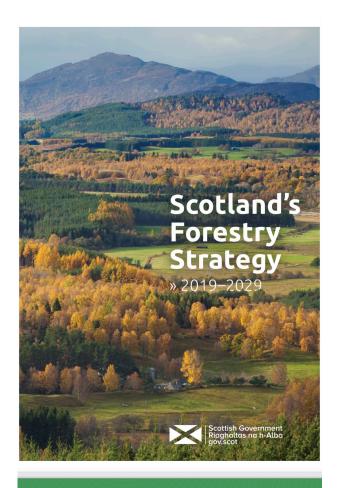


# The Woodland Carbon Code

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## **Forestry in Scotland**



Scotland's Forestry Strategy
» 2019–2029 overview

- Supports 25,000 jobs and contributes £1bn to Scotland's economy
- A net carbon sink, absorbing 7.6 million tonnes of CO2 in 2020, c14% of Scotland's gross GHG emissions
- Woodland creation targets (set out in the SG Climate Change Plan) increasing to 18,000 ha in 2024/25. Annual target for native woodland planting, at least 4,000 ha each year
- Scotland creating around 75% of all the new woodland in the UK
- Additional private finance through rapid expansion in the number of woodland creation projects under the Woodland Carbon Code



### **Global Carbon Market Expectations**

- Integrity Council for the Voluntary Carbon Market
- Voluntary Carbon Market Integrity Initiative
- ICROA, UK Env Rep Guidelines, PAS2060:
  - Independence & good governance consultation
  - Real = real and ex-post
  - Measureable = baseline, leakage, project benefit
  - Permanent -Reversal risk buffer?
  - Additional
  - Independently Verified
  - Unique = Transparent registry
  - Do no harm = Env/Social benefits UK Forestry Standard



#### **Overview**

#### What is the Woodland Carbon Code?

UK's govt-backed, domestic voluntary carbon market standard

- helps companies to become carbon neutral/negative
- helps the UK to meet national GHG targets
- woodland creation only (wide range of woodland types)

WCC's purpose is to underpin market trust and confidence



2011
launched by
Forestry
Commission

2019
managed by
Scottish Forestry
under crossborder MoU

WCC team

Executive Board (UK 'forestry authorities')

Advisory Board (stakeholders)

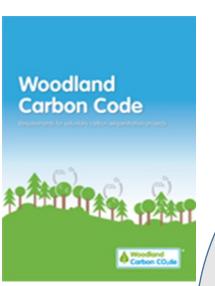


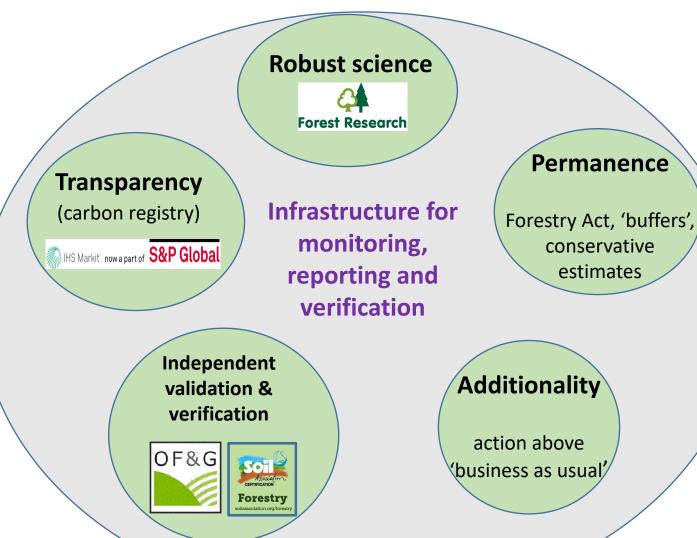
Endorsed in the wider carbon market





#### What are the main components?



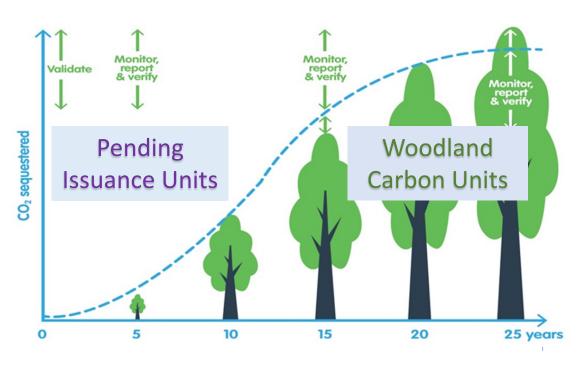




#### Carbon credits under the WCC

<u>Pending Issuance Units</u> (a promise to deliver) – validated but not verified <u>Woodland Carbon Units</u> (actual sequestration) – validated and verified

One unit = one tonne CO2



Up to 500 units per hectare

Both types of units can be sold, but only WCUs can be used as offsets

Prices/tCO2 - 2011 (£5 or less), 2015-20 (£5-15), 2022 (£15-20, even £25+)

Part of a cost-effective approach to GHG mitigation



# Additionality

Legal: The activity cannot be legally required.

- Financial/Investment: Only 'unviable' projects should receive carbon funding.
  - Woodland creation without carbon income is not viable (ie negative NPV)
  - Woodland creation without carbon income is less viable than the previous landuse (ie NPV woodland creation < NPV of previous landuse)
  - Test was standardised and strengthened in 2022



#### **TRANSPARENCY - registry**

- Register of projects, carbon units and documentation
- Track issuance, ownership, transfer and use
- Pending Issuance Units (PIU) 'Promise to deliver'
- → Converted upon verification to
- Woodland Carbon Units (WCU)
  - Actual measured sequestration
  - Guaranteed (with buffer)
- Costs of registry funded by:
  - Scottish Forestry (government)
  - Levies paid by users (private)



### Validation/ Verification

#### Validate

- Within 3 years of registering
- Desk-based
- Meets the standard (incl UKFS)
- Validate carbon prediction

#### Monitor and Verify

- Year 5 and every 10 years
- Field survey
- Meets the standard (incl UKFS)
- Verify the actual amount
   CO<sub>2</sub> sequestered

Carried out by UKAS-accredited bodies (ISO14065, ISO14064/3 & UKFS)







### **Cost savings**

### Project type: standard or small

- Standard projects: any size, can be multiple woodland blocks (up to 5 consecutive planting seasons);
- Small projects (max. 5 hectares), streamlined validation & verification:
  - simplified carbon calculator
  - default assumptions (e.g. baseline and leakage)
  - less intensive 'Small Project Monitoring Protocol' from Year 15

### Project Process: single or group

- Group:
  - up to 15 standard projects
  - up to 50 hectares in 'small' projects;

requires a Group Manager and a Group Agreement



### **Costs of Certification**

- Costs
  - Registration: FREE
  - Validation:
    - ~£800+ / project group savings
    - 10 pence per carbon unit list units in registry
  - Verification:
    - ~£1,500- £2,000 / project with site visit
    - ~£750 / project no site visit group savings
    - 5 pence per unit to convert units in registry
- Potential Income
  - £15-20 / tCO2 − ~400 tCO2/ha native broadleaves →
  - £6,000-8,000 per hectare



### **GOVERNANCE AND OUTREACH**

- 'internal' Executive Board
- Wider Advisory Board



- Carbon sector
- Investors



- linking land managers and investors
- facilitating the WCC process





# **Application Process**



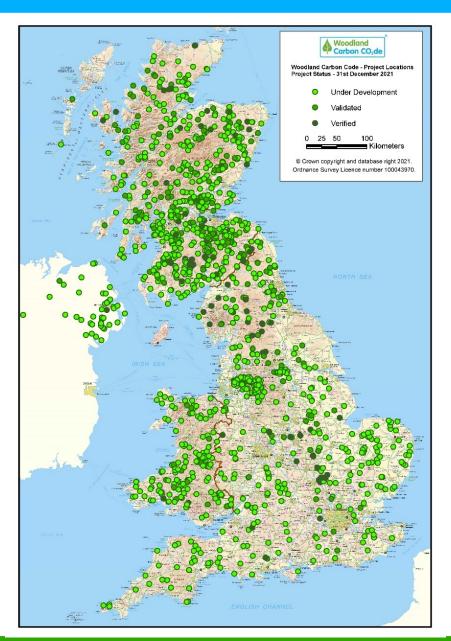


### Progress - UK (as of 31/03/2023)

- 451 projects validated
- 24,344 ha woodland
- 8.5 MtCO<sub>2</sub> over lifetime

#### Of which

- 124 projects verified yr 5
- 4,640 ha woodland
- 2.0 MtCO<sub>2</sub> over lifetime
- In the pipeline:
- 1,465 projects
- 46,055 ha
- 14.4 MtCO<sub>2</sub> over lifetime
- > 500 corporate buyers





# Project Developers

Project developers – help landowners to participate

Andrew Bronwin & Co Ltd	Forest Carbon	Ribble Rivers Trust
Bidwells LLP	Forest Direct	RTS Forestry
Bowts Chartered Surveyors	Fountains Forestry	Savills
Brown & Co	FWAG South West	Scotland's Rural College (SRUC)
Carter Jonas	Galbraith	Scottish Woodlands
Charlton Abbotts	Highfield Forestry	South Pole
City of Trees	lan Thomas	Sylvan Resources Env Consulting
Climate Care	JDM Woodland Management	Sylvawood Agriculture
Coed Cymru	John Clegg & Co	Tillhill Forestry
Davidson & Robertson	Land and Heritage	The Rivers Trust
Dee Atkinson & Harrison	Lockhart-Garratt	Tim Lucas Forest Management
Diverse Ecology	Mark Seed Forest & Land Mgmt	Treeconomy
Dunnewoods	Natural Resource Consultants	White Rose
E4 Environment	Patt Foundation	Williams Round
Edenviro	Pryor & Rickett	Woodland Trust
English Woodlands & Forestry	Quercus Woodland Management	Yorkshire Dales Millennium Trust
Fisher German LLP	Ribble Rivers Trust	



# Selling & Intermediaries

- 'Units for sale' page on WCC website
- Intermediaries source credits for corporate clients



























## Market: Making connections

#### Now

- Buy carbon' page on WCC website
- Intermediary organisations
- 'For sale' board within registry

Project developers with validated (PIU) units available to sell

These project developers/projects have Pending Issuance Units available for sale for future vintages. Note that as of 31 March 2021, there are around 1 Million Pending Issuance Units available for sale which will be delivered over the projects' lifetimes - up to 100 years. 1 PIU = 1 tonne of Carbon Dioxide equivalent that will be sequestered in future.





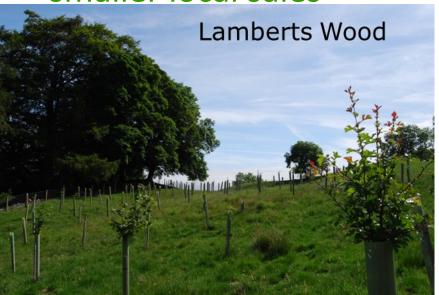


### **Yorks Dales Millennium Trust**

- YDMT Group: 5 projects, 2-13 hectares
- Project Developer: YDMT
- Will sequester 15,000 tCO<sub>2</sub> over 100 years
  - 13,000 tCO<sub>2</sub> for sale
  - 2,000 tCO<sub>2</sub> to buffer

• Sold 2 projects to Allstar Ecopoint via Forest Carbon, other

smaller local sales







### Objectives can be wide-ranging





### Waitrose

- Since 2011 with Woodland Trust
- Compensate for home delivery fleet emissions over time
- Warcop, an MOD site in an AONB, Cumbria
- Bought over 22,000 carbon units

### Why?

- Believe in trees, biodiversity, recreation & flood control benefits
- Environmental and CSR credentials
- Strong marketing messages to stakeholders
- Staff engagement through tree planting





### **Future developments**

- Technology for improved/more frequent monitoring
- Carbon price index (transparency)
- Standardisation and consistency (e.g. contracts?)
- Further risk mitigation insurance for carbon credits?
- Automation validation/verification, sales platforms
- Development of new methodologies
- Wider markets and infrastructure
- Wider benefits
- Market segmentation?





## **The Future**



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