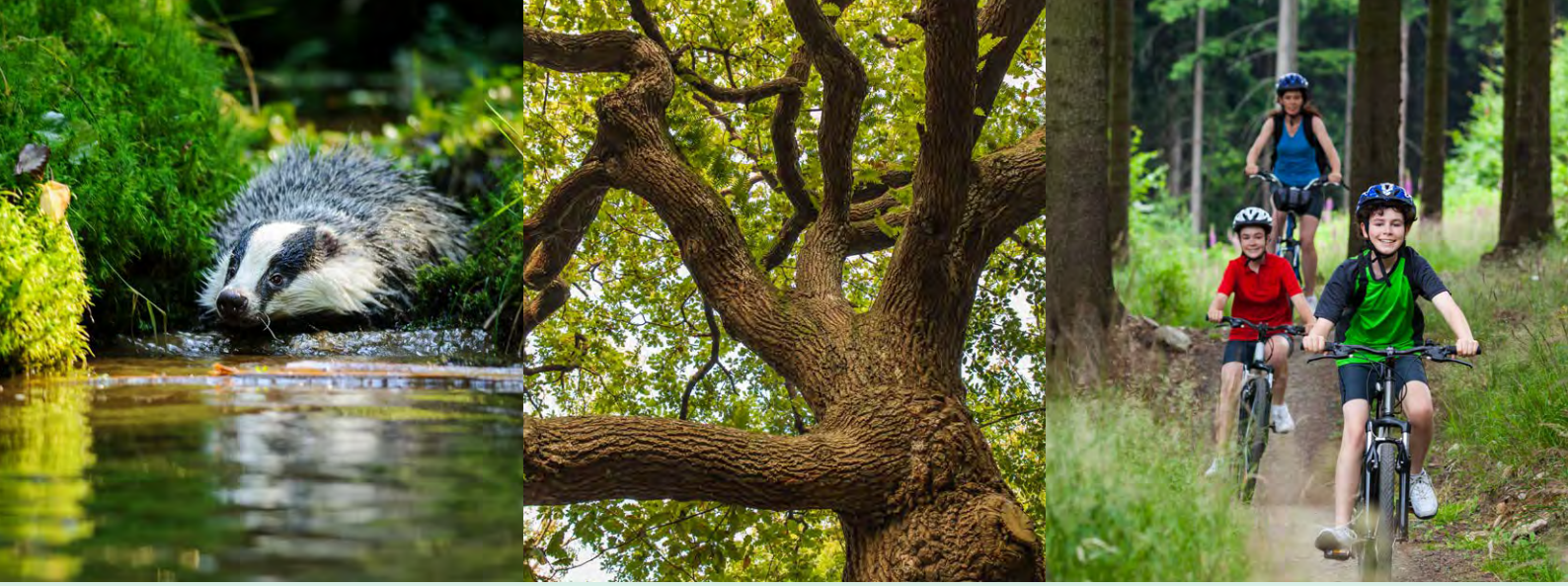
Objective	Recommended Mitigation and Proposed text changes to draft objectives
<p>C012. Develop evidence and understanding of carbon management within the forest and across the forestry supply chain, and pilot new decision-making tools.</p>	<p>It is recommended that during the design of new decision making tools, guidance from suitably qualified professionals including environmental managers and specialist ecologists shall be factored in. Any development of new tools with any potential implications for impacts on European sites shall be screened for Appropriate Assessment.</p> <p>Proposed text change to C012: <i>Develop evidence and understanding of carbon management within the forest and across the forestry supply chain, and pilot new decision-making tools. Design shall incorporate protection measures for the wider environment and be developed with suitably qualified professionals, as necessary. Piloting these new decision making tools shall be carried out in full consideration of the wider environmental and ecological landscape including AA screening where necessary.</i></p>
<p>C014. Support FuturEnergy Ireland and 3rd party renewable energy developers in their current and future renewable energy endeavours.</p>	<p>It is recommended that during the provision of support, engagement and collaboration, respective parties, including Coillte, any plan or project or endeavour which could give rise to a plan or project with any potential implications for impacts on European sites shall be screened for Appropriate Assessment.</p> <p>Proposed text change to C014: <i>Support FuturEnergy Ireland and 3rd party renewable energy developers in their current and future renewable energy in full consideration of protection of the environment including Appropriate Assessment screening where necessary.</i></p>
<p>C016. Develop a clear policy and explore opportunities for onshore and offshore grid infrastructure, rollout and services to support ongoing development.</p>	<p>It is recommended that the development of any such policies and exploration of opportunities with the potential to give rise to plans or projects with any potential implications for impacts on European sites shall be screened for Appropriate Assessment.</p> <p>Where areas of the Coillte estate are identified for the facilitation for on shore or offshore wind development, these developments shall be subject to project level Screening for AA at minimum, and where necessary full AA.</p> <p>Proposed text change to C016: <i>Develop a clear policy and explore opportunities for onshore and offshore grid infrastructure, rollout and services to support ongoing development in full consideration of protection of the environment including Appropriate Assessment screening where necessary.</i></p>
<p>NO2. Continue the process of producing and implementing management plans for biodiversity areas, combining both ecological and forestry perspective and expertise.</p>	<p>In the absence of mitigation, there is potential for unintended significant effects on the European site network, QIs/SCIs where management actions are not designed with all conservation objectives of relevant QIs/SCIs in mind. It is recommended that during the production and design of such management plans, the conservation objectives of relevant QIs/SCIs are incorporated in the design of the plans.</p> <p>Proposed text change to NO2: <i>Continue the process of producing and implementing management plans for biodiversity areas, combining both ecological and forestry perspective and expertise in the effort to improve biodiversity found within the Coillte estate, subject to Appropriate Assessment screening, as necessary.</i></p>

Objective	Recommended Mitigation and Proposed text changes to draft objectives
<p>NO4. Continue to increase the implementation of alternative silvicultural systems including continuous cover forestry (CCF) in forests of ecological value.</p>	<p>In the absence of mitigation, there is potential for unintended significant effects on the European site network, QIs/SCIs where management actions are not designed with the conservation objectives of relevant QIs/SCIs in mind.</p> <p>It is recommended that suitably qualified professionals including specialist ecologists (ornithologists, freshwater habitat and species specialists etc.,) input into the design and implementation of any such alternative methods and where potential to give rise to plans or projects with any potential implications for impacts on European sites an Appropriate Assessment screening shall be carried out.</p> <p>Proposed text change to NO4: <i>Continue to increase the implementation of alternative silvicultural systems including continuous cover forestry (CCF) in forests of ecological value. Implementing such systems shall be conducted in a manner insofar as to avoid unintended consequences of any QI or SCI and any plan or project arising shall be subject to Appropriate Assessment screening, as necessary.</i></p>
<p>NO8. Develop protocols for managing these sites (ref NO6), appropriate to their scale, habitat connectivity and site type, that will improve their nature conservation value.</p>	<p>In order to avoid the potential for likely significant effects on European sites the design of such protocols shall incorporate input from suitably qualified ecologists and relevant specialists across ecology and forestry (e.g. ornithologists).</p> <p>Any implementation of such protocols shall be conducted on a site-by-site basis and where there is potential for impacts on European sites an Appropriate Assessment screening shall be carried out.</p> <p>Proposed text change to NO8: <i>Develop protocols for managing these sites (ref NO6), appropriate to their scale, habitat connectivity and site type, that will improve their nature conservation value. The design of such protocols shall include input from specialists within ecology and forestry respectively and any plan or project arising shall be subject to Appropriate Assessment screening, as necessary.</i></p>
<p>NO11. Identify and implement methods to improve inventory processes and data-gathering, to expand our knowledge of nature on the estate and our reporting capacity.</p>	<p>In order to avoid the potential for likely significant effects on European sites the design of such methods shall incorporate input from suitably qualified ecologists and relevant specialists across ecology and forestry (e.g. ornithologists).</p> <p>Any implementation of such methods shall be conducted on a site-by-site basis and where there is potential for impacts on European sites an Appropriate Assessment screening shall be carried out.</p> <p>Proposed text change to NO11: <i>Identify and implement methods to improve inventory processes and data-gathering, to expand our knowledge of nature on the estate and our reporting capacity. Methods shall be informed by the input of suitable specialist in ecology.</i></p>
<p>NO12. Review and improve methods for how biodiversity features and other important environmental features are recorded across the estate.</p>	<p>It is recommended that prior to the implementation of this objective, that these recording methods are informed by the input of suitably qualified professionals including specialist ecologists.</p> <p>Proposed text change to NO12: <i>Review and improve methods for how biodiversity features and other important environmental features are recorded across the estate. Methods shall be informed by the input of suitable specialist in ecology.</i></p>

Objective	Recommended Mitigation and Proposed text changes to draft objectives
<p>N013. Enhance guidance for the management of habitats and species relevant to Coillte's estate and activities</p>	<p>It is recommended that guidance is designed with input from suitably qualified professionals including ecologists and specialists.</p> <p>It is recommended that detailed spatial analysis, including source-pathway-receptor analysis is carried out in the development of guidance so as to avoid potential for LSE on any European sites.</p> <p>Proposed text change to N013: <i>Enhance guidance for the management of habitats and species relevant to Coillte's estate and activities with the input of suitably qualified specialists and Appropriate Assessment screening for any works arising, as necessary.</i></p>
<p>W01. Maintain production capacity to harvest and supply certified roundwood to support timber production .</p>	<p>Embedded mitigation within the afforestation application process already exists as all licensed forestry activities, including afforestation, require approval in the form of a forestry licence. Such a forestry licence requires, at minimum, a Screening for Appropriate Assessment to ensure that such afforestation, harvesting and related forestry activities do not result in a likely significant effect on the European site network. Where the potential for likely significant effects occurs, these applications are required to advance to full Appropriate Assessment and provide mitigation insofar as to remove the potential for likely significant effects.</p> <p>As a result of this embedded mitigation, no further recommendations for mitigation is made as part of this AA report.</p> <p>No recommended text change to W01.</p>
<p>P01. Identify priority site locations and develop masterplans for future Visitor Destinations</p>	<p>It is recommended, to avoid the potential for likely significant effects, that during the identification process the source-pathway-receptor model is used to identify any potential risks to European sites arising from visitor destination development. Any priority site locations and masterplans shall be subject to an Appropriate Assessment screening (at minimum).</p> <p>Proposed text change to P01: <i>Continue to identify priority site locations and develop masterplans for future Visitor Destinations in full consideration of protection of the environment and Appropriate Assessment screening where necessary.</i></p>
<p>P06. Create a system of classification for Recreation Areas, setting out the offer and facilities to be provided for each category.</p>	<p>It is recommended, to avoid the potential for likely significant effects, that the creation of this classification system has input from suitably qualified professionals including ecologists and specialists to account for important ecological features within the Coillte estate. It is recommended that the classification system shall integrate the presence of important ecological features within its system.</p> <p>Proposed text change to P06: <i>Create a system of classification for Recreation Areas, in full consideration of the important ecological features of Coillte's estate, setting out the offer and facilities to be provided for each category.</i></p>
<p>P012. Enhance operational guidance for staff and contractors regarding biodiversity management and peatland redesign.</p>	<p>It is recommended that operational guidance is designed with input from suitably qualified professionals including ecologists and specialists.</p> <p>It is recommended that detailed spatial analysis, including source-pathway-receptor analysis is carried out in the development of guidance so as to avoid potential for LSE on any European sites.</p> <p>Proposed text change to P012: <i>Enhance operational guidance for staff and contractors regarding biodiversity management and peatland redesign, in full consideration of the important ecological features of Coillte's estate.</i></p>

References

- 1 Forest Statistics Ireland 2023, DAFM: Department of Agriculture, Food & the Marine (published 22/08/23)
- 2 Coillte, 2022. Strategic Vision for Our Future Forest Estate, s.l.: Coillte.
- 3 FSC licence code: FSC®-C005714
- 4 PEFC licence code: PEFC/17-23-042
- 5 The non-forested lands consists of a range of land-cover types, unsuitable for afforestation, these include upland heaths and bogs, lakes, ponds and swamps and are generally maintained in their current state.
- 6 Conifers sink CO₂ at a rate of c. 6.9 tCO₂ eq. ha/year. Broadleaves sink CO₂ more slowly at a rate of c. 2.6 tCO₂ eq. ha/year. COFORD, 2022. Forests and wood products, and their importance in climate mitigation: A series of COFORD statements., s.l.: COFORD.
- 7 Conifers also retain their needles all year round, which allows them to photosynthesize, and thus sequester carbon, for a longer portion of the year compared to deciduous broadleaved trees which lose their leaves during the winter months. Stephenson, N. et al., 2014. Rate of tree carbon accumulation increases continuously with tree size. *Nature*, Issue 507, pp. 90-93.
- 8 When trees die, a portion of this stored carbon is transferred to the forest soil and other organic matter. Alternatively, when a tree is harvested, the stored carbon remains within the timber. If this harvested wood is used as a substitute for carbon heavy products such as steel and concrete, the carbon remains sequestered in these wood products, effectively transferring the carbon storage from the forest to the built environment.
- 9 Holmgren, P., 2021. Fossil displacement and value chain emissions related to primary wood-based products in Ireland, s.l.: Coillte.
- 10 Black, K., Byrne, K., McNerney, D. & Landy, J., 2022. Report on Carbon Modelling of the Coillte Estate, s.l.: Coillte.
- 11 Cross, J. (2012). Ireland's Woodland Heritage: A Guide to Ireland's Native Woodlands. National Parks and Wildlife Service, Dublin.
- 12 O'Mahony, D., O'Reilly, C. and Turner, P. (2005). National Pine Marten Survey of Ireland 2005. COFORD Connects, Environment No. 7; COFORD The National Council for Forest Research and Development, Dublin
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Glossary

Term	Definition
Abiotic threats	Caused by factors such as temperature and moisture extremes, mechanical damage, chemicals, nutrient deficiencies or excesses, salt damage and other environmental issues.
Age Profile	Groups of trees belonging to the same age (e.g. 0–5 years old, 5–10 years ...). This is used as a tool to design and manage woodlands and forests to create diversity in its structure. (A-Z of tree terms, 2021).
Appropriate Assessment (AA)	An assessment of the potential adverse effects of a plan or project (in combination with other plans or projects) on Special Areas of Conservation and Special Protection Areas.
BioClass	Coillte's system for recording assessing and mapping biodiversity areas.
Biodiversity areas	The Coillte estate consists of a varied tapestry of different habitats, ranging from conifer forests and mixed or broadleaved forests to open bogs and heathlands, to lakes and rivers. The sites with best value for biodiversity are mapped and managed as 'biodiversity areas'.
Biodiversity features	Ecological aspects associated with habitats and/or species, that relate to their function e.g., badger setts and/or deer mud-pits.
Bioenergy	Bioenergy is a form of renewable energy generated when we burn biomass fuel. Biomass fuels come from organic material such as harvest residues, purpose-grown crops and organic waste from our homes, businesses and farms.
Biomass	Biomass is renewable organic material that comes from plants and animals. Biomass contains stored chemical energy from the sun that is produced by plants through photosynthesis.
Biotic threats	Caused by living organisms such as pathogens, nematodes, and insects and other arthropods.
Blanket bog	A highly acidic peat bog that spreads out widely over the landscape and is found in cool climates with high levels of rainfall and humidity.
Bogs	A bog is a freshwater wetland of soft, spongy ground consisting mainly of partially decayed plant matter called peat.
Broadleaves	Trees that have flat leaves and produce seeds inside of fruits.



Term	Definition
Brown earths	A shallow and well-drained soil type with brownish subsoils that is rich and fertile.
Carbon cycle	The process in which carbon atoms continually travel from the atmosphere to the Earth and then back into the atmosphere.
Carbon Leakage Effects	Carbon leakage refers to the situation that may occur if, for reasons of costs related to climate policies, businesses were to transfer production to other countries with laxer emission constraints. This could lead to an increase in their total emissions.
Carbon stock	Forest carbon stock is the amount of carbon that has been sequestered from the atmosphere and is now stored within the forest ecosystem, mainly within living biomass and soil, and to a lesser extent also in dead wood and litter.
Climate Adaptation	A set of actions and processes that help societies to adjust to the impacts of adverse changes to the climate.
Climate Mitigation	Making the impacts of climate change less severe by preventing or reducing the emission of greenhouse gases (GHG) into the atmosphere.
Conifers	Mostly evergreen trees and shrubs having leaves resembling needles or scales in shape and including forms (as pines) with true cones.
Continuous Cover Forestry (CCF)	An approach to forest management where the forest canopy is retained and individual or small groups of trees are removed at certain times to allow light reach the forest floor and new seedlings to grow.
Environmental Risk Assessment (ERA)	The process of assessing potential harm to the environment caused by a substance, activity or natural occurrence. This may include the introduction of GM plants, the use of pesticides, or the spread of plant pests.
Environmental, Social and Corporate Governance (ESG)	A framework used to assess an organization's business practices and performance on various sustainability and ethical issues.
Estuarine areas	Bodies of water usually found where rivers meet the sea. Estuaries are home to unique plant and animal communities that have adapted to brackish water.
Forest Stewardship Council (FSC®)	The Forest Stewardship Council (FSC®) is an international, non-governmental organisation dedicated to promoting responsible management of the world's forests.

Term	Definition
Geospatial	Relating to data that is directly linked to specific geographical locations.
Gleys	A sticky clay soil or soil layer formed under the surface of some waterlogged soils.
Harvested Wood Products (HWP)	Wood-based materials harvested from forests, which are used for products such as furniture, plywood, paper and paper-like products, or for energy.
Heathlands	Heathlands are wide open landscapes which occur on barren infertile land. The soils are usually sandy (and therefore free draining), acidic and very low in plant nutrient.
Natura Impact Statement (NIS)	The statement prepared following Appropriate Assessment of Natura 2000 sites as required under the Habitats Directive which presents information on the assessment and the process of collating data on a project and its potential significant impacts on Natura 2000 site(s).
Natural Heritage Areas (NHAs)	A Natural Heritage Area (NHA) is a designation under the Wildlife Act for the protection of habitats considered to be important or wildlife, specifically habitats and/or species of plants and animals that require protection. An area considered important for the habitats present or which holds species of plants and animals whose habitat needs protection.
OSB (oriented strand board)	OSB is a widely used, versatile engineered wood panel made using waterproof heat-cured adhesives and rectangularly shaped wood strands that are arranged in cross-oriented layers.
Peatlands	Peatlands are terrestrial wetland ecosystems in which waterlogged conditions prevent plant material from fully decomposing. Consequently, the production of organic matter exceeds its decomposition, which results in a net accumulation of peat.
Podzols	Podzols are generally infertile and are physically limiting soils for productive use. They are extremely acid and are lacking in most plant nutrients.
Pre-history	The period in time before written records.
Primeval forests	Ancient Forests that developed naturally throughout the from early in the post-glacial period, which started approx. 10,000 years ago. A climax forest that is ancient and has never been disturbed by human interventions.



Term	Definition
Programme for the Endorsement of Forest Certification (PEFC)	PEFC, the Programme for the Endorsement of Forest Certification, is a leading global alliance of national forest certification systems. It is an international non-profit, non-governmental organization, dedicated to promoting sustainable forest management through independent third-party certification.
Raised bog	Raised bogs are vaguely dome-shaped, as decaying vegetation accumulates in the centre.
Roundwood	A length of cut tree generally having round cross section, such as a log or bolt.
Silviculture	The growing and tending of forest stands to meet management objectives.
Special Areas of Conservation (SACs)	A special area of conservation (SAC) is a designation under the European Union Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC), also known as the Habitats Directive, for the protection of the habitats and species listed for protection on Annexes I and II of the Directive. An area that protects one or more special habitats and/or species - terrestrial or marine - listed in the Habitats Directive.
Special Protection Areas (SPAs)	<p>A special protection area (SPA) is a designation under the European Union Directive on the Conservation of Wild Birds. Under the Directive, Member States of the European Union (EU) have a duty to safeguard the habitats of migratory birds and certain particularly threatened birds.</p> <p>The objective of this designation is the protection of natural habitats, fauna and flora. This designation type confers protection against any project which is likely to have significant adverse impacts on the integrity of the site.</p>
Strategic Environmental Assessment (SEA)	Strategic Environmental Assessment (SEA) is the process by which environmental considerations are required to be fully integrated into the preparation of plans and programmes prior to their final adoption.
Thinning	The selective removal of inferior stems in order to favour the growth of the remainder better quality stems.
Value chain emissions	Also referred to as Scope 3 emission, these include all other indirect emissions that occur in the upstream and downstream activities of an organisation.

