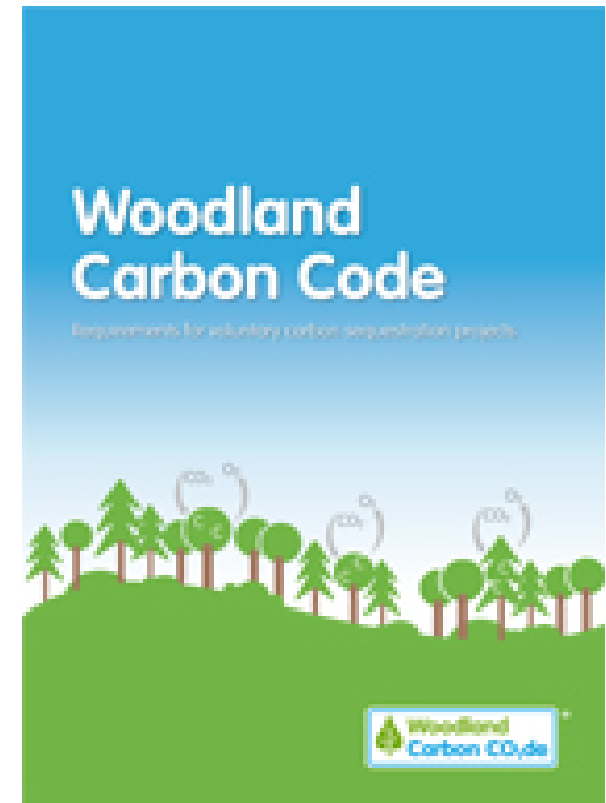


UK Woodland Carbon Code in context

Dr Vicky West
Forestry Commission

- The UK Woodland Carbon Code
 - Background
 - Impact
 - Buyers
- UK Carbon Reporting 'landscape'
- How the WCC fits in – Avoiding double counting?
- Options for improvement

- Launched in 2011
 - Clarity and transparency to bolster market confidence
 - High standard with rigorous scientific basis
 - Woodland creation only
 - Generates 'Woodland Carbon Units'
 - only useable 'ex-post'
- First 'Pending Issuance Units' listed 2013
- First verified 'Woodland Carbon Units' due 2016



- UK Forestry Standard +
- Additionality
 - Legal : Financial : Barrier
- Permanence
 - Forestry Act, EIA regs, Buffer (15-40% of project C)
- Predict and monitor carbon sequestration
 - Baseline : Leakage : Project benefit
 - Methodology developed with Forest Research
- Certification
 - Validation
 - Verification + 5 and then every 10 years
- Wider benefits: optional to monitor over UKFS



UK as of 31 March 2015:

- **199 Projects registered**
- 15,400 ha woodland
- 5.7 MtCO₂ over lifetime
- **100 projects validated**
- 3,320 ha woodland
- 1.6MtCO₂ over lifetime

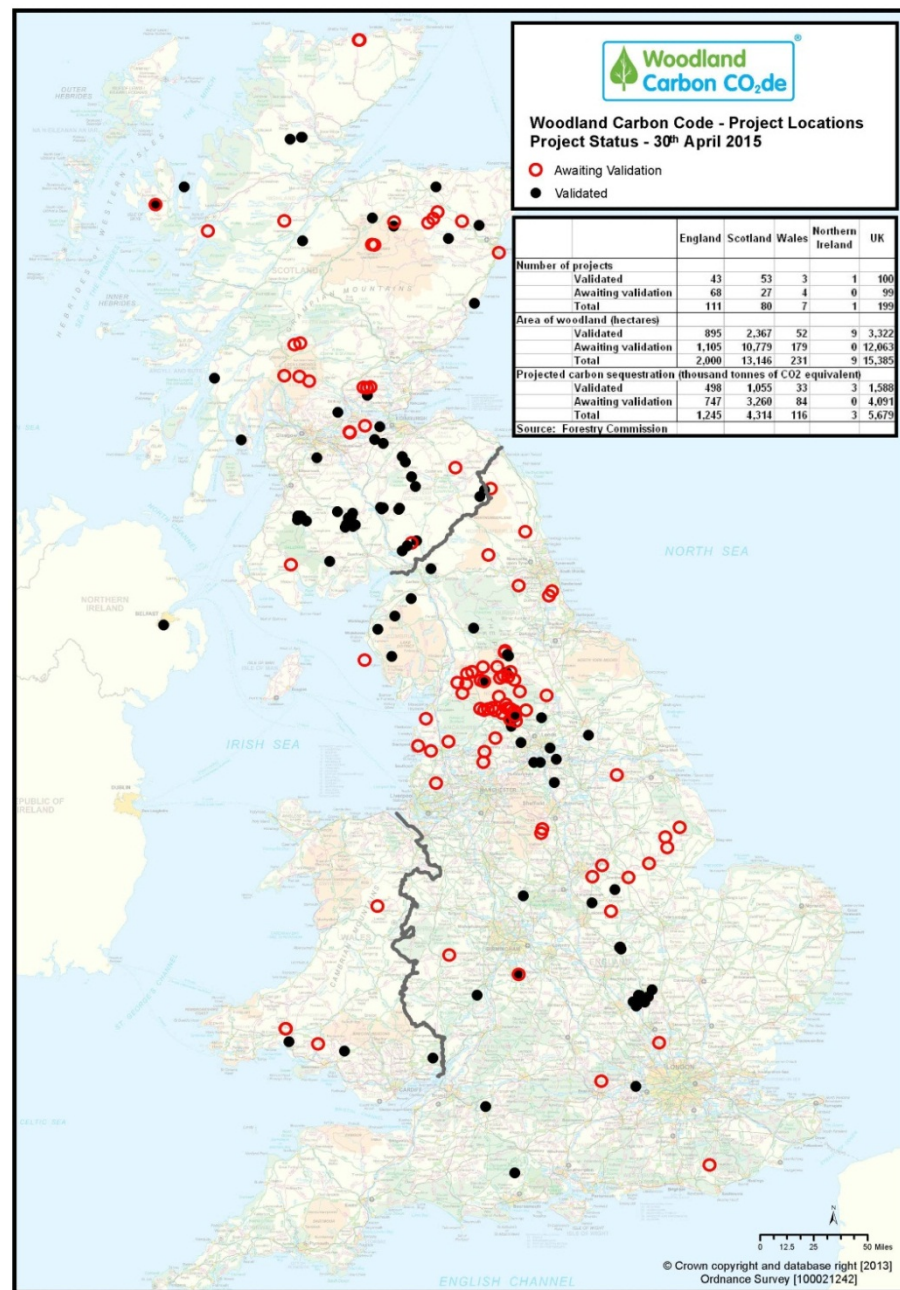
Verified credits available from 2016

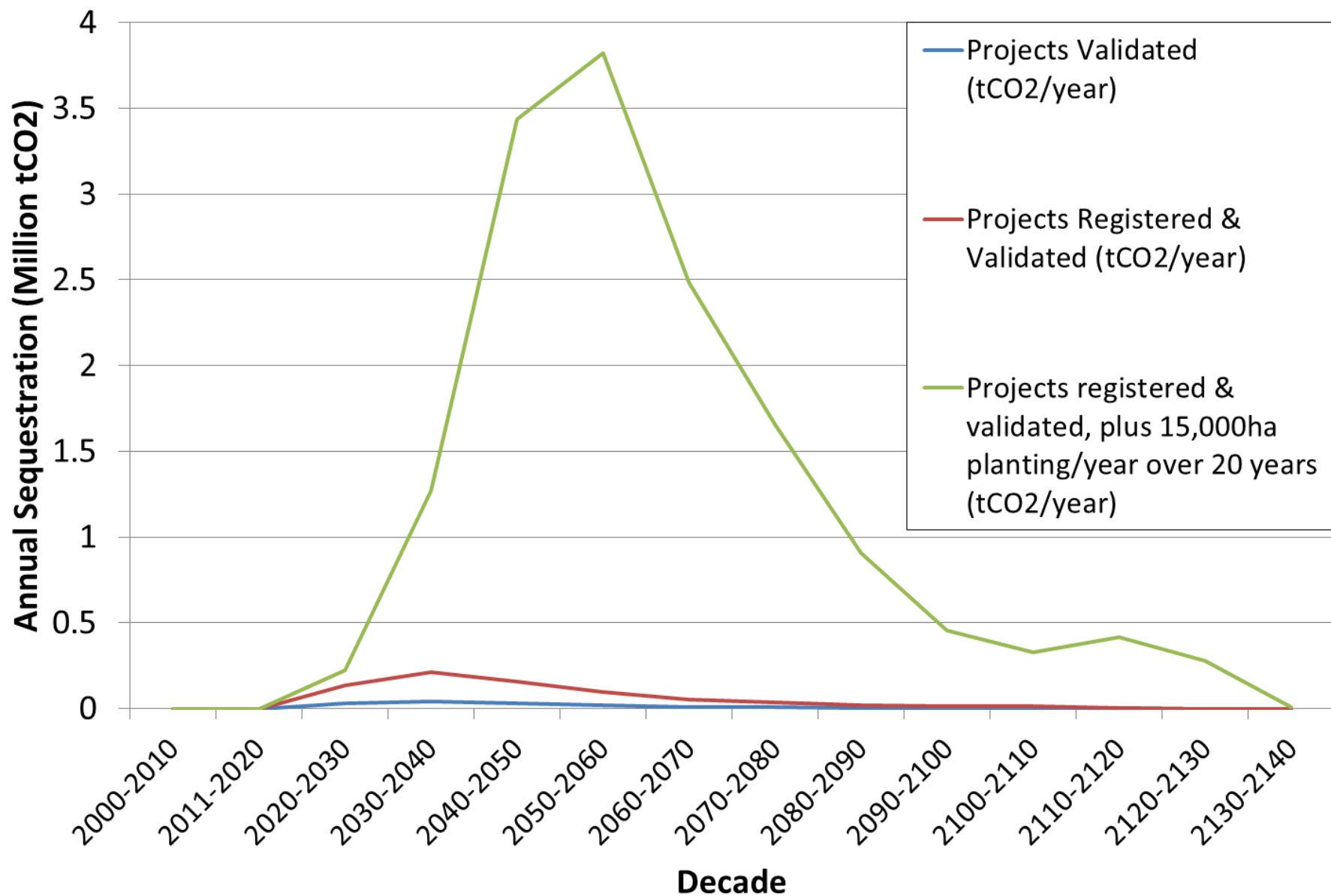
WCC awards 2014:

UK Climate Week Awards: Finalist

Environmental Finance Survey:
3rd voluntary standard globally

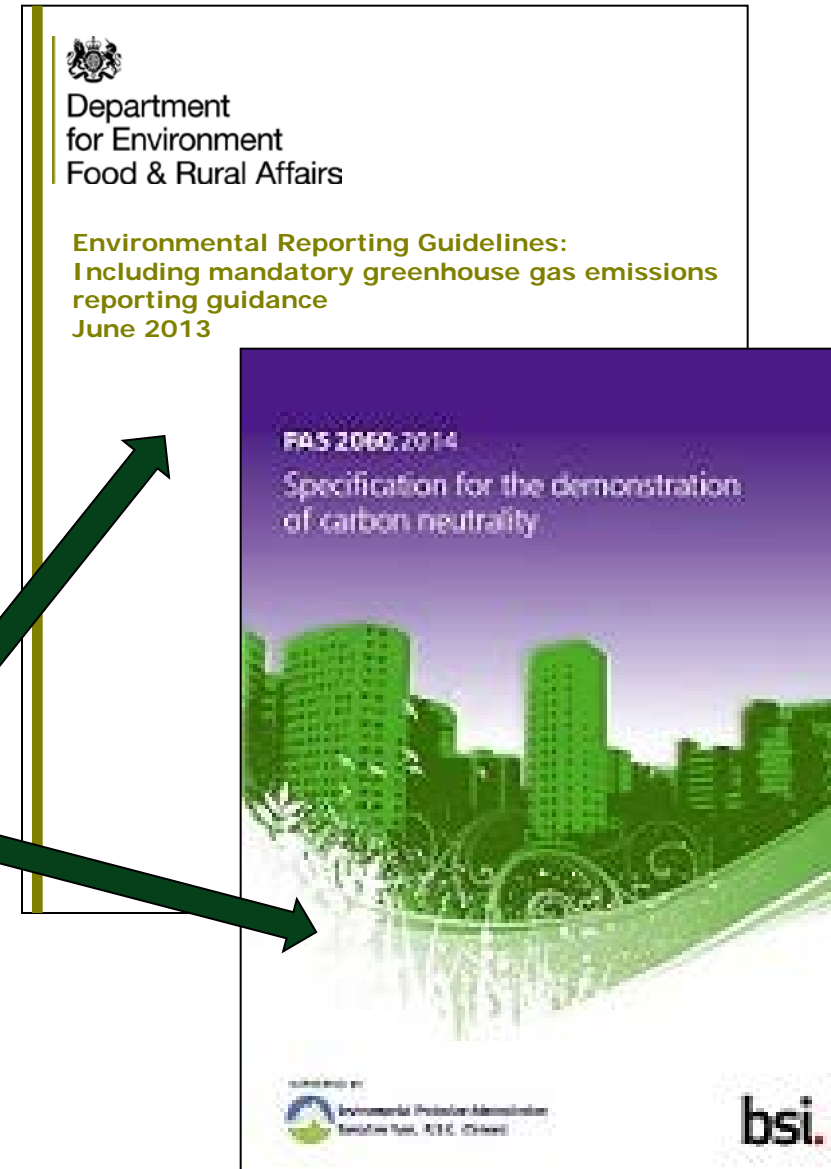
**Peatland Code &
Zero C Homes / Allowable
Solutions**





- UK-based corporates to compensate for their UK-based emissions
- Around **50% of units** sold 'up-front' already
- **Price:** £7-15/tCO₂ €9-19 / tCO₂
- **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
- **Venues:** Edinburgh Int. Conference Centre

- All UK woodland creation contributes to the UK's emissions reduction target (Kyoto Protocol & Domestic C Budget)
- **Mandatory** GHG emissions reporting for companies listed on stock exchange
- Verified WCC Units can be used within the UK:
 - To compensate for organisation's emissions
 - In claims of carbon neutrality of an organisation / product/ event
- Verified WCC Units CAN'T be:
 - Traded internationally
 - Used in EUETS
 - Used in the CRC Energy Efficiency Scheme



- Kyoto Protocol Annex 1 country – UK Targets:
 - 2008-2012: Reduce by 12.5% compared to 1990 levels
 - Met – Removal Units from landuse: Cancelled
 - 2012-2020: Reduce by 20% compared to 1990 levels
 - On target:
 - Use EUETS and CDM but not JI
- UK Climate Change Act (2008)
 - By 2050: Reduce by 80% compared to 1990 levels
 - Budget 1 2008-2012 : 3,018 MtCO₂e : 23% : Met
 - Budget 2 2013-2017 : 2,782 MtCO₂e : 29% :
 - Budget 3 2018-2022 : 2,544 MtCO₂e : 35% :
 - Budget 4 2023-2027 : 1,950 MtCO₂e : 50% :
- All woodland creation included in reporting against Kyoto Targets & meeting UK Domestic C Budgets

Issue: Double-selling: Unit x sold to Company A and Company B:

Solution →

- Use high standard registry: Markit Registry
- Credits with serial numbers only in one account
- Publicly available

Issue: Double-Issuance/Certification: Project A issues the same credits twice – with two different standards/on two different registries

Solution →

- Projects declare they have not registered elsewhere
- Currently no other standard that will issue credits for UK project
- Only use one registry provider
- Administrative checks

Issue: Double-Monetisation: 1tCO₂ is sold once to a corporate and a second time as AAU to another country.

Solution →

- UK has tougher 'national' than 'Kyoto' GHG reduction target
- Current legislation states that any 'spare' AAUs/RMUs ('above' our carbon budgets) will be cancelled – and not sold to another country.

Issue: Double-Claiming: Two entities 'claim' the same unit of GHG reduction (ie both a corporate and the project host country in national GHG account)

Solution→

- As we only generate UK credits and sell to UK corporates credits will only be accounted for in UK national inventory – Environmental Integrity is intact.
- Claims in 2 parallel reporting systems are OK?

- For UK-based corporates:
 - Status of WCUs improved but still not entirely clear
 - May still decide not to buy due to lack of clarity on status
- For multi-nationals:
 - Just wouldn't buy if not an internationally tradable 'offset'
 - Wouldn't buy something not accepted within the Carbon Disclosure Project
 - Difficult to buy 'domestic' units for an 'international' report
- For re-sellers of carbon credits:
 - ICROA members can only sell GS, VCS, ACR, CAR, plus CDM, JI units
 - Some ICROA members sell WCC PIUs 'stapled' to a VER
 - ICROA aware of large global demand for 'domestic' credits
 - Non-ICROA re-sellers appreciate PAS 2060 clarity

We have:

- Robust standard
- High quality registry
- Acceptance in UK corporate-level reporting
- Demand from UK-based companies

We need:

- Further clarity with national GHG account
- Further acceptance with ICROA & others
- Better clarification of wider benefits

Figure 1: Calculating the net UK carbon account

1. Integrate into UK's Carbon Account

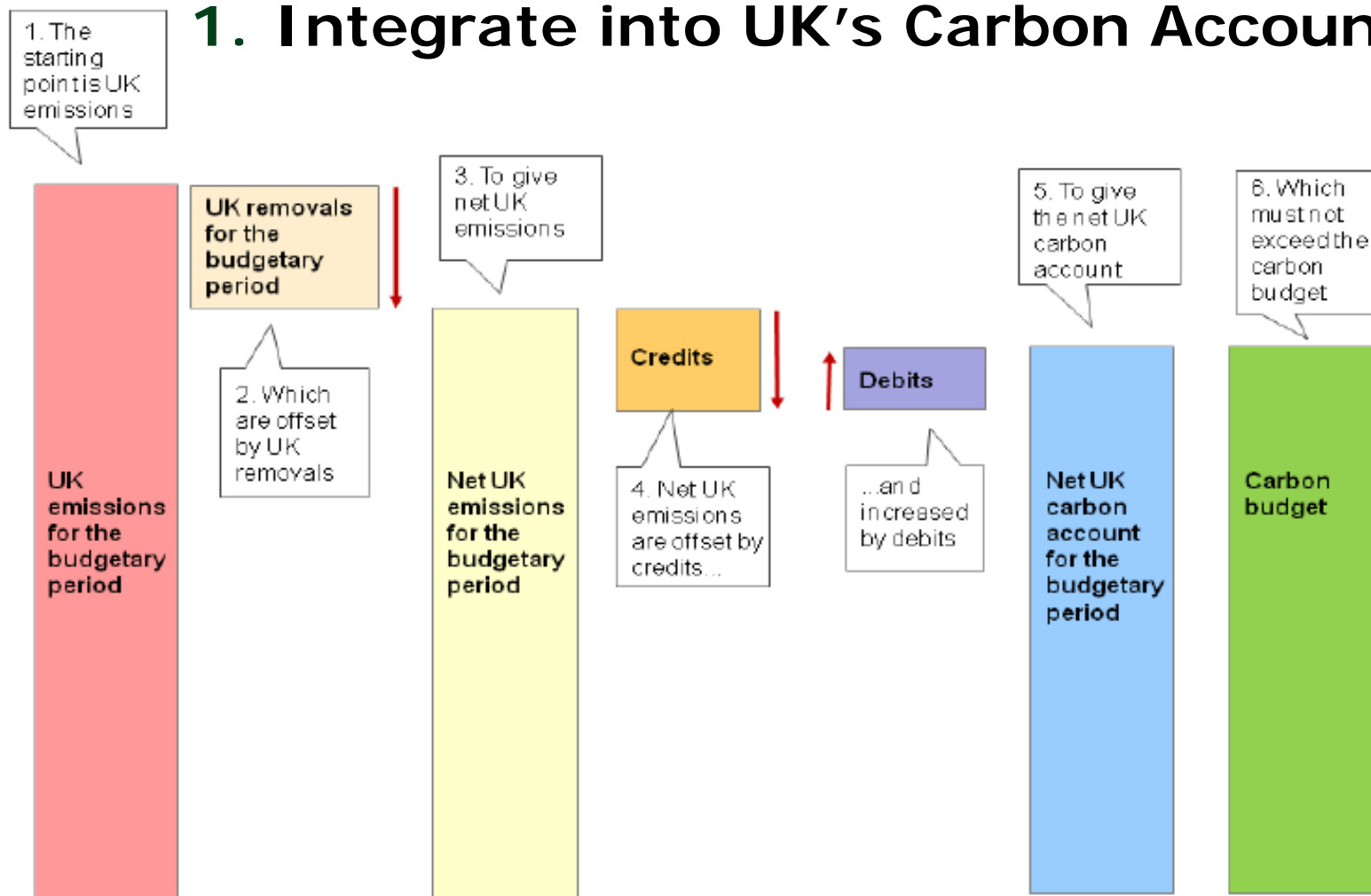
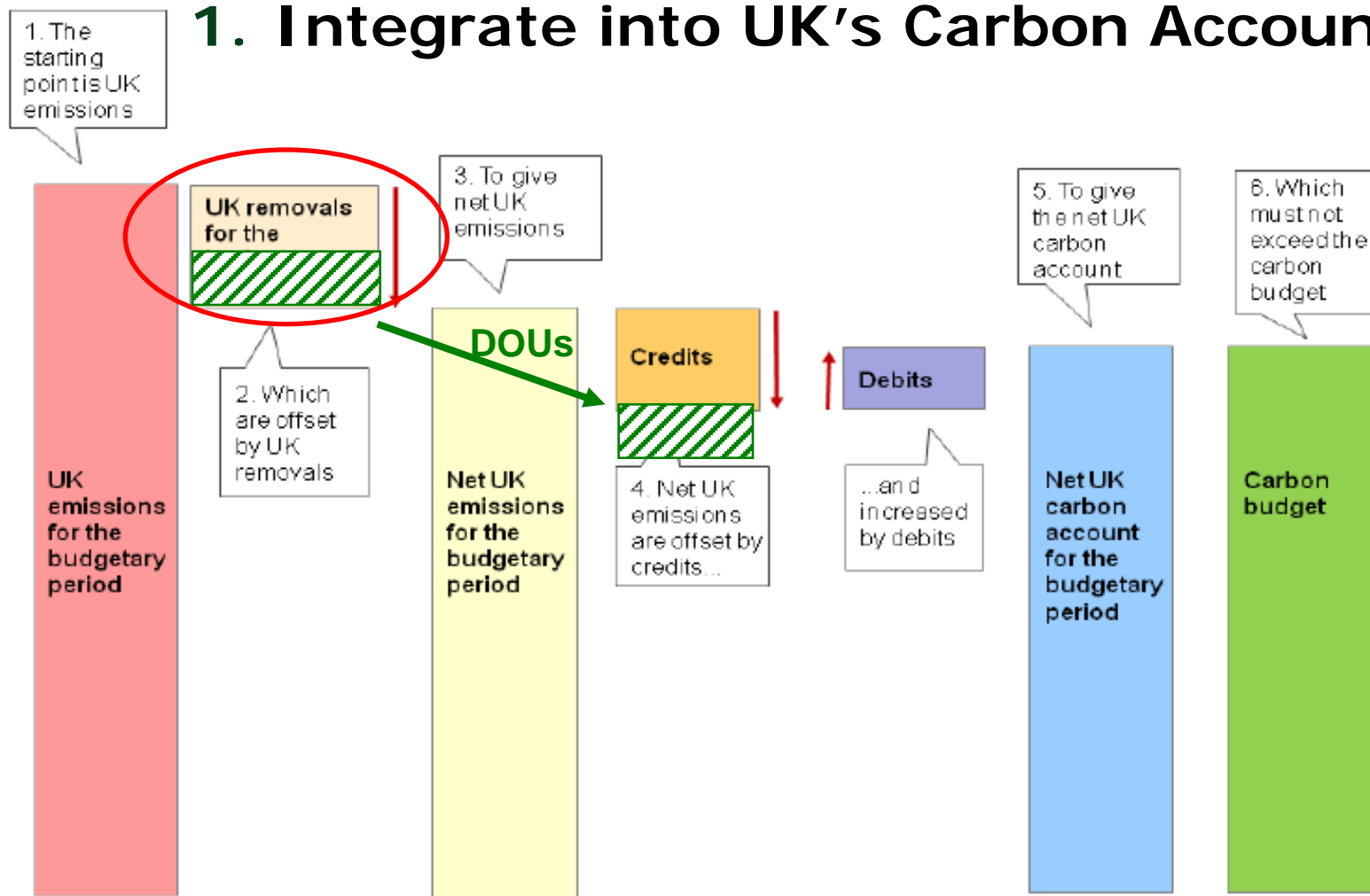


Figure 1: Calculating the net UK carbon account

1. Integrate into UK's Carbon Account



www.forestry.gov.uk/carboncode



vicky.west@forestry.gov.uk

LinkedIn: 'Woodland Carbon' group

- Pending Issuance Units
 - 'Promise to deliver'
 - Not guaranteed
 - Can't be used/retired but allows companies to plan ahead

→ Converted upon verification to →

- Woodland Carbon Units
 - Actual measured sequestration (=ex-post)
 - Guaranteed (with buffer)
 - Can be used/retired
- UK-grown Voluntary Units for UK-based corporates/businesses

How many WCUs when?

	From	To	Projects validated June 2014 (1.5M units / 100 yr)	Remainder of registered projects validated within 2015 (4.2M units / 100 years)	Total (5.7M units / 100 yrs)
Kyoto Commitment Periods					
1	2008	2012	0	0	0
2	2013	2020	7,704	37,513	45,217
UK Carbon Budgets					
1	2008	2012	0	0	0
2	2013	2017	5,888	22,278	28,166
3	2018	2022	4,610	17,442	22,052
4	2023	2027	98,502	372,732	471,234
5	2028	2032	53,535	202,576	256,111

Registry - Public View



Clear

Search: moorside

Registry:

UK Woodland Carbon Code

All Units

Page 1

Account Holders		Projects	Issuances / Listings		Holdings		Retired Credits		
Vintage	Project	Account	Standard	Project Type	Verifier	Units	Measurement	Type	
2065 - 2075	Moorside Wood	The Green Insurance Company	UK Woodland Carbon Code	No thinning or clearfell	SFQC	1,048	WCU	PIU	View
2055 - 2065	Moorside Wood	The Green Insurance Company	UK Woodland Carbon Code	No thinning or clearfell	SFQC	1,307	WCU	PIU	View
2095 - 2105	Moorside Wood	The Green Insurance Company	UK Woodland Carbon Code	No thinning or clearfell	SFQC	783	WCU	PIU	View
2075 - 2085	Moorside Wood	The Green Insurance Company	UK Woodland Carbon Code	No thinning or clearfell	SFQC	930	WCU	PIU	View
2017 - 2025	Moorside Wood	The Green Insurance Company	UK Woodland Carbon Code	No thinning or clearfell	SFQC	827	WCU	PIU	View
2045 - 2055	Moorside Wood	The Green Insurance Company	UK Woodland Carbon Code	No thinning or clearfell	SFQC	1,636	WCU	PIU	View
2010 - 2017	Moorside Wood	The Green Insurance Company	UK Woodland Carbon Code	No thinning or clearfell	SFQC	80	WCU	PIU	View
2105 - 2110	Moorside Wood	The Green Insurance Company	UK Woodland Carbon Code	No thinning or clearfell	SFQC	317	WCU	PIU	View
2035 - 2045	Moorside Wood	The Green Insurance Company	UK Woodland Carbon Code	No thinning or clearfell	SFQC	3,779	WCU	PIU	View
2025 -	Moorside Wood	The Green Insurance	UK Woodland	No thinning or	SFQC	4,759	WCU	PIU	View

2. Cancel AAUs for each WCU created:

- Few (45K) WCUs available from 2016 - 2020
- If we meet Kyoto target and don't need to use our RMU's then there will be no double-counting in 2nd Kyoto period.
- Cancelling AAUs makes it more difficult to reach our international targets
- Perceived 'complex' to administer
- However demand from business to cancel AAUs to remove any uncertainty about status and make units useable anywhere

Post 2020?

- 700K WCUs available in 2020's
- 2M WCUs available in 2030's

- Mandatory reporting of gross emissions:
 - 2013: Mandatory: for companies listed on stock exchange to report gross emissions.
 - Voluntary: all companies to report emissions
 - 2016: Mandatory for all large companies to report gross emissions?
- Reporting of net emissions:

Reporting Period	2015-2016	2014-2015
Scopes of Emissions Reported on	Scope 1, 2 and 3	Scope 1, 2 and 3
Gross Emissions	89,510	91,390
Exported Renewable Energy Generation	(18)	(15)
Offsets	(5,000)	0
Woodland Carbon Units	(100)	
Net Emissions	84,392	91,375

- 2016 Legislation requires All new homes to be zero C in running costs.
- 'Allowable (offsite) solutions' can be used for 30% of emissions
- WCC potentially one of the 'allowable solutions'
- Other options – Increasing efficiency existing housing stock, insulation, electricity generation



Department for
Communities and
Local Government

Next steps to zero carbon homes
- Allowable Solutions
Consultation

August 2013

Department for Communities and Local Government

- 29ha mixed woodland (native & productive conifer)
- Planted on ex-grazing land in Monmouthshire
- Connects isolated areas of ASNW
- Project Developer: Pryor & Rickett Silviculture
- Will sequester 18,102 tCO₂ over 100 years
 - 15,387 tCO₂ for sale
 - 2,715 tCO₂ to buffer

Thorlux Lighting:

Own & customer
emissions



- YDMT Group: 5 projects, 2-13 hectares
- Project Developer: YDMT
- Will sequester 15,000 tCO₂ over 100 years
 - 13,000 tCO₂ for sale
 - 2,000 tCO₂ to buffer
- Comply Direct marketing/selling carbon units



2007 - 2011

Design

2010 -2011

Pilot

July 2011

Launch Woodland
Carbon Code

2013

Launch group
certification

2013

Launch carbon
registry @ Markit

2014

Units available for
sale

Still developing...

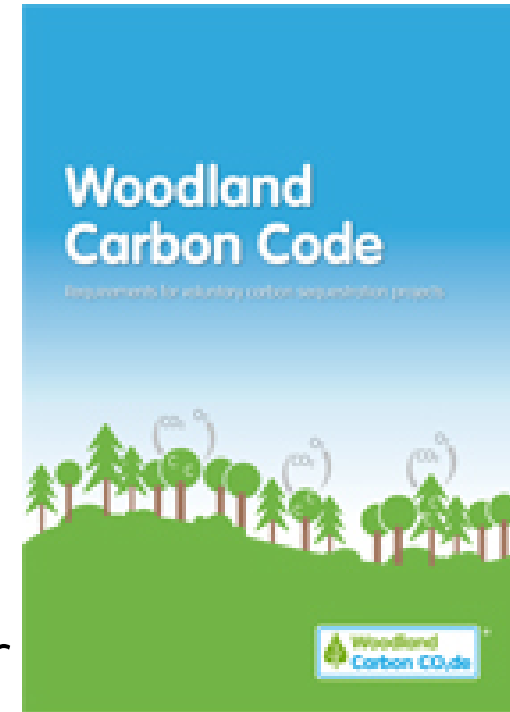
- Following have to take part (around 10% of UK emissions):
 - High electricity users > 6000 MWh not already covered by EUETS or CC Agreements
 - UK Government Departments
 - Devolved Administrations
- Have to
 - Monitor and report energy use (electricity & gas)
 - Buy/surrender allowances equal to energy use - £16/tCO₂
- Phase 1: 2010/11-2013/14
- Phase 2: 2014/15-2018/19
- Not currently possible to buy 'offsets' in scheme

Includes:

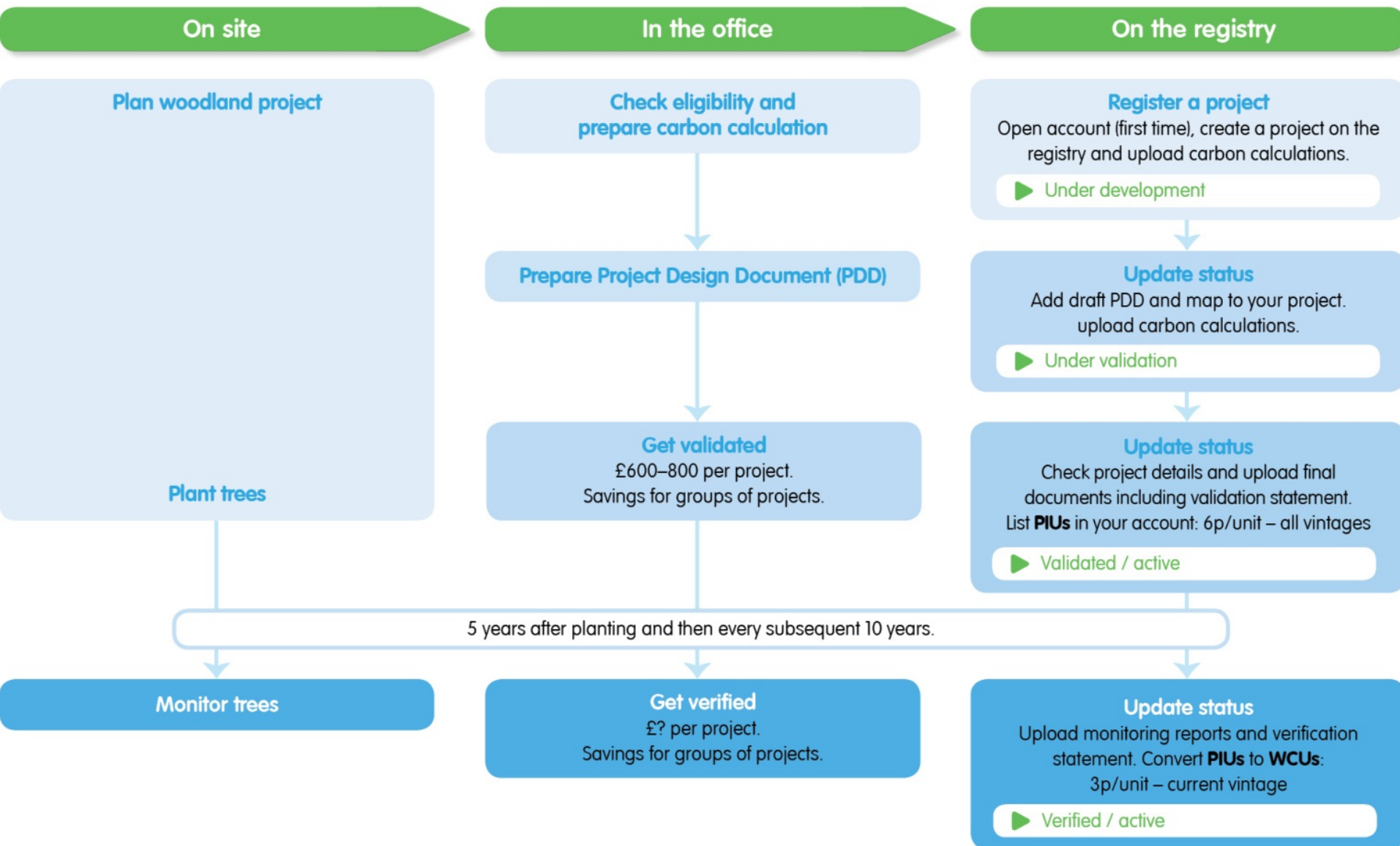
- Woodland creation
- Carbon sequestration and emissions within a woodland

Doesn't include:

- Changes to management of existing woodlands
- Carbon stored in forest products
- Substitution effects (wood products or fuel)
- Avoided emissions from previous landuse

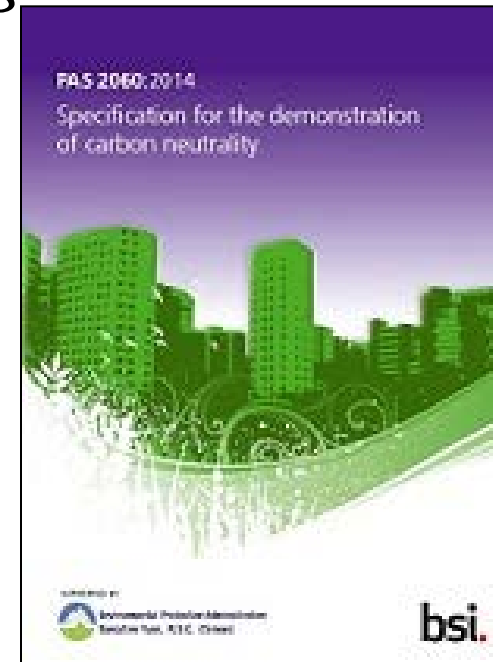


Summary of WCC project registration and carbon unit issuance process



- Monitoring & Verification
- Social and environmental benefits
- Streamlined process for very small projects?
- Scope
 - Changes to management of existing woodlands?
 - Harvested wood products?
- Other landuses
 - Peatland Code
 - Agroforestry / Hedgerows / Urban Trees

- Specifies how to account for C emissions of an activity, product, service, building, project or event
- Encourages reduction of emissions prior to 'offsetting' with:
 - Kyoto-compliant (CDM, JI, EU Allowances)
 - Non-Kyoto (Gold Standard, VCS, CCBS)
 - Domestic Schemes (eg WCC)



NOTE 1 There may be nationally relevant guidelines or offset schemes that entities are mandated to, or can choose to adopt.

NOTE 2 Users of this PAS should consider use of one of the many international and domestic offset schemes .. [However there is a] need to ensure that offset schemes selected meet the principles set out in 9.1.2.