Response to the Defra Consultation on Land Use

About the Institute of Chartered Foresters

The Institute of Chartered Foresters (ICF) is the Royal Chartered body for Foresters and Arboriculturists in the UK. We have 2,300 members who practice forestry, arboriculture and related disciplines in the private and third sectors, central and local government, research institutions, universities and colleges throughout the UK. The Institute regulates standards of entry to the profession. It provides support to its members, guidance to professionals in other sectors, information to the public, and educational advice and training to students and tree professionals seeking to develop their careers in the forestry and arboricultural industry. Chartered Foresters, working with farmers across the country, are already demonstrably helping to improve delivery of society's goals, and we want to do more.

Background

The ICF has been actively engaged with Defra on the development of a Land Use Framework since we gave evidence to the House of Lords Select Committee on Land Use in England in April 2022. We have since been working with the Defra forestry policy team on the skills agenda for the sector.

Forestry is unique in its ability to bring widely ranging interests and elements together into cohesive, multi-functional solutions. That is why the ICF is **committed to working with government in the design and implementation of a successful approach to land management**, supporting a flourishing sector that delivers for climate, nature, people and economy.

Our response

We welcome the opportunity to comment on the development of a national Land Use Framework for England and recognise the urgent need for strategic change to meet future challenges**. However, forestry and woodlands are underrepresented in the assessment of land-use change**. The Framework's current focus prioritises transitioning 19% of high-emission agricultural land to alternative uses to address climate and nature goals. While reducing agricultural emissions is important, this **narrow focus risks overlooking the significant role forestry and woodlands play in delivering climate resilience, biodiversity gains, and rural economic development**.

This response has been informed by our members as well as the Forestry Commmission's annual publication of Facts and Figures, The National Wood Strategy, the Defra Timber into Construction Roadmap and Material Cultures Mosaic Landscape report.

QUESTION 1: To what extent do you agree or disagree with our assessment of the scale and type of land use change needed, as set out in this consultation and the Analytical Annex?

Forestry Must Be Recognised as a Strategic Land Use

The Institute of Chartered Foresters (ICF) supports the need for significant land use changes and recognises that some productive agricultural land will inevitably be repurposed. However, the ICF is concerned that the current assessment overlooks the critical roles of timber security and forestry within the Land Use Framework.

This omission undermines national efforts to reduce dependence on timber imports—currently 73% across the UK, with just 20% of domestic supply sourced from England—and to bring the 42% of unmanaged English woodlands into active management. The *UK's 7th Carbon Budget* sets ambitious goals, such as doubling woodland creation by 2030 and increasing woodland cover to 16.5% by 2050. Achieving this requires 37,000 hectares of annual tree planting across the UK, a target already proving challenging due to land availability.

The Land Use Framework has the potential to facilitate this transition, unlocking significant environmental and economic benefits. Long-term woodland resilience must be part of a wider strategy to develop a sustainable bioeconomy. As we move toward decarbonising our economy, the demand for renewable materials—including timber, cellulose, and lignin—will rise. Forests and forest products will play a key role in sectors like construction and packaging, where low-carbon alternatives are urgently needed.

Properly managed forests offer commercial value, especially in low-carbon construction, which increasingly relies on locally sourced timber co-products. These economic opportunities, and the barriers to achieving them, should be integrated into broader decarbonisation strategies.

Currently, forestry is too often seen merely as tree planting rather than as a productive land use. Farming and forestry are the dominant economic uses of managed land globally, and ignoring the broader forestry value chain is a major oversight.

The *Timber in Construction Roadmap* highlights the vast potential of timber as a sustainable material that reduces emissions, creates jobs, and addresses housing demand. Timber-framed homes store up to 50% more carbon than masonry builds—and up to 400% more when engineered timber products like Cross-Laminated Timber (CLT) replace materials like steel or concrete. UK wood panel manufacturers already meet 63% of national demand for products like Chipboard, OSB, and MDF, using both domestic and recycled wood sources.

Softwoods (conifers) make up over 90% of the timber used in the UK due to their rapid growth, year-round foliage, carbon sequestration potential, and suitability for engineered products. Each tree species brings distinct benefits, economically and ecologically.

Unlike many European sawmills, most British sawmills do not own forestland. To access international markets, at least 70% of their timber must be certified by either the Forest Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certification (PEFC). The UK Woodland Assurance Standard (UKWAS)—recognised by both FSC and PEFC—is a globally unique, market-driven tool for promoting sustainable forest management.

As landowners transition from traditional agriculture, it is crucial they can still generate income. Planting productive forests on suitable land—such as the areas marked "**orange**" in Figure 7 of the Analytical Annex—using species that optimise both timber yield and carbon storage will boost the green economy while supporting biodiversity and climate goals.

To provide a more balanced perspective, Chapter 4 of the Analytical Annex should include mixed conifer and conifer-broadleaf forests in its analysis. These forest types not only offer economic returns but also enhance biodiversity, ecological resilience, and landscape diversity. Prioritising higher-quality land (Grade 4/3b) would support a broader species mix, resulting in multifunctional woodland ecosystems better aligned with national sustainability goals.

QUESTION 2: Do you agree or disagree with the land use principles proposed?

The ICF recognises the importance of a clear and well-defined set of principles as the foundation of the Land Use Framework. These principles should be succinct, unambiguous, and easily understood and applied across different sectors. We support a framework that unlocks the full potential of land while fostering resilient land use—environmentally, economically, and socially. However, there remains an opportunity to further refine these principles to enhance their long-term impact and sustainability.

Significant groundwork has already been laid over the years through collaborative, co-designed spatial strategies at both regional and local levels. These include initiatives such as Rural Development Agency strategies, Local Nature Partnerships, National Character Area statements, Nature Recovery Strategies, and planning within National Parks and Areas of Outstanding Natural Beauty (AONBs). Other efforts—like Forest Investment Zones, Community Forests, the National Forest, new national woodland creation programmes, Nature Improvement Areas, and Facilitation Fund groups—demonstrate the effectiveness of collaborative planning in action.

If this new Land Use Framework can transition from design to practical implementation—targeting areas where change is both necessary and achievable—it has the potential to generate real momentum and drive meaningful progress.

Revised Principles:
Principle 1 – Co-design
Support with revisions.
Suggested wording: Actively support open and inclusive participation and leadership at local and regional levels to align spatial strategies and assess the fairness of land use changes. Public and community involvement must be central to decision-making, especially as land use directly affects quality of life. Particular efforts should be made to involve underrepresented or hard-to-reach communities who may stand to gain the most from these changes.

Principle 2 – Multifunctional Land
Support with revisions.
Suggested wording: Enable and balance multiple land uses to deliver shared environmental, economic, and social benefits while minimising harm. This includes supporting food and timber production, protecting communities from climate impacts, accommodating essential

infrastructure and housing, and providing space for connected, healthy ecosystems that help reverse nature's decline.

Principle 3 – Playing to the Strengths of the Land
Support with revisions.
Suggested wording: Support and spatially target land use changes that maximise shared outcomes and minimise negative impacts. This means striking a balance between the benefits of agricultural land (for food), forestry land (for timber and wood products), process-led natural land (for ecosystems and climate resilience), and developed land (for homes and infrastructure).

Principle 4 – Decisions Fit for the Long-Term
Fully support.
Long-term thinking is essential to ensure decisions made today remain effective and equitable for future generations.

Principle 5 – Responsive by Design
Fully support.
The framework must be adaptable to evolving environmental, social, and economic conditions, allowing it to remain relevant and effective over time.

QUESTION 3: Beyond Government departments in England, which other decision makers do you think would benefit from applying these principles?

- **Construction Firms and Property Developers**: Applying these principles would empower developers to design sustainable, climate-resilient housing that integrates green infrastructure and supports biodiversity. It would also encourage the use of renewable materials—such as timber—aligned with the goals set out in the *Timber in Construction Roadmap 2025*.
- **Energy Sector**: Renewable energy providers and grid operators can leverage these principles to guide site selection and project planning. This ensures that energy infrastructure is developed in harmony with other land use priorities, such as food production, environmental conservation, and community needs.
- **Environmental Research Institutions**: These principles offer a valuable foundation for research into land use challenges, including food security, emissions reduction, and sustainable development. Research institutions can apply them to generate insights and propose innovative, data-driven solutions that enhance implementation on the ground.
- **Non-Governmental Organisations and Community Groups**: Adopting these principles would support greater public participation in land use planning. Local communities and NGOs can use them to influence decisions, ensuring that development reflects local values and protects both environmental and cultural heritage.

QUESTION 4: What are the policies, incentives and other changes that are needed to support decision makers in the agricultural sector to deliver this scale of land use change, while considering the importance of food production?

The government must adopt a more consistent and evidence-based approach to regulating and rewarding land management. The growing interest in agroforestry is a promising sign—it highlights the importance of rethinking how we manage land that spans multiple uses and purposes.

With nearly 40% of principal farmers and landowners now over the age of 65, there is an urgent need to support and incentivise succession planning across farms and estates. Empowering the next generation of farmers and land managers is essential for ushering in a shift in mindset—bringing new ideas, a willingness to innovate, and creative approaches to land use change.

Past initiatives, such as retirement schemes that provided stable pension income while allowing farmers to remain in their homes, have proven effective in unlocking land for new uses like tree planting. One example is The South West Forest, a Future Forests project. Revisiting and modernising such models could once again offer practical pathways for land transition.

Institutional and corporate landowners typically aim to generate financial returns from the land. This often leads to continued farming on high-quality land, while lower-quality areas transition toward forestry. In these contexts, financial incentives play a central role in driving land use decisions. Recognising timber production as a valuable and sustainable land use—supported by long-term grants and tax incentives—can encourage this transition, particularly where land is well-suited for tree growth. This is increasingly relevant as farming becomes less viable on marginal land and property values adjust accordingly.

Nevertheless, land use change carries both financial and emotional challenges. For successful transitions, landowners must have not only economic assurance but also visible leadership within their communities. Appointing and supporting credible ambassadors or thought leaders from within the farming and landowning sectors will be crucial to building trust, shaping narratives, and driving momentum for change.

QUESTION 5: How could Government support more land managers to implement multifunctional land uses that deliver a wider range of benefits, such as agroforestry systems with trees within pasture or arable fields?

Challenges and Opportunities in Agroforestry and Woodland Expansion

As with any farming approach, agroforestry comes with its own set of challenges. Implementing these systems requires adaptability across diverse environments, and plantation designs must ensure sufficient light and airflow for the crops growing beneath the trees. Scaling up timber production from agroforestry systems may also necessitate adjustments in milling practices. Unlike conventional commercial plantations where trees are planted closely to minimise branching and improve timber quality, agroforestry trees are spaced further apart, which could make them incompatible with current processing methods. While these systems may not produce large volumes of construction-grade timber,

they can still yield substantial quantities of high-quality wood as a secondary benefit of a multifunctional, layered landscape.

Promoting Woodland and Multifunctional Land Use on Farms

Many farmers already own or manage woodland—ranging from small patches to extensive areas—while others may have limited wooded land. Decisions about expanding tree cover are often influenced by the perceived value of existing trees and the potential of land available for planting.

Two key government initiatives support integrated land management:

- **Farm Cluster Groups** – Nationwide collaborations encouraging collective action.
- **The National Forest Programme** – Over the past 30 years, this initiative has increased tree cover from 6% to 25% through targeted woodland creation.

These programmes foster strong relationships between farmers, landowners, and land-based businesses. They drive conversations and projects around soil health, water quality, flood management, and biodiversity, helping integrate trees into farming operations and diversify income sources. Beyond planting, the focus extends to woodland management, biomass production, and regional collaboration.

The success of these initiatives lies in their flexible, locally driven approach. Farmers are empowered to shape the direction of projects, learn from peers, and access expert support. Facilitators bridge national strategy with local knowledge, helping farmers set priorities, share insights, and better understand each other's perspectives. Peer-to-peer learning has been a key force behind the progress.

When engaged one-on-one, most farmers and landowners acknowledge the need for change but often feel unprepared or uncertain. Demonstrations and examples from peers are among the most effective ways to inspire action. However, access to innovation and best practices remains uneven—addressing this gap is crucial for enabling change at scale.

Enabling Economic Viability and Policy Flexibility

In consultations, over half of land managers cited consistent income as a primary motivator for land use change. This highlights the need for a shared framework to assess the economic impact of different land use options. Such a framework—developed in collaboration with farmers, foresters, environmentalists, economists, and business leaders—could offer standardised metrics tailored to local contexts, helping identify high-return ventures.

One significant barrier to woodland expansion is the permanence of tree planting under current legislation. The *Forestry Act 1967*, designed to prevent deforestation for agriculture, limits the reversion of woodland to farmland. But today's priorities call for a more flexible approach. Allowing woodland to revert after a set period—say, 30 years—could encourage more landowners to plant trees without fearing irreversible land use commitments.

Advances in monitoring technology, such as satellite imagery, now make it possible to manage these transitions responsibly while minimising risk.

QUESTION 6: What should the Government consider in identifying suitable locations for spatially targeted incentives?

Spatially Targeted Incentives for Land Use Change

Incentives for land use change should be guided primarily by the land's natural suitability. Chapter 4 of the Analytical Annex presents maps showing geographic variations in land potential. (See Question 1)

Tree planting strategies should also reflect the forestry potential of Protected Landscapes, where this land use is particularly prominent. In southeast England, for instance, 30% of tree cover exists within these areas, which are often better suited to trees than other uses. In some Protected Landscapes, forests and the industries they support are closely linked. Especially in northern regions, these forests supply key raw materials for local economies. Protecting and enhancing them supports rural livelihoods and helps expand woodland areas, contributing to more cohesive and resilient rural landscapes.

The effectiveness of tree planting in supporting resilient land use hinges on both the potential of the land and the opportunity cost of displacing existing uses. Planting "down the hill," where land is more fertile, often produces more productive, diverse, and better-structured forests. Economic modelling will be essential to encourage investment from farmers and landowners, showing that large-scale forestry can be a viable long-term business. Since forestry benefits from economies of scale, collaboration between landowners—either through joint projects or expansion of existing woodlands—will be key. The creation of viable, local forestry enterprises can boost resilience while unlocking opportunities in timber, recreation, and related sectors.

Beyond rural areas, the new Western Forest National Forest will integrate tree planting with urban growth, housing, and infrastructure, shaping more liveable and sustainable communities. Here, trade-offs and opportunities will be closely tied to statutory planning. Urban forest resilience will rely on strong links between green spaces and the communities they serve. Cultivating a sense of local ownership will be vital to successful green infrastructure. The National Forest and other community forests offer strong models of spatially targeted land use change in action.

QUESTION 7: What approach(es) could most effectively support land managers and the agricultural sector to steer land use changes to where they can deliver greater potential benefits and lower trade-offs?

The government should create accessible, user-friendly mapping tools that provide detailed insights into land suitability for various use changes. These tools should include information on soil quality, water availability, ecological sensitivities, and proximity to markets. By incorporating resources like the Forestry Commission's low sensitivity mapping, these tools can assist land managers in making well-informed decisions about where land use changes can have the highest impact with minimal trade-offs.

The government should support research and development into forestry techniques and technologies that boost productivity while ensuring sustainability. For instance, advances in tree genetics can improve growth rates, timber quality, and resilience to pests and diseases.

The government should encourage the adoption of precision forestry tools, such as drones for monitoring forest health and GIS for planning and managing forestry operations. These technologies can help land managers optimise timber production while safeguarding biodiversity and reducing environmental impact.

QUESTION 8: In addition to promoting multifunctional land uses and spatially targeting land use change incentives, what more could be done by Government or others to reduce the risk that we displace more food production and environmental impacts abroad?

The UK currently wastes 33% of the food it produces, with much of the best-quality arable land being used to grow grain for whisky, animal feed, and crops for Anaerobic Digestion. If the Government is genuinely concerned about food security, there is a clear need for a standardised licensing system to regulate any land not used for growing food intended for direct human consumption.

In terms of timber, the UK imports approximately 73% of the wood and wood products it consumes, amounting to about 40 million tonnes annually. It is the second-largest net importer of wood globally, behind China. A significant portion of this timber comes from countries such as Canada, Scandinavia, the Baltic States, and, previously, Russia. However, these forests are increasingly vulnerable to pest outbreaks, diseases, and frequent fires, especially in North America, which has hindered forest growth. These challenges are expected to worsen due to climate change and the growing global demand for timber, which is anticipated to more than double by 2050.

Over 90% of the timber and timber products used in the UK are derived from softwoods (conifers), making it critical for England to plant more conifers to reduce its reliance on imports. Alternatively, new markets and supply chains could be developed to better utilise timber from broadleaved woodlands, going beyond solely woodfuel.

The Land Use Consultation's Figures 2 and 3 offer a snapshot of England's current land use, while Chapter 4 of the Analytical Annex presents strategies for reallocating land for food production, nature conservation, and climate objectives, concluding with Figures 11 and 4. Over the past century, much of the broadleaved woodland in England has been planted in mixed conifer/broadleaved stands. Conifers were initially planted to encourage broadleaf growth and generate early income for landowners, but many of these conifers have since been removed, leaving behind broadleaved forests.

Providing strategic support for mixed broadleaved and conifer forests on suitable land could inspire farmers and landowners to establish more resilient and productive woodlands. A stronger emphasis on conifers would also encourage the wood processing sector to invest in improving the supply of domestically sourced timber for the UK market. Figures 11 and 4 should emphasise forestry opportunities separately from nature and climate goals. Areas like

southwest and west England, as well as lands in categories 3 and 4, should be prioritised for forestry initiatives to further reduce reliance on timber imports.

QUESTION 9: What should Government consider in increasing private investment towards appropriate land use changes?

To boost private investment in sustainable land use practices, the government could adopt the following five strategic approaches:

1. **Enhancing Financial Incentives**: Expanding financial mechanisms such as tax breaks, grants, and subsidies can make nature-based investments more attractive to the private sector. These incentives can help mitigate the initial costs for investors, while encouraging land use changes that align with environmental goals.
2. **Public-Private Partnerships**: Engaging with private companies to share risks and costs could promote large-scale investments in nature-based solutions. This could involve joint funding initiatives for projects like reforestation, wetland restoration, and sustainable agriculture practices.
3. **Market-Based Mechanisms**: Programmes like Biodiversity Net Gain, the Woodland Carbon Code, and the Peatland Code play a vital role in incentivising private sector participation. For the Woodland Carbon Code (WCC), it's essential to consider more creative and holistic approaches to leveraging carbon funding to deliver additional carbon benefit. These should include relatively straightforward amendments to the existing code, for example revising financial models to better reflect real-world conditions; and allowing productive forestry schemes to take a lower grant payment so as to meet carbon additionality thresholds, as in Scotland. However, it should also include rapid implementation of mechanisms to utilise trees and timber to achieve full decarbonisation of food and manufacturing supply chains – just as renewable technologies are expected to decarbonise the electricity sector without resort to offsets. This can tap into a wealth of methodologies and datasets emerging globally to rapidly develop robust decarbonisation mechanisms with far greater potential and integrity than the WCC.
4. **Clear Regulatory Frameworks and Certainty**: Transparent, stable, and long-term policies reduce uncertainty for private sector participants, making them more likely to commit to land use changes that support environmental objectives. Streamlining environmental regulations and ensuring they are tailored to support private investment can further accelerate progress.

By focusing on these strategies, including refining market-based mechanisms like the WCC and removing barriers such as forestry permanency rules, the government can establish a solid foundation for private investment that generates significant environmental, economic, and societal benefits.

QUESTION 10: What changes are needed to accelerate 30by30 delivery, including by enabling Protected Landscapes to contribute more?

Our Protected Landscapes are pivotal in accelerating progress toward the 30by30 target. However, achieving meaningful change will require sustained commitment, adequate resources, and sufficient time to place more sites under effective management.

Woodlands within these Protected Landscapes have significant potential to help meet the 30by30 target. A 2020 Forest Research study found that only 7% of native woodland stands are in favourable condition, with around 40% of woodlands in England being either unmanaged or under-managed. Strengthening legislation for Protected Landscapes could be a key part of the solution. The government could introduce incentives, such as grants, and regulations, like mandating woodland management in priority areas or through specific designations, to bring more woodlands into proper management and improve their condition. Shifting the focus of these landscapes towards nature recovery, in line with the Lawton principles, would help move beyond the current emphasis on scenic beauty, landscape value, and tourism.

The government should also promote woodland management certified by organisations like FSC, PEFC, or Grown in Britain. Part of the 30by30 delivery includes "Other Effective Area-Based Conservation Measures" (OECMs). Typically, a certified commercial forest estate might allocate around 20-25% of the land to biodiversity management in the second rotation, with a long-term commitment to sustainable practices. Regular biodiversity monitoring and third-party audits that meet OECM standards should also be ensured.

Aligning Defra schemes more closely with 30by30 criteria could accelerate progress toward these goals. Countryside stewardship grants should be designed to support 30by30 objectives, wherever possible. Protected Landscapes could play a central role in grant schemes, with funding contingent on proof of their contribution to broader landscape-scale conservation goals. For instance, in woodland management, this could include coordinated deer control or efforts to improve ecological connectivity across larger areas.

Increasing targeted funding and providing clear guidance to landowners could significantly expedite progress toward the 30by30 target. However, consistency in funding and policy is crucial to create certainty. Additionally, these resources should evolve over time to incorporate new best practices, technologies, and emerging opportunities. Our Protected Landscapes should be viewed not only as models of best practice across various habitats but also as dynamic, resilient environments capable of adapting to climate change and other emerging threats.

While Protected Landscapes are essential, achieving the 30by30 target also requires focus on areas outside these landscapes, such as the National Forest and the proposed new National Forests. In the National Forest, for example, farmers and land managers have benefited from regular, face-to-face advice and targeted grants, resulting in 80% of newly planted woods being actively maintained. This level of woodland management significantly exceeds the national average. Ecological monitoring data also shows that, while woodland bird abundance decreased by 7% nationally over five years (as of August 2022), it increased by 48% in the National Forest. The habitats in young woodlands support a wide range of species, including woodland birds, butterflies, and bats.

Though much of England's ancient woodland lies within Protected Landscapes, many areas remain outside these zones. Restoring and managing ancient woodlands outside Protected Landscapes could make a substantial contribution to achieving the 30by30 target. These ancient woodland fragments, often situated in the heart of hedgerow networks in farmed landscapes, could provide valuable refuges for wildlife if better managed.

QUESTION 11: What approaches could cost-effectively support nature and food production in urban landscapes and on land managed for recreation?

- **The Role of Urban Forests in Sustainable Cities:** Urban forests are crucial to the development of liveable cities. Street trees, urban woodlands, and parkland trees create an interconnected natural network that contributes to cooling our cities, purifying the air, reducing flood risks, insulating buildings, blocking unsightly views, promoting outdoor activities, and improving overall health and well-being. Nature within urban areas is more than just a visual element—it is a key component of city life.
- **Incorporating Trees and Green Spaces in New Developments:** When designing new towns or housing projects, incorporating networks of trees and woodlands should be a top priority from the outset. These green spaces need to be part of a larger system of green, blue, and grey infrastructure (see question 12). For developers, the challenge often boils down to choosing between building an additional home or preserving a tree. Ultimately, the land they occupy is the same. Planning regulations should ensure adequate space is allocated to protect existing trees and woodlands, while also encouraging new tree planting and the creation of urban green spaces.
- **Supporting Nature, Food Production, and Recreation in Cities:** Cities have the potential to become thriving hubs that support nature, food production, and community well-being. Trees play a significant role, not just by providing food but also by fostering a healthier environment.
- **Enhancing Community Gardens with Beneficial Trees:** Community gardens and allotments should integrate trees that provide shade, improve soil health, and enhance biodiversity. Trees that bear fruit and nuts, for example, offer fresh produce and attract wildlife. Developers can incorporate such spaces into new housing designs. Programmes like AllotMe and Transition Towns can help individuals share unused garden space for growing food, with clear guidelines to ensure sustainability.
- **Building Green Networks and Maximizing Tree Benefits:** Trees function as connectors, linking parks and green spaces while creating wildlife corridors in urban environments. They help reduce flooding, offer shade, and cool cities during heatwaves. Urban planning should prioritise tree planting in residential developments, parks, and streets to establish connections between green spaces, benefiting both people and wildlife.
- **Supporting Timber Production for Sustainable Projects:** Urban trees can also be cultivated for sustainable timber, providing income to fund green initiatives and additional tree planting. This approach aligns with the government's push for greener construction practices using locally sourced timber. When managed effectively, these trees can reduce the reliance on imported timber, helping to make construction more eco-friendly.
- **Promoting Awareness and Sharing Knowledge:** Schools can educate children about growing food and planting trees, fostering a deeper connection to nature and its importance in combating climate challenges. Alongside tree planting, educating students about the forestry cycle, including felling and replanting, is equally important.

Local events can showcase how to plant trees, grow food, and create wildlife-friendly gardens.

QUESTION 12: How can Government ensure that development and infrastructure spatial plans take advantage of potential co-benefits and manage trade-offs?

To build 1.5 million new homes with supporting infrastructure in a series of climate-resilient towns, the land required has likely been underestimated.

New developments provide a unique opportunity to plan for integrated grey, blue, and green infrastructure, embedding resilience to flood risk, urban heat, and air pollution. This may involve actions like planting trees in river catchments to mitigate flash floods, restoring aquifers for clean water (e.g., Friston Forest, Sussex), creating ample urban green space for healthier living (e.g., Epping Forest), and utilising trees for street cooling, visual screening, and noise absorption. By integrating blue and green infrastructure with sustainable urban drainage systems, we can shape an environment where people will want to live. Thoughtful pre-planning of greenfield and brownfield sites can significantly enhance the appeal of these towns, increasing their attractiveness as places to live, work, and invest in economically.

The benefits of tree planting go beyond mitigating flood risks and providing clean water. Forests can supply timber for low-carbon construction materials, including wood panels, insulation, and other building products. These woodlands also offer spaces for walking, cycling, and outdoor activities that promote healthier lifestyles, while supporting biodiversity. Forests designed with a mix of conifers, tracks, and open spaces, in line with the UK Forestry Standard, can meet all these needs.

For these solutions to succeed, greater government intervention is necessary to manage developer "land banks," regulate the speculative value placed on land, and coordinate resource extraction beyond current mechanisms like Section 106 agreements or Biodiversity Net Gain initiatives. Defra could collaborate with local authorities and planning bodies to prepare master plans before detailed projects are developed. Early decisions will be crucial.

QUESTION 13: How can local authorities and Government better take account of land use opportunities in transport planning?

Land Use Change: Agriculture to Forestry

- **Transport Needs:** The transition from agriculture to forestry introduces the need for efficient timber transport from woodland sites to processing facilities and markets. This requires a strong infrastructure capable of supporting timber haulage, including rural roads, bridges, and access points that can accommodate heavy vehicles. For newly established woodlands, this need typically becomes evident around 20 years after planting.
- **Spatial Considerations:** Unlike agricultural grazing, which is generally continuous, forestry operations can lead to concentrated activity periods, such as during harvesting. This creates seasonal spikes in timber traffic. Using spatial data more

effectively can help capture these dynamics and guide infrastructure investments, ensuring minimal disruption to local communities.

Key Aspects for Timber Haulage

- **Road Network Resilience:** Planning should prioritise ensuring that rural roads are equipped to handle increased timber traffic. Regular maintenance and strategic upgrades can prevent damage and enhance safety.
- **Timber Traffic Management:** Effective strategies must be put in place to minimise disruption, such as creating designated haulage routes or scheduling operations at specific times. This practice is already in place in key areas like northern England.
- **Modal Shifts:** Encouraging the use of alternative transport methods, such as rail or waterways, can alleviate road congestion and reduce environmental impact.
- **Collaboration:** Strong coordination between local councils, forestry organisations, and communities is essential to ensure timber transport needs are integrated into broader transport strategies.

Capturing Spatial Data

- **Mapping Timber Resources:** Advanced spatial tools can be used to map current and future woodland areas, helping predict timber yields and transport demands.
- **Scenario Modelling:** Through advanced modelling, different land use scenarios (such as converting agricultural land to forestry) can be assessed to understand how these changes may affect infrastructure needs.

QUESTION 14: How can Government support closer coordination across plans and strategies for different sectors and outcomes at the local and regional level?

The government can play a critical role in promoting coordination across land-related plans and strategies by overcoming fragmented processes and ensuring that different planning elements, such as Local Nature Recovery Strategies (LNRSs) and Forestry Commission low sensitivity mapping for woodland creation, are integrated into a cohesive framework.

LNRSs are key tools for nature recovery, offering local and regional planners' essential data to prioritise environmental improvements. However, the Forestry Commission's low sensitivity mapping, which identifies areas suitable for woodland creation, operates separately and tends to focus on land that is less suitable for food production or ecological conservation. This creates challenges in aligning nature recovery efforts with forestry objectives, especially in upland areas where opportunities for timber production are greater due to larger landholdings and proximity to timber processors and sawmills.

Proposals for improvement:

- **Create an Integrated Planning System**: Develop a unified framework that merges LNRSs, low sensitivity mapping, and other land-use strategies. This would streamline decision-making and ensure that productive woodlands, like those used for timber, are considered alongside nature recovery priorities.
- **Incorporate Broader Forestry Considerations**: Ensure that mapping processes consider key forestry-related factors such as access to timber processors, landholding

size, and the economic potential of upland areas. This would help close gaps in planning and offer land managers a more comprehensive view of land-use options.

- **Facilitate Cross-Sector Collaboration**: Establish partnerships between Local Planning Authorities, the Forestry Commission, and industry stakeholders to balance environmental and economic outcomes. Shared forums could align timber production needs with biodiversity goals.
- **Leverage Data for Policy Development**: Use the extensive data generated by LNRSs and forestry mapping to inform and evaluate national policies. Real-time data sharing with local authorities can improve policy coherence and strengthen democratic accountability.

By fostering closer coordination and addressing disconnects between separate planning processes, the government can ensure that land-use planning effectively balances the diverse needs of nature recovery, productive forestry, and other land-use objectives.

QUESTION 15: Would including additional major landowners and land managers in the Adaptation Reporting Power process (see above) support adaptation knowledge sharing?

At this stage, we believe it's too early for a wider roll-out. Our recommendation is that initial guidance should come from the government, through scientific advisory groups, who can suggest actions for land managers to take to protect themselves from climate change. As land managers adopt these strategies, practical and effective improvements will become more apparent. To support this, it would be helpful for Defra to maintain a centralised database that tracks successful improvements, including those related to soil, water, land use, and other relevant factors.

In the long run, however, involving additional major landowners and managers in the Adaptation Reporting Power process could facilitate the sharing of knowledge and encourage innovation. Their involvement would expand the collective pool of insights, creating more opportunities for collaboration and the replication of successful practices. Over time, this broader engagement could play a crucial role in advancing climate resilience across various land use contexts.

QUESTION 16: Below is a list of activities the Government could implement to support landowners, land managers, and communities to understand and prepare for the impacts of climate change. Please select the activities you think should be prioritised and give any reasons for your answer, or specific approaches you would like to see.

We believe that providing better information on local climate conditions is essential, as it empowers land managers to create customised plans suited to their specific locations and land uses. This should be complemented by enhanced tools and guidance to support climate adaptation strategies.

In the forestry sector, we already benefit from tools like the Ecological Site Classification and climate matching tools developed by Forest Research, which are invaluable for tree planting decisions. However, policies such as *Keepers of Time: Ancient and Native Woodland and Trees* and the *1985 Broadleaf Policy* seem to prioritise preservation, maintaining the status quo in a

rapidly changing world. To build resilient and financially sustainable woodlands, we need a broader range of tree species.

To support this, we propose holding educational events, such as workshops tailored to specific land uses, across the country. These would help land managers understand how climate impacts affect their land and objectives and guide them in developing actionable plans while utilising available tools. These workshops don't have to be government-led; land-based organisations could play a larger role in their delivery.

These plans should be regularly reviewed and updated to ensure they remain effective. Additionally, creating a central database of successful actions would allow users to search by criteria like land use or soil type, promoting knowledge-sharing and the replication of best practices.

A public-private partnership model could also help alleviate the burden on civil servants, enabling them to focus on other priorities instead of managing the development and implementation of these initiatives.

QUESTION 17: What changes to how Government's spatial data is presented or shared could increase its value in decision making and make it more accessible?

To enhance the value and usability of the Government's spatial data for decision-making, we recommend prioritising the following actions:

- **Upgrade Existing Tools and Portals**: Current platforms, such as MAGIC's database, require a redesign to improve their user-friendliness and navigation. Presently, these tools are difficult to navigate, making it challenging for users to find and utilise the data. By modernising these tools and incorporating features like interactive maps, access to information would be significantly improved and more practical.
- **Establish a Centralised Data Hub**: The current lack of clarity about where to access Government datasets creates unnecessary complexity. By consolidating all data into one central platform, users would be able to quickly locate and utilise the information they need, saving time and effort.
- **Standardise Data Formats**: Government data is often provided in varying formats and uses inconsistent terminology, which complicates data integration and comparison. Standardising the presentation of data would improve its interoperability, making it easier to understand and analyse.
- **Expand Data Accessibility**: Opening up more high-quality datasets to the public would foster innovation and collaboration among organisations. While gathering, organising, and sharing this data may require time and resources, its easy accessibility would ultimately empower decision-makers and businesses to leverage it more effectively.

By addressing these key areas and redesigning tools like MAGIC, the Government can make spatial data more accessible and understandable. This will help identify potential conflicts in land use and enable more informed, timely decision-making.

QUESTION 18: What improvements could be made to how spatial data is captured, managed, or used to support land use decisions in the following sectors?

To maximise the value of spatial data, it is essential to first clearly define the specific information needed. Each sector—such as agriculture, forestry, and others—should evaluate the data they currently have, identify any gaps or inefficiencies, and improve their data collection methods. This ensures that the gathered information is both relevant and actionable.

Given that collecting and analysing high-quality data is a complex task, it should be treated as an independent project, rather than being merged with other activities. This approach ensures sufficient time and resources are allocated to develop robust systems for managing this information.

For instance, a dedicated database for woodland ownership—similar to the Single Business Identifier (SBI) in agriculture—could offer significant benefits. This system would enhance data accessibility, support land-use planning, promote sustainable forestry practices for timber, and streamline the process for grants or incentives aimed at managing additional woodlands. By addressing current data gaps, it would increase the value of the data for both policymakers and landowners.

Although technologies like satellite imagery or drones can improve traditional data collection methods, any tools or systems designed to support decision-making—whether for construction, agriculture, or government reporting—will only succeed if built on a solid and trustworthy spatial database. Without this foundation, decisions based on the data will be less effective and less reliable.

QUESTION 19: What improvements are needed to the quality, availability and accessibility of ALC data to support effective land use decisions?

No comment.

QUESTION 20: Which sources of spatial data should Government consider making free or easier to access, including via open licensing, to increase their potential benefit?

No comment.

QUESTION 21: What gaps in land management capacity or skills do you anticipate as part of the land use transition? Please include any suggestions to address these gaps.

The forestry sector is currently facing well-documented issues regarding capacity and skills, as outlined in the recently launched Sector Skills Plan. To meet the statutory target of 16.5% tree and woodland cover in England by 2050, sustained growth in the forestry workforce is essential. Professional foresters must stay updated with best practices and be equipped to manage woodlands in ways that make them resilient to a changing environment, as well as to increasing threats from forestry pests and diseases.

Achieving the woodland cover target will require a shift from other land uses, such as farming, to increased tree planting. If farmers are to effectively manage trees on their land—such as for

timber production—proper training and support, particularly at agricultural colleges, will be crucial. There should also be a stronger focus on growing conifers as part of this training.

Engaging Future Generations

- Attracting interest in the forestry sector starts in schools. The Eco-Schools programme is an excellent starting point to ensure children gain a more balanced understanding of forestry, moving beyond the simplistic message of "deforestation is bad" often emphasised in the curriculum, which tends to focus only on tropical rainforest loss.
- Resources like the virtual work experience programme, developed by the ICF and the FC on the Springpod platform, have the potential to greatly increase sector interest. However, these initiatives are costly and may not continue without further funding. Ideally, such resources would be permanently available.

Changing Sector, Changing Skills

- Forestry is evolving due to technological advances, climate change, increased pest and disease pressures, and new approaches to woodland management. These changes require new skill sets, yet the sector faces challenges such as an ageing workforce resistant to change, insufficient investment in career pathways, and a shortage of forestry-specific expertise in education and training.

Key Barriers to Progress

To address these challenges, the sector must focus on four critical areas:

- **Data Availability**: Reliable data is lacking on the current and future workforce, with labour market and provision intelligence reports outdated and based on limited primary sources. Accurate data is essential for understanding existing workforce issues and proactively addressing future needs.
- **Structural Barriers**: The sector is small, fragmented, and characterised by low collaboration, making it difficult to attract and upskill employees. Many micro-businesses, operating on short-term contracts, lack the capacity or willingness to invest in training, apprenticeships, or workforce development. Additionally, the sector's lack of diversity (gender, ethnicity, age) limits the breadth of skills and perspectives available.
- **Career Pathways and Promotion**: Career pathways are unclear, making it difficult for new entrants to understand their progression or specialisation options. Misconceptions around pay, roles, and course availability further deter interest. Promotion of entry-level roles is limited, and information about careers is dispersed, making it difficult to access opportunities.

Education and Training Provision

- **Full-time Education**: Forestry courses at all levels struggle to meet demand due to high costs, specialised equipment requirements, and the need for access to woodland training sites. A lack of qualified tutors, lecturers, and instructors further

complicates course availability. Forestry content is also underrepresented in early education, such as GCSEs.

- **Work-based Learning**: Work-based learning options (apprenticeships, T-levels, Skills Bootcamps) are scarce and often treated as add-ons to other courses. Many who complete these programmes lack the necessary skills and experience for employment, while forestry contractors often lack the capacity to supervise and support new entrants.
- **CPD and Short-course Training**: Although the Forestry and Arboriculture Training Fund has recently boosted short-course training, demand remains high, and planning for future CPD needs is lacking. Critical skills such as silviculture, agroforestry, and green finance are not being delivered at the required scale.

Addressing these barriers will be essential to future-proof the forestry sector and ensure a skilled, diverse, and adaptable workforce.

QUESTION 22: How could the sharing of best practice in innovative land use practices and management be improved?

Government should insist that any land use discussions which receive public funding, should have a fair representation of land managers. There are many events and workshops without any representation from the forestry and timber industry.

Better sharing of best practices can significantly improve land management, and there are various ways to make this happen. Within each land-based sector, examples of sharing are already occurring through conferences, publications, and collaborations at both local and national levels. To take this further, several ideas could be implemented:

- **Landscape-scale networking**: Creating clusters of land managers around Protected Landscapes, catchments, or county-based regions to facilitate knowledge exchange and cooperation.
- **Land use advisers**: Providing expert advice on best practices and offering grant support to enhance land management efforts.
- **Innovation hubs**: Establishing spaces that encourage peer-to-peer learning and support, fostering creative approaches and solutions.
- **Cross-sector conferences**: Organising events that bring together professionals from different land use sectors to share ideas and experiences.
- **Webinars**: Offering online learning opportunities to engage a wider audience and provide access to valuable insights.
- **Sabbaticals, job swaps, and exchanges**: Promoting professional development by encouraging people to spend time in different roles or environments.
- **Digital knowledge hubs and resource banks**: Creating centralised online platforms that store essential tools, case studies, and resources for easy access.
- **Digital mapping resources and data sharing**: Enhancing the use of technology to share critical land data and maps for better decision-making.
- **Build stronger partnerships with research bodies**: Collaborating more closely with institutions dedicated to advancing land management research.

- **Provide professional training on new technologies and woodland management for resilience**: Offering training to keep land managers up to date with the latest tools and techniques.
- **Test and trial new ideas**: Implementing pilot projects to evaluate the effectiveness of innovative approaches.
- **Reach wider audiences, especially the farming community**: Expanding outreach to ensure that all relevant stakeholders are engaged.
- **Provide better feedback to policymakers**: Offering actionable insights on what strategies are working and where improvements are needed.

The ICF and similar organisations are in an excellent position to identify and share the most effective and innovative forest management practices. Encouraging membership organisations across different land use disciplines to exchange successful ideas can greatly broaden the application of these practices.

We can also benefit from learning across devolved nations as well as within mainland Europe. We would like to see more cross-nation learning through events and joined-up practice notes, to ensure that knowledge exchange is effective and that we don't repeat studies.

QUESTION 23: Should a Land Use Framework for England be updated periodically, and if so, how frequently should this occur?

A 10-year primary update cycle with a 5-year mid-point review could strike a balance between long-term stability and adaptability. It would allow enough time for substantial progress or challenges to emerge, while the mid-review point could serve as a check-in to ensure the framework remains relevant and aligned with evolving priorities.

The mid-review could focus on assessing progress against targets, incorporating urgent innovations, or addressing emerging issues without the need for a full update. This approach might also make the process more resource-efficient and manageable for stakeholders.

QUESTION 24: To what extent do you agree or disagree with the proposed areas above?

Agree. The ICF welcomes the plan for policy co-creation and the joined-up, evidence-based approach taken. We call to be included in the open policy-making process, given our role as a knowledge disseminator and representing practitioners who will deliver the Land Use Framework in practice.

Finally, the Defra Land Use team should have a Chartered Forester working at a senior level.