



# The benefits of woodland creation **Woods and Carbon**



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 by absorbing carbon dioxide from the atmosphere through their leaves, also known as carbon sequestration. Through the process of photosynthesis, trees convert this carbon dioxide by using water drawn up through their roots and the presence of sunlight to create glucose – helping trees to grow. Oxygen is released back into the air, whilst the carbon from the glucose is locked up and stored in the tree's roots, trunk, branches and leaves. Eventually, once trees die and decay, some carbon will be released back into the atmosphere. Decomposing leaf litter, deadwood and other organic matter also contains carbon, which is absorbed into woodland soils. 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. This is 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.

# The time to act is now

Never has there been a more important time to plant new woodland to help tackle the climate emergency. Creating new woodland is a proven way to help remove harmful greenhouse gases from the atmosphere. 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 and cost savings:

- 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. You can sell PIUs to companies as soon as your 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, you 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.
- **3.** 'Growing your own' units may save you money in future, if you plan to become carbon neutral.

At the beginning of your project you calculate the total number of PIUs your woodland is expected to sequester. Each PIU is assigned a vintage year for when the carbon is expected to be sequestered, and it can then be converted into a WCU.

Depending on your wider woodland objectives, you can still produce timber for sale if you enter your project into the WCC. However, your project must still meet additionality requirements, which takes income from timber into consideration.

There is guidance available about tax implications for woodlands. If you're interested and want to find out more, check out our <u>tax guidance</u> GOV.UK page and speak to a financial advisor about your individual situation.

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.



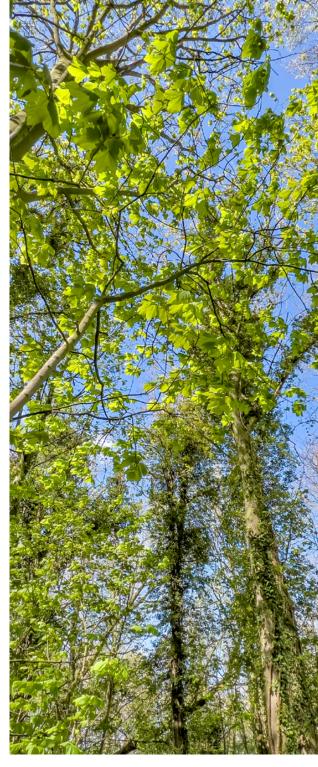
# How much income can be generated from selling carbon units?

The **value of carbon units** is increasing – ranging from £10 to  $\pm$ 50+ per unit. You can decide how long you would like to commit your project to the Woodland Carbon Code, the maximum length is 100 years, and the total carbon capture is calculated across this time period. Greater carbon capture will result in more carbon units to sell, so when designing your new woodland, be sure to consider appropriate tree species, spacing and future management activity. As an example, a native broadleaf project might expect to capture around 500 tonnes of carbon per hectare over 100 years. At £10-£50 per unit and 500 units per hectare. Project developers can help you validate and verify your project with the Woodland Carbon Code, and help sell your units, but they have associated costs. Find out more on **how to sell your carbon units** on the WCC website.

#### 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 vintage year attributed to it, to refer to the year in which that PIU will convert or is predicted to convert to a WCU. This is then checked at each verification stage to ensure that the carbon has actually been sequestered, and approval can be given for a PIU to be converted. 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. PIUs with a vintage of 2050 or before can command a higher price, as 2050 is a popular date for carbon neutrality targets. PIUs with a later vintage may not fetch such a premium.
- 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 may have a preference on a project focussing on native broadleaf species, conifer species, or a mix.
- **4. Flexibility** providing public access to the woodland can increase the price companies are willing to pay for carbon units.
- 5. Future strategy 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. Some companies may be willing to pay more for units that score highly on associated benefits, if they value the importance of these wider benefits.

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.



## 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.



# 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 below to generate carbon units. Within three years the woodland must be validated to generate and list PIUs. A verification assessment is needed in year five and again by year fifteen to check that the woodland is growing as expected, and to enable verified PIUs to be converted into 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.

Discover more **woodland carbon resources** on GOV.UK.



#### 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 their Woodland Carbon Units (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 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 or WCUs 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

- 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. Consider if you want to apply for a government grant to help create your woodland, as this will have implications for your bid at auction.
- Application if the project looks viable with the addition of 'carbon funding' then you will need to register it through the <u>Woodland</u> <u>Carbon Code</u> website. Having calculated how much carbon your woodland will sequester, using the WCC carbon calculation spreadsheet, 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 in a sealed bid process. It is a competitive auction, and only the lowest bids will be successful. A reserve price is set by government, which is the upper limit for successful bids at auction. Successful bids will receive a conditional offer.
- 4. Validation only once you receive a conditional contract offer postauction can you begin to plant your woodland, which then must be validated under the WCC. The Forestry Commission will then issue you with a final contract. All projects will need to follow grant and regulatory requirements.
- 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. You can then sell your WCUs to the government for an index-linked price. All government contracts will expire in 2056, and any units not verified before then will need to be sold to the private market, or used for offsetting your own emissions.

Find further information on **WCaG eligibility** and each of the five stages.

# 3 steps towards woodland creation



# 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.



#### Have clear objectives for your woodland

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



#### 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 greenhouse 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.







**Forestry Commission** 



forestrycommission.blog.gov.uk

**#CaseForTrees** 

### References

**Woodland Carbon Code** 

Woodland Carbon Guarantee

Woodland Trust, How trees capture and store carbon

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