



Version 2.0 March 2023



Copyright © The National Trust for Scotland 2023 as nominee for the UK National Committee of the IUCN.

PEATLAND CODE and the Peatland Code logo are trade marks held by The National Trust for Scotland as nominee for the UK National Committee of the IUCN.

The National Trust for Scotland hereby grants a revocable licence to any party to reproduce this Peatland Code and associated guidance and its previous versions, as amended from time to time subject to the conditions noted below. Any such reproduction of the Peatland Code should acknowledge its source and contain a copyright statement acknowledging the National Trust for Scotland as the holder of the copyright in the Peatland Code. The National Trust for Scotland hereby grants a revocable licence to any party to use the Peatland Code trade marks solely for this purpose. This licence to reproduce does not give any party the right to use the Peatland Code for any commercial purposes or to alter, amend, adapt, change, revise or supplement the Peatland Code, as published from time to time, in any manner or form

Any individual or organisation wishing to reproduce or otherwise make use of the Peatland Code (or any associated guidance) where such use is for commercial purposes or seeks to alter, amend, adapt, change, revise or supplement the Peatland Code in any manner or form, that individual or organisation must seek written permission by way of a licence from The National Trust for Scotland prior to making such use. It is at the sole discretion of The National Trust for Scotland whether or not a licence will be granted.

If any unauthorised acts are carried out in relation to this copyright work or the Peatland Code trade marks, a civil claim for damages may be made and/or a criminal prosecution may result.

Where we have identified any third party copyright material or information you will need to obtain permission from the copyright holders concerned.

Version 2.0 published March 2023

Enquiries relating to the Peatland Code should be sent to: peatlandcode@iucn.org.uk

Contents

The Peatland Code	2
1 Eligibility and Governance	2
1.1 Eligible Activities	2
1.3 Eligible land	4
1.4 Consultation	5
1.5 Additionality	6
1.6 Avoidance of Double Counting	8
1.7 GHG Statements	8
1.8 Validation/verification	8
2 Project Design	10
2.1 Management Plan	10
2.2 Monitoring Plan	10
2.3 Management of Risk to Project Permanence	11
2.4 Commitment of Landowners and Project Developers	12
3 Greenhouse Gas (GHG) Emissions Reduction	13
3.1 Establishment of Baseline Emissions	13
3.2 GHG Leakage	13
3.3 Net GHG Emissions Reduction	14
Glossary	15

The Peatland Code

1 Eligibility and Governance

1.1 Eligible Activities

Requirement

Eligible activities shall be those relating to restoration of:

- Either blanket bog or raised bog with an associated baseline condition category of:
 - ♦ Actively eroding
 - ♦ Drained
 - ♦ Modified bog
 - ♦ Cropland drained¹
 - ♦ Grassland intensive¹
 - ♦ Grassland extensive¹
- · or fen with an associated baseline condition category of:
 - ♦ Cropland drained
 - ♦ Grassland intensive
 - ♦ Grassland extensive
 - ♦ Modified fen
- · Areas with a minimum peat depth of:
 - ♦ 45 cm in fens
 - 30 cm in bogs, with the additional requirement in bogs that areas with peat depth between 30 and 50 cm shall be part of a restoration project contiguous with areas of deeper peat. Areas of continuously shallow peat are excluded. The project shall evidence that the areas between 30 and 50 cm are degrading and are likely to have been deep in the past.

Baseline condition category and peat depth shall be determined using the Peatland Code Field Protocol.

Restoration shall be achieved as a result of both restoration and management activities. Restoration activities shall revegetate and/or rewet the peatland (excluding removal of plantation forest) and shall result in a change to a condition category with a lower associated emission factor.

The creation of large areas of standing water within a restoration site is undesirable; this is due to the potential for methane emissions from the area of standing water and wave action risking the integrity of the vegetation at the water's edge. Large, deep pools should be avoided due to being a potential risk to livestock and general health and safety risk. Areas of standing water on site should be discrete and part of a mosaic within the vegetation.

Management activities shall maintain or enhance the condition category change. An approved validation/verification body will assess whether the combination of restoration interventions and ongoing management of the site is sufficient to maintain the peatland in an enhanced condition.

Restoration and management activities shall not conflict with existing land management agreements.

Guidance

The Peatland Code identifies five eligible baseline condition categories for blanket and raised bog and four for fens, and associated emission factors (defined within the 'Peatland Code Field Protocol'). The Peatland Code validates ex-ante emissions reductions (but verifies ex-post emission reductions) and therefore only restoration actions that result in an immediate condition category change are eligible, with exemption of "modified bog".

^{1.}Please note that the fen section in the Field Protocol shall be used, since they will first transition to rewetted fen.

The key difference between modified and rewetted modified bog is the vegetation composition and vegetation will not change immediately following restoration. Therefore, projects will not receive Pending Issuance Units from the start date of the project for this baseline condition, but only from the date the independent verifier deems the condition to have moved to rewetted modified bog based on a verification site visit. Please note this could take years to achieve, and for some sites this might never be reached due to, for example, the air pollution load. Projects may encompass and restore peatland of ineligible condition category, but emissions reductions cannot be claimed from these areas.

Please note that engaging with the Peatland Code on land in the 'modified' baseline condition category could be interpreted as taking on a prior obligation, depending on the restoration programme being delivered. This could affect the eligibility of that land for Countryside Stewardship or Environmental Land Management Schemes in England. It is important therefore to seek advice on this before restoration starts.

To evidence that peat of between 30 and 50 cm in depth used to be deep peat, soil coring could be used. This will show if it is subsided/compacted deep peat or a peaty podzol. If using soil coring, one core for each distinct area of shallow peat shall be taken. An alternative approach, if available, would be to use historic peat maps.

Existing land management agreements on the land could include governmental agri-environment payment schemes, continuing obligations under Higher Level Stewardship or other agreements and their equivalents under the Rural Development Programmes of the devolved administrations; access or other management agreements covering access land under the National Parks and Access to the Countryside Act 1949, as well as Site of Special Scientific Interest (SSSI) agreements. Other agreements that may be encountered could include Ancient Monument agreements and Forestry Dedication Covenants. Please refer to paragraph 1.5 for financial additionality rules and eligibility.

1.2 Project Duration

Requirement

The project shall have a clearly defined duration. Minimum project duration shall be 30 years. For durations greater than 30 years, since the minimum eligible peatland depth is 30 cm in bogs and 45 cm in fens, the project shall demonstrate that sufficient peat resource is present on the site so that the duration of the claim shall not exceed the point at which the peatland resource would be lost in the baseline 'do-nothing' scenario.

A minimum 75% of peat depth survey points points (for bogs only points on the 100 x 100 m grid are included here) (see Field Protocol) within all assessment units shall exceed the minimum peat depth needed for the project duration (see guidance below).

Guidance

Peat is a finite resource and in poor condition is decreasing in depth/volume as opposed to increasing.

Assuming a maximum loss of 1 cm per year in **blanket or raised bogs** and 1.5 cm per year in **fens**², a peatland resource of 50 cm depth would no longer be present in 50 and 33 years' time respectively if restorative activities were not undertaken. Any associated emissions claimed after this 50 or 75-year period would also no longer be accurate or relevant.

² Evans, C. D., Williamson, J. M., Kacaribu, F., Irawan, D., Suardiwerianto, Y., Hidayat, M. F., Laurén, A. and Page, S. E. (2019) Rates and spatial variability of peat subsidence in Acacia plantation and forest landscapes in Sumatra, Indonesia, Geoderma 338, 410–421

The minimum peat depth for projects to be eligible under the Peatland Code is 30 cm in blanket and raised bogs and 45 cm in fens, so to claim emissions reductions over more than 30 years is therefore necessary to provide evidence that the project duration shall not exceed complete loss of the peatland resource within the project site in the 'do nothing' baseline scenario outlined above.

Providing evidence of 75% of peat depths greater than 30 cm in bogs and 45 cm in fens in all assessment units and in line with the above assumption of 1 cm and 1.5 cm peat loss per year in a degraded state will inform the maximum potential duration of a claim from that project.

For example, a bog project of 75 years would require a minimum peat depth of 75 cm for 75% of the peat depth points in the assessment units and a fen project of 100 years duration would require a minimum peat depth of 1.5 m for 75% of the peat depth points in the assessment units. In all circumstances, peat depth across the site shall be determined using the Peatland Code Field Protocol.

Due to the nature of water table management in the lowlands and the risk that this causes for reversals, fen projects will have a greater need to evidence permanence beyond the project length. This could be done by entering into a long-term legal agreement, such as a conservation covenant in England or a conservation burden in Scotland.

1.3 Eligible land

Requirement

Legal ownership, or tenure of the land for the duration of the project, shall be demonstrated for the project area. If the land within the project area is under tenure, written consent shall be obtained from the landowner, including agreement that the obligation for delivery of the project shall be transferred to the landowner should the tenancy end before conclusion of the project. Consent shall be "Free, Prior and Informed". If the land is sold, the current landowner must inform the future landowners of the commitment to the Peatland Code and any carbon contracts.

The project shall confirm, to the best of their knowledge, that no new activity to drain and/or remove vegetation has taken place on the land within the project area since November 2015.

Guidance

Ownership can be demonstrated by title registers and plans in the Land Registry, if the project area is registered. Other suitable forms of evidence include title deeds or a solicitor's or chartered surveyor's letter. If the land is leased then a certified copy of the lease is required (by solicitor or chartered surveyor).

An example of new activity to drain and/or remove vegetation would be the digging of drains on an otherwise undrained area or the removal of peat via peat cutting at a previously uncut site. Grazing or burning on a site that has been under agricultural and/or game management prior to November 2015 would not be considered a new activity. November 2015 relates to the date of publication of the Peatland Code and is set as a benchmark to ensure that any financial incentives offered as a result of the Peatland Code do not incentivise peatland damage.

1.4 Consultation³

Requirement

Projects shall identify, protect and where possible enhance access to designated and undesignated historic environment features and shall provide an opportunity for, and take account of, inputs from relevant parties during both the project design phase and over the lifespan of the project. Up to date contact information for the landowner and/or project developer shall be publicly available for the duration of the project, to enable ongoing feedback from relevant parties.

For project validation to be completed successfully, evidence must be supplied to the validators to show that scoping work has been undertaken to identify heritage assets, steps have been taken to protect and where possible enhance access to these assets, proactive engagement with relevant parties has taken place and adequate responses have been made to feedback from these parties.

Project developers must proactively engage at an early stage with local communities, neighbouring properties and any other important but potentially marginalised groups. In some instances, a public consultation may be required (see Guidance section below, specifically Scottish Land Commission's Land Rights and Responsibilities Protocol). It is important that project developers use a range of approaches appropriate to the context. This may include the local newspaper, social media, and notifying relevant local representative bodies such as community or parish councils.

Historic environment preservation

Project developers shall consider both designated and undesignated heritage assets as constraints and opportunities during project preparation. They shall take steps to safeguard the continued preservation of known heritage assets while, where possible, improving quality of and access to assets. They shall have plans and contingencies in place in the event of discovery of unexpected and significant archaeological sites.

Project developers shall provide evidence of their consideration of historic assets and consultation with relevant local and national historic environment specialists, provide evidence of the relevant parties that have been contacted, and provide access to all responses to the IUCN UK Peatland Programme and the independent validation body appointed to oversee project validation in line with the guidance below.

Relevant heritage assets requiring consideration include, but are not limited to, scheduled monuments and their settings, undesignated archaeological sites and soils, palaeoecological deposits, historic buildings and features, battlefields, gardens and designed landscapes, UNESCO World Heritage Sites, protected wrecks and military remains, and intangible heritage assets for work undertaken in Scotland (such as place names, folklore, local traditions, etc.).

Specialist guidance for project developers in Scotland has been designed to interact with the Permitted Development Rights process for peatland restoration, and project developers in other areas may find this guidance of use. For projects in England, Historic England and Natural England have joint standards for the delivery environmentally sustainable peatland restoration projects. Some peatland restoration grant schemes may also have dedicated guidance on the historic environment.

Engagement with relevant parties

Project developers must provide evidence of the relevant parties that have been contacted and provide access to all responses to the IUCN UK Peatland Programme and the independent validation body appointed to oversee project validation. As a minimum, individuals, organisations and groups in any of the categories defined in the guidance below deemed to have a material interest in the project shall be contacted.

Every effort shall be made to reach representatives of these groups, using alternative means of communication if initial contact is unsuccessful. Information about the proposed project shall be provided in a concise form, in plain English (and other languages or non-written form, where necessary to reach all necessary parties).

Those consulted must be made aware that their comments (but not their names or contact details) will be passed to independent validation bodies working with the Peatland Code.

^{3.} Written with input from Scottish Land Commission and the Joint UK Heritage Agency Working Group on Peatland Restoration

Objections and reporting

Where concerns arise during engagement and consultation processes, the project developer shall enter into constructive dialogue to resolve the issues, incorporating any necessary changes in their project design.

Where requests are appropriate and proportionate, they shall be addressed within 6 weeks of being raised (either through engagement/consultation processes or at any time during the subsequent project). Where requests are not deemed appropriate or proportionate, they shall still be addressed within this time, providing contact details for the Peatland Code if relevant parties wish to take their concerns further.

These concerns will then be raised with the independent validation body conducting the validation who will make a final judgement on the request. Details of objections and resolutions shall be anonymised in line with GDPR and included as an appendix to the Project Design Document.

Guidance

Relevant parties are defined as anyone who could affect or be affected by the outcomes of a Peatland Code project, and may include freeholders/tenants/sub-tenants, local communities, mortgagees, statutory bodies, environmental agencies, local authorities, water suppliers, archaeologists, and parties to existing agreements on the land, including trustees and beneficiaries, those with access, withdrawal, management or exclusion rights, or those with other legal and equitable interests in the land such as neighbouring landowners.

This guidance has been developed in line with the Scottish Land Commission's Land Rights and Responsibilities Protocol on Community Engagement in Decisions Relating to Land.

1.5 Additionality

Requirement

Projects shall demonstrate additionality by meeting the requirements of a series of additionality tests. Projects shall meet the requirements of Test 1 and Test 2.

Test 1 - Legal Compliance

There shall be no legal requirement specifying that peatland within the project area must be restored.

Test 2 - Financial Feasibility

Projects shall have a maximum level of non-carbon income of 85% of the project's restoration and management costs over the project duration. This non-carbon income could be public grant funding or other private income. The remaining minimum 15% shall come from carbon finance.

Guidance

Various methods for assessing additionality are used within voluntary and mandatory carbon standards. Additionality is assessed to ensure that a project would not have gone ahead in a 'business as usual' scenario and that any emissions reductions are 'additional'.

The Peatland Code has chosen project-based additionality tests relevant to the UK situation where levels of peatland restoration are currently low within the UK, and it is expected that the value of peatland restoration for emissions reduction will encourage peatland restoration projects.

Test 1 - Legal Compliance

A peatland restoration project passes the legal test when there are no laws, statutes, regulations, court orders, environmental management agreements, planning decisions or other legally binding

agreements that require restoration, or the implementation of similar measures that would achieve equivalent levels of GHG emissions reductions. Statutory designations, such as SSSI status, are not regarded as legal obligations for restoration.

In England, peatland restoration projects established to provide biodiversity credits under Biodiversity Net Gain, or nutrient credits under the Solent Nutrient Market or Somerset Catchment Market are unlikely to be eligible for the Peatland Code as their legal agreements are likely to specify that peatland restoration is required.

Test 2 - Financial Feasibility

The financial feasibility test aims to determine whether the project would be financially feasible without carbon finance. The assumption is that cost and revenue are decisive factors in the decision to restore.

A peatland project passes the test when the project can demonstrate via financial analysis that no more than 85% of the project costs over its duration are covered by income other than carbon finance. The remaining minimum 15% shall come from carbon finance. Costs and revenues used within the financial analysis shall be based on current, local, prices.

Non-carbon income includes:

- Government grants and subsidies
- Charitable donations
- Private sources
- Other non-government sources (e.g. lottery funds)
- Any non-carbon income directly to a restoration project.

Carbon finance includes:

- Income for which there is a carbon unit contract (either PIUs or PCUs) with a 3rd party
- Money the landowner has invested in the project with a view to personally making statements or reporting the carbon units (insetting)
- Planned future sales of carbon units, by the landowner or another party, which are linked to predicted emissions reductions rates and current prices.

Costs include:

- Site survey and preparation
- Restoration and management activities for the project duration.

Costs exclude:

- Validation/verification
- Other costs related to provision of other facilities (e.g. recreation and access)
- Land acquisition (purchase, lease, rent) or loss of land value
- Income foregone (e.g. previous agricultural income).

1.6 Avoidance of Double Counting

Requirement

Projects and carbon units shall only appear on one carbon registry – The UK Land Carbon Registry.

All projects, project documentation, carbon units, assignments and retirements shall be visible in the 'public view' of the UK Land Carbon Registry. Upon project or restoration validation Pending Issuance Units (PIUs) shall be listed for all carbon units in the project. Any PIUs sold in advance of verification shall either be transferred to the relevant buyer's account or 'assigned' to that buyer. At each verification PIUs for that vintage shall be cancelled and the verified number of Peatland Carbon Units (PCUs) issued.

Prior to using Peatland Carbon Units in any reports, they shall be 'retired' from the UK Land Carbon Registry.

Guidance

Until sold, the landowner is the sole owner of the emissions reduction benefits of the project, unless contractually agreed differently.

Guidance on the legal ownership of carbon units can be found on our website <u>iucn-uk-peatland-programme.org/peatland-code/introduction-peatland-code/useful-links.</u>

Emissions reduction benefit can be sold at any time over the duration of the project.

1.7 GHG Statements

Requirement

Landowners and project developers shall make carbon buyers aware of the Peatland Code guidance on GHG claims

Any carbon statement by the landowner, the project developer or the carbon buyer shall be true and accurate and conform with recommended wording. Statements of the GHG benefit of the project shall clearly state the timescale over which the emissions reduction will take place.

Emissions reductions shall only be reported, or used, after the emissions reductions have occurred and have been verified (i.e. Peatland Carbon Units) in accordance with guidance. This is sometimes called ex-post reporting. The project shall make buyers aware of Peatland Code requirements with regards to GHG statements and GHG reporting.

For further guidance see the separate Peatland Code Guidance document.

1.8 Validation/verification

Requirement

All Peatland Code projects shall be independently validated and verified.

The validation/verification body shall possess, or be working towards, accreditation by the United Kingdom Accreditation Service (UKAS) to ISO 14064-3 and 14065.

Guidance

Validation/verification is not a legal compliance audit. Validators/verifiers shall only be able to confirm no obvious non-conformance with relevant laws. Projects shall have a mechanism in place to ensure knowledge of new and existing legislation for the project duration.

Best practice guidance can be obtained from a range of sources including <u>iucn-uk-peatlandpro-gramme.org</u>.

Where possible local sources of guidance should be utilised.

2 Project Design

2.1 Management Plan

Requirement

The project shall have a restoration management plan for the duration of the project.

The restoration management plan shall include but is not limited to:

- A statement of project objectives (including anticipated post-restoration condition category)
- A statement of the restoration and management activities to be implemented over the project duration including identification of necessary resources and inputs
- · A map of the project area, showing as a minimum the areas of peatland to be restored
- A chronological plan of restoration and management activities
- A statement of environmental impact (including biodiversity)
- A statement of social impact
- A statement of the individuals involved in the delivery of the restoration and management activities and their expertise.

The project shall confirm that legal compliance and best practice guidance were considered in preparation of the restoration management plan.

The project shall be managed as per the restoration management plan for the project duration.

2.2 Monitoring Plan

Requirement

As a minimum, monitoring of condition category change shall take place (max 12 months) prior to each verification by the project and shall be conducted as per the Peatland Code Field Protocol.

The monitoring process shall be documented and the outputs recorded. Outputs shall lead to review and, where necessary, modification of mitigation and management measures as required.

Projects shall notify IUCN UK PP and the validation/verification body when any new risks to the peatland condition are recorded, any damage occurs or anything that raises concern over the continued maintenance of the site in improved condition is found on site during the period between official inspections. Actions taken to mitigate this shall be recorded.

The project shall have a monitoring plan for the duration of the project and shall cover anything that might have an impact on the success of the restoration in the long term. The monitoring plan shall include but is not limited to:

- A statement of the monitoring activities to be implemented over the project duration including identification of necessary resources and inputs
- The monitoring plan shall link to the risk assessment (see paragraph 2.3) and relate to the ongoing land management. It shall specify how and why the monitoring will take place, using best practise methodologies
- A chronological plan of monitoring activities
- A statement of all individuals, including the surveyor on ground, other contractors/employees of
 the farm or estate, the project developer/agent and the landowner involved in the delivery of
 monitoring activities and their expertise. Show clearly how the process of reporting operates
 and who is responsible for maintaining and filing the monitoring records and overall
 responsibility

- Site condition will be monitored, with a general overview of the site condition identifying any areas of concern and including all assessment unit categories
- As a minimum the following information shall be captured: GPS point, photos, name of surveyor, condition summary and any further work requirements listed
- The project shall be monitored as per the monitoring plan for the project duration.

Guidance

Monitoring in excess of the minimum, detailed in the Peatland Code Field Protocol, can be undertaken by the project to reflect the individual objectives of each project. For example, this could be yearly fixed-point pictures to provide evidence of the progress in between verifications.

Monitoring should include everything from impact of livestock or deer, bare peat revegetation progress, reprofiled haggs and if any further erosion, dam success or any significant failures. It should identify any new risks and state mitigation planned.

2.3 Management of Risk to Project Permanence

Requirement

The project shall undertake remedial action should restoration activities not result in predicted condition category change by Year Five.

Using the Peatland Code <u>Risk Assessment</u>, the project shall identify potential risks to the maintenance of improved condition category and associated emissions reductions over the project duration and identify and implement appropriate mitigation strategies where possible.

The project shall contribute 15% of net GHG emissions reductions over the project duration to the Peatland Code Risk Buffer.

The project shall inform the Peatland Code coordinator and UK Land Carbon Registry of any change in landowner/tenant over the project duration. The project shall inform future landowners/tenants of the commitment to the Peatland Code and any carbon contracts.

Guidance

Peatland restoration projects carry a risk of reversibility with regards to condition category and as such safeguards must be in place to minimise that risk as well as to guarantee compensatory emissions reductions should reversal occur.

The Peatland Code Risk Buffer is managed by the IUCN UK Peatland Programme and comprises emissions reduction contributions from each validated Peatland Code Project. It can be drawn upon should unintentional reversal of post-restoration condition category occur.

The failure of restoration activities to achieve condition category change by Year Five will not be covered by the buffer.

2.4 Commitment of Landowners and Project Developers

Requirement

The landowner (or where land is tenanted, both the landowner and the tenant) shall commit to:

- Conform to this standard
- · Manage the land as per the management plan for the project duration and beyond
- Comply with the law
- Carry out a consultation pre-restoration
- Restore the peatland should the peatland suffer from fire, pests, or disease
- Inform future landowner(s), and where land is tenanted, future tenant(s), of the commitment to the Peatland Code and any carbon contracts
- Monitor and maintain verification for the project duration as per Peatland Code guidance (unless the third-party project developer agrees to take this on)
- Report to the IUCN UK Peatland Programme when any new risks to the peatland condition occur, any damage occurs or anything that raises concern over the continued maintenance of the site in improved condition is found on site
- Ensure the project, any PIU listings, sales to carbon buyers, and retirement for use of verified Peatland Carbon Units are accurately represented and up to date in the UK Land Carbon Registry
- Make true and accurate carbon statements about the project which conform with Peatland Code guidance
- · Abide by the Peatland Code logo rules of use
- Where larger estates are managed by trustees, then either the landowner themselves or the legal signatory shall sign the landowner commitment statement.

The Project Developer shall commit to:

- · Conform to this standard
- · Comply with the law
- Monitor and maintain verification for the project duration as per Peatland Code guidance (unless the landowner has agreed to take this on)
- Ensure the project, any PIU listings, sales to carbon buyers, and retirement for use of verified Peatland Carbon Units is accurately represented and up to date in the UK Land Carbon Registry
- Make true and accurate carbon statements about the project which comply with guidance
- Make carbon buyers aware of the Peatland Code guidance on carbon claims and ensure this is included in contracts with buyers
- Abide by the Peatland Code logo rules of use and make carbon buyers and landowners aware of the Peatland Code logo rules of use.

3 Greenhouse Gas (GHG) Emissions Reduction

3.1 Establishment of Baseline Emissions

Requirement

Projects shall identify the pre-restoration condition categories present within the project site and the area of each using the Peatland Code Field Protocol.

Projects shall establish a GHG emissions baseline (tCO2e), against which GHG emissions reductions as a result of the project shall be calculated, using the Peatland Code Emissions Calculator. The GHG emissions baseline shall be derived from a continuation of the pre-restoration peatland condition category in the absence of the project.

GHG emissions used in the calculation of emissions factors include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), dissolved organic carbon (DOC) and particulate organic carbon (POC).

Emissions factors are stated in CO2 equivalents, which is a metric measure used to make greenhouse gases comparable, by taking into account their different Global Warming Potentials (GWP). This is done by converting amounts of other greenhouse gases to the equivalent amount of carbon dioxide with the same global warming potential.

Guidance

The Peatland Code has adopted a conservative approach to the construction of the baseline scenario (projection of the emissions change on the site in the absence of the project). By deriving the baseline from a continuation of the pre-restoration peatland condition category any deterioration in the condition of the peatland that may have occurred over time, and any associated change in emissions. cannot be accounted for.

3.2 GHG Leakage

Requirement

The project shall declare any intention to change the use or management of land elsewhere within the same agricultural/land holding number as a consequence of the peatland restoration activities. If there is an intention for change, the project shall carry out an assessment to determine whether the change will result in significant GHG emissions (≥5% of the emissions reduction over the duration of the project).

If significant GHG emissions will occur, they shall be quantified (tCO2e/yr) for the duration of the project and subtracted from the projected emissions reductions claimed, using the Emissions Calculator.

Guidance

Assessment of leakage and its significance is project specific but examples of leakage may include an increase in stocking density outside of the project area leading to degradation or the burning of other areas of peatland to compensate for the area under restoration.

3.3 Net GHG Emissions Reduction

Requirement

The project shall calculate the net change in GHG emissions (tCO2e) as a result of the project, relative to the baseline and adjusted for leakage, using the Peatland Code Emissions Calculator.

Net GHG emissions reduction shall be divided into the contribution to the Peatland Code Risk Buffer and the remaining claimable units. The project shall state each contribution at five-yearly intervals for the duration of the project.

Projects shall be validated/verified against the current version of the Peatland Code and the most recent Emission Factors will be used to determine the emissions reductions at verification.

Guidance

Gross emissions reduction is the change in emissions over the project duration, relative to the baseline, as a direct result of the project. Net emissions reduction of the project is calculated as gross emissions reduction minus a 10% precision buffer (which incorporates any emissions from restoration activities) and adjusted for any leakage. To establish claimable net emissions reduction the contribution to the Peatland Code Risk Buffer is removed.

The Risk Buffer is owned by the IUCN UK Peatland Programme.

It is important to remember that claimable emissions reduction over the project duration is a predicted figure and not a guarantee. Every effort has, however, been made to ensure the predicted figure is conservative and achievable. Monitoring will facilitate the comparison of actual emissions reduction to predicted emissions reduction.

If at verification the independent verifier states that the project has moved to the next condition category with a lower emission factor than the original assumed 1 step change in condition category, the additional emissions reductions can be claimed (minus the buffers) as PCUs.

Glossary

For the purpose of the Peatland Code the following terms and definitions apply:

Accreditation - An attestation related to a validation or verification body conveying formal demonstration of a validation/verification body's ability to carry out validation and verification. Accreditation of a validation/verification body is carried out by the United Kingdom Accreditation Service (UKAS).

Actively Eroding - A condition category of peatland. Peatland is considered to be 'actively eroding' if extensive bare peat is present either within a peat pan, a hagg/gully system or at a former peat cutting site.

Additionality - Criterion stipulating that project-based Greenhouse Gas (GHG) reductions shall only be quantified if the project activity "would not have happened anyway". The Peatland Code utilises legal, financial and barrier tests to determine additionality.

Baseline Emissions - Greenhouse Gas (GHG) emissions reductions from a project activity are quantified relative to baseline emissions for the project duration. Baseline GHG emissions are derived from the baseline scenario. For the purposes of the Peatland Code the baseline scenario is a continuation of current peatland condition category and hence a continuation of current GHG emissions ('business as usual').

Blanket Bog - A type of peatland waterlogged only by direct rainfall, where deep deposits of peat blanket the landscape.

Carbon Dioxide equivalents (CO2e) - The universal unit of measurement used to indicate the global warming potential of greenhouse gases. It is used to evaluate the impacts of releasing (or avoiding the release of) different greenhouse gases.

Condition Category - Categories of peatland condition which correlate to an Emission Factor assigned using identified indicators. Five peatland condition categories and emissions factors have been identified: Pristine, Near Natural, Modified, Drained and Actively Eroding.

Carbon Finance - Payments for GHG benefit over and above that which would otherwise have occurred in the 'business as usual' scenario

Double Counting - Double counting occurs when the same tonne of carbon dioxide equivalents is sold more than once.

Drained - A condition category of peatland. Peatland is considered 'drained' if it is within 30 m of an artificial drain or a natural drain formed by the presence of a hagg and gully.

Ecosystem Services - The diverse range of services that we derive from the natural environment. Four categories of ecosystem service have been identified: Provisioning, Regulating, Cultural, and Supporting.

Fen - Fens occur in waterlogged situations where they receive nutrients from the surrounding catchment (typically groundwater) as well as from rainfall. The catchment, hydrological situation and hydrological characteristics are fundamental influences upon the fen vegetation types.

Greenhouse Gas (GHG) - A collective term for gases which are causing the warming of the Earth's atmosphere that is leading to climate change. The Kyoto Protocol recognises 6 said gases: carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons and sulphur hexafluoride.

Greenhouse Gas (GHG) Assertion - Factual and objective declaration regarding Greenhouse Gas benefit made by the project by submitting a project plan for evaluation against the Peatland Code.

Greenhouse Gas (GHG) Reporting - Reporting on the GHG emissions for which a party is responsible. GHG reporting can be either mandatory or voluntary.

Greenhouse Gas (GHG) Statement - A statement of the GHG benefit a project will have or has had to date. It can be restated by more than one party with an interest in a project.

Greenhouse Gas (GHG) Programme - Voluntary or mandatory international, national or sub-national system or scheme that registers, accounts and manages GHG emissions, removals, emissions reductions or removal enhancements. The Peatland Code is an example of a voluntary national GHG programme.

Leakage - GHG emissions occurring outside the project boundary as a result of the project (e.g. displacement of agricultural activities might result in peatland degradation or intensification of use of non-degraded peatlands elsewhere).

Level of Assurance - The degree of assurance the intended user requires in a validation or verification. There are two levels of assurance that can be provided by a validation/verification: reasonable and limited. Absolute assurance cannot be provided. Level of assurance provided is expressed within the validation/verification statement.

Management Activities - All activities that ensure the peatland condition category change as a result of restoration activities is maintained or surpassed for the project duration. Examples of management activities include infrastructure maintenance, grazing management and burning management. Management activities take place over the project duration.

Peatland - Areas of land with a naturally accumulated layer of peat, formed from carbon-rich dead and decaying plant material under waterlogged conditions.

Peatland Code Risk Buffer - A pool of 'unclaimed units' to cover unforeseeable losses that may occur from the project over time as a result of restoration reversal. The risk buffer is owned by the IUCN UK PP.

Project - The sum of activities that alter the conditions identified in the baseline scenario for GHG benefit, taking place on land under sole ownership.

Project 'Start Date' - The date upon which restoration activities are complete. The GHG benefit is quantified relative to the baseline from this date for the project duration.

Project Area - Total area within which restoration activities will take place. Not exclusive to claimable condition category area.

Project Duration - The time over which the GHG benefit of the project will be claimed. Project duration is measured from the project 'Start Date'.

Permanence of Emissions - The issue of ensuring that emissions reductions are permanent, and not reversed at a future point in time. Peatland projects do carry a risk of restoration reversal, but the emissions reductions to the point of reversal remain permanent.

Raised Bog - A type of peatland waterlogged only by direct rainfall, where peat accumulates above the surrounding landscape.

Reasonable Level of Assurance - Achieved when the GHG assertion is concluded to be materially correct and a fair representation of the GHG data and information (which has been prepared in accordance with the relevant GHG programme requirements).

Restoration - Achieved by movement of peatland condition to a category with a lower associated Emission Factor.

Restoration Activities - All one-off activities that result in a change from one condition category to another with a lower associated condition category. Examples of restoration activities include revegetation of actively eroding peatland and rewetting of drained peatland. Restoration activities take place before the project 'Start Date'.

Revegetation - Activity that results in the restoration of extensive bare peat to vegetated peat. Numerous methods exist to achieve re-vegetation.

Rewetting - Activity that results in the rewetting of drained peatland. Numerous methods exist to achieve rewetting.

UK Land Carbon Registry - The official record of Peatland Code projects, their validation/verification status, any validated/verified units and the owners of each unit.

Validation/Verification Body - Independent body appointed to carry out validation and verification of a GHG programme.

Validation - The systematic, independent, and documented process for the evaluation of a GHG assertion within a project plan to determine if it conforms to the agreed requirements and if its implementation can be expected to result in the proposed GHG benefit. Undertaken by a validation/verification body.

Validation Opinion - Formal written declaration attesting to the intended user that implementation of the planned GHG project will take place in the given time frame.

Verification - The systematic, independent, and documented process for the ongoing evaluation of a project and its GHG assertion against the agreed requirements. Undertaken by a validation/verification body.

Verification Opinion - Formal written declaration to the intended user that provides assurance that the responsible party's GHG assertion is stated within the defined level of assurance and materiality in accordance with the applicable verification criteria.

Vintage - The time period in which the associated emission reduction has occurred. Typically, this is annually, although Peatland Code projects are verified in five to ten-yearly blocks and each time period is known as a vintage. Once the verification statement has been issued for that particular vintage Pending Issuance Units (PIUs) will be verified to Peatland Code Units (PCUs).