Environmental Pillar (2022) Coillte's Strategic Vision For Its Future Forest Estate

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Environmental Pillar

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Introduction

This is a submission on behalf of the Environmental Pillar in response to the public consultation on Coillte's strategic vision for its future forest estate. The Environmental Pillar is an organisation that works to represent the views of 32 of Ireland's leading environmental NGOs. We work to promote environmental sustainability and the protection of our natural environment. Our submission is informed by the decades of experience of our members who are actively involved in woodland conservation, sustainable forestry management, regulation of the forestry sector and wider environmental conservation.

At the outset we must highlight our disappointment with the format of the consultation, whereby the public are only afforded the opportunity to provide input via an online survey. The vast majority of the online questions are rhetorical and leading and aren't supported with sufficient detail on specifically what Coillte proposes to do. Likewise, the lack of detail in the supporting report makes it extremely difficult to determine specifically what Coillte proposes to do. It is not sufficient for Coillte to say, for example, that lands will be managed for biodiversity without clarifying what that management will be, what conservation objectives will underpin that management and what habitats and species will be prioritised. Throughout the report Coillte has stated that their positions are based on the best available science but no supporting evidence is provided. This is a major weakness undermining the credibility of the strategic vision report. In short **there is insufficient ambition in places and elsewhere insufficient detail and supporting scientific evidence underpinning Coillte's new strategic vision for us to determine whether this is an ambitious new vision or more of the same old vision with some superficial changes**. This needs to be addressed.

The right tree, in the right place, under the right management can benefit climate, biodiversity and water quality while also generating space for recreation and reflection and supporting sustainable employment. However, the opposite also holds true, with poorly planned afforestation resulting in greenhouse gas emissions, biodiversity loss, pollution and negative socio-economic impacts on affected communities. We are supportive in principle of the stated objectives of the strategic vision i.e. to aim to sustainably balance and deliver the multiple benefits of Ireland's state forests across: climate, nature, wood, and people and "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."

Ireland's unnatural and industrial model of forestry is arguably the least sustainable in Europe. For example, Ireland has the highest share of forest area dominated by introduced tree species and the third highest level of plantation forestry in Europe. This is in stark contrast to Europe as a whole where 87% of forest area is semi-natural[3]. Ireland's forest cover is dominated by plantation forestry with 61.3% of the national forest estate composed of non-native conifers, with 44.6% of forestry in Ireland being made up of just one species, Sitka spruce (*Picea sitchensis*)[1]. The sector remains dominated by low diversity plantations which are clear-cut. Commercial forestry is a leading threat and pressure on protected habitats and species in Ireland[2]. Commercial forestry is also a significant pressure on water quality and freshwater biodiversity at a national level and is the greatest pressure nationally impacting on these ecologically important water bodies[3]. There are also significant legacy issues with forestry on peat which have serious implications for Ireland's ability to achieve carbon neutrality in our land use sector[4].

Coillte manages 440,000 ha or 7% of Ireland's land area and controls the vast majority of the 50.8% of Irish forestry which is in public ownership. As a public authority and leader in Irish forestry, **Coillte has the ability and the responsibility to lead the Irish forestry sector towards a more sustainable model of forestry and land use**.

In the Environmental Pillars (2019) Greening Irish Forestry – Recommendations for Nature Friendly Forestry, we highlighted some key recommendations to deliver a transition to a sustainable forestry and nature friendly forestry sector in Ireland. Specific recommendations that should be integrated into Coillte strategic vision are:

Forestry must enhance biodiversity at a community and regional level by delivering:

- New native woodland establishment while also enhancing and connecting existing woodlands.
- Ambitious targets for the planting of broadleaves.
- Ambitious targets to diversify the species mix within Irish forestry by capping the percentage of non-native tree species that can be planted regionally through afforestation and reforestation.
- Forestry that is compatible with the delivery of ecosystem services such as carbon sequestration, flood attenuation, pollination and water quality protection.

Forestry must ensure the protection of our environment through:

- The full implementation of Irish and European environmental law.
- Working with partners such as environmental NGO's and government bodies to develop tools to ensure the conservation of habitats and species at a landscape level.
- Ensuring that the afforestation and forestry management is not in conflict with the conservation of High Nature Value farmland and threatened habitats and species.
- The adoption of Close to Nature Silviculture and Continuous Cover Forestry, prioritising the conversion of plantations within environmentally sensitive sites.
- In keeping with the recommendations in the Hydrofor report, there should be a cessation of afforestation with conifers on peat soils in acid-sensitive headwater catchments. Reforestation in such catchments, should be conditional on site-specific mitigation measures such as aquatic buffer zones and sediment traps, which can demonstrate empirically that site-specific impacts on water quality and aquatic biodiversity can be mitigated throughout the forest management cycle.
- Addressing the spread of exotic tree species into protected habitats and on to private land e.g. Rhododendron ponticum.
- Ending the use of damaging pesticides across all Coillte land holdings and adopting where necessary Integrated Pest Management (IPM) and of alternative approaches or techniques, such as non-chemical alternatives to pesticides in line the Commission's

proposal on the Sustainable Use of Pesticides. Adopting CNS and CCF will reduce the sector's dependence on pesticides.

- Ensuring that native woodland buffers are used where appropriate to protect water quality.
- Ensuring the proper training and safeguards are in place to protect biodiversity.

Forestry must contribute to the viability and quality of life within rural communities by:

- Establishing regional thresholds for forest cover where environmental and social conflicts are evident.
- Ensuring that forestry licensing is transparent, unbiased and open to public participation.

A new mandate: Public lands managed in the public interest

A new vision requires a new mandate. Coillte's mandate under the 1988 Forestry Act must be reviewed to bring it in line with societal expectations and the stark realities of the climate and biodiversity crises. The review should be informed by input from the public. The Programme for Government[5] commits to "Ensure that Coillte's remit supports the delivery of climate change commitments and the protection of biodiversity. We are fully committed to the retention of the commercial forests of Coillte in public ownership." To deliver on this commitment it will be necessary to amend Coillte's remit to prioritise the delivery of climate change commitments and the protection of biodiversity. The main provisions of the 1988 Act provided for the establishment of a company (Coillte Teoranta). The principal forestry related objects of the company were:

- to carry out the business of forestry and related activities on a commercial basis and in accordance with efficient silvicultural practices;
- to establish and carry on woodland industries;
- to utilise and manage the resources available to it in a manner consistent with the above objectives.

The general duty of the company under the act is:

(b) to conduct its business at all times in a cost effective and efficient manner,

(c) to have due regard to the environmental and amenity consequences of its operations,

The emphasis of the company on profitability and efficiency has contributed to the evolution of a forestry model that has prioritised short-term profits while externalising many of the costs of production in the form of negative impacts on the environment and society. This outdated approach to forestry requires root and branch reform. It must also be accepted that the range of legacy issues resulting from past mistakes now need to be urgently addressed. The particularly intensive forestry model which Coillte has employed is not compatible with a strategic vision based around the delivery of public goods in the form of climate, nature, people and sustainable development including wood products. **Coillte needs a new mandate which empowers the state to utilise public lands in the public interest**, prioritising the management of Coillte's land holding to contribute to the national effort to halt and reverse biodiversity loss and to reduce greenhouse gas emissions and maximise the long-term carbon storage capacity of soils and habitats.

Under Coillte's new mandate the roles of Coillte Teoranta and Coillte Nature should be so closely aligned that there should be no need for two separate entities. The Essence of

Sustainable Forest Management is that the three legs of the Sustainability stool are balanced, that is the Environmental, Social, and the Economic. There should be no need for Coillte Nature? In fact, by establishing Coillte Nature, it highlights the unsustainability of the Coillte Teoranta Forestry Model. **Coillte Teoranta should therefore be subsumed into the overall ethos and mandate of Coillte Nature.**

A new vision requires new visionaries - the Board of Coillte is dominated by people with experience in business, venture capitalism and financial services. The Coillte board has lacks personnel with either environmental or forest management expertise or experience, which is a major deficit. If Coillte is sincere about fundamentally shifting their mandate then **new people with experience relevant to Coillte's new environmental mandate need to be brought onto the board.**

Image 1: Blue Bells in the Burren, Co. Clare (Fintan Kelly)

Present a detailed plan of what Coillte proposes to do and submit that plan to environmental assessment

As previously stated there is insufficient detail provided in the online questionnaire or the supporting report for the public to determine specifically what Coillte proposes to do. While some of the headline targets look promising on paper there is a lack of detail when it comes to the level of ambition being proposed by Coillte. Coillte's ongoing operations and legacy issues are resulting in ongoing negative impacts on biodiversity, climate, water and people. The information supporting this consultation lacks sufficient detail for us to determine if ongoing issues will be addressed or if Coillte will genuinely lead the national effort to address our biodiversity and climate crisis. There are also a number of policies and misleading statements within the supporting report which we do not support and which are not supported by the best available scientific advice.

Coillte should present a detailed strategy document which outlines specifically what the new vision will entail. This should be supported by specific targets for peatland restoration, specific measures linked to ensure compliance with the Water Framework Directive e.g. addressing water pollution and acidification in upland catchments. Coillte should outline how the new vision will deliver favourable conservation status under the Habitats and Birds Directives across all designated Natura 2000 sites and other areas of high biodiversity value within their landholding. Coillte should outline how they will lead in the implementation of the EUs Biodiversity Strategy for 2030 with an emphasis on nature restoration. This detailed plan should be informed by the feedback of this round of consultation and should be subject to environmental assessment (Strategic Environmental Assessment, Appropriate Assessment) as well as another round of public consultation.

Coillte have presented their strategic vision as sustainably balancing the delivery of multiple benefits of Ireland's state forests across four strategic objectives: climate, nature, wood, and people. We will provide feedback under those headings.

Forests for Climate

We welcome Coillte's recognition of the seriousness of the threat posed by climate change and the urgent need for Ireland to meet targets to reduce greenhouse gas emissions, including within the land use sector. Having said that, the fundamental shift in forestry necessitated by the urgent need for climate action and adaptation within the forestry sector is not reflected in the actions proposed by Coillte. **It is critically important that Coillte embrace the need for change, otherwise it may be perceived that the strategic vision is a cynical attempt to cherry-pick actions which suit Coillte's own business interests.** Climate change should not be used as an excuse to reinitiate afforestation while failing to address serious legacy issues and maintaining a business as usual approach to forest management.

Afforestation should not be viewed as an alternative to sustained cuts in emissions within the agricultural and land use sectors. As outlined by the Intergovernmental Panel on Climate Change, such land sequestration is impermanent (relative to the thousands of years of mitigation required), highly uncertain, and subject to carbon cycle rebound effects that seriously reduce their value.

Ireland has declared both a climate and a biodiversity emergency. The biodiversity crisis should be equally prioritised by Coillte. Proposed solutions that may exacerbate the biodiversity crisis should not be countenanced. Coillte should look to identify win-win land use options that protect and restore biodiversity while enhancing the carbon sequestration and storage capacity of habitats such as peatlands, wetlands, grasslands and native woodlands. This should apply to all Coillte's land holdings and not just to new afforestation. Coillte states that their approach to climate is based on their collaboration with leading climate, carbon, and soils experts. **We call on Coillte to make the scientific basis for Coillte's positions publicly available**. It is not sufficient for Coillte to say that the position they have taken has a strong scientific basis without providing the science and the rationale behind different trade-offs.

The need for climate change adaptation

Coillte states that they "recognise the risks that climate change presents to our forest estate in terms of species suitability, productivity, and abiotic and biotic threats such as disease and fire." This unfortunately is not reflected within the strategic vision. Coillte's business model will presumably continue to be predominantly focused on mono-culture plantations of non-native conifers that will be manufactured into short-lived wood products.

Plantations of even aged stands of monocultures that are harvested using clear-cuts are particularly vulnerable to the projected increase in climate driven biotic and abiotic pressures such as disease, pests, wind throw and fire[6]. We have already seen the impact that tree diseases such as Phytophthora ramorum and Ash Dieback (Hymenoscyphus fraxineus), wind throw and forest fires have had on Irish forestry in recent decades. Internationally new approaches are being adopted to transition plantation forestry to forests that are more resilient to the effects of a changing climate. These changes in forest management also present new opportunities to improve biodiversity values within existing and new plantation forests. Increasing species diversity within forests is one common approach to improving the biodiversity value and climate change reliance of commercial forestry[7].

Research in the UK has concluded that 'business as usual' forest management will become unsuitable under the two warmest and driest climate variants, marginal under four variants, and borderline suitable under the remaining five variants. To safeguard the ability of forestry to continue to deliver forest products and a wide range of ecosystem services some adaptation measures to climatic impacts are needed, such as transformation to more diverse species forests managed using low-impact silviculture systems[8]. With careful design and proper management, mixed-species plantations can be more productive and have more advantages in biodiversity, economy and forest health over monocultures[9]. Resilience and sustainability can be achieved if policies control standing stock, age class distribution and the use of diverse species mixes[10].

Close-to-nature silviculture (CNS) has been widely advocated as being the best approach for managing forests to cope with future climate change[11]. Many attributes of CNS can increase the adaptive capacity of European temperate forests to climate change. CNS promotes structural diversity and tree resistance to stressors, and growing stocks can be kept at low levels.
Research has identified six principles for enhancing the adaptive capacity of European temperate forests in a changing climate[12]:
(1) increase tree species richness, (2) increase structural diversity, (3) maintain and increase genetic variation within tree species, (4) increase resistance of individual trees to biotic and abiotic stress, (5) replace high-risk stands and (6) keep average growing stocks low.

Coillte should set ambitious targets to transition towards Close-to-Nature Silviculture (CNS) and Continuous Cover Forestry (CCF). The Programme for Government has committed to the promotion of "close to nature-continuous cover forestry systems to ultimately create permanent biodiverse forests containing trees of all ages." Coillte is well placed to lead this national movement towards a new regime of forestry management that has the capacity to deliver ongoing ecosystem and forest services under various climate change scenarios. **Coillte and DAFM should support the development of an EU "closer-to-nature" voluntary certification scheme**, which is proposed within the European Commission's communication on the New EU Forest Strategy for 2030, so that the most biodiversity friendly management practices could benefit from an EU quality label.

Image 2: Pro Silva Close to Nature Forest Management in the Ardéche, France. A plantation is in the process of being converted to Close to Nature Silviculture (Fintan Kelly)

Prioritise peatland restoration as biodiversity and climate action

Peatlands are the most efficient terrestrial ecosystems at storing carbon. They cover a mere 3% of the World's land area yet their peat contains as much carbon as all terrestrial biomass and twice as much as all the world's forests combined[13]. Peatlands have played an important role in regulating the amount of CO_2, N_2O and CH_4 in the atmosphere and act as net greenhouse gas (GHG) sinks in their pristine state[14][15]. However, degradation by humans as well as climate change and land use change are compromising this vital ecosystem service and switching the peatlands of North West Europe into GHG sources[16]. The release of vast amounts of GHG will have a positive radiative forcing (RF) on atmospheric temperature and create a positive feedback to climate change.

The ability of peatlands to store carbon for long periods of time means they are capable of slowing the rate of climate change. Peatlands are much more efficient at storing carbon than other terrestrial ecosystems such as forests because even the most productive non-peatland ecosystems reach a point where carbon capture plateaus and the total amount of carbon stored in the soil and vegetation levels off. In peatlands carbon may continue to grow for thousands of years as the peat deposits accumulate[17]. Over periods of millennia, the CO_2 sequestered and stored in peat resulted in a net cooling of the atmosphere[18].

Drainage seriously alters the physical and hydraulic characteristics of peatlands and inevitably the biogeochemical processes that are responsible for the net fluxes of CO_2, CH_4 and N_2O[19]. The drainage of the peat for afforestation and other extractive activities results in a lowering of the water table and a deepening of the oxic zone resulting in the oxidation of peat and the loss of C in the form of CO_2 and Dissolved Organic Carbon (DOC). While forestry on drained peat may result in gains in C storage associated with increased above and below ground litter input from trees and shrubs and the obvious gain in C storage in the biomass of the trees and vegetation[20] ongoing loss of C through oxidation and DOC losses must be considered. Clear felling also alters the stand density as well as the site hydrology and may result in significant losses of peat, increasing emissions of CO_2 and N_2O[21]. Recent Irish research has also highlighted the influence of forestry on water table drawdown, which is visible in all bog types but particularly in raised bogs[22]. There are significant emissions embedded within forestry operations, manufacturing and distribution of wood products, these emissions must also be factored in.

The analysis of the GHG dynamics of plantations on peatlands over short time spans is myopic. Over normal forestry cycles the increase in tree biomass and indeed the decrease in CH_4 emissions from peatland after drainage will cause afforestation to have a negative radiative forcing on global warming. However, when considering the GHG balance of the peatlands, the importance of Carbon and the long-term Carbon sequestration of peatlands much longer timescales than a normal forestry cycle must be considered or indeed the lifespan of pallets, stakes or MDF products. When longer time spans are considered the need to protect the carbon stored in peat and the potential carbon sequestration capacity of active peatlands becomes an obvious priority over maintaining forestry on peat[23][24][25].

The Irish context

In the most recent EPA inventory, Land Use, Land-use Change and Forestry (LULUCF) sector was a net source of 4.8Mt CO2eq in 2018. The most recent projections published by the EPA for LULUCF indicate that, with current policies and measures, net emissions for the sector will increase from 4.5 Mt CO2eq in 2019 to 7.1Mt CO2eq in 2030. Ireland's Climate Change Advisory Council (CCAC) proposes that in order for net emissions for LULUCF to achieve a 51% reduction, this projected trend in sectoral emissions will need to be reversed. It is our view that in order to change the land use sector from a net source to a sink, will require wide ranging changes to how we manage our landscape, not least in how we manage commercial forestry.

Overall, Irish peatlands are estimated to store 2216Mt of carbon (uncertainty range: 2005–2320). An approximately equal proportion (42%) of the carbon store is located in the raised bogs and lowland blanket bogs, with the remainder (15%) in mountain blanket bogs[26]. Forestry covers 450,940 ha of peatlands in Ireland[27] and accounts for around 609.5 Mt C. Under a "business-as-usual" approach, where a peatland has been drained, we can expect that CO_2 emissions will persist in the absence of mitigation measures. Natural and cutover bogs hold just over half of all of the Soil Organic Carbon stored in Irish peatlands, which represent two-thirds of the national soil carbon stock. This has major implications for policy decisions **and requires an urgent suite of actions to (1) ensure that these carbon stocks remain in the ground and (2) promote the development of carbon sinks in all types of land use.** International biodiversity and climate change conventions [Convention on Biological Diversity and United Nations Framework Convention on Climate Change (UNFCCC)] now recognise peatlands as a priority for action, with peatland rewetting and

restoration identified as “low-hanging fruit, and among the most cost-effective options for mitigating climate change”[28].

Coilte own 232,500 ha of peatlands making them the largest owner of peatland habitat in Ireland. Tens of thousands of hectares of rare raised bog and blanket bog habitat have been drained and afforested in past decades[29]. Coillte needs to address the significant legacy issues in Irish forestry that have resulted in 60% of the Irish forestry on peat being State owned, with Coillte being responsible for the vast majority[30]. While industrial scale afforestation of bogs has thankfully ceased, the ongoing management and reforestation of these habitats has significant biodiversity, water quality, climate and health impacts with additional negative ecological impacts on species at a landscape level and on adjoining habitats. These plantations continue to be a source of GHG emissions through their role in the ongoing drainage and oxidation of peat and the loss of DOC following ground preparation and clearfell. Action needs to be taken to end the practice of clearfelling on peat soils (where doing so would be compatible with other legal obligations) and there needs to be significant investment in the restoration of afforested peatlands. Research has confirmed the multiple benefits of forest removal on deep peats, highlighting the removal of trees from areas where yields are particularly low as a clear win-win scenario[31].
Coillte’s commitment to redesign 30,000 hectares of Peatland Forests for climate and ecological benefits by 2050 is extremely weak. This represents just 13% of the peatlands owned by Coillte and there is no clear commitment towards restoration.

1. **Coillte must show clear leadership and commit to restoring, rehabilitating and sustainably managing a large proportion of the 232,500 ha of peatland in their ownership with clear restoration targets and timelines.**
2. **Coillte should end the practice of clearfelling on peat soils (where doing so would be compatible with other legal obligations).**
3. **The restoration of afforested peatlands should be prioritised by Coillte where:**

    a) **rehabilitation would prevent ongoing loss of peat through oxidation and forestry management**
    b) **restoration may restore the carbon sequestration capacity of a peatland**
    c) **where the restoration would deliver positive conservation benefits for biodiversity on site and in the wider landscape, with an emphasis on Natura 2000 sites and high priority sites identified within Coillte’s BioClass system.**
    d) **where restoration would positively improve water quality by reducing acidification, pollution, sedimentation and eutrophication associated with forest management.**

Image 3: Sphagnum Moss Species on Coolamber Bog, County Longford (Fintan Kelly)

Sustainable afforestation and forest management

Coillte has committed to increasing the amount of CO_2 sequestered in Irish forests by increasing the level of afforestation across the country. There is a growing body of research which highlights that the use of overly simplistic targets for land-use change such as the number of trees planted or annual afforestation rates can be misleading, potentially contributing to policy failure and misuse of carbon offsets[32]. To maximise GHG reductions a more nuanced approach is required to land use management which recognises spatial and temporal variability as well as the complexity required to deliver across a multitude of interconnected environmental and socio-economic policy objectives.

A number of Scottish studies have highlighted the limitations of area-based afforestation targets as an indicator of carbon sequestration outcomes and the potential for area based targets to unintentionally generate undesirable outcomes such as net emissions resulting from the afforestation of high carbon soils, stating "a combination of land manager preferences, budgetary limitations, and the unintended consequences of other land use or agricultural policies can lead to the afforestation of less productive land, on soils with higher organic matter contents, that in the worst cases results in net emissions of carbon for decades[33]." The heterogeneity of soil types and local conditions means that afforestation policies must take eco-system-level biogeochemistry and C fluxes and pre-existing SOC stocks into account or risk unintended policy and climate outcomes[34]. It is also of concern to us that current approaches to forestry carbon accounting fail to take into account the albedo effect of dark conifer plantations. Recent research[35] has highlighted that the expansion of coniferous forests across Europe has changed the albedo and evapotranspiration of those forests, leading to warming.

When it comes to the role that forest cover and forestry can play in sequestering carbon, the type of tree, where it is planted and how it is managed is extremely important. The level of complexity involved in maximising the positive environmental benefits of forestry and avoiding the negative effects is not currently present in Irish forestry policy. The Irish forestry model has failed to evolve in response to changing societal objectives. As a result, in a business as usual scenario we expect the ongoing afforestation of marginal farmland, including high carbon soils and we anticipate significant negative biodiversity, water quality and climate impacts.

Ireland's forestry model requires root and branch reform if it is going to deliver a credible carbon sink and address the negative environmental and socio-economic impacts it is having in many parts of the country. The scale of change needed within the sector is not reflected in government policy or Coillte's Strategic Vision. Maintaining a business as usual approach to forestry with enhanced afforestation rates will not address the issues within the forestry model which constrain its potential contribution to climate action nor will it address the factors which have resulted in the forestry sector being a leading threat and pressure on Irish biodiversity and water quality (as highlighted in the Environmental Pillars (Greening Irish Forestry report[36]). **Enhanced afforestation on the scale proposed without addressing the issues within the sector or introducing enhanced environmental safeguards will result in massive environmental and socio-economic impacts across affected areas.**

Ireland requires a National Land Use Strategy that incorporates targets for biodiversity, water & climate action. Coillte's strategic vision must be aligned with a national strategy which is based around public forests that are designed to deliver multiple types of public goods & services.

In addition to the issue of forestry of peat there are a number of issues with Ireland's forestry model which need to be addressed in order to address its role in the emissions profile in the LULUCF sector. Coillte has highlighted the carbon sequestration role of wood products and the 'substitution effect', which arises when wood products are used instead of carbon intensive products. These arguments however are contradicted by the fact that Irish forestry is based around a predominance of Sitka spruce plantations which have short-rotation cycles and wood products with low sequestration potential due to their short-lives. Coillte has stated that "the majority of timber harvested from our forests is used to create long-lived wood products." This is not supported by the supporting data on page 22 which shows that Construction materials are the only category that could be considered long-lived and that category only accounts for 14% of total wood products. Even including OSB / MDF at 20% it is clear that the vast majority of Coillte wood products are short-lived.

Product Volume 000 m^3	Product	Percentage
180	Other	4
362	Residues / Sawdust	8
1315	Internal Bioenergy	28

290	Firewood	6
919	OSB / MDF	20
207	Posts	4
436	Fencing / Other	9
344	Pallet / Packaging	7
642	Construction	14
4.7 M m^3	Total	100

Table 1 Irish Wood Product Volume (Taken from page 22 Coillte (2022) Strategic Vision for Our Future Forest Estate)

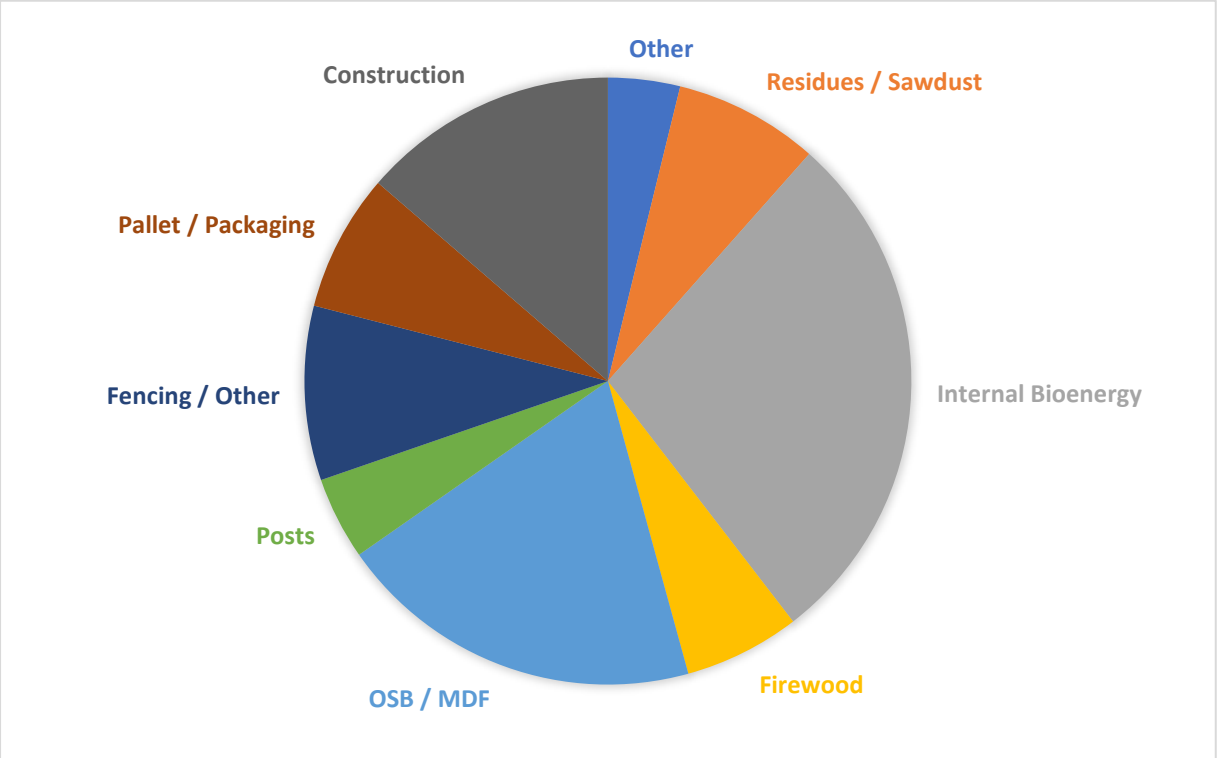

Table 2 Irish Wood Product Volume (Taken from page 22 Coillte (2022) Strategic Vision for Our Future Forest Estate)

If Coillte is seriously considering enhancing the carbon sequestration role and the 'substitution effect' of their wood products then it will be necessary to move away from soft-woods towards hardwoods which will produce longer-lived wood products and more construction grade building materials.

The transition over to hardwoods should be part of an overall shift to CNS and CCF. International research has highlighted that continuous cover forestry has greater potential to produce simultaneously multiple benefits from forests. Research[37] has shown that continuous cover forestry was better than rotation forest management in terms of timber net present value, carbon sequestration, amenity value and the number of large trees. Plantations are also unlikely to match the stability–and hence reliability–of C capture exhibited by more natural forests, particularly in the face of increasing droughts and other climatic perturbations[38]. Promoting natural forest regeneration and/or multi-species native tree plantations instead of plantation monocultures could therefore benefit climate change mitigation efforts, while offering valuable co-benefits for biodiversity conservation and other ecosystem services.

Greenhouse Gas Accounting

The forest industries greenhouse gas accounting does not appear to factor in the emissions from forestry operations and ancillary activities including:

- carbon loss from soils (especially peat) at clear fell
- harvesting, forest management, forwarding and haulage - all fossil fuel driven
- forest road construction
- fencing materials
- fertiliser and pesticide production

Without considering the emissions which are embedded in the lifecycle of forest management and wood products, informed decisions around the climate change impacts of different management decisions cannot be taken into account.

Providing more Renewable Energy

We are supportive of Coillte's commitment to continue to contribute to the development of the renewable energy sector. Having said that, it is important that new and re-commissioned wind farms are developed in a sustainable way that considers the acknowledged negative impacts that wind farms may have on biodiversity[39], water and soil.

Coillte should follow best practice and ensure that any future wind farms on Coillte's land holdings do not negatively impact biodiversity, water quality or soil.

Forests for Nature

Commercial forestry is a key sectoral pressure driving biodiversity loss and water pollution in Ireland. The role of commercial forestry in driving biodiversity loss is clearly evidenced by the range of threatened habitats and species that are being negatively impacted by forestry management in Ireland. According to the NPWS, forestry is a pressure or threat on around 30% of the habitats protected under the Habitats Directive and a high importance pressure / threat on about half of those. Forestry is a pressure or threat on over 15% of the species protected under the Habitats Directive and is a high importance pressure / threat on about 4% of species[40]. According to the NPWS forestry, is reported as having a negative effect on a wide range of species, including fish, molluscs, terrestrial mammals and vascular plants because of the wide sphere of influence of some activities for example through water quality impacts. The habitats which have been most negatively impacted by forestry are peatlands, grasslands, wetlands and coastal habitats.

Commercial forestry is also a significant pressure on water quality and freshwater biodiversity at a national level and is the greatest pressure nationally impacting on these ecologically important water bodies[3]. Pollution resulting from forestry activities are a key threat / pressure on protected aquatic species such as Freshwater Pearl Mussel (Margaritifera margaritifera) and Atlantic Salmon (Salmo salar), while clear-cutting is noted by the NPWS as key threat / pressure on Brook Lamprey (Lampetra planeri)[40].

Coillte has an obligation to play a leading role in tackling the intrinsically linked biodiversity and climate change crisis. Coillte has acknowledged this stating "As Ireland's largest landowner, we have a unique responsibility to manage our estate in a way that meets the needs of today's society while protecting it for future generations[41]."

Coillte owns a significant area of approx. 96,000 ha of Special Protection Areas (SPA) and Special Areas of Conservation (SAC), Natural Heritage Areas (NHA) and proposed Natural Heritage Areas (pNHA). According to Coilltes' own assessment, their landholdings support a number of Rare, Threatened or Endangered (RTE species), which is equivalent to the IUCN conservation status of "critically endangered, endangered or vulnerable" (Table1)[42]. Coillte also has significant expertise when it comes to habitat restoration, having previously restored thousands of hectares of ecologically valuable peatland habitats, rare native forests that have been restored within their estate[43]. **Coillte clearly has the expertise and the capacity to play a leading role in the conservation of nationally and internationally important sites for biodiversity.** There is a lack of clarity within the report when it comes to what Coillte are currently doing for nature and what they propose to do. For example, when Coillte say that "over 90,000 hectares of our estate (c. 20%) is managed primarily for biodiversity" it is not clear what this actually means in practice. We know that there are significant areas of Coillte owned lands within the Natura 2000 network that are managed primarily for commercial forestry, with biodiversity often being viewed as a regulatory burden. This is reflected in the role Coillte has played in limiting ambition within the forestry measures within the Hen Harrier Threat Response Plan process.

The report provides inadequate information to support the statement that Coillte is managing sites primarily for biodiversity and it is lacking sufficient detail on how Coillte will change their approach to improve conservation management. **We call on Coillte to clarify what new conservation management will be undertaken, what conservation objectives will underpin that management and what habitats and species will be prioritised.** Under a new legal mandate, Natura 2000 sites and other areas that support habitats and species of conservation concern should be managed primarily for biodiversity. **Coillte should clearly align the management of Natura 2000 sites with the conservation objectives and management plans for these sites with the objective of delivering favourable conservation status.**

Forestry management plans should be informed by consultation with the NPWS and eNGO's and should be made publicly available. Management plans should be tailored to contribute to the achievement of favourable conservation status for all species and habitats protected under the Habitats and Birds Directives. Initially habitats and species for which forestry and forestry management is a known threat and pressure should be prioritised for urgent intervention e.g. Hen harrier (Circus cyaneus), Curlew (Numenius arquata) and Freshwater Pearl Mussel (Margaritifera margaritifera).

We are supportive of the suggested actions:

- 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.

However, the lack of detail in regard to Coillte's decision making framework makes it impossible for us to adjudge the appropriateness of proposed management options. Some of these actions may be insufficient to deliver favourable conservation status within a given SAC, SPA, NHA, pNHA unless these actions are designed to contribute to the achievement of Favourable Conservation Status. Site specific conservation objectives and management plans should determine which management options are appropriate within Natura 2000 sites. The decision around whether a designated site should be subject to peatland restoration or woodland creation will in most cases be determined by the qualifying interests of the site and should not be determined by Coillte's own discretion. For example, the retention of areas of open ground in SPAs may be positive but ultimately this management decision should be determined by the conservation objectives for the site as interpreted in accordance with the best available scientific advice. For example, if a site is designated for open habitat specialists such as breeding upland birds such as Hen Harrier (Circus cyaneus), Merlin (Falco columbarius), Red Grouse (Lagopus lagopus) then reforesting such sites may be in contravention of the Habitats and Birds Directive.

It should also be acknowledged that small isolated areas of open habitat within closed canopy plantation forestry are of low biodiversity value relative to large areas of well-connected open habitat. These sites may also act as ecological traps for some species such as ground nesting birds who may be at higher risk of predation and have lower breeding success due to edge effects, poor habitat availability and a higher risk of nest predation. Any retained areas of open ground in SPAs and undesignated lowland peatlands should be subject to ongoing management to ensure that they can deliver on their objectives.

Any strategy linked to addressing forestry issues within Freshwater Pearl Mussel catchments should be designed in consultation with national experts such as Dr Evelyn Moorkens. **Habitat restoration and conservation management of sites should therefore be determined by the conservation objectives of a designated site, interpreted using the best available scientific advice. Restoration should aim to achieve favourable conservation status for the relevant habitats and dependent species and this may be best achieved by restoring large areas of well-connected habitat.**

(Note: There is a typo in this section where Special Protection Areas (SPA) are not mentioned and the acronym for an SPA is incorrectly attributed to Special Area of Conservation (SAC).)

Coillte should also set ambitious targets for improving the biodiversity value across its whole land holdings. This should include ambitious targets for peatland restoration and targets for conversion to Close to Nature Silviculture (CNS) and Continuous Cover Forestry (CCF) as outlined in our recommendations under Forests for Climate. Action needs to be taken to end the practice of clear-felling on peat soils (where doing so would be compatible with other legal obligations) and there needs to be significant investment in the restoration of afforested peatlands. Research has confirmed the multiple benefits of forest removal on deep peats, highlighting the removal of trees from areas where yields are particularly low as a clear win-win scenario[44].

Coillte should also align its objectives under 'Forests for Nature' with EU policy and particularly initiatives linked to the EU Biodiversity Strategy 2030 and the proposal of a new Nature Restoration Law. This could include targets for improving the biodiversity value of forests by improving the status of the following indicators: (a) standing deadwood; (b) lying deadwood; (c) share of forests with uneven-aged structure; (d) forest connectivity; (e) common forest bird index; (f) stock of organic carbon.

In the section of the report titled 'Enhancing Biodiversity on Our Estate' we do not support the definitions that have been adopted for Uplands, Peatlands or Water (Highly sensitive catchments). It does not make sense to adopt an elevation criterion for peatlands or an excessively restrictive definition for highly sensitive water bodies when commonly accepted definitions for peatlands and High-Status Water bodies and indeed uplands are already available. Coillte should adopt internationally accepted definitions when defining forests, peatlands, uplands and high-status water bodies.

We are supportive in principle of the identified 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.
- Likewise, we are supportive in principle of the high-level objectives:
- Enhance and restore biodiversity by increasing the area of our estate managed primarily for nature from 20% to 30% by 2025.
- Transform areas of our forests so that 50% of our estate is managed primarily for Nature in the long-term.

These are all laudable objectives however without clarity around what 'managed primarily for nature' actually means and clarity around what management will involve and what the objective of management will be it is impossible for us to comment on whether this approach is appropriate or sufficiently ambitious. As previously stated Coillte has played a negative role in the Hen harrier Threat Response Plan process, undermining eNGO efforts to progress conservation and habitat restoration measures for the species. Coillte Nature has so far also failed to prioritise sites for intervention based on objective ecological criteria. Therefore, there is justified reason to believe that Coillte's new strategic vision will similarly fail to prioritise nature over commercial interests.

Restoring habitat within 'legacy areas' where forestry is non-productive may deliver positive benefits for biodiversity, water, climate and people. In most cases these sites are likely to be failed forestry plantations on deep peat. **Failed plantations are an economic liability for Coillte while also being an environmental liability for society.** These degraded peatlands are resulting in direct and indirect greenhouse gas emissions and water pollution. These plantations were in many cases established on what would be today classified as Annex I and priority habitat under the Habitats Directive. Rehabilitating or restoring these sites is likely to deliver positive biodiversity benefits on site and at a landscape level. Having said that, it is deeply disappointing that the scope of Coilltes supposedly transformation policy for nature is limited to areas which are a commercial legacy issue for Coillte rather than being determined by conservation criteria designed to identify the areas which should be restored to deliver the most positive impact for nature. **Coillte should redraft their approach to how sites for nature are identified with a view to identifying the sites based on objective ecological criteria rather than forestry management or economic**

criteria. While there may at times be a correlation between the two this may not always be the case. In particular, the need to achieve favourable conservation status under the Habitats and Birds Directive and the targets emanating from the Nature Restoration Law should be key priorities determining which sites should be subject to ambitious habitat restoration measures.

One simple targeted action across the Coillte estate would make a huge difference for water quality, soil protection, and biodiversity, would be to **introduce permanent continuous cover riparian native woodland buffers along water courses, with a setback of at least 20 metres.** As well as the buffering effect and bank stabilisation, one other very important issue is also addressed, that is ecological connectivity and forestry fragmentation. The Environmental Pillar recommend this action is implemented immediately to start addressing the continuing downward trend in water quality and associated soil erosion issues.

Image 4: Knocksink Woods, Co. Wicklow (Fintan Kelly)

Future Afforestation

As outlined in this submission there are serious ongoing issues with how afforestation is being conducted in Ireland resulting in negative impacts on nature, water, climate and people. The decision for Coillte to reinitiate afforestation is therefore of concern to us. We are supportive of the principles of the Right Tree, in the Right Place, under the Right Management. What is 'Right' should be based on strong environmental criteria not just forestry criteria. In this context we strongly support Coillte's statement that "in some instances, the right approach for a given habitat may be no tree". This is a principle that should be operationalised in any future decisions around reforestation and afforestation.

We believe that the stated targets for afforestation proposed by DAFM and the Climate Change Advisory Council are totally unfeasible, mainly due to resistance from the public and landowners to Ireland's predominant forestry model, namely non-native conifer plantations,

managed intensively using practices involving pesticides and clear-felling. This resistance is reflected in falling afforestation rates and strong community opposition in parts of the country where forestry has emerged as a dominant land use. Further, there has been no objective and proper land-use assessment to assess the feasibility of such targets with associated environmental assessment. This reality is reflected by the departments acceptance that "*the system of procedures they had in place to screen environmental impacts on protected habitats and species was non-compliant with European law*" and this necessitated change in the Appropriate Assessment Procedure (AAP)-according to statements made by Minister Creed, Minister Doyle and Minister Calleary in Dáil Eireann. These failures have resulted in the crisis within the forestry licensing system. Rather than addressing these issues with ambitious root and branch reform we have observed the sector rallying to drive deregulation and undermine public participation and transparency through the Forestry (Miscellaneous Provisions) Act 2020 and new regulations introduced in 2020 on foot of that Act and the Forestry Act 2014, and the Animal Health and Welfare and Forestry (Miscellaneous Provisions) Act 2022, These have been compounded by ongoing serious issues of non-compliance with EU Environmental Law Requirements, including in respect of SPA's for threatened species such as Hen Harrier.

The pace with which the existing unsustainable forestry model is being perpetuated, compounded by poor and bad implementation of wider legal requirements - is of the gravest concern when compared with the glacial pace in advancing a sustainable forestry strategy - now long outstanding. The admission by successive Ministers that the State has been grossly negligent in ensuring successive forestry programmes were compliant with Ireland's legal requirements does not appear to have shifted the mentality of key actors within the sector. The regulatory review recently finalised by Phillip Lee should provide another opportunity for introspection and change. **Continuing to ignore the law or "red tape" as some may call it is simply not an option when legal compliance with the State Aid Decision underpins almost €200 million, in public funding (2014-2020) and access to important certification-dependent markets.**

Public opposition to the sector will only intensify if Coillte moves to reinitiate afforestation nationally exacerbates existing issues. To avoid this lose – lose scenario for the sector, society and the environment we believe that root and branch reform is needed. **The predominant forestry model which is focused on intensive production, a narrow market focus and poor environmental credentials must be replaced by a new vision for forestry and woodlands as an ecologically and socially coherent sustainable land use that protects and enhances our environment, diversifies our rural economy, while creating spaces for work and recreation that enhance the quality of life for rural communities.** For this to happen, however, there first must be acceptance from the sector that **deep and meaningful change is needed.**

Through various surveys we have seen the department seek to misrepresent public approval for trees and woodlands in order to create a narrative that there is support for business as usual within the sector. While we are supportive of many of the aspirational statements within the consultation overview, these statements are not backed up with tangible proposals for changes to policies and procedures or targets and deadlines. In addition, through processes like the Hen Harrier Treat Response Plan we continue to see the sector resist its legal obligations to protect internationally important habitats and species, both within and outside of the Natura 2000 network. This has included ongoing resistance to restrictions on afforestation within internationally and nationally important sites for the Hen harrier. The recommendations of the Curlew Task Force regarding extending assessment buffer zones have not been implemented. There has been no movement from the sector to accept a definition of High Nature value farmland and protect it. Efforts from the NGO community to ensure that best practice tools such as Forestry Sensitivity Mapping are adopted have been

met with silence, while the protection of important sites for wintering Hen harrier and other protected habitats and species seem to be stuck in limbo. The status and commitment to sensitivity mapping which must precede any consideration of forestry targets is key and yet we now have the gravest misgivings on the commitment to that.

It is our view that the current Forestry Programme is not compliant with the conditions laid down within the state-aid decision and the internal market. In particular we would draw attention to the twelve environmental safeguards within the state-aid decision. It is critically important that there is a dramatic shift in the sector's attitude to the environment. It is in all our interests, not least the sector itself that is dependent on hundreds of millions of euros in public funding and access to important certification dependent markets. Coillte should be as concerned as the Environmental Pillar about these issues and the potential reputational damage associated with being associated with an environmentally damaging national afforestation policy. We therefore believe it is in our shared interests that Coillte work with eNGOs to improve the environmental safeguards within the forestry licensing system. Our recommendations on how this can be achieved are outlined in the Environmental Pillars (2019) Greening Irish Forestry – Recommendations for Nature Friendly Forestry.
Key recommendations to ensure that afforestation is sustainable include:

- Develop and implement forestry sensitivity mapping to protect vulnerable bird species.
- Develop a High Nature Value Farmland mapping tool using existing bird, biodiversity and land cover data to prevent the inappropriate afforestation of High Nature Value Farmland including sites with Flora Protection Order species.

Ongoing Legal Issues

Principle one of the FSC Irish Forest Stewardship Standard on 'Compliance with laws and FSC Principle' outlines that "Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria": Criterion C1.1 Forest management shall respect all national and local laws and administrative requirements. Full legal compliance is also a condition laid down within the State Aid decision which underpins the Forestry Programme.
Based on the observed negative impacts of forest management on habitats and species both within and outside of protected areas there are clear instances where either gaps in procedures or implementation are resulting in Coillte being non-compliant with key environmental laws and regulations in Ireland. Taking key pieces of European environmental legislation, we have presented examples of non-compliance which we believe require urgent investigation. These are:

- The failure to protect birds within designated sites.
- The failure to protect birds in the wider countryside.
- The Failure to Protect Aquatic Biodiversity.

Birds & Habitats Directives

The Birds and Habitats Directives are important cornerstones of biodiversity protection in Ireland and the EU and are transcribed into Irish law within the Birds & Habitats Regulations (2011) (S.I.477/2011). Irish national law does not represent a correct transcription of Article 5 of the Birds Directive as regards the protection of the nests and eggs from deliberate damage and destruction. Therefore there is no general system of protection under Article 5 for forestry activity in Ireland and as a consequence the Irish State is not compliant with European Law. European Law supersedes National Law in terms of both the EU Treaty and

the Irish Constitution. If the State's Regulatory provisions are not consistent with European Law then it cannot be evidenced that forestry activities in Ireland are compliant with the law. It is now on record that the Forest Service is aware that there is a discrepancy between the Irish Wildlife Act and the EU Birds Directive around protecting Birds during the breeding season.

The requirements of Article 6(3) and 6(4) of the Habitats Directive are supposed to be implemented through the Forest Service's Appropriate Assessment Procedures. The negative impacts of reforestation are not being properly assessed r at either the felling licence or reforestation phase.

The Hen Harrier is Ireland's rarest resident breeding Annex I bird species and an excellent case study when it comes to assessing cases of non-compliance with environmental law. A comparison of Hen Harrier numbers in survey areas covered across all four national surveys carried out since 1998-2000, indicates an observed population decline of 33.5%; and a 52% decline in estimated breeding pairs over the last 40yrs[45][46]. Within the six SPAs designated for the species, there has been a 27% breeding population decline between 2005 and 2010. Hen Harriers are traditionally reliant on open upland and extensive farming habitats for both breeding and foraging[47]. The main threat identified by the NPWS for each of the six SPAs is further afforestation: "*The main threat to the long-term survival of Hen Harriers within the site is further afforestation, which would reduce and fragment the area of foraging habitat, resulting in possible reductions in breeding density and productivity*"[77]. A habitat mapping project undertaken across the six SPAs showed that forest cover had reached 53%[48]. This is roughly five times the national average[1] meaning Hen Harrier SPAs are some of the most heavily afforested areas in the country. According to research, assuming forestry at a landscape level has a well-balanced age structure then approximately one quarter of the forestry will be in the pre-thicket stage at any one time. Given the established negative relationship between Hen Harrier breeding success and second rotation pre-thicket forestry a maximum threshold of 40% total forest cover in the landscape would be needed to ensure that a Hen Harrier breeding population does not collapse[47]. This is well below the current forest cover across the six SPAs[79]. It was predicted in 2006 that afforestation and the maturing age structure of forestry would drive the loss of suitable open habitat beyond critical levels by 2015. Within the nine most important areas in the country for breeding Hen Harrier it was predicted that habitat loss would drive a 30% reduction in these populations[49]. Sadly, the national surveys[73][74] which have been carried out in the meantime have proven that this prediction was an accurate one. Similar research based on population viability analysis has predicted that regional populations will go extinct within circa 30 years[50].

Coillte owns significant areas of forestry within the six SPAs designated for breeding Hen Harriers. The failure of Coillte to properly assess the negative impacts of maintaining forest cover within SPAs that have exceeded the 40% threshold is a clear example of the failure of the company to comply with the Birds and Habitats Directives within Ireland. Coillte have persistently worked to undermine proactive conservation measures such as ambitious habitat restoration effort through their interventions within the Hen Harrier Threat Response Plan, a long running strategy designed to protect and restore Ireland's Hen Harrier population.

Within protected areas Article 4 (4) of the Birds Directive states that member states must take "*appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds*." Despite the clear obligation on Coillte and the Forest Service to protect important wild bird habitats from deterioration, there are inadequate safeguards and training in place to identify important habitats for wild birds within or outside of the SPA network. Aside from Hen Harrier and Curlew there are no other species-specific measures in place to

conserve Annex I birds or listed Birds of Conservation Concern in Ireland within the forestry consent process.

During the last national hen harrier breeding survey there were extensive and widespread efforts to record pressures within areas containing hen harriers and/or areas with suitable hen harrier habitat. Field surveyors provided large numbers of records of pressures within 500m (n = 4,145) and 2km (n = 3,947) of these areas. Forestry activities were among the most frequent records numerically and proportionally (Table 2) within 500m was D1 (paths, tracks, cycling tracks; includes non-paved forest roads; n = 337; 9.1%) and B2 (forest and plantation management & use; n = 375; 9.1%) and within 2km was again B2 (n = 391; 9.9%) and D1 (n = 292; 7.4%) (Table 2)[51].

B1	89	2.2	96	2.4	forest planting on open ground (increase in forest area, planting e.g. on grassland, heathland)
B2	375	9.1	391	9.9	forest and plantation management & use
B3	89	2.2	91	2.3	forest replanting (i.e. replanting on forest ground after clear-cutting)
B4	42	1	160	4.1	forest clearance (clear-cutting, removal of all trees)
B5	7	0.2	5	0.1	thinning of tree layer
B6	2	0.1	0	0	fertilisation (forestry)
B7	10	0.2	0	0	other forest activities (e.g. erosion due to forest clearing, fragmentation)

Table 3. The cumulative numbers of each forestry pressure code recorded within 500m and 2km of the centre of the hen harrier territory, nest site and/or suitable breeding habitats, during the national Hen harrier breeding survey 2015 (Ruddock et al., 2016).

The disturbance of breeding Hen harriers as evidenced by expert ornithological observations within the six SPAs due to Coilltes forestry operations is in contravention of Article 4 (4) and Article 6(3) of the Birds and Habitats Directives respectively. Coillte said that the Hen Harrier Protocol is designed to avoid potential disturbance operation(s) during the Hen Harrier breeding season (1st April to 15th August, inclusive)[52]. Firstly this is contradicted by the expert ornithological evidence outlined in Table 2. This is further supported by the inadequacy of the protection afforded by the protocol.

Recent decisions of the FAC in relation to a number of appeals relating to Coillte sites within the same Natura 2000 area where DAFM's decision was amended to reflect the specialist ornithological advice that the Hen Harrier breeding period should be considered to start on the 1st March and not the 1st April. Coillte, through their ongoing implementation of the Hen Harrier Protocol, are ignoring the available scientific advice and carrying out illegal disturbing activities within the Hen Harrier breeding season. Will FSC and PEFC ensure that Coillte is compliant with the requirements of Irish and EU law in respect of disturbing activities during the breeding season?

Coillte has failed to carry out Appropriate Assessment Screening for Forest Road Upgrades in the six Hen Harrier SPA's going back for a number of years. This issue has been subject to a complaint to the Soil Association which was not substantiated (now under appeal).

Image 5: Male Hen Harrier eye

Water Framework Directive (WFD)

The Water Framework Directive (Directive 2000/60/EC) establishes a framework for the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater. It laid down the legal obligation that all aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands meet 'good status' by 2015 (and 2027 at the latest), and that high status where it exists is maintained.
Following the Weser Case (Case C-461/13 BUND V GERMANY), an Article 4 WFD assessment must be carried out for forestry activities to go ahead, further the Weser judgement demonstrates that even if the overall quality class doesn't decrease, i.e. from good to moderate., if one of the quality elements such as hydromorphology decreases then that is considered a deterioration and it is not permissible under WFD:

- Article 4 (1) of the WFD provides: "In making operational the programmes of measures specified in the river basin management plans: (a) for surface waters (i) Member States shall implement the necessary measures to prevent deterioration of

the status of all bodies of surface water (ii) Member States shall protect, enhance and restore all bodies of surface water … ”

- We would highlight that Article 5 of the Surface Water Regulations 2009 requires a public authority, in the performance of its functions, not to undertake those functions in a manner that knowingly causes or allows deterioration in the chemical or ecological status of a body of surface water.

- In Case C- 461/13 Weser the CJEU held: “Article 4(1)(a)(i) to (iii) of Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy must be interpreted as meaning that the Member States are required
  — unless a derogation is granted
  — to refuse authorisation for an individual project where it may cause a deterioration of the status of a body of surface water or where it jeopardises the attainment of good surface water status or of good ecological potential and good surface water chemical status by the date laid down by the directive.”

Therefore, any forestry activities which have the potential to threaten the qualitative or quantitative status of any water body are likely to require a WFD specific assessment. The assessment should include both hydrological and ecological elements. The implementation of these requirements within the Irish forestry sector is poor and we are not aware of Coillte having implemented WFD assessments.
Consumers need to be protected and if certification implies that a company is compliant with the law, in the widest sense, then the public is being misled if timber from Coillte’s estate in these RSB’s is certified.

Coillte Forests wholly or partly in RSB’s which have not been assigned a Water Quality Status by the EPA include;
DL03, DL09, DL14, DL20, DL21, DL24, DL25, DL29, DL30, DL31, LM02, LM03, CN01, CN04, LM08, LM09, SO03, SO04, RN05, RN07, RN14, MO07, GY04, GY10, GY11, GY24, GY28, GY30, CE04, CE05, LK03, KY07, KY12, KY13, CK08, WD01, WD03, WD05, WD10, TY14, TY15, TY16, LS04, LS11, LS15, KE03, OY01, KK04, KK05, KK06, CW03, WX08, WW06, WW09, WH01, MH04 and LD03.

Coillte’s own GIS system would be able to identify all Forest Properties concerned.
Any licences obtained by Coillte within these RSB’s must be considered to be legally suspect – a number of questions regarding the judgement in 740 of 2018 have been referred to the European Court in connection with this matter.

The recommendations of the UCD HYDROFOR project[53] assessed the impacts of forestry operations on aquatic ecology in Ireland. The report recommended that in many areas negative impacts could be reduced by carefully designed water protection measures. However, in catchments with peat soils such was the negative impact of nutrient and sediment loss on the hydrochemistry and ecology of waterbodies that a cessation of conifer afforestation on peat soils in acid-sensitive (< 15 mg CaCO3/L) headwater catchments was recommended. These ongoing impacts are particularly damaging to sensitive high status water bodies. Where Coillte owns plantations within acid sensitive catchments it must be concluded that ongoing operations including fertilisation, clearfelling, ground preparation and replanting are resulting in ongoing negative impacts which are negatively impacting on the WFD status of these water bodies. In respect of aquatic species such as Atlantic Salmon and Freshwater Pearl Mussel and other species that are protected under Habitats Directive it is clear that the water quality impacts resulting from Coillte’s forestry management are in breach of the Habitats Directive.

Natural Regeneration of Conifers (FSC 6.9.2 & 10.4.3)

The adverse ecological impacts of the spread of exotic species (especially exotic coniferous trees) is not being adequately monitored or addressed across the Coillte estate. This is a major issue that is simply not being tackled by Coillte to the degree necessary. Coillte has an extensive estate and the conifer trees from the estate are acting as a seed source which is being distributed through the wider environment. Given the location of much of the estate this means that seed is being distributed into European and Nationally Designated areas; it is also being distributed into Non-designated European Annex I Habitats and other sensitive locations. It is also impacting private farmland.

The issue of impact of natural regeneration of conifers into Annex I Habitats is referred to in Ireland's reporting under Article 17 of the Habitats Directive. Reseeding by Coillte conifers has direct and indirect significant negative impacts on designated habitats and species and the removal of these unwanted trees on protected open habitat by the NPWS drains vital resources that could be spent on other conservation management measures. Despite the acknowledged negative impacts of reseeding, the issues are not considered in AA's or EIA's or management plans.

Some Coillte plantations that aren't properly managed are acting as reservoirs for invasive plant species such as Rhododendron (Rhododendron ponticum), Japanese Knotweed (Fallopia japonica), Himalayan Balsam (Impatiens glandulifera) and Gunnera (Gunnera manicata). These invasive species proliferate within Coillte plantations and then spread onto adjacent habitats, including protected areas resulting in significant negative impact on native biodiversity and the functioning of habitats.

One example of this is Coillte plantations in Glentornan, Co. Donegal adjoining the Crocnafarragh section of Glenveagh National Park. The land adjoining the Coillte plantation is part of the Cloghernagore Bog And Glenveagh National Park Special Area of Conservation (SAC) and proposed Natural Heritage Area (pNHA), Site Code (002047). Crocnafarragh also contains the Derryveagh and Glendowan Mountains SPA, Site Code (004039). The Coillte plantation is acting as a reservoir for Rhododendron (Rhododendron ponticum), Japanese Knotweed (Fallopia japonica), Himalayan Balsam (Impatiens glandulifera) which are spreading from the plantation onto the adjacent designated habitat. We would have serious questions around how the ongoing failure of Coillte to address the proliferation of invasive species within some of their properties is consistent with their legal obligations.

Forests for Wood

By sustainably producing good quality timber in Ireland to meet our domestic demand for construction and manufacturing materials Coillte would positively contribute to the transition to a circular economy. As outlined in our recommendations under Forests for Climate **if Coillte are seriously considering enhancing the carbon sequestration role and the 'substitution effect' of their wood products then it will be necessary to move away from soft-woods towards hardwoods which will produce longer-lived wood products and more construction grade wood products.**

The transition over to hardwoods should be part of an overall shift to CNS and CCF. International research has highlighted that continuous cover forestry has greater potential to produce simultaneously multiple benefits from forests. Research[54] has shown that continuous cover forestry was better than rotation forest management in terms of timber net present value, carbon sequestration, amenity value and the number of large trees. Plantations are also

unlikely to match the stability–and hence reliability–of C capture exhibited by more natural forests, particularly in the face of increasing droughts and other climatic perturbations[55]. Promoting natural forest regeneration and/or multi-species native tree plantations instead of plantation monocultures could therefore benefit climate change mitigation efforts, while offering valuable co-benefits for biodiversity conservation and other ecosystem services.

Forests for People

The Programme for Government[56] commits to "the retention of the commercial forests of Coillte in public ownership." We are supportive of the principle of continued public ownership of public assets and that public lands should deliver public goods in the form of biodiversity, climate, water and recreational spaces. Coillte has stated a commitment to maintaining its open forest policy including the provision of recreational forests for local communities. However, this appears to be directly contradicted by Coillte's commitment to strategic partnerships with businesses in supporting the development of large-scale facilities across the estate such as Center Parcs in Longford. Center Parcs seems to have entailed the transfer of 159ha of publicly owned land in Newcastle Wood, Ballymahon, County Longford to a private commercial entity. We are not supportive of Coillte engaging in commercial activities which may undermine public ownership or public access to public lands. **The revision of Coillte's legal mandate should include a commitment to the retention of Coillte's land in public ownership.**

It should be recognised that the environmental and amenity value of forests and non-forested lands directly contributes to the recreational value of the site. **Coillte should look to place an emphasis on improving the value of sites for nature and protect scenic amenity in parallel with improving the recreational value of sites.** Coillte forestry is negatively impacting on the amenity value of iconic locations for nature and scenic amenity such as Glendalough, Co. Wicklow. Coillte should look to prioritise habitat restoration and Close to Nature Silviculture in areas of high scenic amenity. Forestry activities should look to minimise impacts on Nature and People in these important areas for biodiversity, scenic amenity and recreation.

Recreational activities may negatively impact biodiversity directly through habitat loss or indirectly through disturbance. Coillte must ensure that the proposed development of 500 sites for recreation does not negatively impact on nature.

The Environmental Pillar 10 Point Action Plan to Fix Forestry in Ireland

Many points within the Environmental Pillar's 10 Point Action Plan to fix Forestry in Ireland are directly applicable to reform of Coillte's remit.

1. Change the current timber production narrow focused forestry model and transition to a three-strand forestry strategy, for 1. Timber production, 2 Biodiversity/Ecological services/water protection and long term Carbon storage, and 3. Community Woodland Social/Recreational to ensure a balance of the 3 Pillars of Sustainable Forest Management (SFM), Ecological, Social, and Economic, based on the 1992 Rio Forest Principles for Sustainable Forest Management and subsequent EU Ministerial Conferences on the Protection of Forests treaties for SFM as well as the legally binding UN Convention on Biological Diversity relating to native woodlands and broadleaves to increase biodiversity.

2. Move to a close to nature, continuous cover management model with a focus on native

broadleaves aspen, birch, oak, cherry, holly, and other valuable high-end broadleaves, such as walnut, maple and spanish chestnut, including more use of our native conifer, scots pine to grow better quality softwoods, and non-native conifers such as cedar, douglas fir, european larch, promote natural regeneration, ecological corridors for nature connectivity and traditional coppice management of suitable native and other species.

3. Phase out the damaging practices of clear felling and chemical dependency, as forest management tools. Include compensation for forestry contractors using the just transition model developed for closure of peat burning power stations and introduce training in small scale close to nature SFM to develop ecologically minded foresters.

4.Ensure that wildlife is protected from afforestation and forestry management in line with the requirements of Irish and EU law. Develop tools such as sensitivity mapping and implement species specific guidelines to support ecological assessment of applications for afforestation and felling.

5. Reform, Refocus and Repurpose Coillte, the Irish Forestry Board, legislation via the1988 Forestry Act, which is not fit for purpose and repurpose Coillte to deliver the multiple known benefits of a new 21st century Irish forestry model, which creates higher quality timber, meaningful employment and contributes to our Climate and Biodiversity action/mitigation plans, while ensuring that Communities benefit.

6. Embrace a broad-based agroforestry model that includes sustainable hedgerow management and conservation with less onerous rules for establishing small groves of native and useful broadleaves/ native conifer. Reward farmers for measured ecosystem, Water, Soil protection, and Carbon sequestration services.

7. Assist the development of small scale local Combined Heat and Power (CHP) systems in Public and other buildings utilising locally produced tree thinning's and other sustainably produced biomass/firewood including from farm hedgerows in tandem with the development of a national certified small-scale Sustainable Forest Management standard.

8.Introduce Community Woodland legislation to allow public and community co-operatives access to funding and support to buy unproductive Coillte and other public lands to develop long term native community woodlands[1]. A Forestry Commission model for this exists in the UK, developed for Scotland who have approximately 200 Community woodlands some on ex Forestry Commission sites[2].

9. Establish a broad multi stakeholder forestry-land-water-soil management use Forum, with cross departmental inputs to oversee all new afforestation and guide the forestry strategy implementation, to ensure Joined up thinking so that new woodlands and forestry plantations are sited in an ecologically sound way, with the right tree in the right place, utilising the existing River Basin management plans combined with existing satellite digital data mapping systems as an overarching framework for planning the siting of trees.

10. Ensure that full lifecycle carbon accounting is an integral component of all schemes within the forestry programme and riparian etc woodlands/agroforestry if it is funded under CAP or state eco schemes.

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