



Strategic Vision for Our Future Forest Estate



Coillte's Strategic Vision

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

Our Purpose is to manage the state forests on behalf of the people of Ireland. **Our Mission** is to deliver the multiple benefits of our forests to society. **Our Vision** is a sustainable future for all. The financial sustainability of Coillte underpins our ability to deliver our purpose, and our new mission and vision.

Our new strategic vision for our forest estate to deliver multiple benefits from our forests, brings more focus to climate action, setting ambitious new targets on biodiversity and recreation, while continuing to deliver for the forest and wood products industry. The achievement of our vision will be guided by balancing the multiple benefits of forests through the objectives of climate, nature, wood and people for which we will:

<h2>Forests for climate</h2>	<h2>Forests for nature</h2>
<ul style="list-style-type: none"> • Create new forests which will sink more carbon • Manage our estate to increase carbon storage • Redesign peatland forests to improve carbon balance • Generate renewable energy to power homes 	<ul style="list-style-type: none"> • Increase the area managed primarily for biodiversity • Enhance and restore existing biodiversity value • Transform areas of our estate to create new habitats
<h2>Forests for wood</h2>	<h2>Forests for people</h2>
<ul style="list-style-type: none"> • Provide a sustainable supply of certified timber • Promote the increased use of wood products • Develop new innovative high-value wood products 	<ul style="list-style-type: none"> • Provide more recreation areas to benefit wellbeing • Enable world class visitor destinations for tourism • Create new jobs in rural communities

The purpose of this document is to outline our strategic vision and ambitions under the objectives of forests for climate, nature, wood and people. We would now like to get your views to help shape this vision.

Foreword

The climate emergency is recognised as the greatest challenge we face as a society. 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.

Our new and ambitious strategic vision for our forests is rooted in science and aims to sustainably balance and deliver the multiple benefits of Ireland's state forests across four strategic objectives: **climate, nature, wood, and people.**

Our ambitions are to create new forests and manage our existing forests to enhance their ability to capture carbon, provide more habitats to enhance biodiversity, supply sustainable Irish wood products to support the creation of new homes, and create more incredible recreational spaces for the enjoyment of society and tourists.

Consultation is important to the development of our new strategy. As a result, we are now seeking feedback on our strategic vision to ensure it aligns with the needs of Irish society. This consultation process will inform the development of a strategic plan for the future forest estate which will be developed over the coming months.

Forestry and Coillte have never been more relevant in terms of the challenges of our time. We are focused on delivering the best possible balance across the multiple benefits of forestry and ensuring that, working together, we are delivering a greener future for all – one that we can all look forward to and one that we can all enjoy.



Imelda Hurley
Chief Executive

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Introduction

About Us

Coillte is the largest forest company in Ireland and plays a key role in producing sustainably grown wood products, protecting and enhancing biodiversity, tackling climate change, 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 hectares. Today we manage approximately 440,000 hectares of land, equivalent to 7% of the total land area of the country.

The estate accounts for around 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, to lakes and rivers. Over the last 30 years, Coillte has provided a wide range of benefits to society including wood products, recreation, biodiversity, environmental services, and critical infrastructure such as telecoms and wind energy.

The forest sector supports around 9,000¹ 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, despite having the lowest forest cover in Europe at just 11% compared to a European average of over 40%. Coillte employs 840 staff and approximately 1,200 direct contractors across Ireland, and comprises of separate business areas (Forestry, Land Solutions, Coillte Nature, and MEDITE SMARTPLY) who work with our partners and stakeholders to deliver multiple benefits to society.



Coillte Forest

Coillte grows forests sustainably to provide multiple benefits to society, including the production of quality wood and wood products. Ireland has a competitive advantage for growing trees, as our mild climate means certain conifer species can reach maturity in 35 years, whereas this can take up to 100 years in central and northern Europe.

Wood is a valuable commodity and is used in the construction of our homes, pallets for moving goods and materials, fencing and lifestyle products for our gardens and farms, and also to manufacture innovative panel board products like OSB and MDF that have a wide range of uses. Using Irish wood and wood-based products for construction is a climate efficient and sustainable substitute for conventional carbon intensive products, such as concrete and steel.

Coillte is the leading provider of outdoor recreational activities, with over 6,000 forest properties throughout Ireland, 3,000 km of way-marked trails, 12 forest parks, 6 mountain-bike trails, and 260 recreational sites. Every year there are over 29 million visits¹ to forests across the country. Forest recreation is very important to people's wellbeing, and Coillte's 'Woodlands for Health' programme helps to provide mental health support.

Our forest estate has both Forest Stewardship Council (FSC®) and Programme for the Endorsement of Forest Certification (PEFC™) accreditation, which certifies that our forests are managed sustainably.

Over 90,000 hectares of our 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 forest, 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 our estate. This allows Coillte to develop ecological and silvicultural plans to enhance and/or restore these sites to improve their biodiversity value.

Land Solutions

Land Solutions is our asset development business providing innovative commercial solutions to support industries including renewable energy, housing, healthcare, education, infrastructure development, water and tourism.

Land Solutions also helps deliver significant recreational developments, for example Center Parcs in Longford. The development of this site created 750 jobs during construction and over 1,000 long term rural based jobs, generating an estimated €30 million per annum to the local economy.

Our land base has been critical to the development of the renewable energy sector, having enabled over 30% of all installed wind farms in Ireland as both a land supplier and developer.

Coillte and ESB have come together to form a new joint venture renewable energy company called FuturEnergy Ireland. FuturEnergy Ireland’s aim is 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.

FuturEnergy Ireland’s mission is to maximise the potential of our unique wind and land resources and accelerate Ireland’s transformation to a low carbon energy economy. This will also enable local amenity improvement, contribution to local rates, and local targeted investment via community benefit funds.

FuturEnergy Ireland

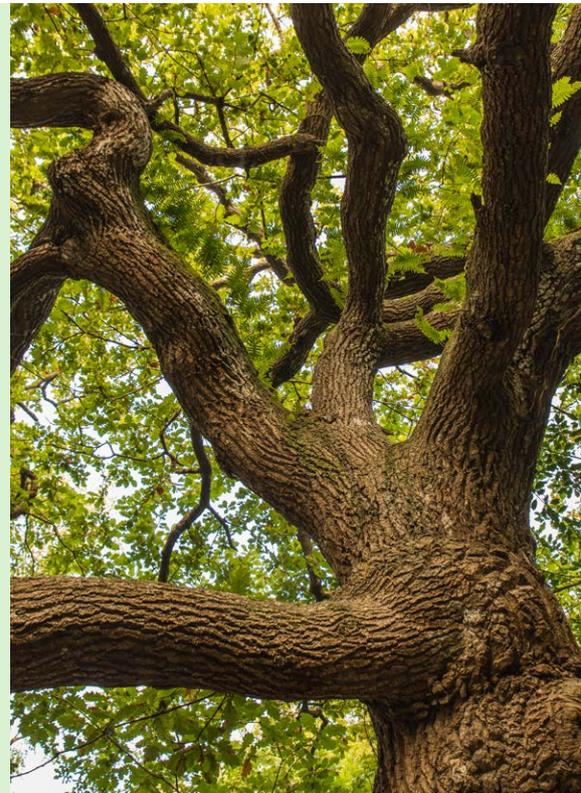


Coillte Nature

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 by:

- *Afforestation* of land to create new native woodland
- *Restoration* of important biodiversity habitats
- *Regeneration* of urban forests
- *Rehabilitation* of critical ecosystem services

Since January 2020, work has been ongoing on the Dublin Mountains Makeover, Midlands Native Woodlands, Wild Western Peatlands and Hazelwood Restoration projects. Coillte Nature has recently launched a new entity Nature Partners CLG which allows corporates to support the establishment of new forests. Coillte Nature will continue to implement new collaborations, partnerships, and projects to benefit nature, people, and our climate.





Medite Smartply

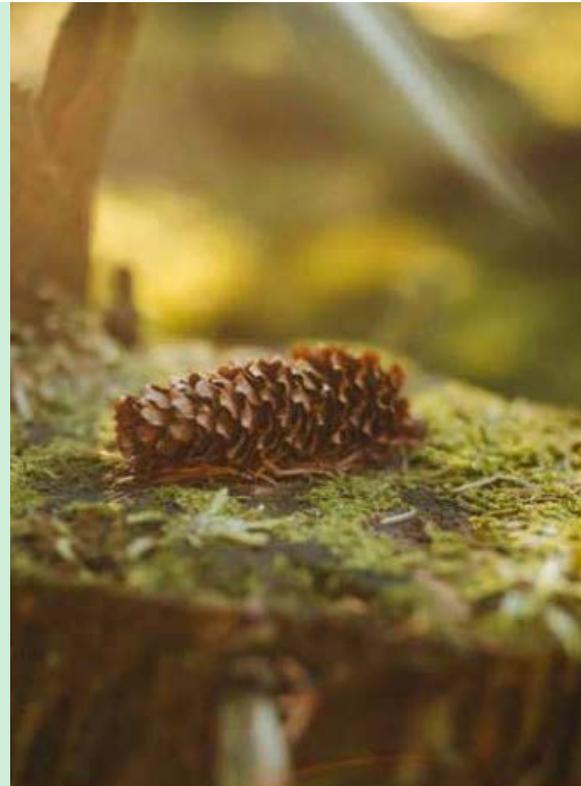
MEDITE SMARTPLY produces engineered wood-based construction panels and is committed to manufacturing products that contribute to healthier, environmentally conscious building solutions. We deliver exceptional products with outstanding sustainability credentials, demonstrating unrivalled innovation and are recognised for industry leading customer service.

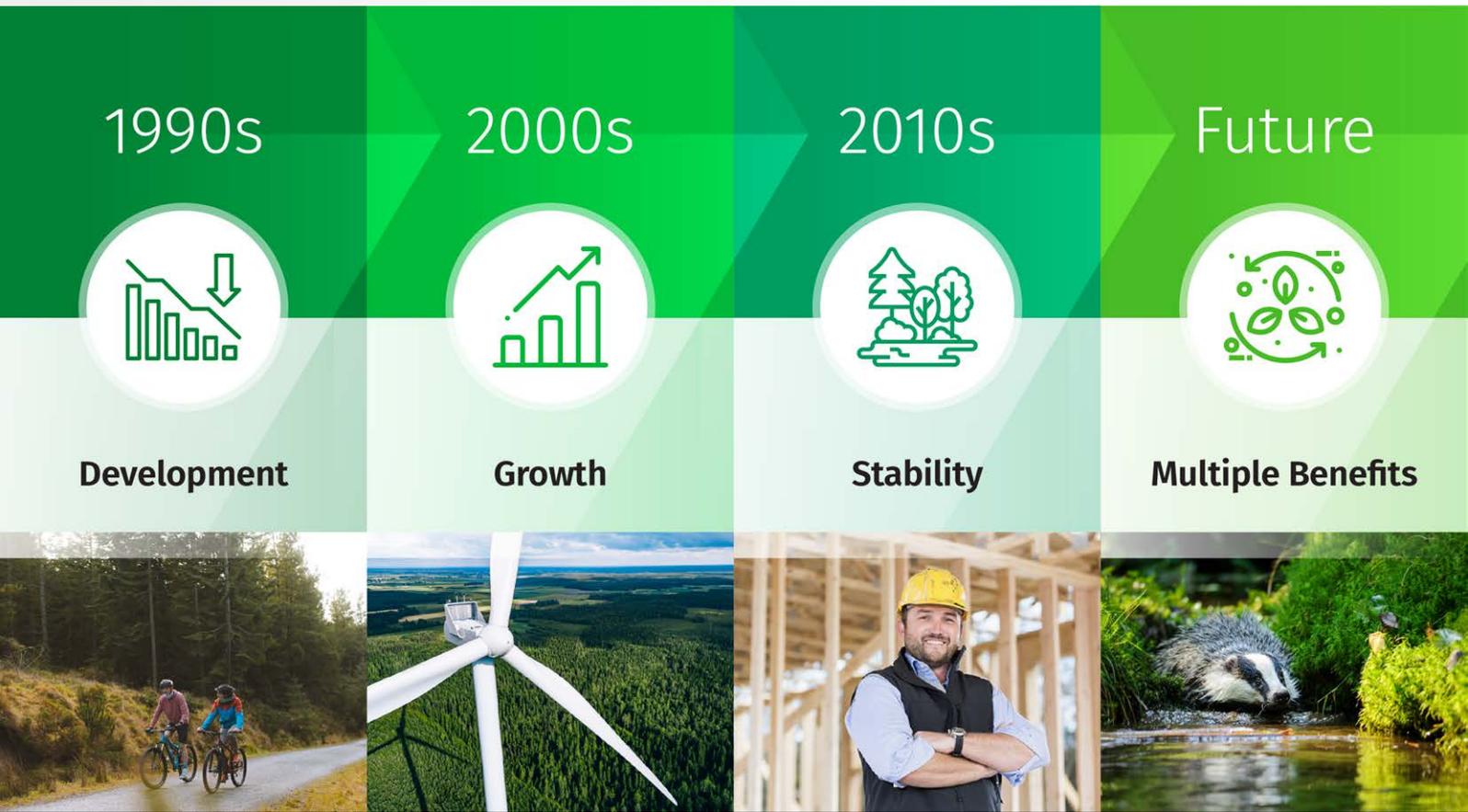
Our manufacturing mills in Clonmel (MEDITE) and Waterford (SMARTPLY) feature the latest production technology to deliver high quality MDF and OSB panels which meet the diverse needs of users, from furniture to floor structures, across 20 countries. We use forest thinnings of new-growth pine and spruce as well as residues from sawmilling and all of our products are certified by the FSC® and PEFC™.

Through consistent commitment to research, development and ongoing investment in technology, we have established MEDITE and SMARTPLY as leading brands in the wood panel market by introducing a wide variety of quality products and customer led innovations such as finish quality, moisture resistance, flame retardancy, machinability, durability and strength. This makes MEDITE SMARTPLY products a trusted alternative to traditional materials and the category of choice for today's designers and specifiers, supporting carbon reduction with sustainable solutions.

Sustainability

Sustainability is a core part of our business. In 2021, Coillte created a sustainability team that is developing a new sustainability and climate-related governance process that will develop and implement a group sustainability framework supported by ambitious targets. As a first step in this process Coillte signed up to the Task Force on Climate-related Financial Disclosures (TCFD) and will incorporate disclosures into future annual reports. This will allow the development of a better understanding of climate related financial risks and opportunities and identify ways to adapt to the changing environment. Coillte is also completing a full assessment of its carbon emissions, and a certification of our carbon reduction commitments through the Science Based Targets initiative (SBTi).





Our Journey

Coillte has consistently evolved throughout its journey to ensure that it is aligned with emerging opportunities and challenges, and to continue to deliver the many benefits of forestry to society.

1990s

In the 1990's, Coillte, along with the forestry sector, was in a development phase as it created new forests through significant levels of afforestation and provided much needed employment in rural areas. We also built SMARTPLY, one of the first OSB factories in Europe.

2000s

In the 2000's, Coillte invested in sustainable growth through wood harvesting and processing technology and diversified the business by creating new enterprises such as Wind Energy and the acquisition of MEDITE. Coillte also adopted best-in-class environmental management and achieved FSC® and PEFC™ accreditation.

2010s

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 by investing in recreation, enhancing, and restoring biodiversity, and increasing our contribution to mitigating climate change through our sustainable wood products and development of renewable energy.

Future

Coillte is committed to continuing to evolve to meet today's challenges by delivering the multiple benefits of forestry. Coillte is seeking to balance the multiple benefits of our forests for **climate, nature, wood, and people** which will involve protecting and restoring nature, providing sustainable wood-based products, providing climate change solutions and delivering recreational facilities for people's health and wellbeing.

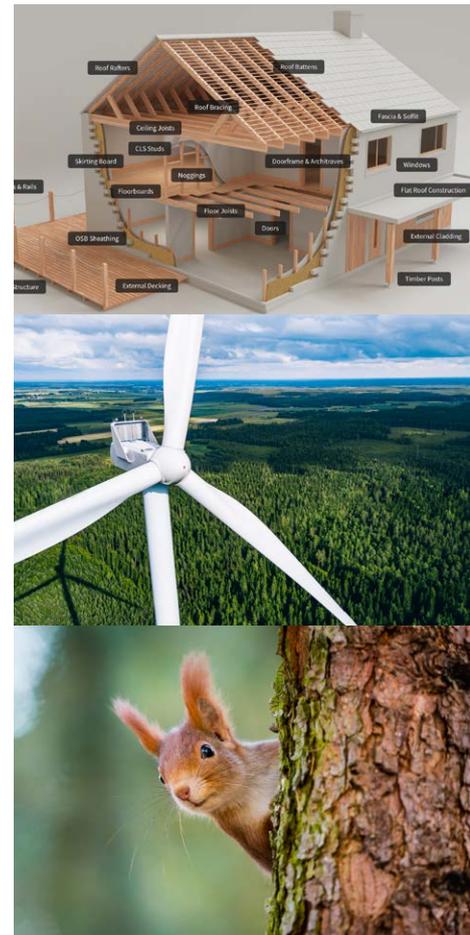
Our Future

Our future estate needs to balance the multiple objectives **climate, nature, wood, and people**. There are many different viewpoints on how to do this and what activities to prioritise on our estate and where. Coillte therefore needs to develop an approach that balances these objectives whilst ensuring the company remains financially sustainable so that it can continue to reinvest in providing a broad range of services to society.

Given the nature of forestry, and the scale of our ambitions, changes to our estate in implementing our vision will occur over the short, medium, and long term. It will take many decades for the full future vision of the Coillte forest estate to be realised. However, we are mindful that actions need to be taken in the shorter-term to put us on the right path to realising our vision.

It should be noted, while we have identified ambitions in this document that will make real positive change, for **climate, nature, wood, and people**, our plans will need to continually evolve to account for new research and analysis, and to facilitate emerging opportunities and challenges.

The strategic vision, embodied in our ambition statements, is a starting point, and we would now like to get your views to help further shape this vision.



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The Need for Change



The Need for Change

The Changing Environment

The world we live in is changing. In 2019, Ireland, the European parliament, and many countries since then, declared a climate emergency. There is a growing demand on our forests to provide more, in relation to helping tackle the climate and biodiversity challenges and in providing sustainable wood products to help address our housing demands. We have also seen during the recent Covid-19 restrictions how important our forests are for people to visit and enjoy, which brings many health and wellbeing benefits. In framing our future vision, we examined the key drivers for change in forestry.

Climate Change Challenge	Housing Challenge	Need for Rural Based Jobs	Post Covid Economic Recovery
<p>Global warming from CO₂ emissions</p> <p>Climate change is causing more frequent and extreme weather events. We need to reduce our emissions and find solutions to reach Net Zero. We need to plant more trees and create new forests.²</p>	<p>Ireland's housing crisis</p> <p>It is estimated that Ireland will need an average of 33,000 new homes to be provided each year from 2021 to 2030. We need to utilise more homegrown timber in timber frame houses to support the drive to net zero and address the housing crisis.³</p>	<p>Future rural job creation is critical to local communities</p> <p>There is a need to provide valuable and sustainable jobs in rural Ireland to support local communities. The sector supports 9,000 people in direct 'green tech' jobs and the sector will expand considerably in the near future.⁴</p>	<p>Economic Recovery post Covid is a key national challenge</p> <p>Covid-19 has had an unprecedented impact on our economy. The recovery plan is underpinned by four pillars: Sustainable Finances, Getting Back to Work, Rebuilding Enterprises and a Balanced Recovery.⁵</p>
Biodiversity Challenge	Programme for Government	Wellbeing & Health Concerns	'Just Transition' to Carbon Neutrality
<p>Nature everywhere is declining at a speed never previously seen</p> <p>Ireland's Vision is that biodiversity and ecosystems are conserved and restored, delivering benefits essential for all sectors of society and that Ireland contributes to efforts to halt the loss of biodiversity and the degradation of ecosystems in the EU and globally.⁶</p>	<p>The Programme for Government is addressing critical societal needs</p> <p>Strategies, policies, and programmes are being actively formulated to attempt to address the global, regional, and national challenges with political priorities of climate change, biodiversity, the economy and jobs, and people's health and wellbeing.⁷</p>	<p>Chronic illness and lifestyle behaviours that negatively impact health are increasing</p> <p>The Vision for the national framework 'Healthy' Ireland is where everyone can enjoy physical and mental health and wellbeing to their full potential, where wellbeing is valued and supported at every level of society and is everyone's responsibility.⁸</p>	<p>Just Transition must be equitable, and have inclusive processes and outcomes</p> <p>Key principles of just transition include ensuring people have the right transition structure, the right skills developed, that cost impacts are equitable and that communities are engaged as core to the transition.⁹</p>

The changing world presents many challenges to address and opportunities to progress. In Coillte, we have considered the challenges and opportunities carefully and have worked to better understand how we can best contribute. In this regard it is also important for us to understand society's needs and expectations and how these are changing.

Society's Expectations of Forestry

Coillte commissioned a RED C poll* to get a better understanding of public expectations of forestry. Climate change and biodiversity are key concerns for the people in Ireland, who also consider that forestry and Coillte have an important role to play economically, socially, and environmentally.



85% are concerned about **Global Warming**



85% want to have more trees in Ireland, both broadleaves and conifers



86% think that wood producing forests are a good thing



82% believe biodiversity is important for Ireland's future

56% believe it is very important



82% believe Forestry is important to the Irish economy



84% think that Coillte have a role to help meeting Ireland's climate change commitments

The survey found that people have a very positive attitude towards forestry and that they understand the multiple benefits that forests have to offer. It also demonstrated that our views on the need for change are supported by public opinion, with the majority of respondents believing that: Coillte has a role to play in meeting Ireland's climate action commitments; biodiversity is important for Ireland's future; forestry is an important sector in the Irish economy; and that wood producing forests are important. Delivering on multiple benefits and societal expectations is complex and challenging. In order to meet these requirements, we have identified and adopted a responsible, science-led approach, that accounts for the needs of people in Ireland.

Our Approach



Our Approach

The Right Trees in the Right Place for the Right Objective

When considering forestry and forest values much of the focus has been on the ‘right trees’, which is related to the type of tree and how it is managed. However, before we can assess what might be the ‘right trees’, it is more important to understand what the ‘right objective’ is, which relates to the reason to plant the tree or the desired outcome.

In seeking to develop a balanced strategic vision for forestry and land-use, the approach taken has been to first consider *the right objective*, then to determine the most appropriate location to deliver on the objective, *the right place*, and then the optimum forest type and management, *the right trees*, to best meet these objectives. It is also acknowledged that the Coillte estate comprises a rich tapestry of habitats (forests, open space, peatlands & water) and therefore, in some instances, the right approach for a given habitat may be no tree.



The 2030 Agenda for Sustainable Development¹⁰, adopted by all United Nations Member States in 2015, *provides a shared blueprint for peace and prosperity for people and the planet, now and into the future*. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries in a global partnership.

The forest objectives used in the creation of this strategic vision, have been identified by firstly considering and understanding the benefits and values that flow from our forests and forest products and how these values support the achievement of the UN SDGs.

Identifying the Right Objectives: The Multiple Values of Forests

To identify our forest objectives, the UN SDGs have been used as a framework to consider the multiple benefits of forestry. It is considered that forestry delivers multiple values and benefits that support 9 of the 17 UNSDGs including climate action and clean energy, good health and wellbeing, life on land, as well as providing economic growth through the production of innovative and sustainable timber products.



UN GOALS		FOREST VALUES	OBJECTIVES
<p>3 GOOD HEALTH AND WELL-BEING</p>	Good Health & Wellbeing	<p>Climate Change Mitigation Trees absorb and capture carbon dioxide and produce oxygen. Wood products store carbon in buildings and furniture.</p>	<p><i>for climate</i></p>
<p>6 CLEAN WATER AND SANITATION</p>	Clean Water & Sanitation		
<p>7 AFFORDABLE AND CLEAN ENERGY</p>	Affordable & Clean Energy	<p>Water & Soil Protection Trees regulate floodwater, reducing surface run off, stabilising riverbanks as well as reducing soil erosion.</p>	<p><i>for nature</i></p>
<p>8 DECENT WORK AND ECONOMIC GROWTH</p>	Work & Economic Growth		
<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	Innovation & Infrastructure	<p>Sustainable Products Wood provides sustainable construction, manufacturing and energy products that can replace carbon intensive materials.</p>	<p><i>for wood</i></p>
<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	Sustainable Construction		
<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	Consumption & Production	<p>Health & Wellbeing Trees, woodlands, and green spaces have proven beneficial effects to people's mental and physical health.</p>	<p><i>for people</i></p>
<p>13 CLIMATE ACTION</p>	Climate Action		
<p>15 LIFE ON LAND</p>	Life on Land	<p>Rural Economy & Jobs Forests, forest products and forest related products and services provide a wide range of employment in rural areas.</p>	

The multiple benefits that flow from our forests and forest activities can be summarised by four main objectives - Forests for climate, Forests for nature, Forests for wood and Forests for people.

Working with in-house and external experts, we analysed the best available data and used advanced modelling techniques to determine what we consider is the right place and right trees to deliver on these forest objectives.

The Right Place and the Right Trees

Having identified the main objectives of **climate**, **nature**, **wood** and **people**, we need to consider the right place and the right trees to best deliver on these objectives.

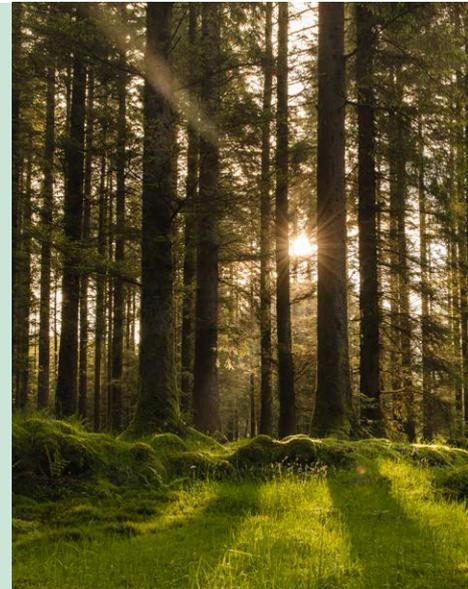
This is our approach for each of the main objectives:

Forests for climate

Our approach to forests for climate was to assess the estate for its potential to sink and store carbon in the forests and soils, and the potential to substitute carbon intensive products with wood products.

Understanding climate and the climate change mitigation potential of our forests is highly complex. We have collaborated with leading climate, carbon, and soils experts to understand the carbon profile of our estate, including peatland forestry, and have developed carbon and tree growth models to identify carbon mitigation measures.

We sought to understand the benefits of wood in substituting and displacing carbon heavy products, as well as the carbon sequestration potential of creating new forests.



Forests for nature

Our approach to forests for nature was to work with our ecology, hydrology, and silviculture experts to identify areas of our estate with existing biodiversity value and identify options to protect, enhance and restore the biodiversity value in these areas, in addition to extending the area of the estate managed primarily for biodiversity. This analysis also involved identifying legacy areas of our estate where through a programme of redesign and diversification we can create new habitats in the long-term and increase the resilience of our forests.



Forests for wood

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 ensure a long-term sustainable supply of sawlog and renewable wood products to support and grow the bioeconomy. We also assessed the potential to promote the greater use of wood and create new innovative wood products.



Forests for people

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 areas of the forest estate to deliver additional outdoor recreational benefits and provide valuable amenities to communities.



Balancing the Multiple Objectives

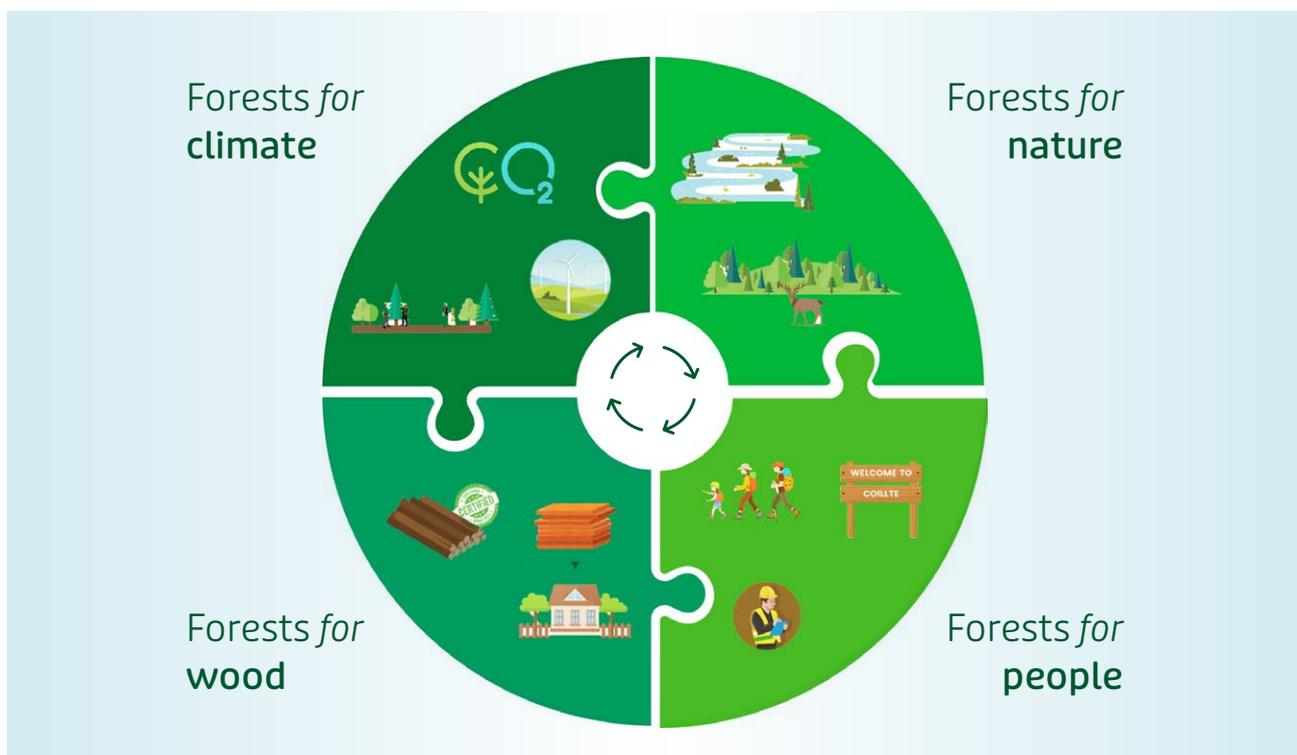
The four forest objectives are intrinsically linked, as are many of the potential benefits. Forests can deliver the multiple objectives of **climate**, **nature**, **wood** and **people** and have the capacity to provide a wide range of economic, environmental, and social benefits. However, it is also important to acknowledge that maximising one objective has the potential to result in trade-offs with others. It may also not be realistic or appropriate to deliver all forest objectives *equally* in all forest locations. In addition, whilst there may be one primary objective, that is an objective which gets priority in a forest, it does not preclude the forest delivering on other additional objectives. Our approach has sought to balance forest objectives at the overall estate level.

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

The overall aims in developing a balanced strategic vision are to:

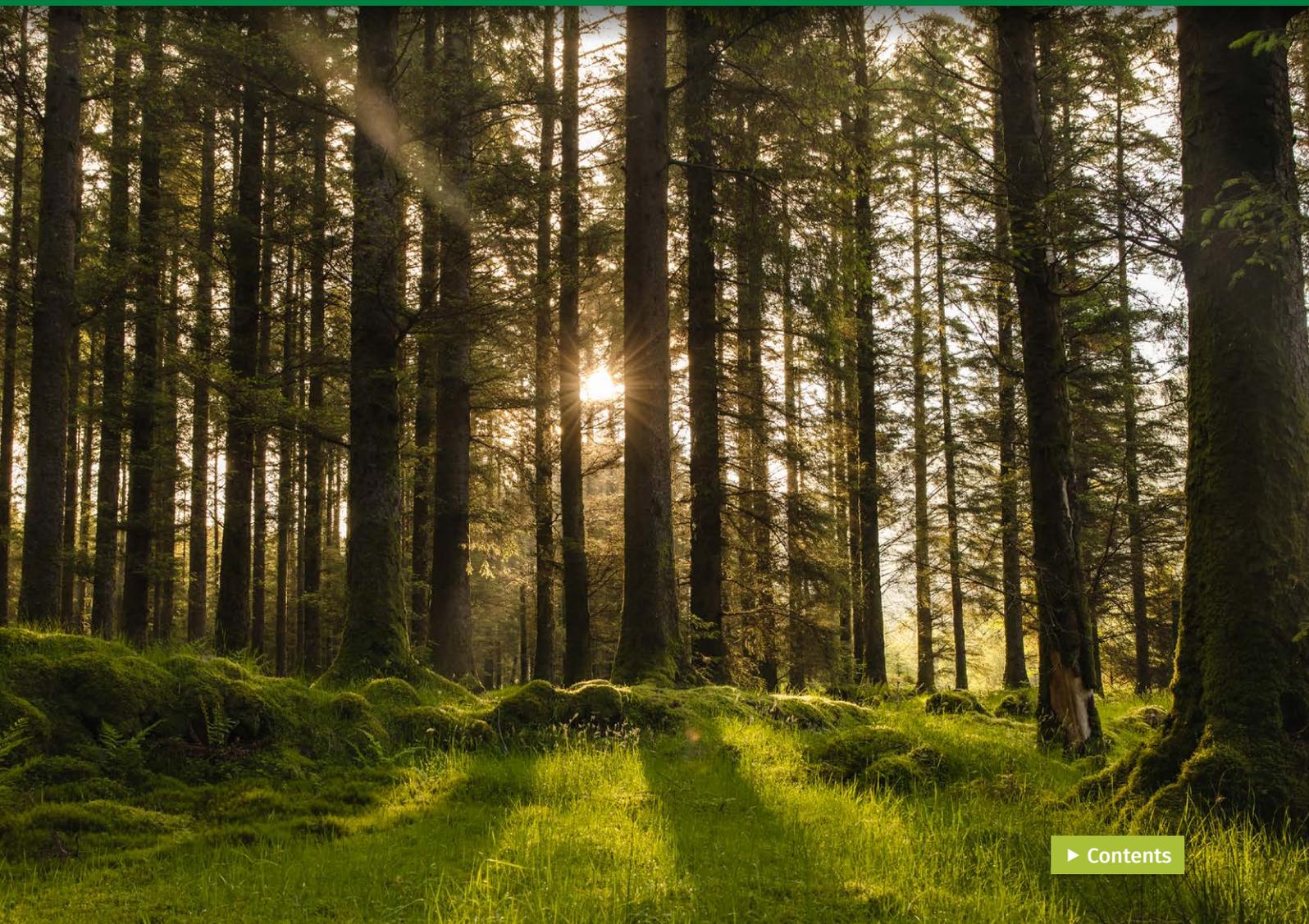
- Ensure forest climate mitigation measures are applied across the estate to maintain the carbon store, increase carbon removals, and substitute carbon intensive products with sustainable wood products.
- Protect and enhance the existing biodiversity across the estate, whilst identifying additional areas that would be managed for biodiversity in the future.
- Maintain a sustainable supply of certified Irish timber to service the wood products industry in Ireland and to meet the growing demand for housing and sustainable wood products.
- Enhance and increase the recreational offering across the estate, with a particular emphasis on community-based forests.

Financial sustainability and an economically strong and sustainable wood and timber sector is essential in order to deliver the multiple benefits of forests.



For each of the main objectives of forests for **climate**, **nature**, **wood** and **people**, a summary of the key learnings, considerations and potential opportunities identified are presented in the following sections.

Forests for Climate



Forests for Climate

Coillte is fully committed to supporting the delivery of Ireland’s Climate Action Plan and we have identified a range of climate-smart mitigation measures that can be applied across the forest estate to increase removals of CO₂ from the atmosphere and improve the store of carbon in our estate.

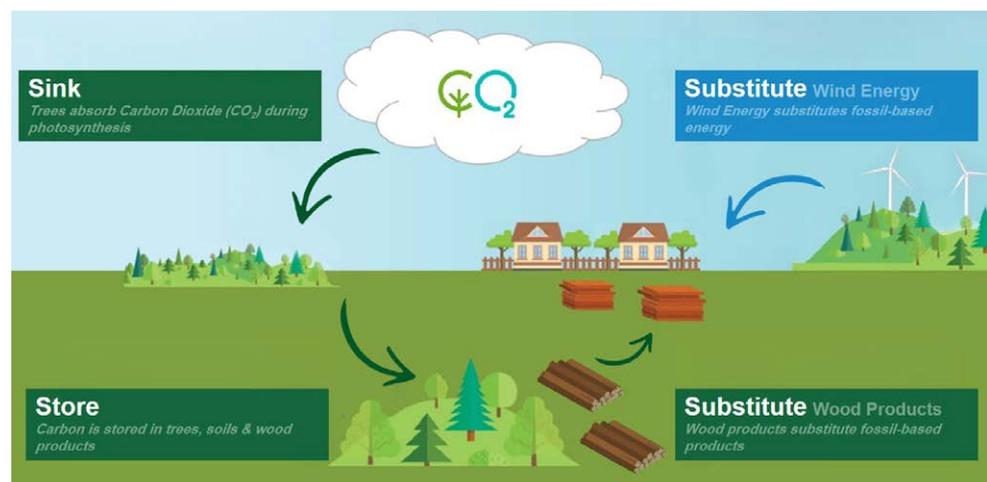
We also recognise the risks that climate change present to our forest estate in terms of species suitability, productivity, and abiotic and biotic threats such as disease and fire. Consequently, we will work to better understand how we can manage and diversify our estate to ensure that our forests are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

Learnings and Considerations

We have assessed our estate in terms of its potential to **SINK**, **STORE** and **SUBSTITUTE** more carbon in our forests and wood products.

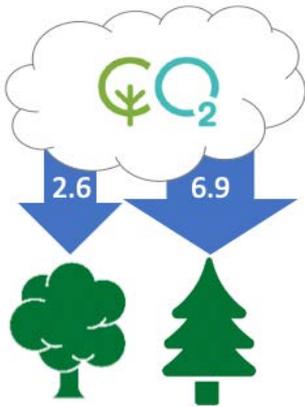
- Sink** Forests remove carbon dioxide (CO₂) from the atmosphere as trees grow.
- Store** Forests store carbon in the woody biomass, forest soils, and wood products.
- Substitute** Forests provide sustainable wood products which can substitute the use of carbon intensive products, such as concrete and steel. Working with renewable energy partners, we are also assessing suitable locations across our estate where we can generate renewable energy which substitutes fossil-based energy.

The Carbon Benefits from our Forests and Land



Sinking more Carbon

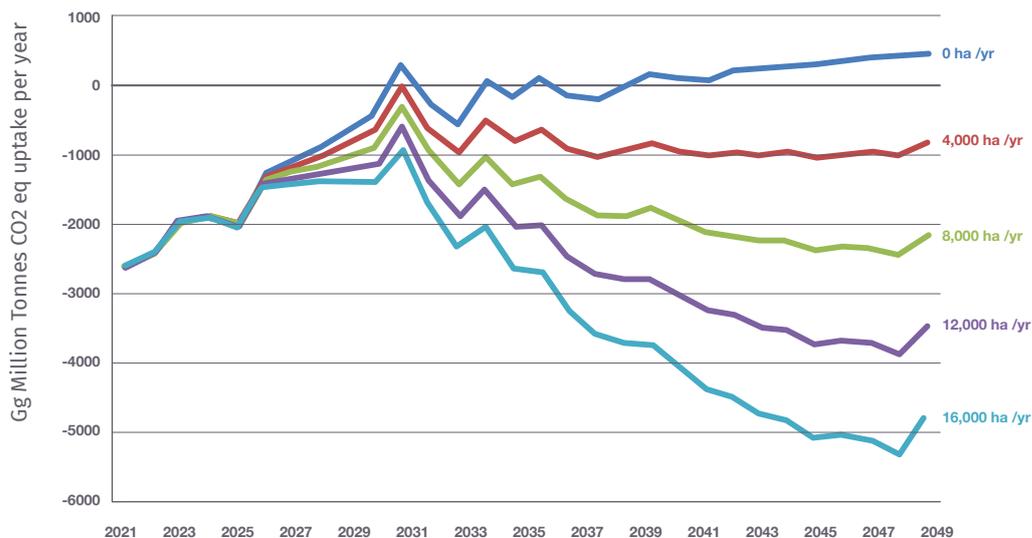
- Ireland's forests are a tremendous sink for CO₂ and through photosynthesis absorb carbon dioxide from the atmosphere. The Climate Action Plan recognises the importance of forests and timber, and the positive impact they make in sequestering and storing carbon. The rate of sequestration ('sinking') fluctuates over time due to changes in the age profiles of the estate and impacts on soils.



- Coillte has the capacity to increase the carbon sink by planting trees and creating new forests:
 - Conifers grow very well in Ireland and 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

Therefore, conifers are excellent at combating climate change as they sink CO₂ quickly; but actively managed broadleaves also play an important role as they provide a very good long-term store of carbon.

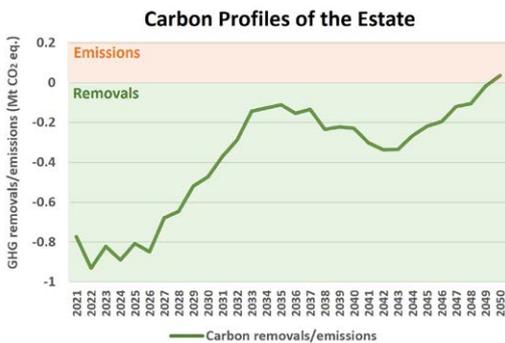
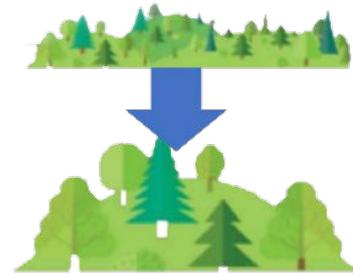
- We can increase the amount of CO₂ sequestered in these forests by increasing the level of afforestation across the country. If Ireland meets its afforestation target of 8,000 hectares per annum, it is estimated that an additional c. 53 Mt CO₂ eq. will be sequestered by 2050.



Projected emissions/removals based on different annual afforestation rates (excludes emissions/removals from managed forest lands)¹¹

Storing more Carbon

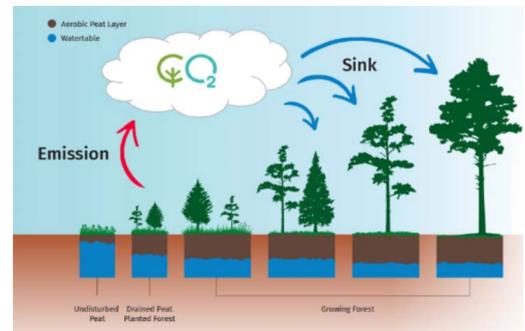
- **Ireland's forests are a large store of carbon** (c. 312 Mt carbon¹), and it is imperative that this store is protected, managed and increased in the long-term. An unmanaged forest estate would present a significant carbon emission risk in the long term due to biotic and abiotic factors, such as disease, storm damage and fire.



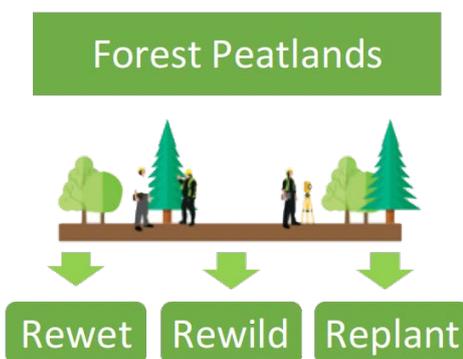
- **We have identified actions to increase our carbon removals and carbon store** through our research and analysis. These include:
 - Managing the age profile of our forest estate to improve its carbon efficiency.
 - Expansion and proactive silvicultural management of our broadleaf estate.
 - Redesigning our peatland forests where appropriate.

The chart displays the carbon profile associated with the management of Coillte's forest estate, including harvested wood products and product substitution, however it excludes removals of carbon associated with future afforestation targets and total foregone displacement.

- **It was essential to understand how we should better manage our peatland forests.** We examined the complexities and importance of our forest soils and forest stand characteristics (such as species, age, and productivity). As part of our analysis, we identified the areas of low productivity forests across our estate that are located on deep peats, and which present an emission risk and should be mitigated.



Adapted from Black & Gallagher 2010¹²

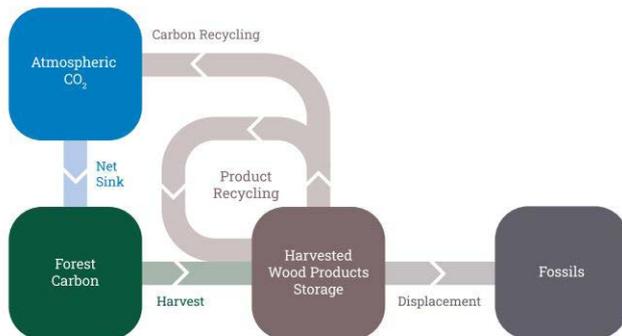


- **For peatland forests we have identified three climate mitigation measures.** These could be applied to different parts of the estate dependent on soil and stand characteristics and would help improve our carbon profile over time. These include:
 - **Rewet:** Remove trees and Bog Restoration
 - **Rewild:** Regenerate forests to Semi-Natural Wilderness
 - **Replant:** Replant with Productive Forests

Redesigning our forested peatlands through rewetting and rewilding will also potentially deliver biodiversity and ecological benefits.

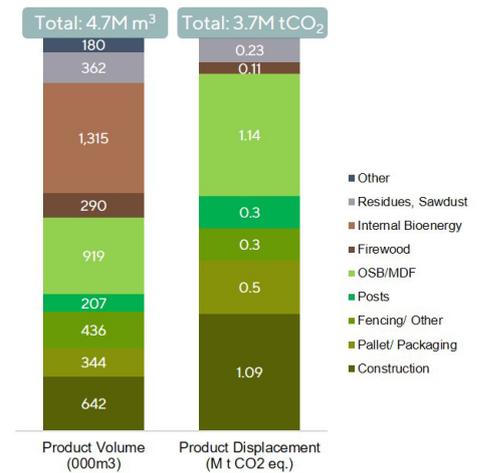
Substituting Carbon Intensive Materials

- **Wood products provide an important carbon store.** Wood products derived from our sustainably managed forests and used in construction and furniture, provide a stable long-term store of carbon.



- **Wood products provide an important ‘substitution effect’,** which arises when wood products are used instead of carbon intensive products (such as concrete, steel or plastic).
- This is illustrated in the circular forest bioeconomy diagram as suggested by Dr. Peter Holmgren.¹³

- **Irish timber has a very high ‘Product Displacement Factor’ of c. 0.77 CO₂/m³,** as the majority of timber harvested from our forests is used to create long-lived wood products. The Displacement Factor represents the amount of CO₂ emissions that could be avoided when a cubic metre of wood is used instead of carbon intensive products. In Ireland, we produce c. 4.7 million m³ of timber every year, which means that the foregone carbon displacement is c. 3.7 million tonnes of CO₂ per year.



Providing more Renewable Energy

- **Wind Energy is a substitute for fossil-based energy.** Our land base has been critical to the development of the renewable energy sector, having enabled over 30% of all installed wind farms in Ireland as both a land supplier and developer. There are a number of potential areas on the Coillte estate which are suitable for the generation of wind energy subject to access to the grid and wind yields.



Forests for climate

Further Considerations

It is important to note that the science in relation to forest, carbon and climate is continuously evolving and that there are areas where further work is required to improve the understanding of forests for climate. These areas include changes in the productivity of forests due to potential changes in future climate; understanding of the different silvicultural options, ecological considerations in forested peatlands, potential biotic and abiotic impacts on forests; and species adaptation to future climate.

In addition, forest and land-management prescriptions have been assessed at the landscape level and further assessment will be required at local scale to ensure that these measures are appropriate.

Opportunities

In summary, forests and soils provide significant opportunities to increase CO₂ removals from the atmosphere as well as improving the carbon store in our forests.

The following outlines the main opportunities that exist to deliver increased value for climate:

- **Create new forests**, with a mix of productive forests and native woodlands, which will increase tree cover and carbon sequestration in Ireland.
- **Manage our forest estate to enhance carbon storage** in our forests, soils, and wood products.
- **Redesign significant areas of our peatland forests** to improve their carbon balance.
- **Generate additional Renewable Wind Energy**, to power more homes in Ireland.

Forests for Nature





Forests for Nature

Coillte is fully committed to helping Ireland protect, enhance and restore areas of biodiversity. We have identified opportunities to protect and enhance the existing biodiversity across the estate, as well as adding new areas that would be managed primarily for nature. These areas would have nature as the primary forest objective while also delivering on the other forest objectives of **climate**, **wood** and **people** where appropriate.

Learnings and Considerations

We have assessed our estate using our existing bioclassification system, which identifies biodiversity site features and classifies areas in terms of their biodiversity value and importance.

Existing Biodiversity in Our Estate

- **The Coillte estate accounts for approximately half of Ireland’s total forests.** The estate consists of a rich tapestry of different habitats, ranging from conifer forests and mixed or broadleaved forests, to open upland bogs and heathlands, to lakes and rivers.
- **Currently 90,000 ha, which accounts for 20% of the estate, is managed primarily for biodiversity** across various habitat types including ancient and native woodlands, open habitats, and riparian zones.



Bioclass Ecological Categories

- **Coillte has developed ‘BioClass’**, a science-based procedure for assessing the ecological value of sites. In general, sites that contain the most important flora and fauna habitats have the highest value for biodiversity and therefore a higher ‘BioClass’.
- **Every part of the Coillte estate is available as a potential habitat** for a wide range of Ireland’s plants and animals and therefore has value for biodiversity.
- While ‘BioClass’ identifies and assesses the ecological value of sites on our estate, the classification is only the start of the process. Through our ‘BioForest’ approach, we then commence developing ecology and silvicultural plans to enhance and restore biodiversity, carrying out actions such as removal of invasive species, improving hydrology of sites and underplanting with native species.

Enhancing Biodiversity on Our Estate

- We have analysed our estate under four broad themes of **Forests, Uplands, Peatlands and Water** under which biodiversity potential was considered.

A broad description of each of the four themes:

- Forests** Forests >20% cover including conifer forest, mixed forest, broadleaved forest, and native forest.
- Uplands** Land >150m above sea level, ranging from conifer plantation forest to open heath, and blanket bog.
- Peatlands** Land <150m above sea level, on deep peat soils and includes habitats such as lowland blanket bog, raised bog, cutover bog, and conifer plantation on deep peat.
- Water** Highly sensitive catchments, for example freshwater pearl mussel catchments, and sub-basins.



Our assessments identified additional areas that could be potentially managed primarily for nature. Various options have been considered to enhance these additional areas including low impact silvicultural systems, rewilding, or long-term retention to allow them to develop naturally:

- *Converting to Continuous Cover Forestry* ancient forests, old woodland sites, mixed, native, and broadleaved forests.
- *Restoring or rewilding forested peatlands* within Special Areas of Conservation (SPA), Natural Heritage Areas (NHA) on deep peat and the top freshwater pearl mussel catchments.
- *Retaining areas of open ground* in SPAs and undesignated lowland peatlands.

Transforming the Estate for nature

- **Further analysis of the estate identified areas that may have future potential to be managed primarily for nature.**

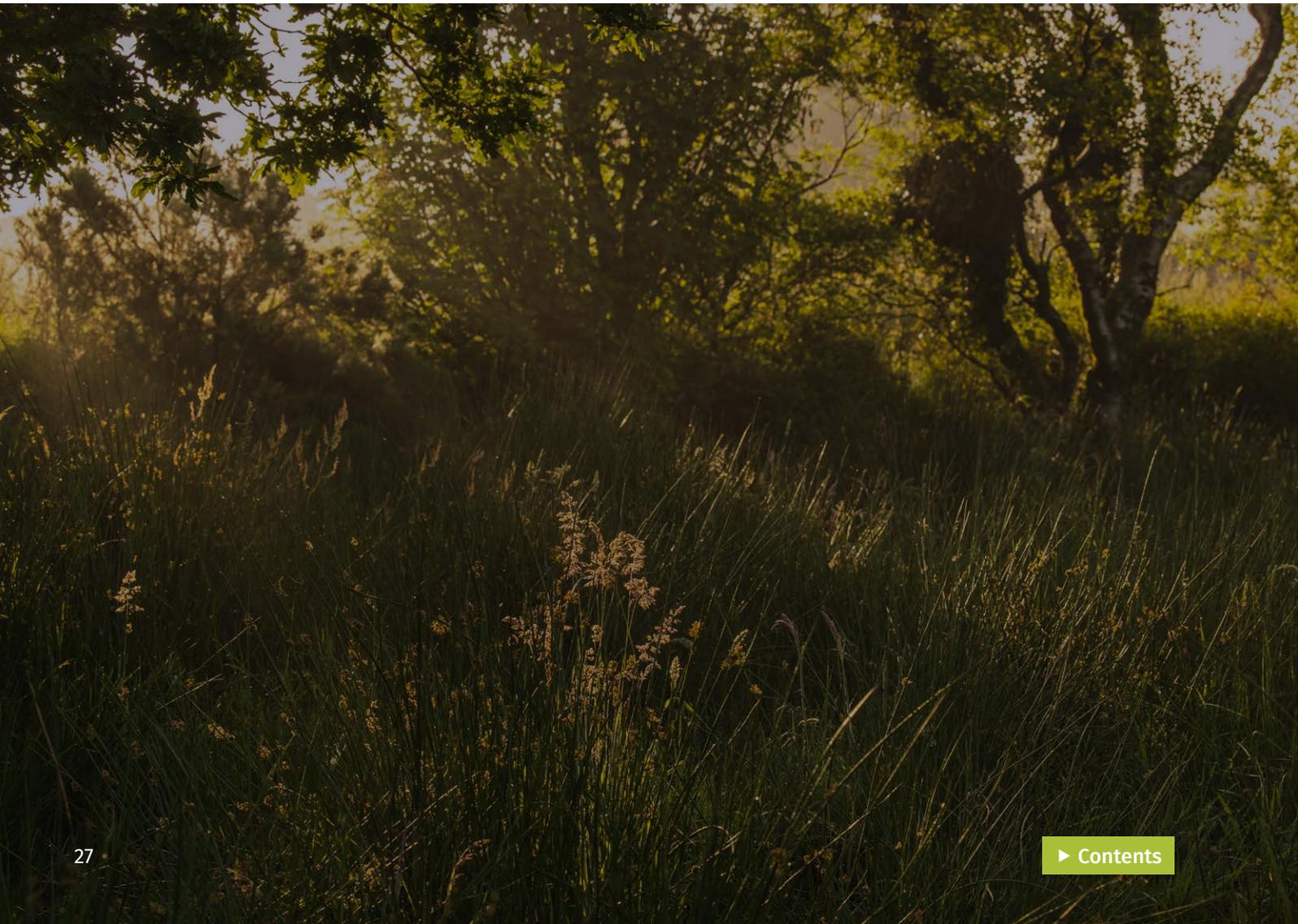
These 'legacy areas', where the current forest is not meeting one of our core objectives, can provide opportunities to create new habitats. Redesigning these areas would provide greater species diversification as well as potential ecological and climate benefits.



Further areas of our estate could be transformed for nature, through:



- *Converting peatland forests where appropriate to semi-natural wilderness to promote species diversification.*
- *Transitioning forests near recreational areas to semi-natural forests where appropriate.*
- *Redesigning poorly performing forests to enhance biodiversity and climate benefits.*





Forests for nature

Further Considerations

Further research is required in some areas, particularly in relation to forests and water. This will inform the management of biodiversity areas and the wider estate in relation to key species, habitats, and environmental features.

Ecological assessment of the potential additional biodiversity areas will be required to determine their biodiversity value or potential for restoration and to develop the appropriate silvicultural and management prescriptions.

Learnings from pilot projects such as the Wild Western Peatlands project will also help us to develop a range of solutions for rehabilitating other similar areas.

Opportunities

Forests provide significant opportunities to protect, enhance and transform land for biodiversity and nature. **The following outlines the main opportunities that exist to deliver increased value for nature:**

- **Enhance and restore** areas of existing biodiversity to improve their biodiversity value.
- **Manage additional areas** of our estate to be managed primarily for nature and biodiversity.
- **Transform and redesign legacy areas** of our forest estate to create new habitats that will increase the area being managed primarily for nature.

Forests for Wood





Forests for Wood

Coillte is fully committed to supporting the increased use and promotion of timber as a viable alternative to carbon intensive products and providing a sustainable supply of certified timber to support the increased demand from society for renewable and sustainable materials.

Learnings and Considerations

The increased use of wood and wood-based products presents a great opportunity to tackle both the climate emergency and the need to decarbonise our built environment.

Wood is a naturally renewable material that:

1. **Sequesters carbon** in forests as trees grow.
2. **Stores carbon** in harvested wood products.
3. **Substitutes** for carbon intensive traditional building materials.
4. **Helps to address the housing crisis** by supporting the shift to prefabrication and off-site solutions.
5. **Contributes to our growing bioeconomy** by ensuring that we are using sustainable products.
6. **Contributes to a circular economy** as wood can be reused, recycled, and recovered.

Sustainable Supply of Certified Irish Timber

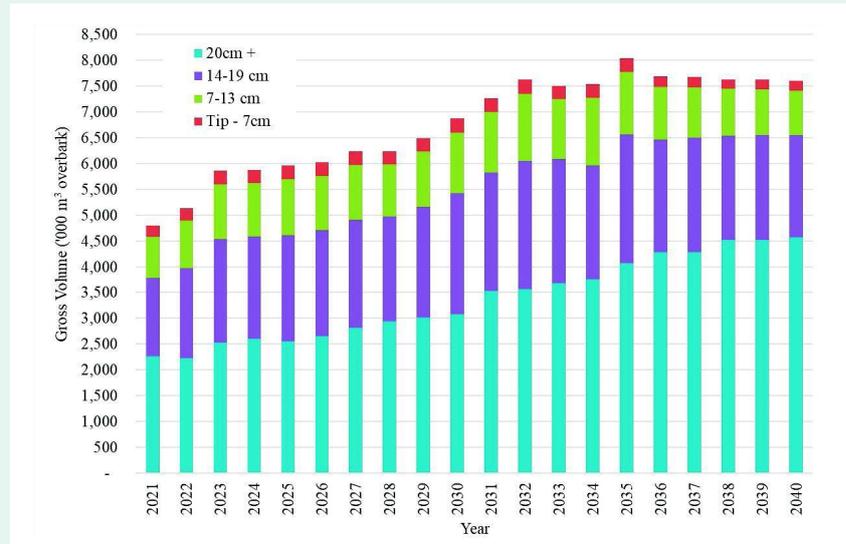
- Coillte's timber and forest products are **sustainably produced** in accordance with two forest management certification schemes, namely FSC® (Forest Stewardship Council®), and PEFC™ (Programme for the Endorsement of Forest Certification).
- Certification of Coillte's forest estate is independently verified annually.
- Consumers and developers are increasingly seeking green, low carbon building products and timber must be sourced from certified sustainably managed forests.
- In addition, timber and forest products contribute towards the mitigation of climate change by acting as a substitute for a vast range of synthetic materials derived from non-renewable sources.





- Demand for wood will increase by 3.1% p.a. * and Coillte’s focus is to **supply a viable and sustainable level** of Irish certified timber.
- Annual timber output is forecast to increase substantially in Ireland from c. 4 million m³ up to 8 million m³.
- As developers transition to off-site building solutions, this will lead to increased timber use in timber frame housing.

Forecast of Gross Volume Production (Republic of Ireland)



Coford All Ireland Roundwood Production Forecast 2021- 2040¹⁴

- **The carbon benefits of building with wood are three times greater than conventional masonry builds**, using almost eight fewer tonnes of carbon dioxide per housing unit (based on a four-bedroom house), according to research carried out by Bangor University’s Biocomposites Centre.¹¹
- Together with the Forestry Sector, we need to continue to work with governmental agencies to promote and support greater use of sustainable wood products in construction.



Modelled net carbon benefits of increased use of timber¹¹

Supporting Innovation and Promoting Timber Use

- **There is a great opportunity to increase research, development, and innovation (RD&I)** and develop an industry led Centre of Excellence to underpin market-led product and systems development and marketing and promotional activity.
- **Sustained and coordinated investment in RD&I, training and technical support** will bring new technologies and solutions, such as mass timber CLT (Cross Laminated Timber) to the market. This will support the increased use of wood and of wood products particularly in the construction sector and in larger scale developments.



- **Coillte, along with the wider Forest Products Sector, needs to continue to work with design professionals** to develop training, technical guidance and supports, to aid practising specifiers to choose sustainable timber building materials.

- **Coillte needs to continue to promote sustainable wood products**, including enhancing awareness with the wider public on the positive environmental benefits wood offers and the critical role our forests and forest products play in mitigating climate change.
- **Coillte needs to continue working with construction industry regulators** to enable greater use of timber for new high rise, low carbon timber building systems such as mass timber.



Forests for wood

Further Considerations

Further work is required to understand and address the low level of uptake of homegrown wood in timber frame building solutions that will support the drive to net zero and address the housing crisis.

Building regulations restricting the use of wood in certain construction applications need to be addressed and brought in line with other European jurisdictions.

Measures are needed to encourage investment in research, development, and innovation to underpin market-led wood product development and promotion.

Opportunities

Forests provide significant opportunities to decarbonise our built environment, to develop innovative, low carbon, sustainable wood products, to support job creation and to support the growth of the emerging bioeconomy. **The following outlines the main opportunities that exist to deliver increased value for wood:**

- **Produce a sustainable supply of Irish certified timber** that support the construction of Irish homes.
- **Promote the increased use of wood products** to ensure we are using sustainable products to support the bioeconomy and de-carbonise our built environment.
- **Create new innovative wood products**, to significantly increase the substitution of carbon intensive materials and support the construction of 300,000 homes in Ireland.

Forests for People





Forests for People

Coillte as Ireland's largest outdoor recreation provider is fully committed to playing a key role in providing extensive access to the outdoors through its recreation infrastructure and to unlock the benefits of forests for the public. Coillte, through our open forest policy, provides a leading role in the provision of recreational forests for local communities, not only providing outdoor spaces to enjoy, but also creating opportunities for local employment and enterprise. We actively support the Woodlands for Health Initiative, which has demonstrated the direct benefits of forests on people's well-being and mental health.

We have identified opportunities to enhance the recreation offering throughout the estate, enabling the development of world class destinations, that also support the creation of new jobs.

Learnings and Considerations

- The substantial rise in visitor numbers during the Covid-19 pandemic underlined the importance of our forests in providing access to the outdoors and supporting peoples' mental and physical wellbeing. Every year there are over 29 million visits¹ to Irish forests.
- The Woodlands for Health project involves a nature based intervention for mental health and wellbeing in Coillte forests. The 2020 Evaluation Report¹⁵ indicated an improvement in people's wellbeing (31%) as a result of the programme.
- Located at a range of scenic locations in the country, the Coillte estate is in a strong position to play a key role in supporting the provision of new tourism and recreation uses, including thematic tourism and active recreational projects at appropriate locations. It is considered that investment in outdoor recreation and forest-based activities drives economic activity, supporting job creation and sustaining local communities.

Increasing Recreation for Communities

- We identified potential opportunities to increase the recreational offering through community-based forests across the estate.
- The analysis focussed on our forest estate adjacent to population centres to understand the recreational potential that our forests can provide to local communities.



Coillte properties in proximity to population centres



Enabling World Class Destinations



- Coillte, through our assets, experience, and leadership, is well positioned, in partnership, to support the growth in Tourism and Recreation in Ireland through:
 - World Class Visitor Destinations
 - Adventure & Activity
 - Private Investment
- Coillte has strategic partnerships in place with both Fáilte Ireland and the Department of Rural and Community Development to enhance recreational facilities to support increased tourism and economic activity in rural areas. Coillte has also partnered with councils, communities, agencies, and businesses in supporting the development of large-scale facilities across the estate from Lough Key Forest Park in Roscommon to Rossmore Park in Co. Monaghan to Center Parcs in Longford.



Supporting Job Creation

- Coillte has supported the development of a vibrant Forest industry which contributes €2.3 billion to the economy while supporting c. 9,000 direct jobs predominantly in rural settings.
- There is potential to support the creation of further direct and indirect jobs through:
 - Afforestation and renewable energy development
 - Creation and enhancement of biodiversity areas
 - Development and maintenance of additional recreational areas
 - Supply of certified wood and the promotion of wood products





Forests for people

Further Considerations

In relation to increasing forest recreation for communities, it should be noted that our work to date has been desk-based with the objective of identifying the potential scale of the opportunity at a national level. Further assessments are required at a local level to identify sites and ensure site suitability. This will include engagement with local communities and stakeholders to understand local needs and objectives and to develop a model for successful delivery.

Opportunities

Forests provide opportunities to meet society's demands for natural outdoor recreation, health, and wellbeing and to support rural jobs. **The following outlines the main opportunities that exist to deliver increased value for people:**

- **Increase the number of our recreation areas** throughout the country to benefit physical and mental wellbeing.
- **Create world-class visitor destinations** in our forests to support the growth in tourism and recreation.
- **Create new jobs in rural communities** to support the just transition to a low carbon economy.

Our Ambitions



Our Ambitions*

Delivering Multiple Benefits

We have identified high-level ambitions under the four main objectives of **climate**, **nature**, **wood** and **people** that will underpin the achievement of our strategic vision for our future forest estate.

<h3>Forests for climate</h3>  <p>Enable the creation of 100,000 hectares of new forests, half of which will be native woodlands, which will sink 18m tonnes CO₂ by 2050</p>  <p>Manage the existing Forest Estate to increase the carbon store by 10m tonnes of CO₂ by 2050</p>  <p>Redesign 30,000 hectares of Peatland Forests for climate and ecological benefits by 2050</p>  <p>Generate an additional 1 Gigawatt of renewable wind energy to power 500,000 homes by 2030</p> 	<h3>Forests for nature</h3>  <p>Enhance and restore biodiversity by increasing the area of our estate managed primarily for nature from 20% to 30% by 2025</p>  <p>Transform areas of our forests so that 50% of our estate is managed primarily for Nature in the long-term</p> 
<h3>Forests for wood</h3>  <p>Produce 25m cubic metres of certified Irish timber, to support the construction of 300,000 homes by 2030</p>  <p>Promote the use and benefits of wood products to increase the level of timber homes from 20% to 80% by 2050</p> 	<h3>Forests for people</h3>  <p>Enable the investment of €100 million in world-class Visitor Destinations to support growth in tourism and recreation by 2030</p>  <p>Double the number of Recreation Areas to 500, to benefit local communities and people's wellbeing</p>  <p>Create 1,200 new jobs in rural communities to support the just transition to a low carbon economy</p> 

Next Steps

Coillte has developed a strategic vision for the future forest estate to deliver the multiple objectives of forestry under the four main objectives of **climate, nature, wood and people**.

Our ambitions represent the starting point for our vision and we welcome people's consideration and feedback, as part of the development of our strategic plan.

We would now like to hear your views to help shape this vision. We will consider these submissions in the development of our vision and our strategic plan. Our draft strategic plan will be subject to Strategic Environmental Assessment and screening for Appropriate Assessment. When this process is complete, Coillte will be guided by the adopted plan when carrying out all future activities and development.

A report, which will provide a summary of submissions received will be published on our website.

How to make your submission

Everyone is welcome to make a submission through our online consultation portal. The consultation will run from **24th May – 5th July 2022**. Submissions must be received **before 5 pm on 5th July 2022**.

All submissions must be made through the online consultation portal:

<https://coillte.citizenspace.com/coillte-communications/futureforestvision>

How your submission will be processed and stored

All the information submitted by participants will be aggregated and collated for the purposes of our research. In doing so, all data elements that could identify a single individual will be removed rendering the data anonymous. Identifiable data will be retained for up to 3 months from the date the submissions are closed and will be used only for validation and quality control of responses.

Under the European Communities (Access to Information on the Environment) Regulations 2007–2018, Coillte is subject to disclosure of submissions and comments received; however this will be done in aggregated and unidentifiable format. Accordingly personal, confidential, or commercially sensitive information should not be included in your submission. It will be presumed that information contained within your submission, is releasable under the European Communities (Access to Information on the Environment) Regulations 2007–2018.

Personal data (i.e. your name; contact details; IP address) will be processed in accordance with the EU General Data Protection Regulation (GDPR EU 2016/679), the Data Protection Acts 1988–2018. Please be advised that IP address data is gathered as soon as you enter the consultation portal. Further information about how your personal data is processed is available in our Privacy Policy, accessible at <https://www.coillte.ie/privacy-policy/>

References

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- 2 An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems <https://www.ipcc.ch/srccl/>
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- 7 Programme for Government Our Shared Future <https://assets.gov.ie/130911/fe93e24e-dfe0-40ff-9934-def2b44b7b52.pdf>
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- 10 UN Office for Sustainable Development: Sustainable Development Goals (SDGs) <https://unosd.un.org/content/sustainable-development-goals-sdgs>
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- 12 The greenhouse gas balance of peatland forest Kevin Black and Gerhard Gallagher <http://www.coford.ie/media/coford/content/publications/projectreports/cofordconnects/env11.pdf>
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- 14 All Ireland Roundwood Production Forecast 2021-2040 <http://www.coford.ie/media/coford/content/CofordAllIrelandRoundwoodBookREVISED150721.pdf>
- 15 Woodlands for Health Evaluation Report 2020 <https://www.mentalhealthireland.ie/woodlands-for-health-evaluation-report-2020/>

 **COILLTE**

