

# The benefits of woodland creation

## Woods and Carbon



### How woodland creation can help

Creating new woodlands is a proven way to help tackle the effects of climate change – they act as a natural ‘carbon sink’. Trees do this through the process of photosynthesis, in which leaves absorb atmospheric carbon dioxide and release oxygen whilst locking up carbon. Some carbon enters the woodland soil through fallen leaves and is stored in the long-term, helping to form the tree’s roots, trunk, branches and leaves – this process is known as carbon sequestration. However, planting a new woodland isn’t just good for the planet – it could help your business too.

Growing a woodland could make you an income from selling official carbon units, or, with increasing demand for net zero supply chains, by helping to offset your own business’ emissions. To sell carbon units, you must register and validate your woodland and its potential carbon capture with the Woodland Carbon Code before you have planted it.

### Trees sequester carbon at different rates

Conifer trees normally grow faster in their early life and therefore absorb more carbon dioxide earlier, when compared to native broadleaf woodlands. However, broadleaf woodland can store larger amounts of carbon in the long run. The same can be said when managing a woodland to provide continuous canopy cover – whereby the forest canopy is maintained without clear felling – resulting in larger amounts of carbon storage. Young, fast-growing trees will capture carbon dioxide at a quicker rate, while mature trees can act as carbon stores for hundreds of years. Appropriate tree species and woodland management techniques are needed to realise these carbon benefits.

# The Woodland Carbon Code

The **Woodland Carbon Code** (WCC) is the quality assurance standard for UK-based woodland creation projects hoping to create carbon offsets and is internationally recognised for its high values for sustainable forestry and carbon management. The WCC generates independently verified carbon units, backed by the Government and experts within forestry and the carbon market. More information can be found on the [WCC website](#).

It's important to note that the WCC is not a grant and allows woodland creation projects to benefit from blended finance models, which can help to pay for the associated costs of tree planting.

You must register your woodland creation project with the WCC before planting trees. For a new woodland creation project to be validated with the WCC, it must pass associated additionality tests – to ensure the project would not have gone ahead without funding from carbon offsetting, or the desire to make income from that source. Find more information on [additionality](#) on the WCC website.

## Why act now?

Never has there been a more important time to plant new woodland to help tackle the climate emergency. By planting more trees, and protecting existing woodland, together, we can help counteract some of the harmful effects of greenhouse gas emissions. Financial support and expert advice are available now to support your woodland creation goals.

Find further guidance on [woodland creation](#) and information on grants and available support.

## How the Woodland Carbon Code can benefit you

New woodland creation projects which meet WCC standards could provide an alternative income stream in two ways:

1. Through the sale of Pending Issuance Units (PIUs) – an estimate of the future carbon dioxide the woodland will capture once the trees have grown. This can generate upfront income to help with the establishment of woodland. Farmers and landowners can sell PIUs to companies as soon as their woodland creation project is validated. This would enable companies purchasing woodland carbon PIUs to state they are 'working towards' becoming carbon neutral as they are a promise of future carbon sequestration.
2. Alternatively, farmers and landowners can wait until the woodland has sequestered carbon to sell as verified Woodland Carbon Units (WCUs), the value of which is likely to be higher compared to PIUs as they allow companies to state their carbon neutrality.

PIUs convert into WCUs at a certain point in time, once the 'promise' of future carbon has been verified as converted into actual carbon storage.

Depending on your wider woodland objectives, timber for production and woodfuel can generate additional income if woodlands are actively managed.

Further savings can be gained from commercial forestry as it is not subject to Income or Corporation Tax, and the sale of voluntary carbon credits is outside the scope of VAT. We would recommend that you seek professional independent tax advice before making any long-term decisions.

A woodland creation project validated and verified by the WCC reassures companies buying carbon units that the project is credible. The WCC is also endorsed by the International Carbon Reduction & Offset Alliance, providing greater market trust which can result in companies paying higher prices for both PIUs and WCUs.





## How much income can be generated from selling carbon units?

Woodland creation projects can generate a healthy return with carbon prices ranging from £10 to £30+ per unit. Projects can produce anywhere from 100 units/ha to over 500 units/ha over 100 years, which can generate £1,000/ha to £15,000+/ha through the sale of carbon units via the WCC over the same time period. There are costs associated with using a broker or project developer to manage your woodland project. Find out more on [how to sell your carbon units](#).

### England Woodland Creation Offer

Our flagship [England Woodland Creation Offer](#) covers standard capital costs and annual maintenance payments as your woodland establishes, with additional stackable payments when delivering wider benefits to society, nature recovery, and the environment. Applicants can also retain Basic Payment Scheme payments and receive a contribution towards the costs of access infrastructure.

#### Factors that can affect carbon unit prices include:

- 1. The 'vintage'** of a carbon offset can influence how much companies are willing to pay for carbon units. Each PIU has a serial number attributed to it, to refer to the year in which that PIU will convert or is predicted to convert to a WCU. A WCU predicted to convert in the same timeframe as a company looking to offset their carbon emissions may be considered more valuable to them than one that is not. Typically, the further away the vintage year is, the cheaper the price per credit. As companies are looking to offset their carbon emissions sooner rather than later, it is likely that they will want to buy PIUs that 'mature' into WCUs when they need them and not decades from now.
- 2. Location** – some businesses looking to purchase carbon units value getting involved in the project themselves, so may be willing to pay more if the project is located near to their offices.
- 3. The nature of the project** – some companies prefer mixed broadleaf projects, while others may favour productive woodland projects, for instance if they have timber production in their supply chains.
- 4. Flexibility** – providing public access to the woodland can increase the price companies are willing to pay for carbon units.
- 5. The stage of the project** – some companies prefer to buy before planting, while others may prefer to buy 'off the shelf' carbon units later down the line.
- 6. Associated benefits** – using the WCC's Woodland Benefits Tool, a project can be ranked (out of five) for each of the following four categories: wildlife, community, water, and the economy. A woodland project boasting higher associated benefits to environmental services can therefore expect a higher carbon unit price.

The sale of PIUs and WCUs can take place at the same time and can include a mix of the two. They can be sold any time and to any company looking to offset UK carbon emissions.



# How to generate carbon units through the Woodland Carbon Code

Before planting trees, you must register your woodland creation project with the WCC. Thereafter, you can follow the steps laid out by the WCC to generate carbon units. Within three years the woodland must be validated to generate and list PIUs. A validation assessment is needed in year five and again by

year fifteen to convert PIUs to WCUs. The WCC provides guidance on how to validate and verify your woodland project – the Organic Farmers and Growers or Soil Association are both accredited by the UK Accreditation Service to provide this independent service for Woodland Carbon Code projects.

## Woodland Carbon Code Process





## The Woodland Carbon Guarantee

The [Woodland Carbon Guarantee](#) (WCaG) ensures long term certainty for landowners and farmers, providing a guaranteed price for WCUs to make it a worthwhile investment. Having a guaranteed price, alongside index-linking, reduces the financial risk that is often associated with a long-term investment.

The WCaG is an incentive aimed at helping accelerate woodland creation that is clearly targeted at the removal of carbon dioxide from the atmosphere. Projects registered with the WCC and holding a valid WCaG contract can sell their verified Woodland Carbon Units (WCUs) to the government for a guaranteed price that is index-linked for the life of the project contract, every five or 10 years up to 2055/56. However, to allow you flexibility and the ability to make income from a rising market, you can still choose to sell your carbon units on the open market as PIUs at any point in time – you just need to tell the government that you are not going to sell to them. The WCaG is available in addition to the [England Woodland Creation Offer](#).

## The Woodland Carbon Guarantee – 5 stages to selling carbon units

- 1. Pre-application** – discovering more about the WCC and WCaG and project funding gaps can help you to understand if it will be financially viable before investing time and effort into the design process. Remember carbon funding from either the private market or the WCaG can help bridge those funding gaps and provide good evidence of potential additionality.
- 2. Application** – if the project looks viable with the addition of ‘carbon funding’ then you will need to register it through the [Woodland Carbon Code](#) website. Having calculated how much carbon your woodland will sequester, using the WCC Carbon Calculator, you can then submit a Woodland Carbon Guarantee application form.
- 3. Auction** – upon acceptance of your application, you will be invited to take part in an online auction which takes place approximately twice a year. Auctions are used to agree the price of WCUs to be sold to the government. Participants are asked to submit their lowest price – also known as a reverse auction.
- 4. Validation** – only once you receive a conditional contract offer post-auction can you begin to plant your woodland, which then must be validated under the WCC.
- 5. Verification and sale of carbon** – you’ll need to verify your woodland carbon estimates every five or 10 years through the WCC to confirm the amount of carbon sequestered and the number of WCUs you will deliver through your woodland creation project. Government contracts through WCaG are for the first 35 years of your carbon project and will end in 2056 – at the latest. PIUs maturing to WCUs, once a contract has ended, are still able to be sold on the private market.

Find further information on [WCaG eligibility](#) and each of the five stages.

# 3 steps towards woodland creation



# 1

## Consider opportunities for woodland creation on your land

You may wish to integrate trees on your land, plant trees on under-utilised areas, or create a new block of woodland or expand an existing woodland. Make the most of what your land can offer you, depending on your existing land use model.



# 2

## Have clear objectives for your woodland

Having clear objectives will help to inform your woodland design and the most suitable funding for you.



# 3

## Speak to your local Woodland Creation Team or one of our partners

Expert support is on hand to discuss how to plan your woodland and apply for available funding.

Read the latest guidance on [woodland creation](#) and information on grants and available support.

Find more in-depth guidance on [Planning a New Woodland in England](#).



## The wider benefits of woodland creation

Woodland creation not only helps to absorb harmful gasses from the atmosphere, but also offers far-reaching benefits: boosting biodiversity, allowing businesses to diversify, enhancing local landscapes, improving water quality, alleviating flooding and protecting crops and livestock from adverse weather conditions. Find out how trees can benefit you, your land, the environment, and future generations in [The case for trees brochure](#).





## Forestry Commission grants

### **Woodland Creation Planning Grant (WCPG):**

Contributes towards the costs of designing your new woodland in line with the UK Forestry Standard, and offers you access to expert advice from your local Forestry Commission Woodland Creation Team to assist in the production of your plan.

### **England Woodland Creation Offer (EWCO):**

Covers standard capital costs and annual maintenance payments as your woodland establishes, with additional stackable payments when delivering wider benefits to society, nature recovery, and the environment. Applicants can retain Basic Payment Scheme payments and receive a contribution towards the costs of access infrastructure.

## Partner grants

### **England's Community Forests Trees for Climate Fund**

Expert support and up to 100% flexible and bespoke grant funding for up to 15 years. Open to all landowners within any Community Forest area.

### **The National Forest**

Generous grants and support for tree planting, forest creation and habitat management in the Midlands, available to landowners within the 200 square miles of the National Forest. Grant schemes offer funding to cover design, planning and up to 100% of implementation costs.

### **Northern Forest**

A partnership between the Woodland Trust, four Community Forests – Mersey Forest, Manchester City of Trees, White Rose Forest, Humber Forest – and the Community Forest Trust, with funding from the government's Nature for Climate Fund. You can secure up to 100% of the capital costs of woodland design, planning and creation, and a generous maintenance budget.

### **Woodland Trust**

Offers three national schemes: MOREwoods and MOREhedges covering up to 75% of the costs for a range of woodland and hedgerow creation, starting from 1.25 acres or 100 metres of new hedging, and Trees for Your Farm, funding up to 100% of costs for bespoke agroforestry schemes.



## Useful resources

[England Woodland Creation Offer](#)

[Helping local authorities respond to the climate emergency](#)

[How trees capture and store carbon video](#)

[Local Authority Treescapes Fund](#)

[Planning a New Woodland in England guide](#)

[Responding to the climate emergency with new trees and woodlands](#)

[Woodland Carbon Code](#)

[Woodland Carbon Guarantee](#)

[Woodland Carbon Guarantee Application Form](#)



Discover farmers and landowners already benefitting from [woodland creation](#).



[@ForestryComm](#)



[Forestry Commission](#)



[forestrycommission.blog.gov.uk](#)

[#CaseForTrees](#)

## References

[Woodland Carbon Code](#)

[Woodland Carbon Guarantee](#)

[Woodland Trust, How trees capture and store carbon](#)

All images owned by Forestry Commission with exception of the Woodland Carbon Code Process diagram on page 4 reproduced with permission of WCC.

