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Welsh Government

Consultation – summary of response

Timber Industrial Strategy Consultation

Making wood work for Wales

July 2025

Mae'r ddogfen hon ar gael yn Gymraeg hefyd / This document is also available in Welsh
Rydym yn croesawu gohebiaeth a galwadau ffôn yn Gymraeg / We welcome correspondence and telephone calls in Welsh.

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Overview

This document provides a summary of responses to our consultation on the Timber Industrial Strategy. This consultation was published on 22 January 2025. Information on next steps has also been provided.

Action Required

This document is for information only.

Further information and related documents

Large print, Braille and alternative language versions of this document are available on request.

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Additional copies

This summary of response and copies of all the consultation documentation are published in electronic form only and can be accessed on the Welsh Government's website.

Link to the consultation documentation: Timber Industrial Strategy | GOV.WALES

Mae'r ddogfen hon hefyd ar gael yn Gymraeg. This document is also available in Welsh at: Y Strategaeth Ddiwydiannol ar gyfer Pren | LLYW.CYMRU

Contents

Introduction

Background and context

1.1 As part of a Welsh Government commitment to the creation of a timber based industrial strategy, officials working across Welsh Government, supported by a Timber Industrial Strategy Working Group, developed a series of proposals to put to consultation. These proposals sought to deliver against priorities set out in Woodlands for Wales[1].

1.2 The strategy was formulated in the context of forestry productivity being identified as an area affected by climate change,[2] the need to secure future timber supply in the face of increasing global demand,[3] opportunities for green jobs and growth, and the potential of timber to be used in sustainable housebuilding.

1.3 Through the strategy development phase, the following six priorities for Wales emerged:

- Increasing timber supply
- Increasing resilience in our forests
- Resource efficiency and circular economy
- Instilling confidence in demand
- Developing sector capacity
- Underpinned by behaviour change

1.4 On 22 January 2025, the Deputy First Minister and Cabinet Secretary for Climate Change and Rural Affairs opened a 12-week consultation[4] on the priorities and proposals for the Timber Industrial Strategy. This consultation sought feedback primarily through open questions on each of the priorities. The consultation closed on 16 April 2025.

1.5 Strategic Research and Insight Ltd (SRI) were appointed to independently analyse and report on the responses to the consultation.

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[1] Woodlands for Wales: strategy
[2] Climate Adaptation Strategy for Wales 2024
[3] World Bank Group, World Bank Group Forest Action Plan FY16–20, April 2016;
[4] Timber Industrial Strategy Consultation

Methodology

The consultation responses

2.1 The online consultation response form consisted of 18 open-ended questions about various aspects of the proposals, as well as a ‘further comments’ question at the end to capture any additional considerations which respondents might have. There were also two closed ‘yes/no’ questions.

2.2 The consultation response form could be completed by individuals as well as on behalf of organisations. 85 of the consultation responses were received online.

2.3 In addition, 35 submissions were received by email which followed the format of the consultation response form (with and without introductions/prefaces) and were combined with the online responses for analysis.

2.4 Eight submissions did not follow the format of the consultation questionnaire, although the submissions covered topics raised in the consultation document. These were either in the form of specific comments, or lengthy and technical submissions raising some points which were unique or highly specific. As a result, these submissions are analysed separately from the combined response form responses.

2.5 In total, there were a combined 128 individual responses to the consultation. All open-ended responses received, regardless of format of submission, have been read and classified thematically using a standardised coding frame. The main themes raised are summarised in following chapters of the report.

2.6 In general, respondents raised points for Welsh Government to consider in the implementation of priorities, rather than raising outright opposition to the proposals. Specific areas of disagreement or objection are outlined in the main body of the report.

Format of the report

2.7 The report is ordered by the questions in the consultation response form and are summarised in terms of the key themes which arose from the responses under each question.

2.8 While coding frames indicate respondents’ key concerns and the strength of feeling about certain issues, the number of responses is not the only factor to take into consideration for decision-makers. The frequency of key themes cannot be used to interpret the balance of views in the same way that a closed question can, particularly as there were a number of responses from individuals from the same organisations, or individuals that submitted similar responses on behalf of their organisation and again as a personal response. As such, the key themes of responses are discussed narratively, but without quantification.

2.9 The summary is loosely ordered by the most frequently occurring themes. Quotations from respondents serve to elaborate on and illustrate key themes, but do not necessarily represent all comments.

Demographics

3.1 The consultation included questions asking for the name, contact details, and the organisation the respondent was from, if applicable. From the organisation names, SRI produced broad and more detailed sector categories outlined in tables below based on publicly available information about the organisations. The categories were produced in conjunction with Welsh Government to indicate which area of the timber sector they most accurately represented or dealt with. Where organisations operate across sectors, their sector was determined by the sector in which they primarily operated. Where they had multiple primary operations, these are indicated by the 'multiple sectors' category.

3.2 Not all responses from individuals that identified the name of their organisation responded on behalf of that organisation. Where respondents clearly indicated that their response was on behalf of their organisation, or where this was specified in communication with Welsh Government, this is shown in Table 3. Where responses did not provide this information, they have been classified as 'individual/not specified'.

3.3 In some cases, respondents raised the same themes across their responses to all consultation questions or repeated their answers. Where this is the case, these themes are discussed in greatest detail in the questions to which the answers are most applicable.

3.4 Respondents were asked whether they would like their feedback to remain anonymous. Throughout the report, where organisational respondents specified that they do not want to keep their response anonymous, quotes are attributed. Where they wished to remain anonymous, the respondent's sector or their status as an individual is indicated alongside their quote.

Table 1: Response by sector (broad)

Sector (broad)	Count	%
Individual response	33	26%
Private sector	55	43%
Public sector	7	5%
Membership organisation / representative body	20	16%
Third sector	13	10%
Total	128	100%

Table 3: Response by organisation

Type of response	Count	%
Organisational response	46	36%
Individual/not specified	82	64%
Total	128	100%

Table 2: Response by sector (detailed)

Sector (detailed)	Count	%
Woodland management	25	26%
Manufacturing and product development	12	13%
Environmental NGO	10	11%
Skills	9	9%
Multiple sectors	9	9%
Markets	7	7%
Millers and producers	7	7%
Recycling/biofuel	6	6%
Agriculture	3	3%
Harvesting and transport	2	2%
Tree nurseries	1	1%
Other	4	4%
All organisations	95	100%

Priority 1: Increasing timber supply

How can the sustainable forest resource grown in Wales, be increased to make more timber and wood fibre available for the future?

Consultation form responses

4.1 When asked how the sustainable forest resource grown in Wales could be increased, many respondents chose to give their most detailed responses. The themes raised in these responses related to, and were repeated in, following questions in the consultation form.

4.2 However, key themes relating to increasing sustainable forest resource included the following:

Improving the management of existing woodland

4.3 The most frequent responses relating to increasing the sustainable forest resource to make more timber and wood fibre available in future related to improving the management and maintenance of existing woodland.

4.4 Some of these comments related to the management of the Welsh Government Woodland Estate (WGWE). In particular, some felt that current management practices had decreased the quality or availability of Welsh timber, with examples including the following:

- Delays in restocking post felling resulting in stocking with unintended species
- Broadleaves not being planted densely enough
- Inadequate thinning
- A lack of management of bracken, bramble or brush

4.5 Some pointed to this as a reason why timber supply had been below forecasted levels, and which had a negative impact on the sector supply chain. These respondents felt that WGWE management required addressing in order to increase output and give confidence in sustained volumes moving forward.

4.6 Others gave wider feedback on the management of woodlands, either specific to private woodland or without specifying where the suggestions applied. This included a suggested improvement around the submission of management plans as part of the felling licence process administered by Natural Resources Wales (NRW).

> "We would also support improvements to NRW's current process for submitting management plans as part of the felling licencing process, for example enabling other management plan templates to be used if they meet certain UKFS (UK Forestry Standard) checks, as this could incentivise a wider range of operators to submit longer-term and more strategic/ holistic felling and restocking programmes. (The current process is an administrative burden – essentially requiring managers to re-write existing management plans in a different template – and as such we believe few if any forestry actors are currently engaging.)" (Third sector – woodland management)

4.7 Others highlighted the importance of increasing squirrel and deer control in the maintenance of existing woodland, particularly in relation to maintaining the commercial quality of broadleaf species.

4.8 As was the case elsewhere in the consultation, some respondents highlighted making use of the potential of small operators (e.g. millers/processors/woodland owners) in improving forest management and expansion.

> "Small sawmillers and processors exist throughout Wales but fly below the political radar. They typically add value, create significantly more jobs/log than the larger processors and can help to connect trees to value within our rural communities, helping to develop a wood culture. These processors are almost completely excluded from accessing timber from the WGWE and therefore source timber from the private sector and farm woodlands. With some support, this under-appreciated sector of the timber industry could become key ambassadors for the expansion of farm woodland and should be nurtured by WG in a similar way that Scottish Government supports the Association of Scottish Hardwood Sawmillers." (Membership organisation / representative body – multiple sectors)

Increasing afforestation, planting and restocking

4.9 Calls to increase planting and expand afforestation were among the most common responses. Respondents made reference to the need to promote sustainable forests which produce high quality timber for commercial use, necessitating a species mix which takes into account future climate conditions. Included in these comments was a call to ensure timely restocking of woodland after felling, with respondents frequently stipulating that replanting should feature diverse and sustainable species.

4.10 Some suggested increasing the proportion of conifer (including improved conifer species) when restocking, in line with UK Forestry Standard (UKFS). These commenters tended to feel there was currently too great an emphasis on broadleaves, for example through existing preferential grant schemes, and that this had led to a loss of productive coniferous timber.

> "This afforestation programme has to be largely coniferous as conifer timber is the feedstock for the Timber Industry which this strategy seeks to promote." (Private sector – woodland management & Private sector – recycling/biofuel)

4.11 Conversely, a smaller number suggested increasing broadleaves was necessary, with one comment caveating that these require greater management to produce quality hardwood, including squirrel control and thinning, and at greater expense to established woodland compared to conifers.

4.12 There were some suggestions that increased research and development into tree breeding, genetics and provenance trials would be required into a range of productive species as well as Sitka spruce to increase species resilience to future climates and pathogen/pest resistance, balanced with crop productivity.

The use of targets

4.13 Among suggestions were introducing or better enforcing targets on tree planting and species mix (for example, the Climate Change Committee's recommendation on tree planting). However, some felt that Welsh Government targets for afforestation faced barriers, were unrealistic, or highlighted that planting was on the decline. In a small number of cases, it was suggested that NRW should be made accountable for targets for new woodland creation in order to drive progress.

> "In recent year's NRW timber supplies to the market have been inconsistent and way below forecast availability. This has led to a reduction in confidence in NRW in the sector and potential loss of future investment in processing. Consistent and increased future timber supplies to the market are essential for the future viability of the wood processing sector in Wales. Therefore, it is essential that the Timber Industrial Strategy lays out clear direction for the future management of the Welsh Government Woodland Estate (WGWE) to increase annual timber production, thereby generating much needed income, as well as delivering environmental and social benefits for Wales. We would suggest that some KPI's are implemented for the WGWE:
>
> - Woodland creation targets (with productive element) are set to ensure there is incentive to deliver woodland creation.
> - Agree with the wood processing sector a target annual volume offered to the market to instil more confidence in the wood processing sector and provide continuity for the supply chain.
> - Restocking to be completed within 3 years of harvesting to minimise delays in future wood supplies.
> - Use improved planting material where possible to optimise productivity."
>
> (Membership organisation / representative body – multiple sectors)

Prioritising land use

4.14 In order to increase afforestation, there were suggestions to prioritise unproductive and degraded land. In order to facilitate this, comments highlighted a potential need to audit land in Wales to earmark areas suitable for woodland creation, create a hierarchy of land use or a land use framework to gauge the most suitable function for land, and set land use priorities. Land viewed as most suitable for afforestation varied, but included suggestions of sheep grazing land, hill farms, areas of bracken, Plantations on Ancient Woodland Sites (PAWs) which had become poorly managed, and priority habitats in poor ecological condition which are not supporting biodiversity. One suggestion was that planting should take place on the basis of a 'Right Place First' approach, i.e. planting in areas other than where pre-existing land use is high conservation, carbon or community value, or is highly productive farmland.

4.15 To inform this framework, some felt it was important to commit to research into data modelling integrating land suitability, biodiversity, and carbon sequestration potential.

Engagement with farmers

4.16 Nevertheless, some felt that land use competition with farmers was a barrier to afforestation targets, and were concerned about the negative impacts to farmers in the event that the WGWE was expanded. In particular, some flagged that many farmers are sceptical of forestry, in some cases due to poor communication around the Sustainable Farming Scheme. These respondents suggested increasing communication with farmers to improve awareness of woodland creation as a potential commercial crop, although it was also highlighted that farmers often have little experience with tree growing or managing woodlands and cannot necessarily afford to wait decades for forest income.

> "The setting up of timber microbusinesses or hubs, for example, would be complementary to farming activities as a form of diversification and ensure an all-year-round employment and thereby the protection of jobs in our communities and the 'brain drain' to urban areas […] Welsh Government must do more to understand and address the current barriers to tree planting on Welsh farms, including the weak economic rationale for this permanent land use change. Put simply, farming is a business reliant on the sale of a range of agricultural commodities produced from the land to derive the income needed to sustain livelihoods and invest for the future. There is a need to recognise that few farmers can afford to wait decades for a crop of timber to mature for their income; nor can the many local businesses dependent on farmers for their livelihoods. There are also impacts to land values that can arise as a result of this permanent change in land use" (Membership organisation / representative body – agriculture)

Providing incentives

4.17 In order to achieve the increase to sustainable forest resource, respondents made a number of suggestions. These included the use of government incentives, such as those aimed at farmers to increase afforestation. Tying in grant receipt with the requirement for certification (e.g. Sustainable Forest Management certification) was suggested to improve the management of new woodland as well as its planting. There were other suggestions for grants which focused on improving forest management, such as for infrastructure, engineering, or machinery to access timber – particularly in difficult terrain.

> "An alternative would be to offer a bigger grant to farmers for afforestation with productive conifers that does not need to be replanted at the end of its initial rotation. This would provide flexibility to farmers and may increase buy in. They would not be able to achieve certification if there is no replant requirement, but it is still better than nothing." (Private sector – skills)

Reducing regulatory burden

4.18 Others suggested reducing 'bureaucracy' and 'red tape' surrounding tree planting, with some perceiving the approval processes for woodland creation to be slow due to general 'regulatory burden', tension with wildlife law and priority areas, and public opposition, as well as the amount of paperwork involved.

> "Remove the current regulatory barriers to tree planting schemes and the recent changes to the felling license application scheme - this is the current greatest unspoken bottle neck preventing active woodland management and new woodland creation (in particular commercial conifers) in Wales." (Individual)

4.19 Some additionally raised the use of natural regeneration as a delaying factor in restocking and reducing the viability of commercial woodland, particularly on WGWE.

> "The policy of accepting natural regeneration on harvested sites needs urgent review. It's a useful tool, but natural regen needs careful and

intensive management with timely interventions and is not a cost saving measure. Spruce regeneration can result in excessively high or uneven stocking densities which means that the resulting crop is very poor quality. Broadleaved regeneration is sporadic, and hundreds of hectares of previously productive forest on PAWS sites are being lost to bracken, bramble or brush, through which natural regeneration cannot compete. These areas will never be woodland again." (Private sector – woodland management)

Workforce shortages and skills gaps

4.20 In order to facilitate sustainable forest growth, respondents identified a number of workforce shortages and skills gaps which needed to be addressed through public sector investment and wider education/promotion of the sector. Particular areas of focus including the following:

- Forestry operations (including training for thinning and mechanised harvesting and specialised silviculture)
- Sawmilling and processing
- Ecology
- Hardwood silviculture and species management
- Lack of younger workers entering the sector and an ageing workforce

Market factors

4.21 Some respondents suggested the increasing demand for timber would further encourage resource development. However, it was also noted that this would cause an increase to imports in the short term due to lead times on planting for timber.

Other comments

4.22 A more general theme raised was that to achieve this aim, it would require long term commitment from Welsh Government.

4.23 It is worth noting that four respondents disagreed with the language or terminology of the question and supporting consultation information, or found it difficult to interpret.

"Please define sustainable in this context - jobs, ability for soils to grow trees to produce timber, etc" (Individual)

"The consultation document treats concerns about the longevity of wood building products as a 'perception' and a 'barrier' to be overcome by finding enough evidence to inspire 'confidence' – this is the wrong approach and strongly implies a pre-determined conclusion." (Mineral Products Association Cymru / Wales)

"…'Timber famine' and constrained global supply (and increased prices) has been predicted numerous times for over a hundred years. No serious constraint has arisen. In fact, in real terms, timber prices are lower than they have been in the past. (See Forest Research timber price indices.) We should clearly make the most of the resource we have - but the Welsh Government should think carefully before devoting significant resources to increasing timber supply in Wales." (Individual)

How can volumes of Welsh timber and wood fibre coming to market be increased?

Consultation form responses

Improved maintenance/management

4.24 The most frequent suggestions to increase volumes of Welsh timber and wood fibre once again related to woodland management. Comments suggested that broadleaf woodlands in Wales were largely unmanaged; that small forests and farm woodlands are often neglected and could contribute to timber supply if brought under management; and that overmature stands exist, particularly on WGWE, with more timber growing annually than being harvested and targets being missed.

4.25 To improve management, some suggestions focused again on the importance of thinning, especially first thinnings, and shorter thinning cycles to improve timber quality, forest resilience, and market supply. Some advocated for Continuous Cover Forestry (CCF) over traditional clearfelling models, which they suggested could degrade soil, harm biodiversity, and reduce climate resilience.

> "Encourage the supply of good quality timber to market by subsidising sustainable CCF and LISS techniques in private woodlands." (Public sector – woodland management)

> "It should be possible to increase volumes of timber and wood entering the supply chain by judicious management of existing woodland resources through regimes such as CCF" (Membership organisation / representative body – woodland management)

4.26 However, a small number reflected that there was currently a lack of capacity to carry out thinnings, and suggested they were also hampered by the current felling licence process.

> "Poor thinnings can destroy the potential of the remainder of the crop, by making it more susceptible to windblow, or by creaming off the final crop trees. The felling licence process needs to be rigorous but could be streamlined by more use of Long-Term Plans in the private sector or by granting Felling Licences for 5 years for clearfell and 10 years for thinnings. This is especially important when wind damage starts to occur. Granting a licence period of only 2 years for clearfell and 5 years for thinning, with no option of extension or renewal, gives the Regulators a vast amount of unnecessary work producing new licences for parcels that have been licenced before but where the licence has expired" (Private sector – woodland management)

> "Acknowledging the current public sector forest managers skills limitations and funding resource, seek out alternative operating models to include sector partnership investment and working through emerging opportunities for mutual investment models and joint ventures." (Individual)

Regulatory barriers

4.27 A number of other barriers to tree planting and woodland management were identified, each by a small number of respondents.

- Rigid adherence to forest plans followed by NRW delaying the bringing forward of timber parcels to markets
- Sustainable Drainage Systems (SuDS) causing burden and delay
- A lack of ease in submitting plans to NRW for long term management easier to create and submit (e.g. lack of integration with Sylva myForest)

Grants and incentives to improve supply

4.28 As in the responses to the previous question, a number of government grants or incentives were put forward including forest management grants, grants for management plans, grants for access and improving logistics and transportation, and in workforce development in specific sectors like milling. Again, some suggested that any public funding would need to be committed long term.

> "It is essential that this funding is protected from future cuts. In contrast, the Scottish Government reduced its woodland creation budget by 40% in its 2024/25 budget, leading to a revised target of only 10,000 hectares planted out of an 18,000-hectare goal. Although 16% of the budget has been restored for 2025/26, it will only support the creation of 11,000 hectares, leaving Scotland 7,000 hectares short of its original target. The Welsh Government has consistently increased its forestry budget, from £5.8 million in 2021/22 to £15.7 million in 2024/25, with a stable budget projected for 2025/26. This positive trend has been encouraging for the forestry sector. However, any reduction in this budget, similar to the cuts seen in Scotland, would likely result in reduced industry confidence and greater reliance on imported timber products." (Kronospan Limited)

Improving metrics and data

4.29 Other respondents also pointed out limitations with existing data to inform timber supply needs.

> "The current available data has several discrepancies especially in relation to the Welsh Government Woodland Estate (WGWE) e.g. The Forest Research (FR) 25 Year Softwood Forecast published in 2022 states that there will be an average of 1,284,000m^3 available annually between 2022 and 2026. However, Natural Resources Wales (NRW) Timber sales and marketing plan for the same period states there is 982,473m^3 which is more than 300,000m^3 difference with little explanation. To be able to improve timber availability, more accurate data is needed. We also need a better understanding of the quality of the data in the NRW Sub-Compartment Database (SCDB) and also how many National Forest Inventory (NFI) sample squares there are in Wales which in turn raises issues with the quality of data from the NFI." (Membership organisation / representative body – multiple sectors)

Improve timber access for small operators

4.30 In order to improve access to small operators, respondents suggested re-establishing small parcel timber sales from WGWE to support local millers and small-scale users, marketing high quality timber parcels and avoiding mixed lots. There were also suggestions to develop local ‘timber sales yards’, enabling farmers and small woodland owners to offer timber for sale directly, and allow for open bidding to enable smaller businesses to compete, as well as a suggestion to create a small-scale NRW timber merchant to assist with sales, transport, and logistics for small buyers.

> “Farmers in Wales have no way of accessing local timber markets and there is little incentive for them to grow high quality, diverse timber on the farm. Welsh Government should look at incentivising the provision of temporary ‘timber sales yards’, where timber buyers are invited to bid on timber presented by farmers and landowners in the locality. This is likely to follow the huge success of timber sales yards in Belgium and France, which are run in partnership between community woodland co-operatives and the state forestry enterprise." (Private sector – woodland management / Third sector – environmental NGO)

Incorporating biochar

4.31 Additionally, some respondents focused their suggestions on the expansion of the use of biochar as a valuable use for forest residues. It was suggested that brash and offcuts, typically left unused after felling, can be converted into biochar, providing increased efficiency of resources use and additional value from forestry operations. This in turn could support agricultural productivity and strengthen the circular economy but relies upon expanding infrastructure and processing capabilities.

Sales, marketing and awareness

4.32 As was covered in more detail in other parts of the consultation responses, some suggestions were made to increase the marketing of Welsh timber, educating the public and end users about the value of domestic timber to encourage demand, promoting its use in public sector construction/social housing. In addition to the public, there were suggestions to create a commercial sales and marketing department for forestry internally or within NRW, complete with targets / KPI’s for timber sales, include regions and sales teams, and accountability for poor delivery.

Co-ordination

4.33 There were additional suggestions to co-ordinate with other UK nations on volumes, including a suggestion to create a Working Group under the Tree Planting Task Force, consisting of the bodies which represent the timber industries. This group would serve as a forum to discuss a long-term strategy for tree planting across the UK.

4.34 Other key themes which arose less frequently were similar to responses in the previous question, with general calls to prioritise large scale afforestation, and encourage buy-in and participation from farmers.

Priority 2: Increasing resilience in our forests

What actions can be taken in Wales to reduce the risks to our forests posed by climate change and pests and diseases?

Consultation form responses

5.1 When asking respondents what actions they think can be taken to reduce the risks to our forests posed by climate change, pests and diseases, feedback coalesced around a small number of central themes.

Increase diversity of tree crops / polyculture

5.2 Many respondents felt that there needs to be an increase in diversity of tree crops, including species resistant to climate, pest and disease impacts. Monoculture was routinely highlighted as undesirable, with diversity and polyculture viewed as methods to increase the resilience of the forests through the inclusion of disease resistant plants. Diversity in planting was also highlighted as an effective way to deter fire spreading as this affects single species more often.

5.3 This was a recommendation generally, as well as particularly on the Welsh Government Woodland Estate. While Sitka spruce was highlighted as an important species in its resistance to climate change, risks were also identified in its vulnerability to pests, particularly when undermanaged.

> "The government might consider restructuring grants to enhance the resilience of existing woodlands by creating different canopy layers and introducing more varied species" (Third sector – environmental NGO)

> "It is important that a range of species and a mix of appropriate silvicultural systems are adopted to improve resilience. Diversification is key. More incentives to encourage growers to broaden the range of species they plant would help, alongside more research and evidence on the future suitability of current and alternative species, taking into account their future climatic resilience as well as their productive potential. Late frosts, summer droughts and water logging in winter are all factors for consideration. This could include the setting up of new trials and using information from existing planting across the whole of GB. It may be necessary to accept a reduction in overall increment to create a resource that is resilient to a predicted three degrees warming this Century […] Ensuring tools such as Ecological Site Classification (ESC) are based on the latest climate change projections and species suitability research is also important to help the sector make the best planting decisions, as well as promotion of guidance on Forest Development Types (Forest Research) to guide decisions on diversifying species mixtures and continuous cover forestry." (Public sector – woodland management)

5.4 To facilitate diversity, some suggested that there needs to be an incentive to encourage growers to broaden their range of species, linking up with research that can prove the future suitability of alternative tree crops being more resilient to the climate, pests and diseases as well as having increased productive potential and positive impact to biodiversity and ecosystem health.

> "Species diversity has to be at the heart of new planting schemes to avoid the current situation with i.e. ash. In England, landowners have been pushed towards mixed broadleaf planting in many cases and have been happy to proceed largely based on the attractiveness of the grant. In Wales,

future planting decisions should be informed by a more thorough description of the pros & cons of various planting types; expected ongoing costs and expected returns, more inclusive of the owners' views." (Membership organisation / representative body – skills)

5.5 However, many pointed out that this diversification should come from native stock to avoid the importing of pests and diseases.

> "For native broadleaved woodland the [organisation] advises against the sourcing of southerly provenances, as the evidence-base for this approach is weak: our native trees will largely remain within their climate envelope even in light of various modelled changes in climate, already have high levels of genetic diversity and turnover/ interaction with continental provenances and the long term impacts of climate change remain highly unpredictable. Welsh Government could incentivise choices of local provenance stock through making this a requirement for native planting as part of grant-funded schemes." (Third sector – woodland management)

> "Industry pressure to diversify the non-native stock for commercial planting must not be allowed to drive importation of stock in a way that could heighten the risk of importing novel pests and diseases: this will require UK-level coordination not just Wales in isolation." (Third sector – environmental NGO)

5.6 To achieve these aims, some respondents suggested that closer to nature forest management is needed, including Continuous Cover Forestry, and that woodland managers would need to work closely with forestry researchers to ensure that both the types and distribution of species are suitable for the area.

Increase monitoring / woodland maintenance

5.7 Increasing monitoring and forest maintenance was another common theme in relation to this priority. Respondents felt that actively monitoring and managing emerging pests and diseases will further reduce vulnerability and collectively build stronger, climate-resilient forests. The importance of checking for early signs of pests and diseases was viewed as vital in building resilience, including suggestions to increase checks at borders. Others felt that as well as monitoring and maintaining woodland that training and certification should also be in place, looking at species management, fire prevention/control and soil health. This training could help to manage forests from climate impacts and mitigate risks through their practices.

> "The lack of appropriate management is a cause of poor ecological condition in many of our native woodlands, leaving them less resilient to threats" (Membership organisation / representative body – woodland management)

> "Well managed forests containing healthy trees will be more resilient to climate change. Designing in buffers, a sensible range of species and thinning trees so they are not stressed by competition will all help" (Private sector – woodland management)

5.8 Regular thinning of woodlands was preferred to clearfelling by some respondents to decrease windblow, soil erosion and flood risk. It was agreed by many that funding is needed so that this can be done in a timely manner, especially when it comes to private landowners.

“The deleterious impacts of clearfelling are now well documented across Europe, from soil degradation, soil desiccation and erosion (subsequent carbon leakage), to the fragmentation and deterioration of habitats and ecological connectivity. Forestry should be a key sector in Wales that demonstrates the principles of the sustainable management of natural resources, exemplifying the ecosystem approach of the Convention on Biological Diversity, which underpins the Environment (Wales) Act 2016. Unfortunately, the current approach towards biodiversity conservation by NRW in its management of the WGWE is one of obstacle, tick-boxing and ‘compartmentalising the forest’, with little understanding or recognition of how a healthy forest ecosystem is better able to withstand drought and storms, prevent flooding and pollution, tolerate pests and diseases or reverse species decline.” (Third sector – environmental NGO)

5.9 Others also highlighted that woodland management would need to be adapted to look at better resilience measures to extreme weather events, climate change, pests and diseases, and that current maintenance may be insufficient. Knowledge transfer and increased government guidance would be important in achieving increased management and maintenance.

“The management of woodlands will need to be adapted…Continuous Cover techniques, low impact silviculture in the uplands and riparian planting should be incentivised to reduce the risks of impacts.” (Third sector – environmental NGO)

Taking additional steps to prevent summer heat risks

5.10 A number of recommendations from respondents looked at the removal of brash and how this could reduce the amount of forest fires in Wales. It was also agreed by some that this removal could also help reduce the risk of increased pests and diseases which can arise when waste wood is left to rot, although it was also acknowledged that a small proportion should be left to support biodiversity.

“Wildfires can be mitigated and managed by regular clearance of combustible material that accumulates on forest floors and after forestry operation.” (Private sector – multiple sectors)

5.11 Some believe that forest management techniques such as controlled burns, fire breaks and strategic thinning can all help in the reduction of summer fires and are critical in maintaining a healthy forest.

“Building Firebreaks: Creating breaks in the forest can help prevent the spread of fires by removing vegetation that could fuel the flames.” (Private sector – harvesting and transport)

5.12 Another suggestion was to train forest management teams in fire prevention to reduce the risk of forest fires and ensure the long-term sustainability of the forests and a minority of respondents proposed that there needs to be more education and prevention campaigns to protect forests against fires as they believe the majority of forest fires are caused by human activity so making people aware of the situation would be a more effective prevention.

5.13 To achieve these aims some believe that contingency plans and response teams should be put in place to help reduce wildfires. With a small number suggesting that beaver reintroduction would help with the prevention.

> “With the licenced release of free-living beavers looking more likely for Wales, Beavers and Beaver habitat needs greater consideration. Both within the felling licence and regulatory system and grant schemes, so beaver modifications are not penalised, but seen as positive and a part of a woodland within an ecosystem. Rewilding Britain has asked for beaver habitat to be included within the 10% habitat within the Sustainable Farming Scheme and ideally recognised within the collaborative layer, for landowners working at catchment scale where beavers are present. Beavers and their wetland habitat help reduce fire risk and drought vulnerability, which will protect woodlands.” (Third sector – environmental NGO)

5.14 Additional suggestions included reviewing the existing phytophthora ramorum control strategies to assess if these are still appropriate and promoting wider education on pests and diseases.

> “There are alternative approaches to dealing with phytophthora ramorum, the approach of clearfelling larch unnecessarily must be stopped to avoid the early felling of larch, one of our most valuable useful timbers. A direct approach to removing clearly affected individuals when infected rather than the broad stroke felling that has been encouraged by NRW up until now.” (Coleg Llandrillo Menai)

> “Larch is very important for small sawmills. The larch PR control strategy needs to be reopened and reviewed with FR to see if the strategy is still effective […] Wales has an important opportunity to understand why some individual larch trees are tolerant to p. ramorum in south Wales within the Core Disease Zone (CDZ). WG should work with academics and the wider sector in the CDZ to identify genetic traits that confer tolerance. Larch has the potential to be an important species in future climates.” (Membership organisation / representative body – multiple sectors)

How can growers and nurseries accelerate the implementation of adaptation measures?

Consultation form responses

Nurseries need certainty/commitment

5.15 Many respondents highlight that growers and nurseries need long term commitment for demand to be able to accelerate the implementation of adaptation measures. Many highlighted that nurseries cannot be expected to invest heavily in seeds and new technology if they don't have the confidence they will get a return on this investment.

5.16 Ensuring long term funding would be crucial for tree breeding programs, with some expressing concerns at the potential for future Government policy changes to result in financial loss, flagging the three-year lead in production on certain plant stock, and the lead times required to establish supply chains for seed or other reproductive materials of the appropriate genetic quality.

> "Not like baking more biscuits in a biscuit factory! It takes 3 years from collection of seed to production of a forestry transplant for sale, so forward planning is critical." (Private sector – woodland management)

> "The nursery sector in the UK does not have any capacity issues, it has consistency issues caused by constant shifts in government policy. To deliver at scale the nursery sector needs a minimum of 3 years forward visibility." (Individual)

5.17 In order to provide this stability to give growers the confidence to invest, some commented that funding and support would need to come from both the sector and from the Government, possibly in the form of grants.

> "They will be helped if WG is consistent in its support for the forest industry. E.g. grants." (Individual)

> "Securing stable, long-term funding for tree breeding is essential for developing resilient and productive forests. Here are some key points to consider: 1. Diverse Funding Sources: Exploring various funding opportunities, including government grants, private sector investments, and non-profit organisations, can provide the necessary financial support. 2. Government Grants 3. Private Sector and Non-Profit Support: Collaborations with organisations such as the Future Trees Trust and the Conifer Breeding Coop can enhance research and development efforts. 4. Consistent and Long-Term Investment: Ensuring that funding is stable and long-term is crucial for the success of tree breeding programs, given the lengthy growth cycles of trees." (Individual)

Additional research and innovation required

5.18 Responses commonly touched on research and innovation to accelerate the implementation of adaptation measures for growers. Among the suggestions was the need for advanced tree breeding techniques to identify and develop trees that are resilient to pests, disease and climate change; research into local adaptations (e.g. how a seed performs at different altitudes); mapping high quality seed sources, forecasting and planting demand models; Mycorrhizal inoculation and insecticide pre-treatment; research into how pathogens spread within nurseries; and research into the use of biochar for soil enhancement.

5.19 Collaboration between key organisations would further research, including facilitating knowledge transfer between nurseries, growers and policymakers, and making use of best practice, including from other countries.

> "More research is needed into species growing techniques that will respond to changing needs. The result of this research needs to be widely available and communicated to nurseries with support available to help them respond and adapt their practices." (Membership organisation / representative body – woodland management)

5.20 While respondents generally agree that investment in research to identify and propagate disease resistant varieties is vital to increase resilience and adaptation in the production of forests, government investment and grant funding was also suggested for research and development. It was thought that investing in these techniques would not only improve forest resilience but could also enhance soil health by improving sustainable practices. Some felt that the drive for this would come from research agencies and Government fostering collaboration, and demonstration of proven success would be needed before using the techniques could be implemented on a wider scale.

High quality seed sources

5.21 Also emphasised to accelerate the implementation of adaption measures was the need to collect seeds from high quality trees rather than just those easiest to get to, which can sometimes be on the roadside, and prioritising native stock over imports.

> "In terms of our native woods, selection of local provenance, increases in native nursery stock or preferably use of natural regeneration or colonisation is the most desirable approach for both climate adaptation and biodiversity outcomes. Tree nurseries in Wales could be incentivised to join the Woodland Trust's UK and Ireland Sourced and Grown scheme, which ensures that seed sources are of local provenance and providing the best ability for future trees to adapt to local environmental conditions and future climatic change and tolerate future outbreaks of pests and diseases." (Third sector – environmental NGO)

5.22 Additionally, there were less frequent suggestions that nurseries should be further encouraged to adopt modern tree breeding methods, such as cell grown stock, and that greater flexibility of planting windows would enable nurseries to plan and deliver a higher proportion of British grown planting stock.

Priority 3: Resource efficiency and circular economy

What actions could be taken in Wales to encourage reuse and recycling of wood to minimise waste?

Consultation form responses

6.1 Respondents identified a range of actions to encourage a more circular wood economy, with suggestions focusing on market development, financial incentives, and regulatory changes.

Regulatory changes

6.2 One of the most common responses called for policy and regulatory reforms to support timber reuse, including suggestion to provide incentives, such as the removal of VAT from recycled timber to increase the attractiveness of its use, tax incentives for construction projects that can evidence timber reuse, or conversely tax penalties for those using virgin timber/concrete and brick. Several respondents advised that this could also be achieved through changing public procurement policies and enforcing them throughout Welsh Government.

> “Policy incentives and regulations to encourage sustainable timber use and recycling would help minimise wood waste.” (Private sector – manufacturing and product development)

> “Subsidise timber-frame housebuilding and/or tax concrete/brick housebuilding… Encourage the circular economy.” (Other public sector – Woodland management)

> "Use government procurement to drive improved behaviours and more measurably support government strategy. Connect across all government departments to enable application of policies to support the use of Welsh timber.” (Membership organisation / representative body – multiple sectors)

6.3 External regulatory changes were also flagged for the potential to impact on timber reuse, such as the implementation of the Part Z amendment to the UK Building Regulations, aimed at reducing embodied carbon emissions in new building projects.

6.4 There were additional suggestions relating to forestry activities, rather than products. This was to create a requirement to gather brash and tree limbs from the land following felling to make use of e.g. in biochar production, and alternative suggestions to make producers responsible for the lifecycle of wood, and targeting specific industries which generate wood waste.

Incentivising wood reclamation

6.5 In addition to incentivising the reuse of timber by producers and markets, respondents also highlighted the importance of policy changes and financial incentives when it came to recycling organisations. This included changing the intake process of wood at recycling centres, either through investing in recycling infrastructure, the banning of wood from landfill, or preventing local authorities from charging for wood recycling.

"Develop a Wood Recycling Infrastructure – invest in dedicated collection, sorting, and processing facilities to divert waste wood from landfills and maximise reuse in construction, furniture, and manufacturing." (Individual)

6.6 There was also backing for fostering greater collaboration with, or providing direct support to reclamation businesses, and funding for innovation in the re-use of post use wood.

"Support and financial support is needed for start-up businesses, as well as innovation grants to kick start research, not just to universities but businesses." (Private sector – harvesting and transport)

"All timber manufacturers will have a surplus of by-products such as offcuts, shavings and sawdust, but will not necessarily have the facilities to deal with this 'waste'. Creating funding for a number of centralised processing facilities (e.g. wood pellet manufacturing, pulping plants, engineered wood manufacturing, etc.) would allow this waste to be turned into more desirable, valuable products, creating jobs and boosting Wales' economy in the process. As a first step, creating & maintaining a position for a facilitator to connect businesses that produce such by-products with those that can use them would be a positive step for waste reduction." (Private sector – millers and producers)

"Waste and demolition contractors need to be encouraged to save wood that comes into their hands. In old buildings especially, joists, doors, door frames and window frames could all be recycled or reused, especially where they are made from hardwood. This could be incentivised if a price per tonne of wood handed over could be offered, similarly to scrap metal." (Individual)

6.7 Others suggested making recycling centres/infrastructure/wood collection services more accessible than they currently are.

Promoting design changes

6.8 Some suggested making changes to product design that extends the usable life of wood. This included design approaches that enable reuse in construction, new uses of lower quality wood, and useful products to prevent post-use wood ending up in landfill.

"Invest in new innovations using lower quality or recycled timber such as Glulam / LVL / CLT which minimise waste and replace concrete products with sustainable and lower-carbon alternatives." (Private sector – woodland management)

"Local authorities need to be supported to engage with reused and recycled timber… to make this a norm." (Third sector – markets)

"Promoting the benefits of wood recycling like material efficiencies and environmental benefits will help businesses when making material choices, particularly with regards to treatments." (Third sector – environmental NGO)

Creating a hierarchy of use

6.9 Several suggestions included implementation of a waste wood hierarchy to optimise wood recycling and ensure the burning of timber for fuel is a last resort, although one respondent warned that targets to enforce this could be counterproductive.

> "Over the past decade, the volume of waste wood directed towards energy recovery has increased significantly, with energy recovery now accounting for roughly two-thirds of the available domestic supply. If the prioritisation of waste wood for energy recovery or SAF production continues at the expense of recycling, there will be an insufficient supply of waste wood for industries such as wood panel manufacturing that rely on recycling. […] To prevent this situation, it is essential to drive the increased use of wood across the economy. One effective measure would be to uphold the Waste Wood Hierarchy in policy, which prioritises recycling over energy recovery. This will help safeguard the supply of raw materials for high-value manufacturing and support extended carbon sequestration." (Kronospan Limited)

> "Hierarchy can sometimes be used in association with primary wood products, but is also used in this document in relation to the hierarchy of waste wood. Hierarchy is also a concept that relates to models of optimising resource use, or optimising carbon storage effects. However, the concept of hierarchy must be balanced with the product break out which occurs as a natural result of turning cylindrical raw materials into rectangular products. A mix of products is required for practical reasons. It is counterproductive to favour one product from this basket at the expense of others due to some priority or target. The process of sawmilling (or other breakdown into products) will also reflect the pattern of growth of the wood within this cylinder – on occasion seeking to utilise material from the edge, or from the centre, or from selected directions within the log. Decisions about sawmill cutting pattern are influenced by the desire to match the product to the region of the log it is cut from, and requires some thought of quality and value." (Public sector – skills)

6.10 A challenge in implementing this may be in the potential hazards of dealing with recycling waste wood.

> "With regards to recycling, waste wood is variable in quality and maybe hazardous due to additives and treatments applied to it. Therefore, we stress the importance that, for the recycling, recovery and reuse of waste wood, it must meet the requirements of Article 13 of the Waste Framework Directive (Directive 2008/98/EC)." (Public sector – woodland management)

Action already being taken

6.11 Some commented that steps were already being taken to address and encourage wood reuse and recycling, and that Welsh Government should look to these for best practice or re-evaluate its importance in the strategy.

> "The established supply chain in Wales for recycled wood provides a feedstock for panel board, animal beddings (from clean wood) and biomass fuel. Smaller volumes of wood are reused or repurposed to create household items and construction materials, often by community initiatives

such as the Reseiclo social enterprise in Newport, South Wales. Both supply chain models should be promoted and supported by Welsh Government." (Third sector – multiple sectors)

"Refer to the Wood Recyclers Association. The Strategy describes minimal amounts of timber going to landfill, so perhaps this matter is being given greater priority than is merited." (Third sector – environmental NGO)

How could Wales promote innovation, to design and manufacture wood-based products with increased value, extended durability and climate resilience?

Consultation form responses

6.12 This question received a wide range of responses, with innovation seen as dependent on stronger research capacity, consistent demand, and supportive regulations. Respondents felt that innovation should be underpinned by research and learning, reinforced by consistent demand and supported by regulatory frameworks that enable climate-resilient timber products to thrive in Wales.

Increase knowledge base

6.13 In particular, respondents highlighted the need for greater investment in research and knowledge exchange. Some called for better promotion of best practice, while others showed support for funding collaborative R&D projects.

"…supporting research and development into advanced wood treatments, sustainable manufacturing processes, and design technologies." (Private sector – manufacturing and product development)

"Collaboration between industry, academia, and innovation centres should be encouraged through funding calls and innovation hubs. Supporting start-ups and SMEs to access Research and Development funding and technical expertise will help scale new products and technologies. CPD for designers and manufacturers can help embed innovation throughout the value chain." (Individual)

Encourage use and increase sustained demand

6.14 A common response was that maintaining or increasing demand was critical to promote innovation, particularly where confidence could be given that this demand would be sustained long into the future. To achieve this, Welsh Government procurement was suggested as an avenue to drive change, in addition to marketing and championing the sector to build awareness.

"Use more timber/wood based products in high value construction projects - specifically projects which have long term investment from Government. In particular affordable social housing where Government supports high levels of stable, long term investment through Social Housing Grant and other capital schemes." (Other public sector – markets)

> "Welsh Government could work in partnership with home builders… to develop and articulate a clear wood cascading protocol." (Other public sector – skills)
>
> "Support innovation and commercialisation of new products such as wood fibre insulation." (Other public sector – woodland management)
>
> "Design for disassembly and reuse can be driven via stipulation within any government procurement of new buildings." (Membership organisation / representative body)

Regulatory changes

6.15 Many respondents felt innovation in design could be supported by clarifying and amending regulations. This included updates to building standards and amending technical timber specifications. In particular, a number of respondents felt that new building projects should be designed for disassembly and reuse.

> "The Welsh Government should consider setting targets for the amount of wood used in construction." (Individual)
>
> "Standards need to be amended and supported such as promoting C16 instead of always asking for C24 structural grade timber." (Individual)

Incentives

6.16 Another way to foster innovation was through the provision of grants and incentives. Suggestions either targeted incentives at product development – varying from direct funding for product development to fostering collaboration between industry, universities and government – to incentivising demand for these products to drive innovation.

> "Create an annual competition for microbusinesses with rewards and recognition attached." (Membership organisation / representative body – multiple sectors)
>
> "Provide more grants for wood based product innovations or wood based products competitions with rewards." (Private sector – manufacturing and product development)
>
> "The Welsh Government could introduce incentives or regulations to encourage the adoption of such products." (Individual)

6.17 Less frequently, respondents also pointed to the need for wider engagement and communication building across the supply chain.

> "Increasing connectivity between growers, producers and manufacturers. Growers need to grow what the manufacturers want to buy." (Private sector – woodland management)

Looking to existing progress

6.18 Similarly to the previous question, some highlighted organisations which are already making progress towards this objective, such as Tai ar y Cyd, BSW Group and Kronospan, and suggested Welsh Government consult them for their expertise.

Priority 4: Instilling confidence in demand

What actions could be taken in Wales to increase the use of timber and wood fibre in long-term uses, such as construction?

Consultation form responses

Incentives and regulatory changes

7.1 Most commonly, respondents suggested encouraging increased timber use in construction, including making regulatory changes or incentivising its use. These suggestions included insisting on timber construction at the procurement stage or even penalising non-timber construction.

7.2 Other suggested changes were targeted at overcoming barriers which housebuilders face in using more timber, such as providing assurance about the safety of using timber in construction to insurers and fire departments or underwriting risks.

> “There are issues with insurers and fire departments still when building with timber. More assurance schemes are needed to underwrite the long-term safety and longevity of timber framed buildings.” (Individual)

> “Doing things differently from the norm inevitably increases the cost of construction due to the insurance industry’s understandable response to change and unfamiliarity. The timber industry is delivering on its responsibility to address insurance concerns through publications such as the ASBP’s Mass Timber Insurance Playbook. Timber framed housing is increasingly widely accepted, not only in Scotland where it makes up over 90% of new build housing, but also Wales and England. However, there is evidence of the need for a similar publication for low rise standard timber frame construction, particularly for when biogenic insulation or timber cladding is used. There is also a potential role for government to underwrite a degree of risk in a similar way to the approach used for housing vulnerable to flooding that would otherwise be uninsurable – this is known as Flood Re. It may also be possible to insure all public buildings and social homes under a single all-encompassing insurance policy reducing risks and costs for all parties.” (Membership organisation / representative body – multiple sectors)

Aligning supply and demand

7.3 In order to facilitate this, some felt it was important to align timber supply better to markets, both in terms of quality of timber for construction use, and its quantity. In some cases, this involved Welsh Government involvement in creating better forecasting and tracking timber supply and demand to assist businesses.

> “Government to encourage the larger proportional use of timber in construction. The whole supply chain needs to have a degree of confidence injected which will allow all participants to play their part.” (Individual)

7.4 For some, this also meant that better communication within the supply chain and NRW was necessary, including engaging with housebuilders about their needs, and seeking to align timber growth and processing with construction demand. It was highlighted that efforts to increase demand without the availability of corresponding local timber supply would be environmentally unsustainable.

> "Support for small and medium scale enterprises, especially sawmilling and product manufacture going into local supply chains so they are better able to respond to market needs. Increased availability and accessibility of timber from WGWE via NRW, especially in small lots suitable for local processors." (Membership organisation / representative body – woodland management)

Raising the profile of Welsh timber

7.5 In addition to providing assurances to fire departments and insurance organisations, respondents commonly suggested increasing marketing, awareness or education regarding Welsh timber and the sector, the need to counter negative perceptions of Welsh timber, as well as the downsides of using timber alternatives in long term uses like construction.

> "GiB has just submitted a myth busting article to the TTJ and one of the myths it addresses is that homegrown timber is not as good as imported. Facts are needed to dispel this perception including research into the use of C16 rather than the overspecification that currently happens with imported C24. Work is needed with insurers and specifiers to address this issue coupled with a shift in mindset towards efficient material usage of the timber that is on our doorstep." (Third sector – environmental NGO)

> "Advertising, marketing. Emphasis on the harm of using plastics." (Individual)

7.6 This included a comment raising the opportunity of using the standardised housing designs in the Tai ar y Cyd pattern book to accelerate actors in the social housing market and demonstrate both demand and commitment to the use of Welsh timber.

How can we use home-grown timber and wood fibre to maximise local supply chain opportunities?

Consultation form responses

Increase marketing/ awareness of /education about Welsh timber and sector

7.7 Across all questions against this priority, respondents made similar suggestions for increasing marketing and publicity of Welsh timber to raise awareness among both commercial sectors and the public. Besides general promotion about the benefits to the local economy, one novel suggestion was to make the origin of wood products traceable to decrease disconnect between producer and consumer.

> "We do not make enough of marketing locally produced timber. If it was easily traceable to a forest using blockchain technology, it could alter public perception and make them link woodland management with products that they use on a day-to-day basis. There's a disconnect between producer and consumer. How many people know where the timber in their garden

seat comes from? Many might consider the use of tropical hardwoods to be an indicator of a premium product, but we need to highlight the benefits of local sustainably grown timber." (Membership organisation / representative body – markets)

Shorten supply chains / more local supply chains

7.8 A number of suggestions called for more local supply chains to minimise transportation emissions and imports and increase buy-in from local communities.

"Timber is a renewable resource that helps reduce carbon emissions. Using locally sourced timber minimises transportation emissions and supports sustainable forest management." (Private sector – harvesting and transport)

"Investing in domestic processing capacity, including sawmills and engineered timber production, will reduce reliance on imports. Establishing regional timber supply clusters could connect growers, processors, and end-users more effectively. Public procurement should favour local timber wherever possible." (Private sector – skills)

"Trwy sefydlu meithrinfeydd, coedwigoedd, melinau coed a systemau cludiant yn agos at ei gilydd mewn ardaloedd dros Gymru gyfan." [By establishing nurseries, forests, wood mills and transport systems close to each other in areas all over Wales.] (Individual).

"Develop Integrated Biochar Production Hubs: Establish localised biochar production units near forestry sites and nurseries, using brash and wood residues. This creates immediate local demand, reduces transportation costs, and encourages sustainable forest management. Link Forestry with Agriculture: Facilitate direct partnerships between forestry producers, local farms, and horticultural nurseries, enabling farms to utilise locally produced biochar for improved soil fertility, water retention, and climate resilience. Encourage Circular Economy Initiatives: Foster enterprises that convert lower-grade timber and brash into biochar, woodchip mulch, animal bedding, and horticultural substrates. These secondary products significantly boost local economic value, job creation, and resource efficiency." (Private sector – woodland management)

Economic incentives/ disincentivise use of imported timber

7.9 In addition, there were calls for financial incentives for using local timber in government procurement, assigning carbon budgets, or disincentivising imports.

"Stipulate in government contracts that UK timber should be used in public building projects. This can set a precedent and encourage wider adoption in the private sector." (Private sector – harvesting and transport)

Prioritise small scale operators/ processors

7.10 Some pointed out a lack of small sawmilling capacity, and that steps would need to be taken to encourage their access to timber in order to process home-grown timber, and that this was potentially a role for NRW or Welsh Government.

> "Almost all of the small local sawmills that existed 25 years ago have disappeared. Only the large players remain." (Private sector Woodland management)

> "There needs to be better access to NRW eSales for small or niche sawmills/processors/buyers to maximise products available to the market" (Individual)

> "Small businesses should be enabled to enter wood production, through, for example, expanding the limited range of species that large sawmills will take, helping with transport or energy costs to make it economical to mill, or funding new equipment. Certification is important but is very expensive for the smaller scale." (The Chartered Institute of Ecology and Environmental Management (CIEEM))

How can Wales better align timber supply with market demand?

Consultation form responses

Educating the industry

7.11 Similar to themes in the previous question, respondents commonly felt it was necessary to increase marketing, awareness and education about Welsh timber to markets. This included education directed at housebuilders/developers, architects, engineers, landowners, and the wider community about the benefits of Welsh timber. Some also suggested integrating teaching of forestry with farming.

Increasing supply

7.12 Consistent with responses to Priority 1, respondents remarked that it was necessary to significantly increase the supply of timber to meet current and future demand and reduce reliance on imports.

> "Only 50% of the roundwood consumed at Kronospan can be sourced from the Welsh market, the Welsh market could therefore absorb a minimum of 250,000mt per year from this single source." (Kronospan Limited)

Improving understanding of demand and supply chains

7.13 There were calls for improved understanding of local markets, more data and forecasting for future market demand, maximising the growth of species that would be most desired by housebuilders, and processing to the specifications desired.

> "Firstly, we need to understand what the demand is. For example, if the demand is for increased amounts of C16 structural timber then we need to

ensure that the management practices and public and private forests promote this.” (Private sector – skills)

“Develop a better more integrated understanding of local markets in Wales. The timber supply industry is totally dependent on imported timber for a very narrow end use particularly within the construction industry. We have not retained sufficient sawmill capacity to counteract this trend. One factor emerges in the general industrial supply chain in there is no real attempt to grade timber for the sawmill based on product or quality. In general this only applied to straightness of log with no incentive to attempt to consider grading to a higher log value for a different market. This has been the case in general for a very long time maybe due to lack of a market opportunity. Most of our higher construction timber grades are imported therefore there is little incentive to grow better quality timber. Local builders and timber users have a requirement for bespoke and specialist timber generally unavailable through traditional import based and industrial mill supplied timber. This could be seen as an opportunity to develop as an ongoing support mechanism for the local supply networks based in small mills with specialist knowledge. The government could take the initiative to support local mills and producers to procure and develop these market opportunities.” (Individual)

Priority 5: Developing sector capacity

What challenges need to be addressed to improve recruitment and retention in forestry and timber industries in Wales?

Consultation form responses

Invest in education, training and career pathways

8.1 Across the submissions, the need to invest in education, training and career pathways was the strongest theme in response to the question on how to improve recruitment and retention in the industry. There was some feeling that the current pipeline is not creating a large or skilled enough workforce.

8.2 Many responses noted the importance of better promoting the forestry sector and its career pathways to more learners and career-seekers. Underpinning many of these responses was feedback that learners are not aware either of the career opportunities that exist in the forestry and timber industries in Wales, or of pathways into and through them.

8.3 Some felt that it is important to teach knowledge and skills related to forestry and timber at all levels and ages of education to raise the profile of the sector from as early as primary level. This could include building stronger links between different parts of the education sector as well as between the education sector and industry.

> "Support school engagement events by exploring mechanisms to support local schools to attend college open days which needs to include understanding why schools could not attend this year." (Membership organisation / representative body – multiple sectors)
>
> "If a fire engine can visit a school why can't a harvester?" (Confederation of Timber Industries)

8.4 Some highlighted a need to improve the education and training available to learners, with the suggestions including:

- Increasing the number of vocational courses with different modes of delivery and teaching to widen access and suit a wider range of learning styles. This includes practical courses. Examples of good practice included: Llysfasi (Coleg Cambria), Glynllifon (Grŵp Llandrillo Menai), and Bangor University
- More integration between courses in related sectors (e.g. forestry and agriculture)
- Improving apprenticeship schemes and increasing the number of apprenticeships available. The Professional Forester Apprenticeship Scheme in England was given as an example of good practice
- Increasing the availability of work experience opportunities
- Embedding forestry across the school curriculum from a younger age (e.g. Forest Schools)
- Building forestry pathways through school (e.g. the new VCSE in Agriculture, Horticulture and Forestry)
- Providing training in specific industry required skills (e.g. HGV licences; training in heavy and dangerous equipment such as chainsaws)

- Working with the sector to align course curricula to meet current sector skill and knowledge needs, potentially as part of a review of current provision and gaps in provision

8.5 Timber and forestry careers should be promoted more widely among learners to raise its profile not only as a career option in general, but also as a high-skilled, modern, environmental and future-proof career option. This includes the need for investment to ensure careers advice and careers advisers are up-to-date and flag timber and forestry as career options.

> "Forestry needs to be perceived by young people as a progressive, dynamic, environmentally acceptable profession which can deliver multiple public benefits. It needs to be taught in ways that reflect the need for our forests to be managed as sustainable natural resources, where timber production is one of the benefits delivered alongside others - of equal importance - renewable energy, flood alleviation, biodiversity conservation and nature recovery, public access, landscape. A career in forestry must require a thorough understanding of how all these benefits can be delivered simultaneously in a balanced way from one forest area." (Private sector – other)

> "It's important careers advisors are taught about forestry. There is still an annoying view in schools you have to be a lawyer or a bricklayer. There seems to be very little thought into career provision." (Private sector – woodland management)

> "There is a lack of awareness among pupils, parents and careers advisers of the range of careers that forestry, ecology and wider environmental professions can offer and not enough in school curricula." (The Chartered Institute of Ecology and Environmental Management (CIEEM))

> "Forestry needs to be a topic in primary and secondary schools with an updated Careers Wales website which has an awful description of the sector along with very inaccurate roles, salaries and demand forecast which are all quite damaging if seen by school leavers." (Private sector – woodland management)

8.6 There is also a need to improve training and professional development for those already working in the sector. This needs to be accessible and high-quality and coupled with clear developmental pathways.

8.7 A few highlighted the need for funding to help improve education and training. This included: helping with costs for expensive courses for both new entrants to the sector and those wishing to change careers into the sector and writing off student loans for people who stay and work in Wales.

Addressing working conditions

8.8 Many suggested that the working conditions of forestry are a barrier to entry and recruitment, particularly for young people.

8.9 Most notable among the barriers mentioned was a lack of affordable housing in the rural areas where most forestry jobs are.

> "Build zero carbon pre fab timber buildings in regions where those forestry jobs are needed – rural housing availability and affordability is a significant barrier." (Third sector – environmental NGO)

8.10 Other barriers often involved characteristics of the job that could be off-putting. Some of these crossed-over with previous themes in this section and included:

- Working environment (e.g. working outdoors, in all weathers; working in all types of terrain; use of heavy and dangerous equipment and machinery)
- Physical work
- Low salaries where more money can be earned in alternative and similar-skilled or lower-skilled jobs
- Expense of training

8.11 While some barriers cannot be changed (e.g. outdoor working) suggestions for elements that could be addressed included:

- Competitive wages through salary uplifts which should be attractive at all levels of entry
- Affordable housing
- Improved job satisfaction
- Improved job stability/security
- Clearer progression pathways
- Raising the profile of the profession within education systems and among the public
- Funding to support training

Raise the public profile of the sector

8.12 As well as the need to raise the profile of the sector within the education and careers systems, raising the profile of the Welsh timber and forestry sectors in general was also a notable recommendation to improve retention and recruitment.

8.13 Some suggested that forestry lacks the public awareness of related industries, particularly farming which can be seen as the only industry important to rural areas. Raising public awareness could helpfully include promoting understanding that: forestry is a complex and skilled profession; woodlands are diverse and complex; forestry and wood processing are vital industries in the Welsh economy; and that the contribution of wood processing and forestry to Net Zero is crucial. Raising the profile awareness might help foresters feel more valued which may improve recruitment and retention.

> "We need to make foresters feel valued as professionals. In Europe, forestry is a highly respected profession that is valued by society, but in the UK we have lost our cultural connection to actively managed woodlands." (Private sector – woodland management)

Collect data to improve understanding of the sector

8.14 A group of responses suggested the need to collect data to understand the sector better in order to support workforce recruitment and retention. Suggestions included:

- Detailed labour market intelligence analysis
- Engagement with sector stakeholders to assess needs (e.g. timber market needs; impacts on profitability; skills needs and gaps)
- Impact assessments of existing activity

Draw on examples from outside Wales

8.15 A few responses suggested that it is worth learning from examples of approaches taken outside of Wales. Some of these were projects that the respondent was involved with.

> "Recruitment and retention issues in forestry and timber industries are familiar issues in other parts of the UK, so liaison with other administrations is advisable, e.g. Defra has recently launched a Sector Skills Plan which may have useful content which could apply in Wales." (Third sector – environmental NGO)

8.16 Examples included:

- Recruitment, retention and training challenges faced by Wales forestry and timber industries are the same as faced elsewhere in the UK so it may be worth considering approaches across the UK. Examples included: work done in Scotland (e.g. Industry Leadership Group to champion the sector); Defra Sector Skills Plan; Professional Forester Apprenticeship in England; Association of Scottish Hardwood Sawmillers; and FISA)
- Recruitment, retention and training challenges faced by Wales forestry and timber industries are also found across Europe, so best practice can be found here (e.g. RESILIENTWOOD project; 2024 European Wood Policy Platform policy paper *A Wood-Based Circular Bioeconomy For A Sustainable Europe which had a section on Skills and Education*; and Finland and Sweden are suggested as good examples without elaboration)

8.17 One respondent gave a detailed response suggesting Wales lags behind other European nations due to the limitation of the types of funding it can access.

> "The forest product sector in the UK is at risk of lagging behind other European nations due to the limitation of the types of funding offered through UKRI research councils. Timber is often excluded from both EPSRC and BBSRC open calls as being too close to the border between the two. While there is opportunity for businesses to access funding to work with higher education via Innovate UK, there can also be fields within the timber and wood products sector which are seen as unexciting, and thus having a lower likelihood of funding. Horizon scanning exercises such as that commissioned by Forestry England and reported in the paper by Tew et al. (2023) often identify potential for developments in the timber products field, or in development of silvichemicals, however the route to market for both of these is at the mercy of funding models and preferred areas for

funding support, or the ability and willingness of companies to pay directly for private research. Many of the smaller companies in the Welsh forest/wood products sector would struggle to access this support – despite the availability of R&D facilities such as the BioComposites Centre at Bangor University. As a result, the Smart Feasible Innovation Fund (S-FIS) as well as other programmes offered by Business Wales are essential to supporting the development of the forest products sector." (Public sector – skills)

Change the demographic makeup of workforce

8.18 A group of comments concerned changing the demographic makeup of the forestry and timber workforce.

8.19 Among these, most comments highlighted that the workforce, including contractors, is an ageing one. With a lack of appropriately skilled young workforce coming into the industry, some felt that most skills are being lost though retirement.

"The industry faces an ageing workforce, and without targeted action, there may not be a sufficient pipeline of trained new entrants to replace retirees." (Private sector – skills)

"Most people don't leave forestry or the timber industry for other professions except by retirement but there are a lot of people who have retired in recent years and all their experience has been lost." (Private sector – woodland management)

8.20 A few other respondents noted a lack of diversity in the workforce that should be addressed with gender and socio-economic background both being flagged as particular areas for improvement. One suggested that there is less diversity in the rural workforce. One respondent highlighted research in this area being undertaken by RFS and Bangor University.

Other comments

8.21 Other comments represented themes that were less well developed by respondents or comments only made by one or a few people. These included the following.

8.22 Some suggested the potential for exploring synergies with linked industries. Examples included: synergies between forestry and farming to develop cross-disciplinary training, skills and recruitment from farming and links with the biochar industry to increase employment.

8.23 Some focused specifically on the need to develop or expand the capacity of the contractor base. For some, increasing skills in the contractor base was about replacing skills lost through an ageing workforce and a lack of appropriately skilled contractors coming through.

"The opportunity to develop a contractor base who have the skills, equipment and entrepreneurship to develop productive and sensitive models for the management of smaller/ broadleaved/ on-farm woodlands + equipping the processing sector and beyond to make use of the wider range of species and timber sizes that would be likely to result from a more species and structurally diverse forest resource." (Private sector – harvesting and transport)

8.24 Some responses highlighted that economic uncertainty and the costs of doing business can be prohibitive to hiring new staff.

> "The lack of consistency in funding for woodland creation and the lack of certainty in getting schemes approved has seen our programmes boom and bust over relatively short cycles. This is not an operating environment where we can recruit with confidence and invest in training our staff. This effects our suppliers, particularly in the contracting sector in exactly the same way." (Private sector – woodland management)

What gaps are there in forestry and timber training and skills provision in Wales?

Consultation form responses

8.25 Responses to this question overlap with responses to other questions in Priority 5. While responses did outline gaps, many went on to suggest reasons for, and solutions to, these gaps. These are all summarised here. While some responses provided specific examples, responses are summarised in general terms.

Identification of specific gaps

8.26 Some responses identified particular skill gaps. Some responses discussed gaps in workforce skills while others discussed gaps in training more directly.

8.27 Respondents often said that they felt there is a lack of appropriate skills among the workforce and contractor base. Particular skills gaps, some mentioned in more than one response, included:

- Gaps in broadleaf forestry knowledge due to a fear of working native broadleaf for timber
- Lack of specialised courses for emerging technologies (e.g. sustainable timber processing; advanced forest management techniques)
- Lack of knowledge about managing higher value timber species
- Lack of knowledge about planning and designing for CCF
- Lack of knowledge of more traditional and low-impact approaches and techniques (e.g. horse logging)
- Lack of knowledge around climate resilience
- Lack of knowledge about forest ecology and ecology of other natural/semi-natural habitats that occur within the forest environment
- Lack of skills and knowledge of best practice and products which have been developed through experience
- Lack of skills in use of heavy and dangerous equipment (e.g. chainsaws)
- Advanced timber construction techniques
- Sustainable forest management

- Digital tools (e.g. GIS)
- No standard training on safe mill operation
- Silviculture
- Woodland management
- Need more planters
- Need more Forest Works Managers
- Tree marking in uneven-aged forest management
- Lack of knowledge about how to grow, manage and market higher value timber species
- Long-term management of hardwood timber
- Disease identification
- Lack of understanding of the benefits of public use of woodland
- General business skills (health and safety management; business administration)

8.28 One response said they worried that the lack of skills means that the current workforce is not futureproof. For example, they are not equipped to meet future industry demands and environmental standards.

Reasons for skill gaps

8.29 Some responses suggested reasons for skill gaps. These responses included:

- Lack of appropriate, modern, specialised training courses for learners and workforce including the contractor base
- Lack of representation of forestry and timber in school curricula
- Not enough uptake of some available training while some is reported as over-subscribed (Forestry Commission degree-level apprenticeship)
- It is hard to deliver some of the relevant courses which are high cost and low numbers (e.g. FMO)
- Knowledge gaps occur within courses (e.g. Forest Machine Operators do not learn about silviculture; forestry in schools seen as an environmental rather than industrial/technological concern)
- There is too much of a gap between the forestry and farming sectors, both in cross-sector working and in separation of knowledge and skills for each during training
- The working environment can put some people off (see previous question). This can also reduce retention of trained entrants to the industry
- Geographic gaps in locations of training mean that it is not easy for everyone to get to training courses
- It can be hard for SMEs to justify training new entrants due to costs and risks
- Differences in funding contexts of different training providers and training routes is inequitable

Proposed solutions to skill gaps

8.30 Finally, some respondents proposed specific solutions to identified skills gaps. These included:

- Develop more and better training (e.g. develop critical hubs for education and training)
- Better promotion of both timber as a career pathway and the training available to help enter the industry
- Better career development pathways and opportunities to those within the industry and promote these
- Stronger partnerships between education and industry to provide practical experience and career pathways
- More industry-specific apprenticeships
- Increased focus on skills training for small businesses (e.g. forestry-specific skills; health and safety; business management)
- Improve access to training for a more diverse group of learners
- Greater support for specific industries/areas to increase employment in them (e.g. small mills; biochar producers)
- Funding to support training and training providers (e.g. travel and accommodation; paid apprenticeships; grants to support contractors to train staff)
- Invest in more good quality trainers to meet anticipated demand
- Collect data from training providers to help identify gaps and areas for improvement in training
- Activity to help ensure learners are industry-ready (e.g. CPD events; mentorship; training)
- Provide clear guidance and support for learners to promote and facilitate entry into the sector (see responses to last question)
- Work collaboratively across countries
- Increase diversity in the workforce
- Create local circular economies
- Clear national narrative of forestry and woodland sector with political support
- Centrally supported, long-term national training programme set within a national organisation
- Potential to create a new scheme similar to Focus on Forestry First. The removal of support for this has had negative impacts on the sector
- Invest in training to bridge gaps/encourage links between sectors (e.g. forestry and farming; forestry and construction)
- Invest in Marteloscope training (good examples already exist in Wales and elsewhere in Europe)
- Fully-funded courses for heavy and dangerous equipment (e.g. chainsaws)
- Training which takes a holistic approach to forestry management. By not compartmentalising woodland for different objectives links between, for

example, conservation of biodiversity, flood alleviation and carbon sequestration can be appreciated

- Stronger consideration of the wide range of possible employment opportunity that stems from sustainable forestry across Wales
- Investigate post-college drop off (e.g. why forestry students are moving into arboriculture)

What actions are needed to support the development and adoption of new products, processes and/or technologies?

Consultation form responses

Investment in the sector

8.31 Some responses highlighted the need for investment in the sector to support the development of new products, processes and/or technologies. Investment in a range of institutions and sectors (e.g. schools, colleges, universities, manufacturers, users) could support innovation, including cross-sector collaboration. Public, private and third sector all have a role to play.

8.32 Suggestions made by one or two respondents and which were not elaborated on included: need for tax breaks (an R&D tax credit was specifically mentioned in one response); an innovation fund; low-interest loans; start-up grants and business rates relief for businesses looking to grow, invest and expand.

8.33 Innovation needs to be supported by consistent policy and strategy. Consistent long-term commitment is essential to create the confidence for investment.

8.34 Some responses highlighted the need to invest in the workforce to support innovation. This includes investing in quality and appropriate training, including in-work learning (a consolidation training model was recommended by one respondent involved in this type of approach) and the potential for statutory training requirements to be considered. One said that increasing diversity in the workforce will raise the capacity of the sector to innovate. Another said that recruitment from elsewhere could drive innovation in the sector.

8.35 Financial support (e.g. grants, funding) in particular industries can help create certainty in the sector, including over the future adoption and use of products, technologies and processes.

8.36 Some mentioned specific areas of the sector suitable for investment. The most commonly mentioned was biochar. Another suggestion was the need to invest in and commit to the volume of timber coming to market as this will create the conditions for further investment from the sector. A third suggestion was support for small and innovative timber processing.

8.37 Investment in associated industries (e.g. construction), cross-sector and cross-border collaboration were also suggested as important for the development of new technologies and processes which align with sector needs.

> "Foster collaboration between construction firms, academia, technology developers, and government bodies. This will facilitate knowledge

> exchange, accelerate product development, and ensure that new solutions are practical and aligned with market needs." (Private sector – markets)

Investment in technology

8.38 Other responses focused on investment in technologies themselves.

8.39 Some general comments suggested investment in technology with no elaboration. One mentioned the need for both innovation and capital funding to help develop new ideas and then bring them to market.

8.40 Investment in technological innovation will assist the creation of new products which the sector will then invest in further once the products are established. WGWE could play a role in trialling new technologies to attract later investment from the private sector. Investment could come in the form of funding and grants and encourage cross-sector collaboration.

> "To support the development and adoption of new products, processes, and technologies in forestry and timber industries, Wales should invest in research and development, offer funding and grants for innovation, and foster collaboration between industry, academia, and government." (Private sector – manufacturing and product development)

8.41 It is important to support the end product of innovation by providing training and education on new technologies. This could involve developing regional demonstration hubs and knowledge-sharing networks. Circulation of information relating to new technologies could be helpful and could include technical guidance and best practice.

8.42 Funding to support businesses to invest in new technologies (e.g. software, machinery, equipment) would be welcomed. There should also be support to help businesses commercialise successful innovation.

8.43 Technological innovation could also be supported by: promoting new technologies; creating pilot projects to test innovations (Welsh Government's Co-operation and Supply Chain Development Scheme mentioned for its role in supporting pilot projects); incentivising businesses to adopt sustainable, high-tech solutions; and Welsh Government working with universities and their spin-off businesses.

8.44 Just as with investment in the sector more broadly, investment in technologies themselves needs to be supported by the consistent policy and strategy to create the confidence for further investment.

8.45 Some mentioned specific areas of the sector suitable for investment. Mostly reference was made to biochar. The development of new wood products could help make use of poorer quality timber was also suggested.

Regulation

8.46 Some responses suggested the need to focus on regulatory practices. The need for clear standards and regulations for new materials and technologies are important. They could help ensure that new products meet safety, quality, and environmental standards. This will boost confidence and make them easier to invest in further.

Priority 6: Underpinned by behaviour change

What actions are needed to improve public understanding of productive forestry?

Consultation form responses

Publicity and communication

9.1 In order to improve public understanding of public forestry, responses to the consultation focused heavily on the importance of communication and involvement with the general public about the role of woodland as a crop and its economic benefits to Wales.

9.2 Some suggested publicity campaigns, to highlight the environmental, economic, and social benefits of sustainable forest management.

> "Welsh Government need to say with a loud clear voice forestry is positive, good for the economy, environment and for Wales. There needs to be better publicity & education tied to point 5 above to the benefits of using timber with Wales, both environmentally and carbon neutrality." (Private sector – agriculture / Private sector – woodland management)

> "A robust publicity campaign extolling the benefits of affordable housing constructed in timber, with information displayed for the public at every site where such buildings are being erected. The positive aspects of timber usage including its role in climate change mitigation, and where possible information on where the timber has been sourced, would help educate the public in the utility of productive forestry and the benefits of increasing forestry cover." (Individual)

Countering misunderstanding and negative perceptions

9.3 In particular, many respondents felt it was important to educate the public about why trees are felled and how woodland is designated commercial to reduce negative perceptions and misunderstandings of the industry. Some highlighted examples of existing campaigns on this topic.

> "The Forestry Commission's recently launched 'Trees for Timber' campaign is exactly the kind of initiative that is needed – reaching out to the wider public and explaining why we need to grow (more) trees and then cut them down! And replant of course. Productive forestry has a great story to tell and we need to have the confidence to go out there and tell it." (Confederation of Timber Industries)

> "There is a disconnect between public perception of forestry, and knowledge of the role that wood plays in their lives. Most people do not understand that most trees in Wales are managed as a crop, similar to an agricultural crop. This needs increased communication from the whole sector. Campaigns like Wood for Good (the UK's wood promotion campaign which campaigns on behalf of the whole timber industry in the UK) do good work but need to be better promoted." (Private sector – woodland management)

9.4 In addition, some respondents pointed to actions which could also help counter negative perceptions, suggesting reducing what they believed were destructive or unsightly clearfelling, or providing better localised messaging when they do take place to explain why.

> "Limited communication (such as poor signage or online message publication) prior to felling activities can lead to localised negative responses. Creating more opportunities to engage local people with their nearest productive woodlands, as well as education opportunities, would help to alleviate these responses." (Private sector – millers and producers)

Wider education

9.5 In addition to direct publicity of the sector, it was commonly suggested that wider education was required on topics such as biodiversity, carbon reduction, and the interconnectedness of these elements with forestry was necessary. Suggestions commonly included embedding this within the Welsh curriculum.

> "It will take time to change public understanding of productive forestry but this change is needed in order for forestry to thrive in the longer-term. Schools and early years forest education can and should play a major role in starting to change the public perception of productive forestry." (Third sector – environmental NGO)

> "Integrating Forestry into the Curriculum: Curriculum Development:
>
> - Work with educational authorities to develop modules that accurately represent UK forestry, highlighting the differences from global issues like deforestation in rainforests.
> - Forest School Programs: Programs like Forest School offer hands-on learning experiences in natural settings, helping children connect with nature and understand sustainable forestry practices."
>
> (Membership organisation / representative body – multiple sectors)

> "Raising awareness of the benefits of trees and woodlands through the curriculum, through the farming sector and other land-based activities is essential, as is the acknowledgement of the need to diversify the participation in the sector. Mainstreaming Nature Based Solutions to the multiple challenges we face will go some way to improving pro-environmental behaviours, and greater support for a wood-based economy in Wales" (Third sector – environmental NGO)

9.6 A small number of comments suggested increasing woodland in urban environments to broaden education about the benefits and importance of forests.

> "To improve understanding of the industry will need increased urban woodland that deliver positive outcomes. Although not directly supporting a timber industry these urban woodlands nevertheless will help convince our urban population of the benefits of trees and help in creating the acceptance of an increase in woodlands and wood products. Urban woodland has also been shown to provide huge benefits to urban communities (see Woodlands for Wales)." (Individual)

9.7 Additionally, some suggested that farmers in particular could benefit from specific communications.

> "The nature and climate adaptation benefits should also be made explicit, while for landowners, understanding how trees and woodlands can be planned and used by farmers themselves, in ways that directly support the economic sustainability of the farm business, is likely to be among the best ways to incentivise engagement." (Third sector – woodland management & Third sector – environmental NGO)

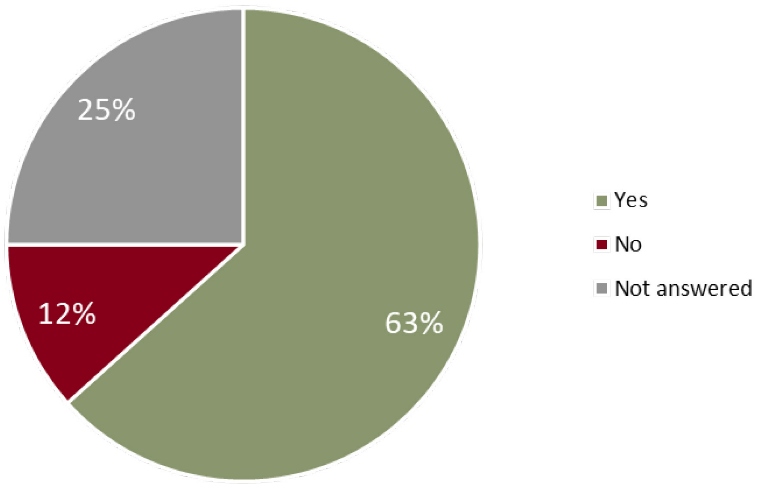
> "Develop case studies of examples of farmers successfully practising production forestry in a positive way, retaining the integrity of their farms and quashing the illusion of losing family farms." (Membership organisation / representative body – multiple sectors)

Do you support the proposal to establish an Industry Leadership Group in Wales?

Consultation form responses

9.8 The consultation included two closed (yes/no) questions. Responses that were received via email did not always explicitly indicate a yes/no response when giving comments. Responses were only coded to 'yes' or 'no' where this was unambiguously their response (e.g. they stated explicitly that they supported the proposals or said 'yes' at the beginning of their comments). Comments which offered qualified support or were ambiguous were marked as 'not answered' to the closed question, but their written responses were included in the thematic analysis.

Figure 1: Do you support the proposal to establish an Industry Leadership Group in Wales?



Base: 120 (respondents that answered the consultation form questions)

9.9 Overall, almost two thirds of consultation respondents supported the proposal to establish an Industry Leadership Group in Wales (63%). Around one in ten (12%) opposed the proposal, while a quarter (25%) did not respond to the question.

Do you support the proposal to recruit a Chief Forester for Wales?

9.10 Many respondents made generally supportive comments about the prospect of the establishment of an Industry Leadership Group. In general, these respondents saw the role positively influencing:

- Industry promotion / profile raising, both politically and among the public
- Representing the needs, interests and voice of the industry
- Co-ordination (e.g. supporting collaboration between forestry related sectors and with NRW)
- Improving practice, such as through linking in with UK nations or promoting international best practice, providing guidance and training, and inputting into policy
- Monitor progress towards achieving the aims of the Timber Industrial Strategy

9.11 In order for the group to achieve these positive effects, some respondents qualified their responses with recommendations on how the group should operate.

9.12 Most numerous among these was that the group would require adequate expertise, including input from those with real world experience of working in the sector. This meant including a diverse range of expertise and experience, and ensuring the group is not dominated by one particular interest. Suggestions included the following: representatives from both the public and private sector; those from forestry, processing and construction backgrounds; those from related sectors (farming, nature, water, construction, etc.); industry bodies; trade unions; small operators.

> "It should be led by the industry with representatives from across the timber supply chain, and include private and public sector and NGO involvement." (Third sector – environmental NGO)
>
> "Membership should be focused on experienced senior business managers from across the full wood supply chain" (Individual)

9.13 Others felt that the group needed to have clear and well communicated objectives and terms of reference, including targets, accountability mechanisms and progress monitoring towards goals.

> "The group must have a clear terms of reference and WG/NRW must be happy to take criticism and not be thin skinned. Government must accept failure and drive through it. My concern is the group may be perceived as the private sector stating the obvious and not be very constructive, similar to the legacy Welsh Forest Business Partnership." (Velcourt Group & Private sector – woodland management)

9.14 Nevertheless, a small number of respondents expressed concerns that the group would not provide value for money or would experience mission creep and delays.

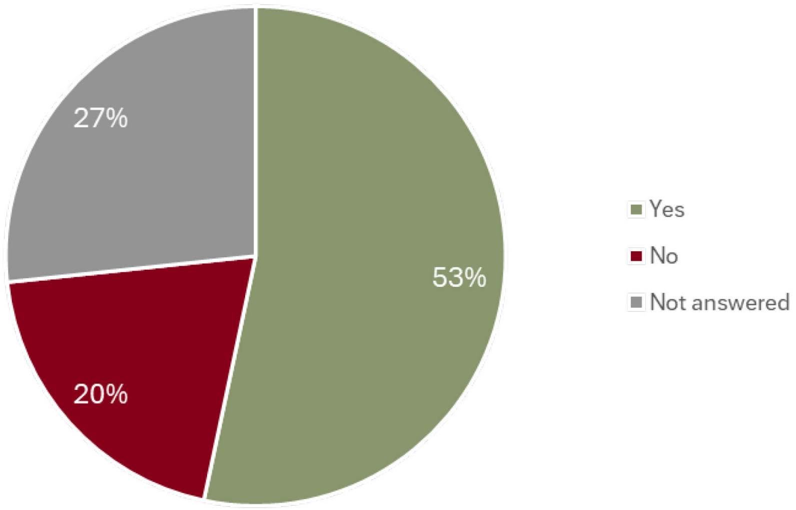
> "Yes but needs... Clear and Measurable Objectives: Ensure that the group sets clear, measurable goals with specific timelines. Without concrete targets, there is a risk that discussions could become too broad or unfocused, which might delay tangible outcomes." (Individual)

> "As long as they are not an industry lobbying group with a focus on maintaining the status quo, it should be a positive development." (Private sector – millers and producers)

Do you support the proposal to recruit a Chief Forester for Wales?

Consultation form responses

Figure 2: Do you support the proposal to recruit a Chief Forester for Wales?



Base: 120 (respondents that answered the consultation form questions)

9.15 Around half of respondents (53%) supported the proposal to recruit a Chief Forester for Wales, while a fifth (20%) disagreed and around a quarter (27%) did not provide a response.

If yes, what added value would the role bring to the forestry sector in Wales?

9.16 When it came to the added value the role of a Chief Forester for Wales would bring to the forestry sector, respondents to the consultation raised three prominent themes.

An ambassadorial / sector champion role

9.17 Some saw a key potential role for the Chief Forester being to promote the sector, including in raising awareness of the importance of the sector among the public and related industries, and provide a stronger voice for the sector to Welsh Government or the UK government.

> "A role for a forestry specialist could enable a stronger voice that could speak up for the sector and bring better balance to debates about the subject." (Individual)

> "The new role should see an increase in the use of timber in Wales along with promotion of land take up for strategic tree planting, improving skills, training, manufacturing, onboarding of professionals and industry recognition for Welsh and UK timber in home building was recognised by insurance, building control and warranty providers." (Home Builders Federation)

Co-ordinating collaboration

9.18 Some pointed to similar roles in other countries, such as Scotland, where the role had been beneficial in this capacity in implementing standards.

> "The Chief Forester would need to be a non-political appointee with genuine expertise. They would act as spokesperson for the industry to the public, Natural Resources Wales and the Welsh Government. But, the role needs to be embedded in a timber industry 'system' where inputs and outputs are linked. The post-holder would need to represent the whole industry, up to and maybe including the producers of timber-based products." (Individual)

Strategy implementation and delivery

9.19 Some believe the Chief Forester should be responsible for delivering the Timber Industrial Strategy's priorities. In order to do this effectively, this would require working with a range of organisations in the industry, and sufficient powers to hold public sector organisations like NRW to account. Some suggested this would require a degree of independence from Welsh Government and NRW, although others felt that the Chief Forester would need to work alongside or sit on NRW's board in order to effect change.

> "The role should include something of a historic 'Inspector General of Forests' role - capable of making visits and audits, and requiring reports, and 'calling in' plans from NRW. Their appointment should be more

> independent of NRW than the Scottish model, closer to an independent commissioner.” (Individual)

> “The main role of the Chief Forester would be to provide independent advice to the relevant minister on the forestry professionalism within NRW and to be responsible for maintaining and ensuring professional standards are adopted and applied in NRW.” (Individual)

> “Hold the public sector forest estate manager to account, for delivery of key programme outcomes.” (Individual)

Requirements for the role

9.20 In order to facilitate this role, respondents commonly thought the individual would require adequate sector knowledge and experience.

> “The post should be undertaken by a forester with knowledge, experience and understanding across all aspects of the sector.” (Membership organisation / representative body – woodland management)

> “We believe such a position could be useful as it has been in other countries, e.g. Scotland. They should be a professional forester, with sound understanding of the whole supply chain and the issues faced by the sector.” (Third sector – environmental NGO)

Other comments

9.21 Besides these comments, a small number of responses were received stating that additional information about the scope of the role was needed in order to provide comment or suggest whether or not the role would be necessary or beneficial.

> “A single champion advocate for the Welsh forest industry has potential to unify the sector, but it is unclear from the proposal how this post will be funded, what this appointment would deliver, and to whom the post would be accountable. To make a proper judgement on the proposal, a term of reference should first be established along with a justification for the role. The value of a Chief Forester in the absence of similar positions to represent agriculture or tourism, for example, should be carefully considered.” (Public sector – woodland management)

9.22 Several comments suggested that the role was not needed at all, and that resource would be better spent on woodland creation/management, or that it would present a risk of giving power to a single point of view.

> “This is likely to be a high paid post and better to put resources into actual woodlands.” (Individual)

> “I fear that providing such a role risks the predomination of one persons’ views, and if this is simply focussed on so called productive forestry we will maintain the current poor practice of non-native low value timber production.” (Individual)

The Welsh Language

What, in your opinion, would be the likely effects of the proposals on the Welsh language?

- **Do you think that there are opportunities to promote any positive effects?**
- **Do you think that there are opportunities to mitigate any adverse effects?**

Consultation form responses

Rurality and the Welsh language

10.1 A substantial number of submissions highlighted the links between rural populations in Wales and the Welsh language. Respondents felt that rural communities were both more likely to be Welsh speakers and to work in sectors relating to forestry. As a result, some saw the proposals' potential to increase employment among rural communities by expanding these sectors, and therefore a positive impact on the language.

> "The Welsh language strongholds are mostly in rural areas of Wales. Forestry is a rural sector and a thriving forest industry will have a positive effect on use of the Welsh language by increasing rural employment and thus keeping rural communities alive." (Woodland management)

10.2 Some believed this would have the effect of reducing the numbers of Welsh speakers, and particularly young people, who look for employment in areas of lower Welsh language use, and across the border in England. It was suggested that a prosperous Welsh timber industry would result in cohesive, stable communities of Welsh speakers remaining in their communities, helping to retain use of the Welsh language and culture. A small number of these responses highlighted this could have the greatest positive effect when encouraging small operators embedded within their communities.

> "All of the ambitions and opportunities in this strategy will, by default, promote positively the use of the Welsh language, by offering more skilled employment in our rural communities allowing for a cohesive resilient community - this has been a proven benefit as a post war society with the Forestry Commission in Wales employing and training a workforce to establish our forests today in our rural areas, allowing communities and Welsh speaking families to stay in their home regions." (Individual)

10.3 A minority of responses saw the opportunity of Welsh farmers – another group with high Welsh language proficiency – to supplement their income through forest work and producing timber.

Encouraging Welsh language use in the sector

10.4 A small number of respondents made proposals to encourage the use of Welsh language across the sector. These included encouraging use of Welsh in descriptive materials or imagery attached to timber products, and putting Welsh-language information first before the English.

10.5 There were also suggestions to market timber products as having been produced in Wales, and any public engagement materials to promote the sector being available in both Welsh and English. A small number of responses suggested this should be extended to encourage the use of Welsh tree names and timber operational terms, including integrating this within forestry courses in universities and colleges.

> "Where possible the learning of the Welsh tree names and Welsh timber operational terms should be encouraged. The unfortunate mixing of forestry with English speaking science in Welsh universities has created an unfortunate gap this must be bridged and suppressed with positively reinforced first language Welsh attitudes to Welsh forestry where possible. Therefore we propose that Welsh language modules should be included in all forestry courses within universities and colleges by law to support Welsh as a timber language moving forward the number of self-employed." (Private sector – millers and producers)

10.6 Separately, some suggested providing more opportunities to learn Welsh, including funding classes for those in the sector/communities where forestry is a prominent source of employment.

Mitigating adverse effects

10.7 Fewer respondents suggested ways to mitigate potential negative effects to the Welsh language, with some respondents stating they did not believe anything within the proposals would have a negative impact.

10.8 Those that did make suggestions tended to reiterate concerns around the potential impact to farming discussed earlier in the report, and how this might affect the Welsh language as a result.

> "Overall, 43% of workers in Agriculture, Forestry and Fisheries speak Welsh compared to an average of 17% across all workers in Wales. This figure is the highest percentage of any sector. The evidence is useful in highlighting the role of farming within our communities in terms of the preservation of the Welsh language. Overall, it is our strong view that a thriving Welsh language in rural areas is underpinned by thriving Welsh farms; any proposals that weaken the farming sector will ultimately weaken our Welsh language and what defines us as a people and a nation. Farming is, therefore, central to the future of the Welsh language and any strategy aimed at increasing timber supply in Wales should prioritise farming families and rural businesses rather than an approach that leads to widespread change in land use and ownership." (Membership organisation / representative body – agriculture)

10.9 Relatedly, one response raised unique concerns that the strategy would disempower smaller rural communities and suggested the strategy be reconsidered through the lens of the 'A Wales of Vibrant Culture and Thriving Welsh Language' goal of the Well-being of Future Generations Act; place greater consideration on the interconnected nature of culture and land; and implement the strategy via an integrated multifunctional land use framework co-designed between all land-based interests.

10.10 Others called for increased employment opportunities among rural communities, identifying a current lack of workers in the forestry sector in Wales which necessitates employing workers from outside of these communities and reducing the use of Welsh. It was therefore seen as important to create opportunities for local people, including through increasing training in Welsh.

10.11 Additional suggestions of mitigations for Welsh Government to consider included:

- Securing funding for increasing Welsh learning among the forestry sector
- Providing translation support to convert standards/industry guidance/ research findings into Welsh
- Publicity campaigns about the importance of farming/rural communities to Welsh language and culture

In your opinion, could the proposals be formulated or changed so as to:

- **have positive effects or more positive effects on using the Welsh language and on not treating the Welsh language less favourably than English; or**
- **mitigate any negative effects on using the Welsh language and on not treating the Welsh language less favourably than English?**

Consultation form responses

10.12 Fewer respondents gave comments to the second question about the Welsh language.

10.13 Those that did respond tended to reiterate comments from the previous question or provide general comments about the importance of the Welsh language, rather than suggesting changes to the proposals.

10.14 The most prominent theme was again about the interconnection between forestry, rural communities and the Welsh language, and that proposals aiming to support or expand the forestry sector would result in positive economic impacts to rural communities and benefits to the Welsh language.

> "The more vibrant and active the forestry sector is in Wales, the better for the Welsh language and culture." (Woodland management)

10.15 A greater proportion in this question stated they did not believe the proposals would have a bearing on the Welsh language in any way, either positively or negatively; that Welsh is treated less favourably currently by bodies like NRW; or that existing Welsh language provisions were insufficient to achieve this.

10.16 Nevertheless, one respondent commented that English is commonly used to facilitate communication internationally in relation to forest management, and questioned expectations around how Welsh might be used in international communication.

Further Comments

We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them.

11.1 The final question of the consultation allowed space for any further comments that had not been covered by the consultation questions.

11.2 While some used this space to reiterate points made in their earlier responses, there were some additional themes which emerged:

Creating a clear roadmap

11.3 Several respondents stated they would like to see a clear roadmap of how the strategy will be implemented following the consultation, including clear division of responsibility to enable accountability, timescales, and how progress will be monitored.

Considering changes to NRW's operation

11.4 While this theme emerged in certain responses elsewhere in the consultation, common overarching suggestions were made to change the way NRW operates, including:

- Reform the commercial operations into an independent body focused solely on forest management
- Increase collaboration with the private sector, focusing on enablement over delivery
- Appoint foresters or wood processors to the NRW board to improve representation and expertise
- Increased recruitment and retention of forestry-trained staff

Considering existing policies

11.5 There were a range of policies flagged by respondents which they felt should be considered in relation to the strategy. These included:

- Aligning with the Environment (Wales) Act 2016, the Well-being of Future Generations Act 2015, and forthcoming Biodiversity (Wales) Bill
- Considering impacts on historic landscapes/assets in line with the Historic Environment Wales Act 2023
- A lack of clarity within the Sustainable Farming Scheme for appropriate grazing levels or guidance on regeneration
- The role of the Social Partnership and Public Procurement Act in procuring timber for construction

Highlighting areas of disagreement

11.6 Some respondents used this opportunity to highlight the parts of the consultation or strategy with which they disagreed. These disagreements included:

- That the current strategy is seen as biased towards timber and potentially disadvantaging domestically produced materials like concrete and cement. This respondent suggested the Welsh Government should adopt a material-neutral approach to decarbonising construction instead, supporting all low-carbon building materials and not just timber

"We object to the ambition apparently underpinning this strategy of using timber to "replace" or "displace" concrete as a construction material. While we support efforts to decarbonise the built environment in Wales, we firmly believe that the Welsh Government should take a material-neutral approach to this goal, providing equal support to all low-carbon building materials, including low-carbon cements and concretes. Timber has a legitimate place in construction and the built environment, but so do all building materials. If the Welsh Government is to produce a strategy for timber in construction, then it should not be aimed at promoting one industry at the expense of another (let alone promoting an industry so heavily reliant on imports at the expense of one which is predominantly domestic), and the Welsh Government should also produce equally supportive strategies for other major construction materials, such as mineral products (including but not limited to cement, concrete, aggregates, and masonry). This would be a particularly worthwhile initiative at a time when all major construction materials – concrete, cement, and steel as well as timber – can expect increased demand due to the Welsh and UK governments' laudable ambitions for housebuilding and net zero infrastructure. (Mineral Products Association Cymru/Wales)

- A prioritisation of timber production over ecological interests, and lack of focus on potential impacts to biodiversity

"The influence of the timber industry on Welsh biodiversity is not mentioned expressly at all. We are in a nature as well as climate emergency, and I am disappointed it's not a consideration. It's well known that well-managed sustainable woodland management can be massively beneficial to woodland biodiversity overall, so is there a funding mechanism that can help produce evidence that clearly demonstrates that productive forestry benefits both species diversity and abundance of all sorts of wildlife, from fungi to bats and from woodland flora to birds of prey?" (Public sector – woodland management)

- A suggestion that consultation requires broader participation with the public than those within the industry

"My concern with this consultation is that few people other than those directly involved in forestry and the timber industries in Wales will read and comment on it, when in fact it should be the subject of far wider public engagement." (Private sector – other)

- Criticism of gaps and inaccuracies in data used in the consultation (e.g. missing years in graphs)

- A need for a more comprehensive review of the international evidence on carbon sequestration
- A general lack of clarity of the end goal of the strategy

11.7 Similarly, some identified what they believed were gaps in the consultation content or strategy overall, or other concerns:

- A lack of reference to the role biochar could play throughout the strategy's priorities
- That safety was not considered as a specific area of the strategy to improve the safety culture within the sector
- A concern certain interests would have undue influence over the consultation

Offers of expertise

11.8 Some wished to highlight the importance of a collaborative approach. It should also be noted that throughout the consultation, as well as in this question, some individuals and organisations also offered their expertise to Welsh Government, wanted to be kept updated with changes, or asked to be included in decision making moving forwards.

Submissions

11.9 In addition to responses which followed the format of the consultation response form, six responses gave comments on specific issues, which covered the following topics:

- Noting the intention to proportionally apply the principles of the Green Book – Central Government guidance on appraisal and evaluation, in the development of the programmes and/or projects when continuing towards implementation

Points which also appeared in other responses to the consultation, including the importance of the following:

- Facilitating smaller businesses in accessing timber from WGWE, and highlighting the benefits small operators bring
- Reviewing p. ramorum management strategies
- Grants to support conservation management
- Expanding redwood / conifer planting other than Sitka spruce
- Encouraging and enabling planting
- Highlighting Welsh timber's potential role in building sustainable housing
- Encouraging a wood fibre manufacturer in Wales
- Increasing education about timber (including architects on the efficacy of C16 timber) or the wider value of forestry
- Discouraging short life timber products (e.g. decking) and burning wood that could be reused

11.10 Two respondents gave lengthier submissions, which were detailed and provided supporting evidence. The first of these focused on Priority 5 and is briefly summarised below:

- Identified challenges to developing sector capacity, including a lack of data to inform actions and measure impact, a lack of defined competency structures and recording mechanisms, and limited availability of training and assessment offers
- They also identified practical issues with training, including difficulties hiring assessors and high costs due to low learner ratios, travel costs, machinery, facilities and equipment requirements, and rurality
- Other gaps in training and skills provision included a lack of training and levels 2 and 3, a lack of education products targeted at Forest Works Managers, and decline in uptake of higher-level education in forestry related subjects
- The response requested a workforce review to inform competency frameworks, suggested improving learner access based on geography, and promoting the sector to learners, similar to themes raised in the response form responses to Priority 5

11.11 The second lengthy submission had a broader focus than the priorities in the consultation, and expressed:

- Support for the implementation of land use planning
- Wider risks to ecology of growth being is given precedence over conservation and sustainability
- Support for an approach that harnesses community enterprise, avoids venture capital, and fairly distributes benefits as a sustainable model
- Hemp’s potential both as a standalone agricultural product and as a complement to timber in construction
- Support for a wider range of ‘permissible’ species to ensure the resilience (e.g. eucalypt species)
- The benefits of shrouding clearfelling activities for tourism
- Specific suggestions for matching locations/conditions and species when planting

Webinar feedback

12.1 In addition to the consultation form, Welsh Government hosted two online webinars on the 20th and 25th of March. These webinars sought to explain the consultation proposals, foster discussion through Q&A sessions, and signpost attendees to the consultation response form.

12.2 The sessions received a range of comments and questions, which are summarised below.

12.3 Contributions highlighted:

- A lack of reference to urban forestry potential within the consultation
- That competency frameworks that were currently in development in relation to Priority 5, which needed consideration
- A query on the roadmap following the consultation in the context of the 2026 Senedd elections, questioning whether the strategy had cross-party commitment
- The potential for there to be connections or contradictions with UK-wide policy
- A lack of forestry experience at NRW board and executive levels, enquiring whether the board composition would form part of the consultation
- Questions about the role of the sustainable farming scheme and agroforestry in the strategy
- The use of biochar in storing carbon, its potential for generating green jobs and new industry, and scaling up brash utilisation
- Existing misconceptions around the use of timber, the importance of highlighting sustainable forest management in the messaging around the sustainable use of timber, and encouraging demand for timber use in construction

Key considerations and recommendations

13.1 Across the consultation, several core themes appeared strongly and repeatedly across different priority areas. Below, these key considerations and recommendations made by respondents are summarised from across the consultation.

Increasing woodland creation and improving woodland management

13.2 Particularly affecting Priorities 1 and 2, respondents commonly showed support for afforestation and repeatedly recommended improving the current management of existing woodland in order to increase forest resource, increase timber and wood fibre supply, as well as reduce risks to forests posed by climate change, pests and diseases.

13.3 Recommendations included:

- Considering the future role of the Welsh Government Woodland Estate in contributing to ongoing timber production
- Increasing harvesting of overmature stands
- Encouraging increased thinning, including first thinning and shorter thinning cycles. This could require increasing both workforce capacity and felling licences.
- Providing government guidance and facilitating knowledge exchange around improving forest resilience
- Increasing monitoring and reporting for early signs of pests and diseases
- Considering training and certification to support improved forest management
- Considering the role of animals, both in terms of controlling browsing mammals and exploring the potential benefits of animal introduction for forest health and maintenance
- Reviewing phytophthora ramorum control strategies

Considering species mix

13.4 Encouraging diverse planting was recommended to increase resistance to climate, pest and disease impacts, as well as to deter the risk of fires spreading.

13.5 Comments also suggested reviewing future productive species (for both softwood and hardwood) in order to ensure there is an appropriate mix to meet future demand among manufacturers and markets.

Providing financial incentives

13.6 A common recommendation throughout the consultation was the need to provide incentives to achieve priority aims, including potentially long-term grant funding. Calls for financial incentives were wide ranging, including public, private and blended finance options to support the following:

- Incentives for farmers to encourage afforestation and certification

- Grants for infrastructure, engineering or machinery to access and transport timber
- Grants aimed to improve forest management
- Grants aimed at increasing workforce development in targeted sectors such as milling
- Grants aimed at diversifying species planting, or encouraging native planting
- Tax incentives for using recycled timber in construction (or removing VAT from recycled timber) and/or penalties for virgin timber/concrete and brick
- Funding development of wood-based products/innovations (e.g. competitions)
- Funding for research into genetics, tree breeding or to support nurseries
- Grants to support start-up businesses to encourage reuse and recycling
- Funding to support training/training providers (e.g. with travel and accommodation, paid apprenticeships, or to support contractors to train staff)

13.7 Others suggested that instead of financial incentives, public sector procurement could be used as a tool to incentivise and drive change, e.g. in encouraging the use of timber (and specifically Welsh or UK timber) in construction.

Making regulatory changes

13.8 Regulatory barriers were identified across the priority areas, including removing bureaucracy around tree planting and felling licences, with a small number of respondents highlighting specific examples of barriers.

13.9 Some flagged specific regulations Welsh Government needed to take into account, such as the Part Z amendment to the UK building regulations.

13.10 Others suggested adding requirements to maximise the use of materials made available by: gathering brash and tree limbs during harvesting for use e.g. in biochar; making manufacturers of timber products responsible for products beyond their initial use; targeting regulations at specific industries which generate wood waste.

13.11 Updates to building standards and amending technical timber specifications were suggested. In particular, a number of respondents felt that new building projects should be designed for disassembly and reuse.

13.12 More generally, clear standards and regulations for new materials and technologies would help ensure that new timber products meet safety, quality, and environmental standards.

Considering changes to NRW's operation

13.13 Relatedly, there were suggestions throughout the consultation responses about considering changes to NRW's operation, examples include: facilitating access to parcels for small scale processors and operators; reforming commercial operations into an independent body focused solely on forest management; forming a commercial sales and marketing department for forestry; increasing collaboration with forestry sectors and related sectors such as housebuilders; appointing foresters/wood processers to the NRW board; increasing recruitment and retention of forestry trained staff.

Supporting small operators

13.14 Respondents frequently saw opportunities to support smaller operators across the priority areas, including the potential of small sawmillers and processers in expanding access to farm woodland, in order to increase responsiveness to market demand and benefit local communities.

13.15 To facilitate access to small operators, there were recommendations to facilitate marketing of small parcel timber sales from WGWE via NRW, as well as establishing timber sales yards from private woodlands.

Rural communities

13.16 The relationship between rural communities, the farming sector and forestry appeared in consultation responses. Most commonly, respondents saw an opportunity to benefit rural communities by expanding timber industries locally to them. This would also provide opportunities to enhance the Welsh language through keeping rural communities together and decreasing the need for Welsh speakers to move and work outside of their communities to areas where Welsh is spoken less frequently. However, respondents also saw geographic gaps in the provision of training as barriers to the sector.

13.17 As part of considering rural communities, it was suggested that Welsh Government should consider strengthening communications with farmers, in particular around the topic of land use competition if looking to expand the WGWE. Some respondents highlighted farmers as a particular group sceptical of forestry, and thus requiring greater engagement.

Increasing awareness and education about the sector

13.18 There were numerous recommendations throughout the consultation to increase education among the general public about the role of woodland as a crop, its connection with biodiversity and climate, and timber’s economic benefits to Wales. This included countering misunderstandings and negative perceptions (e.g. around felling and timber’s use in construction) through improved marketing of Welsh timber and timber products. Some recommended that Welsh Government should lead this education and awareness raising, with some recommending embedding this education generally in the Welsh curriculum. Others also recommended localised messaging and awareness raising directed at communities that may be affected by timber harvesting activities.

13.19 As well as to the public, there were also recommendations to direct awareness raising to specific sectors related to timber, such as housebuilders, developers, architects, engineers and landowners and, in particular, farmers.

Workforce improvements

13.20 In addition to raising awareness of the sector among the public, there were numerous suggestions throughout the responses on workforce development, both relating to increasing the size and skills of the workforce.

13.21 Recommendations to expand the future workforce included promoting timber generally as well as specific industries in demand as career pathways in schools and improving access to and the quality of education and training available to learners.

13.22 However, to ensure this was an attractive career path, some suggested a need to address working conditions, such as a lack of affordable housing in rural areas where forestry jobs are located, working environment, expense of training, and low salaries. Suggestions included competitive wages through salary uplifts, affordable housing, efforts to improve job satisfaction, stability and security, as well as funding for training.

13.23 Meanwhile, respondents identified numerous skills gaps among the existing workforce, which they suggested would become increasingly apparent in the face of future industry demands and standards. Proposed solutions to these skills gaps were numerous and listed in full in the main body of the report, but included improving professional development and careers pathways; partnerships and collaboration between education and industry; apprenticeships; improving access to training including investment in trainers, adopting specific training approaches, and funding skills training for small businesses.

Improving research, data, and learning from best practice

13.24 Respondents suggested a need for increased research and development, particularly into species development/suitability for future planting, tree breeding techniques, the use of biochar, and product development/technological innovations. There were some recommendations highlighting the importance of long-term funding commitment in these areas, including from government, as well as calls to foster collaboration and develop and support long-term visions.

13.25 Others called for better data and forecasting, commonly in future timber supply and demand, identifying land suitability for afforestation, or pathogen spread.

13.26 There were numerous recommendations to draw on examples of best practice, including looking at the rest of the UK and other European countries. This included best practice in recruitment and retention, as well as knowledge transfer.

13.27 Additionally, individual organisations were highlighted:

- Reseiclo and the Wood Recyclers Association for best practice in wood reuse and recycling
- Llysfasi (Coleg Cambria), Glynllifon (Grŵp Llandrillo Menai), and Bangor University for education and training
- Tai ar y Cyd, BSW Group and Kronospan in innovation in the design and manufacture of wood-based products with increased value, extended durability and climate resilience

Industry Leadership Group and Chief Forester

13.28 A majority of respondents responding via the consultation response form supported both the creation of an industry leadership group (63%) and Chief Forester for Wales (53%).

13.29 In both instances, respondents saw opportunities in the creation of these roles, e.g. for raising the profile of the sector, improved collaboration, and helping to achieve the goals of the Timber Industrial Strategy.

13.30 In order to make these successful, respondents suggested that those involved would need to have sufficient expertise (e.g. real-world experience in the sector), a clearly defined and communicated role, and would need to balance or take into account competing interests.

13.31 There were a few concerns around the potential cost of creating the Chief Forester role and some calls for greater clarity on the scope of their remit.

13.32 More generally, some respondents also wanted a clear roadmap from Welsh Government setting out how the Timber Industrial Strategy as a whole would be implemented.

Areas of disagreement

13.33 In general, respondents raised points for Welsh Government to consider in the implementation of priorities, rather than raising outright opposition to the proposals. Nevertheless, there were some specific areas of objection which should be considered, including whether the proposals:

- Disadvantage domestically produced materials such as concrete and cement in favour of timber, suggesting taking a materials neutral approach instead
- Prioritise timber production over ecological interests, and requesting a greater focus on the potential impacts on biodiversity
- Risk being influenced by specific interest groups, rather than reflecting a broader spectrum of public views
- May not have sufficiently mentioned or considered the role of biochar and the importance of improving health and safety culture

13.34 Additionally, there was some disagreement with language, terminology or supporting information used in the consultation, particularly in relation to Priority 1. These included suggestions to better define ‘sustainable’ in context, comments pointing out pre-conceived assumptions behind viewing concerns about longevity of wood as a ‘perception’ or ‘barrier’ to be overcome, and disagreement about the extent of the risk of serious future timber supply constraints. A few also pointed out potential gaps and limitations in the data used in the consultation materials.

Next Steps

14 The Welsh Government would like to thank everyone who submitted a consultation response. It is encouraging to have received responses from a wide range of businesses, organisations, representative bodies, membership organisations and individuals across sectors and the supply chain.

14.1 Following this consultation, Welsh Government will review the priorities and proposals towards the Timber Industrial Strategy, taking into account the feedback received.

14.2 The Deputy First Minister and Cabinet Secretary for Climate Change and Rural Affairs will consider the Timber Industrial Strategy with a view to publishing in the summer of 2025. Detail of priority actions for the financial year 2025/2026 will be provided.

14.3 The Timber Industrial Strategy and its actions will deliver against the Woodlands for Wales strategy, with a particular focus on supporting a competitive and integrated forestry sector, supporting thriving forest and wood-based industries. The Timber Industrial Strategy will underpin our support for the forestry and timber sectors and provide a strategic framework for stakeholders.

Appendix 1: Consultation Response Form

Your name:

Organisation (if applicable):

email / telephone number:

Your address:

Consultation Questions:

1. Increasing timber supply
    I. How can the sustainable forest resource grown in Wales, be increased to make more timber and wood fibre available for the future?
    II. How can volumes of Welsh timber and wood fibre coming to market be increased?
2. Increasing resilience in our forests
    I. What actions can be taken in Wales to reduce the risks to our forests posed by climate change and pests and diseases?
    II. How can growers and nurseries accelerate the implementation of adaptation measures?
3. Resource efficiency and circular economy
    I. What actions could be taken in Wales to encourage reuse and recycling of wood to minimise waste?
    II. How could Wales promote innovation, to design and manufacture wood-based products with increased value, extended durability and climate resilience?
4. Instilling confidence in demand
    I. What actions could be taken in Wales to increase the use of timber and wood fibre in long-term uses, such as construction?
    II. How can we use home-grown timber and wood fibre to maximise local supply chain opportunities?
    III. How can Wales better align timber supply with market demand?
5. Developing sector capacity
    I. What challenges need to be addressed to improve recruitment and retention in forestry and timber industries in Wales?
    II. What gaps are there in forestry and timber training and skills provision in Wales?
    III. What actions are needed to support the development and adoption of new products, processes and/or technologies?

6. Underpinned by behaviour change
    I. What actions are needed to improve public understanding of productive forestry?
    II. Do you support the proposal to establish an Industry Leadership Group in Wales? Yes/No
        a. If yes, what contribution could it make during the implementation of the Timber Industrial Strategy?
    III. Do you support the proposal to recruit a Chief Forester for Wales? Yes/No
        b. If yes, what added value would the role bring to the forestry sector in Wales?

7. What, in your opinion, would be the likely effects of the proposals on the Welsh language? We are particularly interested in any likely effects on opportunities to use the Welsh language and on not treating the Welsh language less favourably than English.
    I. Do you think that there are opportunities to promote any positive effects?
    II. Do you think that there are opportunities to mitigate any adverse effects?

8. In your opinion, could the proposals be formulated or changed so as to:

    - have positive effects or more positive effects on using the Welsh language and on not treating the Welsh language less favourably than English; or
    - mitigate any negative effects on using the Welsh language and on not treating the Welsh language less favourably than English?

9. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them. Please enter here:

Responses to consultations are likely to be made public, on the internet or in a report. If you would prefer your response to remain anonymous, please tick here: