

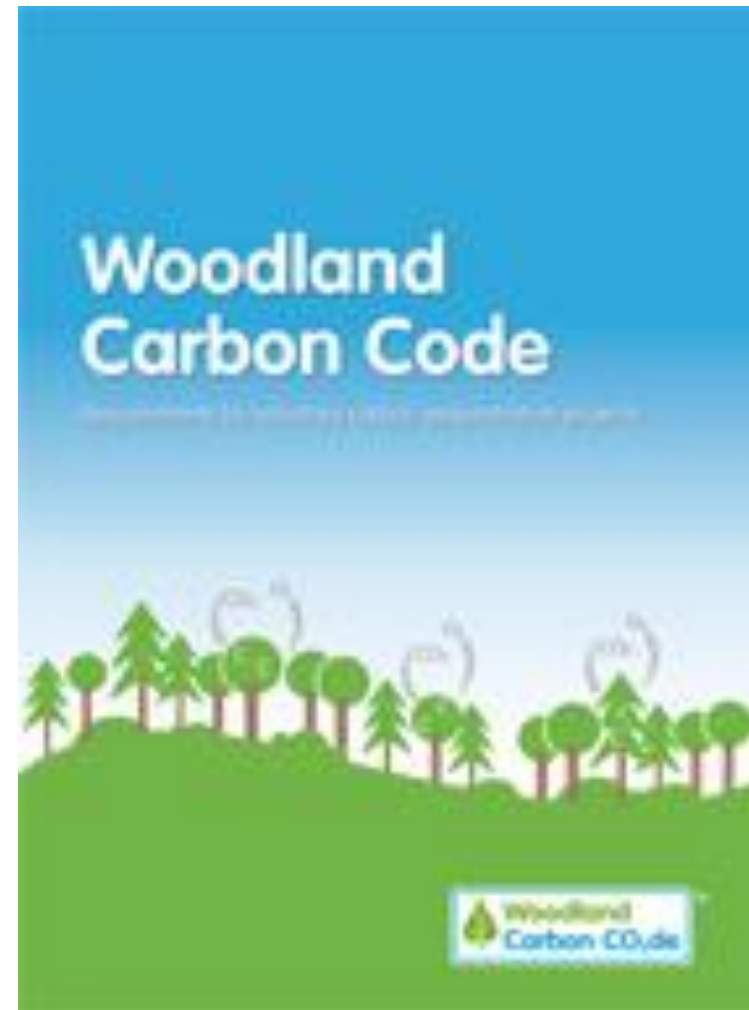
# Private sector payments for ecosystem services via the UK Woodland Carbon Code

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Forestry Commission

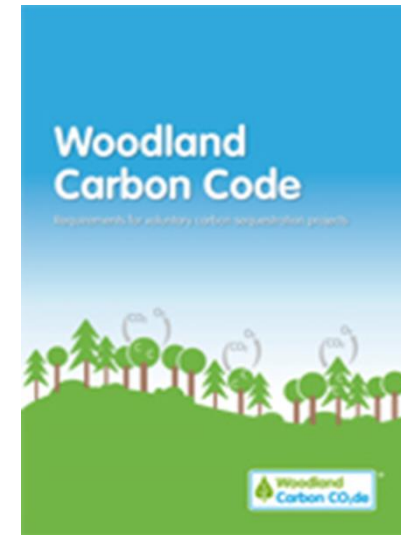
- Launched in 2011
- Woodland creation only
- CO<sub>2</sub>e in biomass, soil and management emissions

## High Standards

- > Robust science
- > Transparent Registry
- > Independent Validation/  
Verification



- UK Forestry Standard +
- Additionality
  - Legal : Financial : Barrier
- Permanence
  - Forestry Act, EIA regs,
  - Risk assessment, Buffer (20% of project CO<sub>2</sub>)
  - Require restock if losses to wind, fire, pest & disease, development
- Predict and monitor carbon sequestration
  - Baseline : Leakage : Project benefit
- Carbon Statements & Reporting



- Questions on woodland design/management
- Score out of 5
- Consistent description from all projects

<b>Wildlife</b>	<b>5</b>		<b>Community</b>	<b>4</b>	
Wildlife haven			Community asset		
<b>Water</b>	<b>5</b>		<b>Economy</b>	<b>3</b>	
Freshwater friendly					

## Validation

- At the outset
- Meets the standard (incl UKFS)
- Validate carbon prediction



## Monitoring

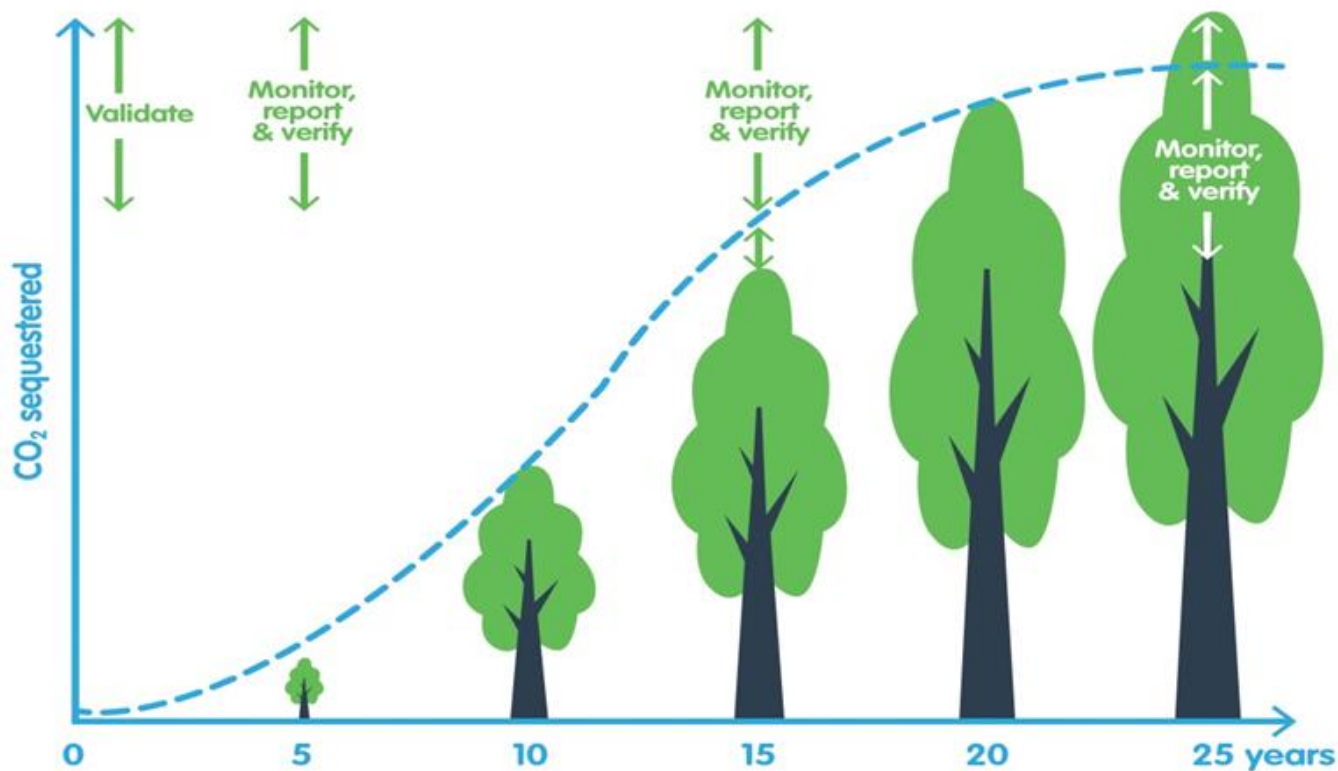
- After year 5 and every 10 years
- Field survey
- Assess carbon stock

## Verification

- After year 5 and every 10 years up to 100 years/project length
- Meets the standard (incl UKFS)
- Verify actual carbon sequestration

## UKAS-accredited bodies

- ISO 14065
- ISO 14064/3
- UKWAS



- Predict Carbon sequestration – up to 100 years:
  - 'C Lookup Tables' based on Forest Research models & ESC
- Measure carbon sequestration as trees grow:
  - 'Carbon Assessment Protocol' sets out monitoring methods

- Each unit has unique serial number
- Track issuance, ownership, transfer and use
- **Pending Issuance Units**
  - 'Promise to deliver'
  - Not guaranteed
  - Can only make CSR statements about future sequestration

→ Converted upon verification to →

- **Woodland Carbon Units**
  - Actual measured sequestration (=ex-post)
  - Guaranteed (with buffer)
  - Can be used as offset/compensation



Registry - Public View

Clear

Search:

UK Woodland Carbon Code



All Units

Account Holders

Projects

Issuances / Listings

Holdings

Retired Credits

API Retired Credits

Assigned Credits

Cancelled Units

Funded cred

Vintage	Project	Account	Standard	Project Type	Verifier	Units	Measurement	Type	Details
2048 - 2057	Yoxall	BWOC	UK Woodland Carbon Code	No thinning or clearfell	Acoura	428	WCU	PIU	<a href="#">View</a>
2014 - 2018	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	10	WCU	UNIT	<a href="#">View</a>
2079 - 2089	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	13	WCU	PIU	<a href="#">View</a>
2039 - 2049	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	42	WCU	PIU	<a href="#">View</a>
2029 - 2039	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	34	WCU	PIU	<a href="#">View</a>
2049 - 2059	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	26	WCU	PIU	<a href="#">View</a>
2018 - 2029	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	45	WCU	PIU	<a href="#">View</a>
2069 - 2079	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	13	WCU	PIU	<a href="#">View</a>
2059 - 2069	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	19	WCU	PIU	<a href="#">View</a>
2079 - 2089	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	744	WCU	PIU	<a href="#">View</a>
2039 - 2049	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	1,763	WCU	PIU	<a href="#">View</a>
2029 - 2039	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	1,635	WCU	PIU	<a href="#">View</a>
2049 - 2059	Haywood	BWOC	UK Woodland Carbon Code	Continuous cover system	Acoura	1,272	WCU	PIU	<a href="#">View</a>

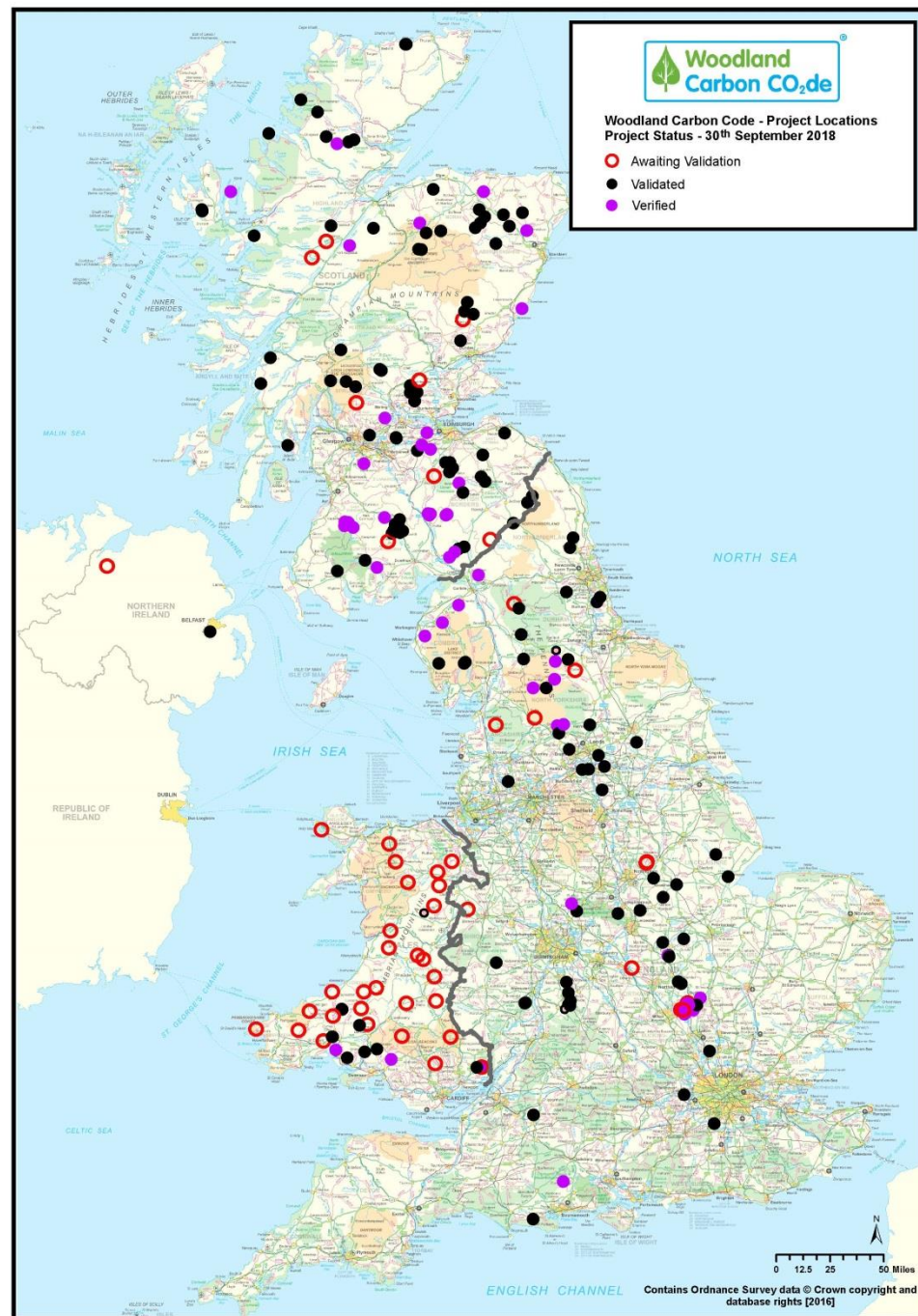


## UK as of 30 Sep 2018:

- **240 Projects registered**
- 21,143 ha woodland
- 6.6 MtCO<sub>2</sub> over lifetime
- **191 projects validated**
- 20,582 ha woodland
- 6.4 MtCO<sub>2</sub> over lifetime

## Of which

- **56 projects verified yr 5**
  - 2,207 ha woodland
  - 1.0M tCO<sub>2</sub> over lifetime
- 34 Proj Dev -registered project
  - 24 Proj Dev -validated projects
  - **> 70 Corporate Buyers**



## 1. Get Help? DIY or ask a project developer/ agent



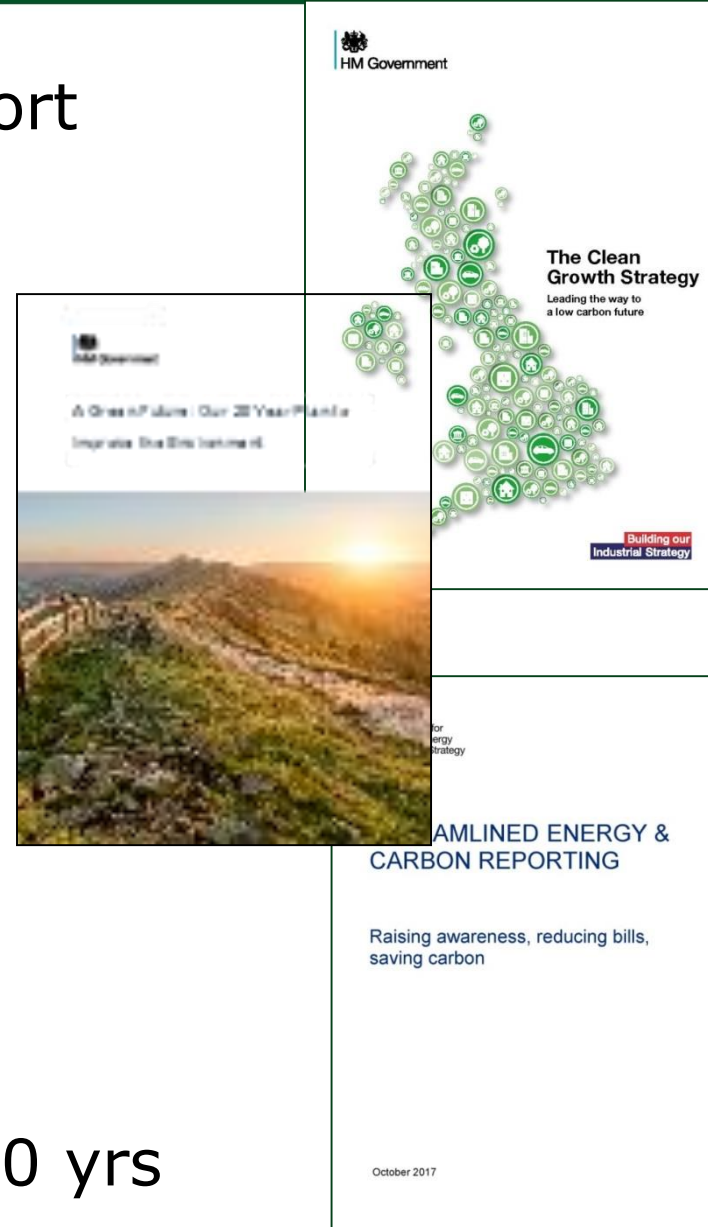
- 1,000 UK companies have to report GHG emissions
- Expanded to 12,000 next year?

Companies can use verified credits:

- To compensate for emissions
- To claim carbon neutrality

UK Policy documents promise:

- Stronger domestic carbon offset market
- Woodland C Guarantee: £50M/ 30 yrs



UK-based corporates for CSR or to compensate for their UK-based emissions

60% Sold upfront as PIUs, £5-£15 / tCO<sub>2</sub>

- **Retail:** Waitrose, M&S, Sofa.com
- **Paper/Printers:** Premier Paper
- **Transport:** Stagecoach(Bus), Taxi, Chauffeur
- **Travel:** Eurocamp
- **Fuel Distribution/Cards:** BWOC, All Star Cards
- **Financial:** Green Investment Bank, Barclays
- **Venues:** Edinburgh Int. Conference Centre
- **Building Manangement:** Rider Levett Bucknall

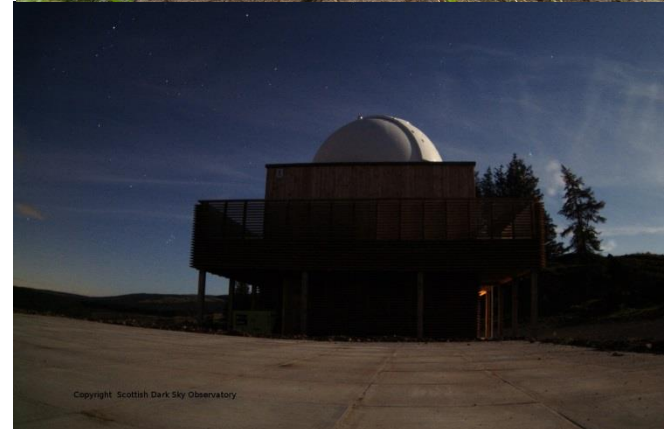
For each tonne of CO<sub>2</sub> sequestered (Eftec, 2016):

- £20-£90 of **biodiversity** benefit
- £64-£75 of **recreation** benefit
- £10 of **air quality regulation** benefit
- Support economic activity by increasing Gross Value Added by £7.38

Other ecosystem services:

- 12.5% of woodlands **water pollution/flood risks** priority areas
- 1 or 2 projects **accessible** to deprived communities

- 210 ha, native woodland
- previously rough pasture for grazing
- Project Developer: Eamonn Wall → Watston Forestry
- Will sequester 81,000 tCO<sub>2</sub> over 100 years
  - 65,000 tCO<sub>2</sub> for sale,
  - 16,000 tCO<sub>2</sub> to buffer
- UNESCO Biosphere
- Observatory in 'Gold' Dark Sky Park
- Chance to participate in conservn & community projects
- Education (schools, scouts...)
- Recreation (17 miles footpath)



# Waitrose

- Since 2011 with Woodland Trust
- Will compensate for emissions of home delivery fleet over time
- Bought carbon at Warcop, an MOD site in an AONB, Cumbria
- Have bought over 22,000 carbon units

## Why?

- They believe in trees, value the biodiversity, environmental, recreation & flood control benefits
- Raises Waitrose's environmental and CSR credentials
- Strong marketing messages to convey to stakeholders
- Staff engagement through tree planting



- Global: Gold Standard: 'Stacking' credits for
  - Carbon, Water, Health
- Globally other landuses sell GHG emissions reductions
  - Sustainable agriculture/grassland management
  - Livestock/manure management→ Verra, Gold Standard, Australian Emissions Reduction Fund, Climate Action Reserve

**PEATLAND  
CODE** 

Restoration of  
degraded peatlands

 IUCN | National Committee  
United Kingdom  
**Peatland Programme**

- Scottish Agriculture : Agricarbon
  - Soil C tool demo 2019: Near-InfraRed spectroscopy
  - Developing ecosystem services marketplace → Green Alliance

- WCC: private sector money to landowners for carbon sequestration
- It's the sequestration that's monetised
- Projects deliver many other public goods
- Need policy drivers for the landowner and buyer
- Could be applied to other public goods/ landuses

## Any Questions?

**WCC Mailing list?**

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LinkedIn: 'Woodland Carbon' group