UK Rural - April 2023

SPOTLIGHT
Savills Research

The Forestry Market

savills

Forestry investment • UK regional markets • Maximising value • Woodland creation

£295m
UK forestry investment in the 2022 forest year

52%
of total value traded in seven large sales

12,600
gross area of hectares traded in the 2022 forest year

Forestry trends

The UK's diverse woodland and forestry market has remained resilient despite economic uncertainties

Along with other external forces such as the war in Ukraine and economic uncertainties, the 2022 forest year will be remembered for the extreme weather events that caused damage to large areas of woodland across the UK. According to Forest Research, almost 12,750 hectares of trees were lost due to storms, with most of the damage caused by Storm Arwen. Despite initial concerns over impetus in the forestry investment market following these events, they appear to have had little direct impact and the market remained resilient.

In this Spotlight, we report on UK forestry investments during the 2022 forest year and explore the increasingly distinctive smaller woodland markets. As the pressure intensifies for UK landowners and forest owners to mitigate against climate change, we consider the opportunities for biodiversity, carbon and timber income from trees. In addition, we review tree planting policy and discuss the motivations and barriers to woodland creation.

INVESTMENT TRENDS

The UK's woodland and forestry market is diverse and differentiated by factors such as size, species, age, location and purpose. To reflect the divergence in investment trends across smaller, medium and large scale assets, this year we analyse the performance of three distinct market categories using our database of publicly marketed forest and woodland properties and our transactional database of forest sales in Great Britain.

THE MARKETS

Amenity/small woodlands (under 10 hectares)
Amenity woodlands are traditionally smaller with a mix of tree species. They are managed for a variety of recreational, environmental and cultural purposes, although informal timber production can be important, for instance for firewood.

Mixed/small commercial (10 to under 50 hectares)
Mixed and small commercial woodlands that have wider interest than purely lifestyle/ amenity factors.

Commercial (50+ hectares)
Larger forests managed principally for commercial timber production.

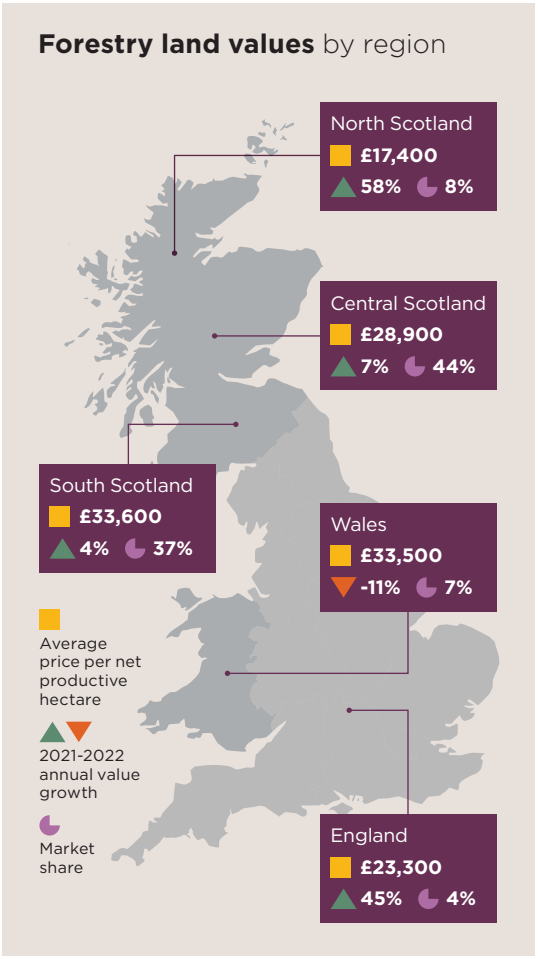


figure 1 **Source** Savills Research

Forestry investment analysis

The outlook for commercial forestry remains positive

Our commercial forestry investment analysis reviews data from transactions over 50 hectares including, where we are aware, off-market transactions.

Strong timber prices alongside an urgency surrounding climate change and biodiversity loss were the catalyst for record-breaking capital values in the 2021 forest year. For 2022, our research shows a larger overall traded value, but a quieter year in terms of the rate of average value growth.

Figure 2 illustrates that over 2022 the total value of UK forestry sold reached a new high of £295 million. This was influenced by a small number of high value sales over £10 million, that represented only 12% of individual sales but 52% of the total value traded. The total volume of land sold was low at 12,600 hectares.

COMMERCIAL FORESTRY VALUES

All forests have unproductive areas such as tracks, rivers and lochs, so it is important to consider the value of the net productive area. In 2021, we reported a widening gap in the price of a net productive hectare compared to the price of a gross hectare. This related to the extraordinary rise in productive values during 2021. Our analysis of the 2022 market indicates this gap has reduced and the average gross value per hectare rose at a faster pace than net productive values.

The average gross value increased by 19% to just over £20,000 per hectare during 2022. The average price per net productive hectare rose by 7.5% to just over £28,000, with the median at just under £27,000. This reflects all sales over 50 hectares and covers a wide variation in the type, location and size of forest sold. However, closer analysis of the larger commercial forest sales (over 150 hectares) highlights the strength of the upper end of the investment market, with average gross values at £22,700 per hectare and the average net productive hectare rising to £30,900.

In recent years, our research has reported a growing proportion of off-market sales compared to publicly marketed properties. Analysis of the data suggests there were less off-market sales in 2022. On average, in the four years prior to 2022 private sales represented a quarter of all sales, compared to a slightly lower 21% in 2022. Nevertheless, they were still an important component of the market, representing some of the largest sales by value and making up a significant share in terms of the total market value.

REGIONALLY

During the 2022 forest year, North Scotland witnessed a quieter year in terms of the number of commercial forestry hectares sold (*figure 1*). Nevertheless, the region again

Cover image: Halyna Lakatosh / iStock

“The rising interest in trees increased demand for smaller ‘amenity woodlands’, but despite a desire to own, economic headwinds have impacted this market”

reported the strongest value growth with the average net productive hectare rising by a significant 58% to £17,400. While this figure is still well below average values in other regions, it does show the trend for “levelling up” in regional pricing is continuing.

Central Scotland recorded the highest number of forest hectares sold across all regions during 2022. Compared to 2021, South Scotland is the only region to have shown an increase in the number of hectares sold during the year.

Across England, the average price paid per net productive hectare rose by 45%, albeit this is based on a very small number of sales, and is not indicative of strong market performance, just the change in absolute pricing between the sample of sold property in 2021 and 2022.

Following a number of large sales in Wales during the previous few years, there were less hectares sold during 2022 and a slight reduction in the average price paid per net productive hectare. However, average values in Wales are still strong and mirror South Scotland, the region long considered to be the most important for forestry investment.

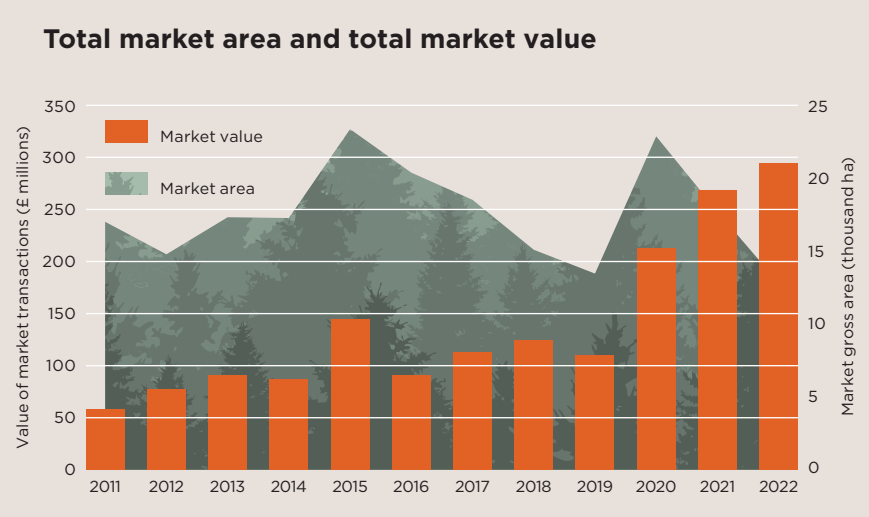


figure 2 **Source** Savills Research

COMPARISON TO OTHER ASSET CLASSES

The performance of UK forestry over recent years is well-documented and it is interesting to compare the percentage increases in capital value over the last 10 years with other asset classes. Forestry has significantly outperformed all of these, from commercial to agricultural property and gold, rewarding early investors and forming the vibrant market we see now (*figure 3*).

THE MIXED AND AMENITY MARKETS

The trend towards a more sustainable lifestyle has accelerated interest in the benefits of nature. As well as their commercial value, trees are increasingly recognised for their benefits to the environment and society. According to the Public Opinion of Forestry 2021 Survey (Forest Research), 69% of UK respondents said they had visited forests or woodlands for walks, picnics or other recreation. This compared to 63% in 2019.

Rising public interest in trees has increased the demand for smaller woodlands, often referred to as “amenity woodlands”. Analysis from Savills database of advertised property shows strong pricing differences between different sizes of woodland (*figure 4*).

The price paid for amenity woodland is often based on the personal motivations of the buyer. Characteristics such as location, geographical features, privacy and access will influence the demand and ultimately the price paid. The ability to harvest firewood is also important to some woodland buyers. This market is heavily influenced by general economic performance, which came under some pressure over the second half of 2022.

Since 2018, the average asking price per gross hectare has risen furthest (144%) within the larger commercial properties, in line with the strong performance of the investment market. This compares to 115% for mixed properties and 65% for amenity woodlands.

FOCUS ON SIZE

Further segmentation of the amenity market into smaller size bands, reveals woodlands with the smallest area of under 2.5 hectares represented the highest proportion of those properties advertised within the amenity market during the 2022 forest year. The average advertised price per hectare for these smaller properties is also the highest, at just under £42,000 per gross hectare.

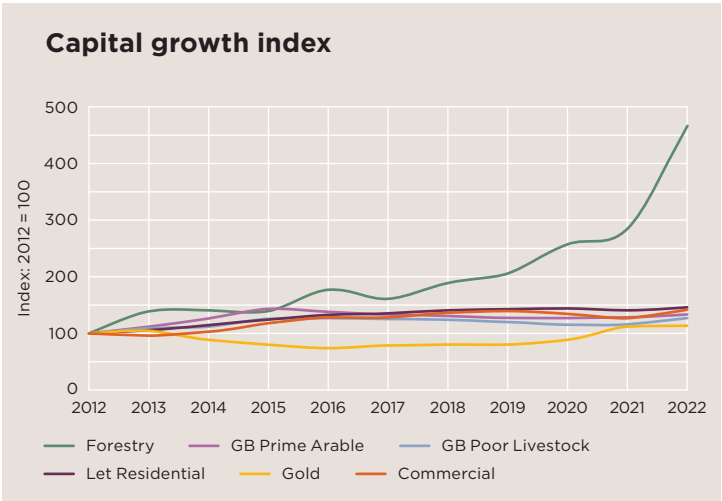


figure 3 **Source** Savills Research / MSCI /Kitco

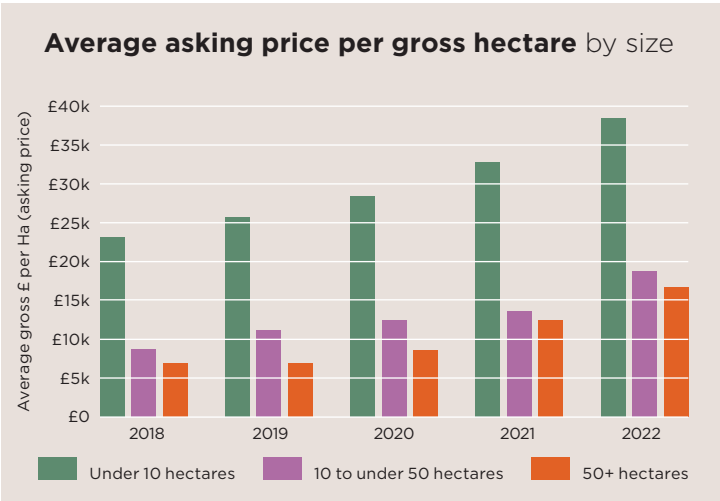


figure 4 **Source** Savills Research

> **The key drivers in woodland creation are biodiversity, carbon storage and landscape amenity**

PENDING ISSUANCE UNIT (PIU) AND WOODLAND CARBON UNIT (WCU)

One unit is equivalent to one tonne of carbon dioxide sequestered. PIUs are a promise to deliver a WCU in the future, but cannot be used to report against current emissions until verified and converted to a WCU. Bear in mind when selling PIUs that the carbon calculator is a prediction and not a guarantee, but it enables companies to plan to compensate for future UK based emissions as part of the transition to net zero emissions by 2050.

Woodland Carbon Code

How the accreditation system supports woodland creation across the country

The Woodland Carbon Code (WCC) provides the standard accreditation system to harness carbon offsetting income to support woodland creation in England, Scotland and Wales.

From October 2022, version 2.2. of the WCC has been applicable to anyone submitting for validation and verification. This changed how additionality is assessed. Additionality is proving that without the added income of the sale of credits, the woodland creation would not have gone ahead. In version 2.2 the test has been simplified, standardised and changed to ensure that initial expenditure on high value land cannot be used to justify a project's additionality. While this may make the process more accessible, woodland carbon remains aligned to less commercial woodland, which many investors see as a missed opportunity.

WCC PROCESS:

1 *Register* the project on the UK Land Carbon Registry
2 *Submit* project design document
3 *Validation* from an independent body within three years of registration, once trees are planted
4 *Pending Issuance Units* are issued upon validation
5 *Verification* at year five and then every 10 years by an independent body, by submitting a project progress report and monitoring report.
6 *Woodland Carbon Units* issued, or converted from Pending Issuance Units upon verification.

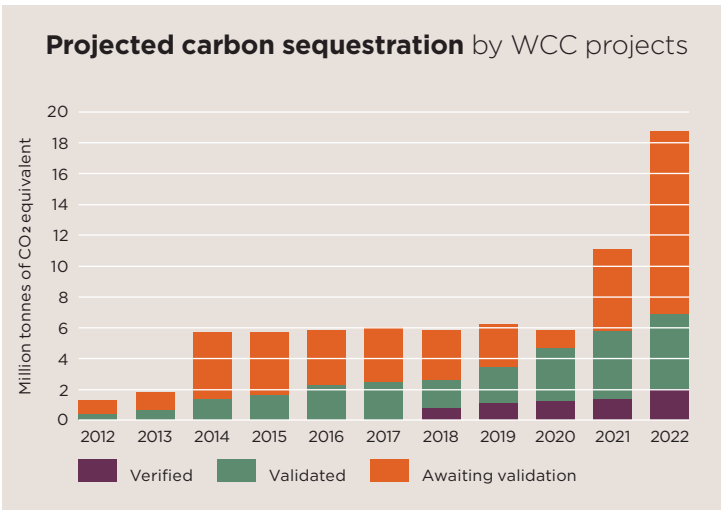


figure 5

Source UK Woodland Carbon Registry, Scottish Forestry

THE VALUE OF CARBON

Carbon can be sold as the trees grow, with the peak sequestration rates between the 25–30 year period when it is estimated that around 60 tonnes per hectare can be sequestered in coniferous forests within that five year period. A new native woodland can capture between 300-500 tonnes per hectare of carbon over 100 years.

Data is currently limited for verified WCUs, given that only 123 projects have been verified, with 3,500 units sold as of December 2022 *(figure 5)*. The majority of units are currently sold as PIUs.

According to the WCC, companies are spending on average between £10-£20 per unit. There are reports of higher prices, anecdotally. However, these prices may refer to individual small transactions and as such have limited reliability.

Within the woodland carbon guarantee (England only) and ahead of the seventh auction, the government recently set the maximum price it would pay at £30 per unit. However, the use of the guarantee is more suited to smaller scale parcels, with larger scale parcels being more in demand to the wider market.

300-500

A new native woodland can capture between 300 to 500 tonnes of carbon per hectare over 100 years

2,260 ha

were planted in England between April 2021 and March 2022 against a government target of 7,000 hectares per annum by 2024

Biodiversity Net Gain

The need for a sustainable approach to planting

What is it?
From November 2023 in England, many developments requiring planning permission will be required to increase the biodiversity that was originally on the site by 10%. This should be done on-site, but where this is not possible developers will be required to look off-site and pay for biodiversity units that improve biodiversity elsewhere.

What is a biodiversity unit?
These are generated through the creation or uplifting of a habitat and are calculated on the size and quality of the habitat.

How can it impact woodland?
Developers are required to offset under the same broad habitat type that has been developed. Therefore, the market for units created from woodlands may not be as large as categories like grassland given there is generally less development within woodland. Woodland units may be more beneficial for larger scale infrastructure and utility projects, like railways and pipelines, where developers impact these habitats more often. Under existing policy it is not possible to create a woodland for carbon and biodiversity. However, it is possible to increase the biodiversity of a woodland already planted under the WCC, provided the baseline for biodiversity is taken once the woodland is established.

Consideration needs to be given to the cost of the initial habitat creation or uplift and also the maintenance over a minimum period of 30 years. Factoring in timber to the biodiversity equation may be difficult as it is not yet clear what protections there will be over an area once the 30 years is over, and as such it should be clearly stated within the management plan that timber removal is planned. It is worth noting that this is an emerging area, and legislation is still expected over the coming months prior to the November 2023 roll out.

What does a biodiverse woodland look like?

PLANTING RATES

In England between April 2021 and March 2022, 2,260 hectares were planted with the government hoping to achieve 7,000 hectares per year by 2024. However, with the launch of the England Woodland Creation Offer in June 2021, we expect to see an increase in planting rates when the next set of data is published in September.

The UK government's commitment is to reach 30,000 hectares of new planting per year from May 2024. This may seem ambitious, but it was achieved during the 1980s, when tax incentives drove afforestation (*figure 6*) but with little consideration to the "right tree for the right place". New standards prevent this now, but the clamour to meet targets cannot outweigh the necessity for a sustainable and effective planting strategy. It is crucial that investors and land managers adopt a long term, balanced approach to planting.

Historic tree planting rates 1976-2022

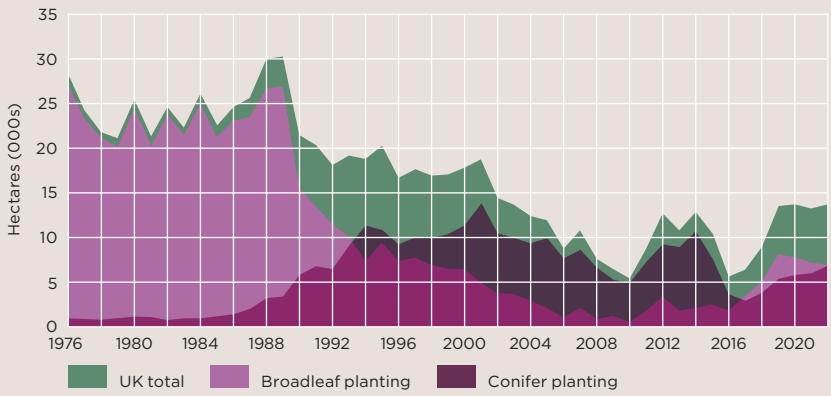


figure 6

Source Forest Research

ARE ENGLAND'S LANDOWNERS MAXIMISING TREE COVER?

Friends of the Earth analysed the largest landowners by acreage in England and their tree coverage in order to assess which were above or below the English national average of 10% tree cover. Interestingly, eight out of 10 were above 10%, however six out of 10 were below the UK average of 13%, so there are opportunities in those areas for additional planting.

Motivations and reservations to increasing tree cover

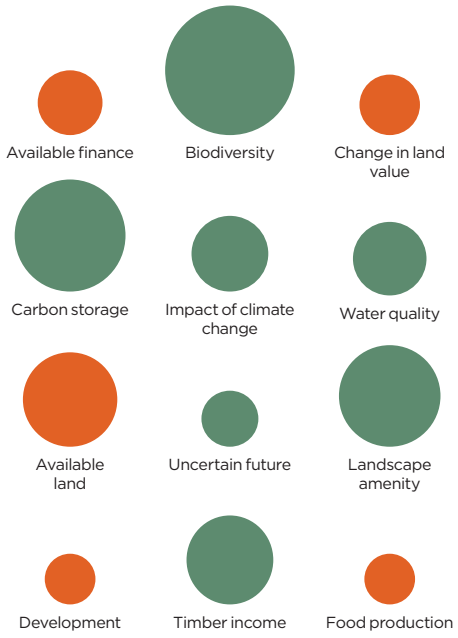


figure 7

BARRIERS TO WOODLAND CREATION

Savills undertook a survey of landowners' motivations and reservations in planting woodland on their farm. The key drivers were biodiversity, carbon storage and landscape amenity, while the main barriers were available land, available finance and the change in land value. More generally, when reviewing the factors in groups, the main drivers for afforestation are social and environmental, while the main barriers are economic. Available land was the largest concern, made more significant by the permanence of any land use change. When landowners were asked which areas of their holding they would be content to allocate to tree planting, the average "spare land" volunteered was just 6.5% of the holding.

7-8%
of all man-made CO_2 emissions worldwide are caused by the cement industry

75%
of new housing in Scotland is built with a timber frame

4.7%
According to forecasts, construction output is expected to fall by 4.7% in 2023

Timber values

Timber-frame buildings are on the rise again thanks to the environmental benefits

Historically, the price of timber has strongly correlated to supply and demand factors, with wider economic events and extreme weather impacting prices. *Figure 8* illustrates recent timber price fluctuations. During 2020, despite the increase in homeowner DIY, housebuilding was halted due to Covid-19 restrictions. According to the Office for National Statistics, there was a 26% reduction in permanent dwellings completed compared to 2019, resulting in a reduction in demand and therefore the price of timber.

2021 saw a spike in timber prices. Supply was low due to a reduction in timber production during the 2020 lockdowns, while in 2021 demand boomed as many projects that had been delayed began.

During 2022 a small fall in prices was recorded, which may have been surprising as Russia halted its timber exports on 1 January 2022. Russia was the fifth largest net exporter of timber in the world in 2020 and prices were expected to rise as demand for product rose globally. However, just 1.2% of UK construction imports in 2021 came from Russia and Ukraine, including around 5% of timber imports, and therefore the impact was low. Also, the mini budget of September 2022 created uncertainty in the UK housing sector and the subsequent rises in inflation and mortgage rates had a negative impact on house prices as homebuyer confidence faltered. Alongside this, housebuilding targets appear to be slipping down the political agenda, with the government adding some flexibility to the original 300,000 houses per year figure. These are all factors resulting in a reduction in demand for construction timber.

Looking forwards, according to the Construction Products Association's Winter Forecasts, construction output is expected to fall by 4.7% in 2023 before recovering slowly in 2024 with growth of just 0.6%, which could temper demand of timber for a longer period.

Year end	Percentage change in Coniferous Standing Sales Price Index in real terms from previous year
Sep 2019	-2%
Sep 2020	-19%
Sep 2021	50%
Sep 2022	-6%

figure 8 **Source** Forest Research

TIMBER USE

Recently biodiversity and carbon have grabbed the headlines, but production of quality timber remains the primary output from forestry, and wood has been used in construction for over 10,000 years. Today, timber remains one of the most environmentally-friendly materials owing to its renewability, durability and versatility, particularly when compared to alternatives such as concrete, plastic and steel. Timber-frame buildings are on the rise, and although historically there was a stigma around the life expectancy of the construction, this appears to be waning and the design flexibility alongside the speed of construction are boosting production and uptake.

The environmental benefits of using timber in construction include the low energy needed to manufacture the wood, the utilisation of waste wood in bioenergy and the stored carbon locked into the product itself. On top of this, timber buildings generate lower energy consumption and 20% lower carbon emissions over a building's lifecycle compared with concrete-framed construction.

When we compare this to the cement industry, which causes between 7–8% of all man-made CO_2 emissions worldwide, the question arises as to whether we are

WHAT IS PASSIVE HOUSE?

The Passive House (or Passivhaus) concept is a design standard originating in Germany and used in construction, based upon minimal heating and cooling by using insulation, air tightness and eliminating thermal bridges. The Passive House Institute can issue certification allowing for buildings to be recognised as a Passive House. Performance targets need to be met, but there is no requirement for certain materials to be utilised.

brizmaker / Shutterstock, ungvar / Shutterstock

> **Timber remains one of the most environmentally-friendly materials owing to its renewability, durability and versatility**

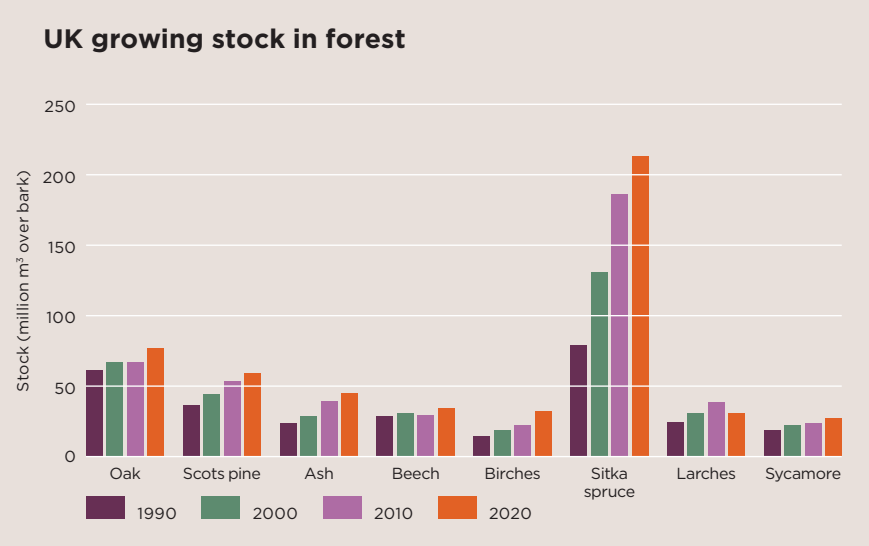


figure 9

Source Global Forest Resources Assessment

maximising our use of timber in construction, particularly with advancements in production of cross-laminated timber (CLT), which is a timber made by layering boards in alternate directions, bonded with structural adhesives. CLT has a much higher strength to weight ratio than concrete or steel.

PASSIVE HOUSE

New legislation in Scotland, expected to be implemented in late 2024, to build all new houses to a standard similar to Passive House has the potential to increase demand for timber. While Insulated Concrete Formwork (ICF) provides a good choice in a Passive House, timber still remains the best option environmentally. Additionally, around 75% of new housing in Scotland is built with timber-frame technology already and it is a known and trusted construction material. A timber frame reduces energy demand and has superior air tightness. CLT could also become more widely used in Passive House construction following some excellent results in America.

HOMEGROWN TIMBER

An increase in timber use in construction has environmental merits on the one hand, but on the other the UK is the second largest net importer of forest products in the world, importing £8.5 billion worth per annum. At its current levels the UK will not be self-sufficient in timber, given that only 13% of current land use is forest cover compared to the EU average of 38% , with the majority of conifer coverage being Sitka spruce (*figure 9*). However, as planting rates increase we need to look at the balance of imports and exports and see whether we can maximise the use of home-grown stock.

Currently the UK is nearly self-sufficient in lower grade products such as fencing, but we rely heavily on sawn wood imports, with 8.2 million cubic metres imported in 2021 as well as most of the engineered wood such as CLT. One question currently raised with UK timber is that it may be inferior in terms of strength grading compared to the denser and slower grown competition from Europe.

To counteract this issue and reduce imports, there is an argument to be made for investment into a large-scale manufacturing plant for CLT within the UK. While an expensive investment, and perhaps more of a long-term solution, this would allow lower grade UK grown wood to be utilised at the higher end specification in construction and maximise the increasing amount of home-grown timber.

TIMBER VS CARBON VS BIODIVERSITY

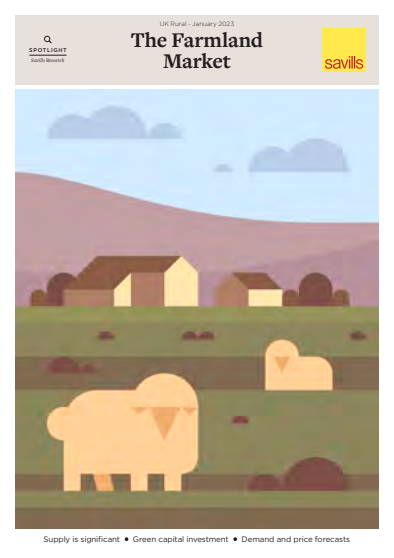
In our autumn Market in Minutes we explored future drivers of value for the forestry sector. There are currently three potential factors – carbon, biodiversity and the traditional timber market. Commercial forestry will always have a heavy timber influence over its values, however for smaller and amenity woodland we may see more emphasis placed on the carbon and biodiversity aspects.

The need to prove additionality means that commercial carbon and commercial forestry schemes are increasingly incompatible, as deriving carbon income from financially-viable timber production makes additionality hard to justify.

However, in the creation of smaller amenity woodlands, there is potential for all three of these income streams to be combined, alongside creation and maintenance grants, which provides a good cashflow over the lifetime of a woodland provided that certain criteria are met *(figure 10)*. For Biodiversity Net Gain (BNG) to be incorporated alongside timber removal, it should be stated within the management plan that this will be the case, which is likely to lower the overall net gain and therefore the saleable units. Additionally, for BNG to be claimed alongside the WCC, the woodland needs to be established first, and then a baseline taken and biodiversity improved above and beyond the existing condition, provided there is no impact to the carbon value.

figure 10

Source Savills Research



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Analysis methodology: Forest sales database: Our research on forest sales analyses our transactional database of all mainstream forestry transactions over 50 hectares in area and, where we are aware, off-market or private sales. While every effort is taken to ensure all transactions are included within the information presented within this publication, it is likely that further sales are reported after our publishing. Therefore, this Spotlight on the UK Forestry Market takes into account all new available information. Advertised forest property database: Our research on the supply of forest properties analyses data from our advertised forest property database. This database collates data from publicly marketed forest properties across the UK, and utilises asking prices in place of sold prices.