

# PEATLAND CODE

## Guidance

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## Scope

The Peatland Code specifies requirements for the validation and verification of a Greenhouse Gas (GHG) assertion from voluntary UK based projects which reduce GHG emissions through peatland restoration. Peatland Code emissions reduction accounts for both GHG from and sequestered by peatland. It does not account for carbon already stored within the peatland or the carbon saved when substituting peat products for products with a lower carbon footprint.

## Why is the Peatland Code needed?

A significant barrier to peatland restoration is financial with current public funding being both limited and competitive. To make peatland restoration economically attractive additional funding sources are required. One such source of funding is the sale of ecosystem services, such as climate benefit on the voluntary carbon market. To access these voluntary carbon markets, buyers need to be given assurance that the climate benefits being sold are real, quantifiable, additional, and permanent. The Peatland Code is the mechanism through which such assurances can be given and implements the International Greenhouse Gas accounting standard [ISO 14065](#).

## History of the Peatland Code

The Peatland Code was originally proposed based on research funded by the Rural Economy and Land Use programme's Sustainable Uplands project (2005-2011), coordinated by Professor Mark Reed. A Pilot Peatland Code was then funded in 2012 by Defra as one of several Payment for Ecosystem Service Pilots<sup>1</sup>. In 2013 a number of pilot restoration projects were established in South-West England, the Lake District and Wales, alongside a series of projects under the Scottish Government's Peatland Action Programme. The pilots informed a [Defra funded and commissioned report](#)<sup>2</sup> to develop carbon metrics and financial modelling to enable the quantification and valuation of the carbon impacts of peatland restoration. The concept was taken from this project and developed into the Peatland Code 1.0 which was formally launched at the World Forum for Natural Capital in Edinburgh in 2015. The IUCN UK Peatland Programme was instrumental in bringing together the partnership that developed and piloted the Peatland Code. The development of the Peatland Code went through a steering group, involving academics employed by the UK Government to advise on greenhouse gas values, as well as experts in managing other nature-based standards, carbon brokers and land managers. Commissioned research was used to test and develop the Peatland Code, as well as the required documents and field protocol.

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<sup>1</sup> Reed, M.S., Bonn, A., Evans, C., Joosten, H., Bain, C., Farmer, J., Emmer, I., Couwenberg, J., Moxey, A., Artz, R., Tanneberger, F., von Unger, M., Smyth, M., Birnie, R., Inman, I., Smith, S., Quick, T., Cowap, C., Prior, S., Lindsay, R., 2013. Peatland Code Research Project Final Report. Defra, London.

<sup>2</sup> Smyth, M.A., Taylor, E.S., Birnie, R.V., Artz, R.R.E., Dickie, I., Evans, C., Gray, A., Moxey, A., Prior, S., Littlewood, N. and Bonaventura, M. (2015) Developing Peatland Carbon Metrics and Financial Modelling to Inform the Pilot Phase UK Peatland Code. Report to Defra for Project NR0165, Crichton Carbon Centre, Dumfries.

## **Emission factors**

The emission factors used to determine the emissions reductions achieved by Peatland Code projects are developed by academics employed by the UK Government<sup>2</sup>. They include carbon dioxide, methane, nitrous oxide, dissolved organic carbon and particulate organic carbon and are expressed in carbon dioxide equivalent (CO<sub>2</sub>e), which takes into account the different global warming potential for each greenhouse gas. These emission factors are developed in synergy with the UK greenhouse gas inventory to ensure consistency with national reporting. As the availability and scientific confidence of data increases for peatlands these emission factors will be updated and the eligibility for inclusion in the Peatland Code of different condition categories will be reviewed. By working closely with UK government, we keep up to date of the latest developments, this then allows us to identify when a review is required.

## **Governance**

The Peatland Code is a voluntary standard owned and operated by the IUCN UK National Committee and is managed on its behalf by an Executive Board. The Executive Board is facilitated by IUCN UK Peatland Programme (IUCN UK PP) staff and supported by a Technical Advisory Board (TAB) which includes a broad range of stakeholders: Defra, statutory agencies, the Woodland Carbon Code, the land managing community, and independent research bodies. In addition to the TAB, a separate Market and Investment Forum is in place. This forum acts as a platform for those who have a financial interest in the development and operation of the Peatland Code, and who are registered as an account holder on the UK Land Carbon registry, to feedback on their user experience and relevant issues. Membership of the Executive Board, Technical Advisory Board and Market and Investment Forum are available to view at [www.iucn-uk-peatlandprogramme.org/peatland-code/introduction-peatland-code/peatland-code-governance](http://www.iucn-uk-peatlandprogramme.org/peatland-code/introduction-peatland-code/peatland-code-governance) and is kept under review to ensure that all relevant stakeholder groups are engaged in the operation and development of the Peatland Code.

## **Disputes process**

There is a Disputes process in place overseen by the Dispute Panel (the EB minus the Peatland Code coordinator), which deals with any disputes relating to interpretation of the Standard. If you have an issue to bring to the Dispute Panel, complete the Claimant Dispute Form and email it to [info@iucn.org.uk](mailto:info@iucn.org.uk)

The process followed is set out below:

1. The Dispute Panel will invite the 'claimant' to make their case
2. The Peatland Code coordinator and/or the validation/verification body will also provide information on the case
3. The Dispute Panel will consider all information and then share a draft response with the claimant for comment.
4. The claimant will have a fixed time to comment.
5. Any new information will be shared with the Peatland Code coordinator to ensure a common understanding of the issues.
6. The Dispute Panel will consider any further information and then formally respond.

7. The Dispute Panels decision is final.

### **Peatland Code process**

To provide assurance to buyers, Peatland Code projects and their GHG assertion will be validated and verified by an independent validation/verification body to a limited or reasonable level of assurance<sup>3</sup>. ISO 14064/3 and 14065 will be used as the governing standard for Peatland Code validation and verification delivery. The validation/verification body shall possess, or at least are working towards, accreditation by the UK National Accreditation Body (UKAS) to ISO 14064/3 and 14065.

Validation happens in two steps; 1) project validation where the project plan and its predicted GHG emission reductions are evaluated against the requirements of the Peatland Code and shall determine if implementation of the project plan can be expected to result in the GHG emission reduction asserted. 2) restoration validation where the actual restoration done is evaluated against the submitted documents at project validation.

Verification shall regularly evaluate the project and its actual GHG emission reduction against both the requirements of the Peatland Code, and its validated project plan and GHG assertion. The Peatland Code validation/verification pathway is illustrated below.



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<sup>3</sup> Two levels of assurance can be provided by validation/verification bodies, reasonable and limited.

### Registration

The [UK Land Carbon registry](#) on IHS Markit, now part of S&P Global, provides an open and transparent record of projects within the Peatland Code process.

To register the intention of a project to become Peatland Code validated/verified please upload the project on to the UK Land Carbon registry (see [www.iucn-uk-peatlandprogramme.org/funding-finance/peatland-code/peatland-code-projects](http://www.iucn-uk-peatlandprogramme.org/funding-finance/peatland-code/peatland-code-projects)). This should be done prior to the start of restoration. If you do not have a UK Land Carbon registry account yet, you will have to apply for one first via the “Join the registry” link in the previously mentioned link. When registering a project, a draft project map (which includes the project name and grid reference) and a draft emissions calculator (using the latest template from our website) will have to be uploaded. Further, the “Additional information” (areas of the different categories and predicted emissions reductions) and “Site detail” (location of the project) must be filled in on the registry, as well as the “Project description”. After registering, project validation should be achieved within 3 years.

### Site Survey and Creation of Restoration Plan

Following identification of a suitable project, a site survey is required using the Peatland Code Field Protocol as a guide. The information collected will confirm eligibility for Peatland Code participation and allow for the creation of a suitable restoration plan and a calculation of emissions reduction. Restoration can be done over 2 years for one single Peatland Code project.

### Project validation

During project validation the restoration plan and GHG assertion will be evaluated against the Peatland Code by an approved validation body.

Contact one of the approved validation bodies to arrange project validation. Ideally project validation is in place before any restoration work starts. If needed however, restoration could start prior to completion of project validation IF sufficient baseline evidence is handed in to the validation body. The risk of not achieving project validation is for the project. In this instance project validation should be achieved as soon as possible and before finishing the restoration.

The following documents should be emailed to the validation/verification body:

- Project Development Document<sup>4</sup>
- Emissions calculator<sup>4</sup>
- Additionality calculator<sup>4</sup>
- Risk assessment<sup>4</sup>
- Project maps (see Field Protocol for guidance)
- Management plan (see Peatland Code for requirements)
- Monitoring plan (see Peatland Code for requirements)
- Landowner and Project developer commitments (see Peatland Code for requirements)

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<sup>4</sup>Templates available at [www.iucn-uk-peatlandprogramme.org/peatland-code/introduction-peatland-code/projects](http://www.iucn-uk-peatlandprogramme.org/peatland-code/introduction-peatland-code/projects)

The project validation will consist of a review of these documents and a site check to determine if Peatland Code requirements have been met. The site check can be done virtually if the evidence (for example drone images, fixed point photographs, etc.) that is handed in allows this, but if the validation body cannot adequately check the baseline virtually an in-person site visit will have to be arranged. If no non-conformances are raised or if all non-conformances are suitably rectified within a specified timeframe as determined by the validation body, a project validation statement will be issued, and the project listed on the UK Land Carbon registry as validated. The project validation statement will expire three years from the date of issue.

Projects can choose to have their Pending Issuance Units (PIUs) for the whole project duration issued at this point. Please note that these units will be linked to the expected “Start date” of the project, which is the completion date of restoration activities of the project. If this “Start date” turns out to be wrong, all PIUs will have to be cancelled and reissued by IHS Markit, now part of S&P Global, which will result in a fee for the project. If a project developer acts on behalf of the landowner, a communications agreement between the landowner and the project developer must be signed before PIUs can be set up. This agreement should state that the landowner gives the project developer permission to hold the units in their account on behalf of the landowner (a template can be obtained from the IUCN UK PP).

On achieving project validation, a project map, the Project Design Document (PDD) and the emissions calculator will be published on the UK Land Carbon registry alongside a copy of the project validation statement and the project will get the status “Validated”.

#### Implementation of Restoration Plan

Projects are required to implement the validated restoration plan and complete the restoration activities before expiry of the project validation statement. This to make sure that the surveyed baseline is still valid. Requests for extension of project validation can be applied for if necessary and will be considered on a case-by-case basis by IUCN UK Peatland Programme in liaison with the validation/verification body. All evidence for the delay will be discussed, extensions are more likely to be granted if the delay was out with the project’s fault. A new baseline check might be necessary to be able to grant the extension. If extension is not granted and the project disagrees, they can take it to the Peatland Code ‘Disputes Panel’.

The completion date of restoration activities is the project ‘Start date’ and the project shall update said date on the UK Land Carbon registry, within 1 month of completion. Projects can choose to have their PIUs for the whole project duration issued at this point, without the risk of IHS Markit, now part of S&P Global, having to cancel and reissue them, since the “Start date” is known.

### Restoration validation

Within one year of the project “Start date” the restoration validation will take place, conducted by an approved validation body.

Restoration validation will evaluate the restoration activities undertaken and any resulting impact on the peatland condition category against the validated restoration plan. The project must submit a final restoration report to the validator, outlining which restoration activities were carried out, including evidence of this, and cross referencing with the validated restoration plan. If the implemented restoration differed from the restoration plan submitted at project validation, all relevant documents need to be updated and resubmitted during restoration validation. If necessary, an adjustment to the amount of PIUs issued will be made. The evaluation will consist of a review of documentation and a site visit to determine if Peatland Code Requirements have been met. During the site visit the independent auditor will walk over the site and carry out a risk-based assessment of any evidence on site at risk of reversal in condition category, e.g., evidence of increased deer numbers, erosion evidence, dams failing. If no non-conformances are raised or if all non-conformances are suitably rectified within the required timeframe, as determined by the validation body, a restoration validation statement will be issued. The project will be listed on the UK Land Carbon registry as “Restoration validated”. The Restoration validation statement is valid until the Year 5 verification is due.

### Verification

Verification will take place at year 5 of the project “Start date” and thereafter at least every 10 years, an additional verification is required at the end of the project if the time since last verification is less than 10 years. For example, for a 30-year project verification would take place at year 5, 15, 25 and an additional verification at year 30. The verification dates are linked to the vintage end dates on the Pending Issuance Units listed at restoration validation. If projects want more frequent verifications, the vintages will have to be set up accordingly when setting up PIUs at validation.

The project must submit the following documents to the verification body:

- Project Progress Report
- Condition change monitoring report (see Field Protocol for guidance)
- Fixed-point photographs
- Updated map if necessary
- Landowner, Tenant and Agent Contact Details (if any parties have changed since last assessment)

Projects should begin the verification process 12 months before the verification is due. After surveying and submitting your documents, allow 6-9 months from when you sign a contract with the verifier to converting your carbon units on the UK Land Carbon Registry.

Verification is conducted by an approved verification body who will evaluate the condition category of the peatland against the baseline condition category presented at Project validation. The evaluation will consist of a check of the submitted documents and a site visit to determine if the requirements of the Peatland Code have been met.

During the site visit the independent auditor will walk over the site and carry out a risk-based assessment of any evidence on site at risk of reversal in condition category, e.g., evidence of increased deer numbers, erosion evidence, dams failing. They will also check the condition category of at least 10% of the survey points. If no non-conformances are raised or if all non-conformances are suitably rectified within the required timeframe, as determined by the verification body, a verification statement will be issued and the PIUs for that particular vintage (e.g., at year 5, PIUs for year 0-5 will be verified to PCUs) will be converted to verified Peatland Code Units (PCUs). The project will be listed on the UK Land Carbon registry as verified. Verification statements never expire. If 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, more carbon units can be issued at that point.

### **Validation/verification bodies**

Only an approved validation/verification body is permitted to carry out Peatland Code validation and verification. Approved validation/verification bodies will be appointed by the Peatland Code Executive Board and possess, or are working towards, accreditation by the UK National Accreditation Body (UKAS) to ISO 14064/3 and 14065.

By appointing approved validation/verification bodies the Peatland Code Executive Board delegate all validation/verification decisions to that body. Clarification on the requirements of the Peatland Code may be sought but the decision to award or retract validation/verification rests solely with the appointed body. The Peatland Code Executive Board do, however, retain access rights to the data collected and created by the appointed validation/verification body.

The Peatland Code Coordinator holds monthly meetings with the independent validation/verification bodies to continually monitor their performance. The accreditation body, UKAS, will also continually monitor performance of independent verification bodies.

A project will enter into a contract with the validation/verification body to carry out validation and verification by means of an application form obtainable from the validation/verification body.

In the event of having no approved validation/verification bodies the Peatland Code Executive Board would appoint the IUCN UK Peatland Programme to carry out Peatland Code validation and verification. In doing so it would recognise that decisions made carry a lower level of independence.

Approved validation/verification bodies are listed at <https://www.iucn-uk-peatlandprogramme.org/peatland-code/introduction-peatland-code/projects>

### **Demonstration of conformance with the Peatland Code**

Validation and verification shall consist of a review of documentation and a site visit by the validation/verification body with the purpose of collecting sufficient objective evidence to decide on whether validation and verification requirements have been met. Documentary evidence shall consist of the relevant Peatland Code template documents, including a Project Design Document, and any supplementary supporting

documentation. Documentary evidence shall be retained by the project for the duration of the project.

All Peatland Code template documents are available at <https://www.iucn-uk-peatlandprogramme.org/peatland-code/introduction-peatland-code/projects>.

### **Review of the Peatland Code**

The Peatland Code will be reviewed regularly to ensure the content is clear and reflects best practice.

Projects will be validated/verified against the current version of the Peatland Code and the most recent look up tables will be used to determine the emission reductions at verification.

### **Use of the Peatland Code and the Peatland Code Logo**

Use of the Peatland Code is currently restricted to projects within the UK. Emissions reductions resulting from Peatland Code projects will contribute directly to the UK's national targets for reducing emissions of greenhouse gases. Verified Peatland Carbon Units from Peatland Code projects can be used by companies to compensate for their UK-based greenhouse gas emissions. Peatland Carbon Units cannot be used in compliance schemes (eg. the CRC Energy Efficiency Scheme or the UK Emissions Trading Scheme); they cannot currently be used for emissions outside of the UK.

Project owners and developers are only permitted to use the Peatland Code logo once those projects have been issued a validation certificate and may only continue to use the logo if pursuing restoration and verification as a Peatland Code project. Project owners using the Peatland Code logo shall do so in accordance with the Peatland Code brand guidelines available to download from <https://www.iucn-uk-peatlandprogramme.org/peatland-code/introduction-peatland-code/projects>.

### **GHG statements**

#### *Pending Issuance Units and Peatland Carbon Units*

The Peatland Code issues carbon units which represent measurable amounts of carbon dioxide equivalent (CO<sub>2</sub>e) reductions coming from the peatland – one unit is 1 tonne of carbon dioxide equivalent. The Peatland Code issues two types of units, both can be sold:

- A **Peatland Carbon Unit (PCU)** is a tonne of CO<sub>2</sub>e emissions savings from a Peatland Code certified peatland. It has been independently verified, is guaranteed to have been achieved, and can be used to report against a business's UK based emissions as soon as it is purchased.
- A **Pending Issuance Unit (PIU)** is effectively a 'promise to deliver' a Peatland Carbon Unit in the future. It is not 'guaranteed' and therefore cannot be used to report against UK based emissions until verified. However, it allows companies to plan to compensate for future UK based emissions or make credible CSR statements in support of peatland restoration. At the start of a project, all units available are PIUs as the restored peatland hasn't yet made any emissions reductions.

### Statements and Claims - General

Landowners and project developers can only make statements about the emission reduction potential of their peatland restoration project if it is registered and validated to the Peatland Code.

UK-based companies can only make claims about the emission reduction benefit of a peatland restoration project in the UK if they have purchased either Pending Issuance Units or verified Peatland Carbon Units from a Peatland Code project or have established a validated Peatland Code project on their own land or land they are in control of. Only verified Peatland Carbon Units (from the Peatland Code) and Woodland Carbon Units (from the Woodland Carbon Code) are recognised in the [UK Government's Environmental Reporting Guidelines](#).

### Statements about Pending Issuance Units

A Pending Issuance Unit (PIU) allows companies to plan to compensate for future UK-based emissions. Buyers of PIUs can make a statement about their purchase, provided they clearly state the timescale over which the expected greenhouse gas emission reduction will take place. No claims of offsetting, use, compensating for, balancing emissions or carbon neutrality can be made until these units are converted to Peatland Carbon Units at verification.

Example statement(s):

The landowner or project developer could make a statement such as:

Project [Name/Number] has listed [XXXX] Pending Issuance Units representing tonnes of carbon dioxide equivalent which is expected to be saved between – Start and End date].

A company buying Pending Issuance Units could make a statement such as:

Company [XXXX] has purchased [XXXX] Pending Issuance Units from Project [Name/Number] representing tonnes of carbon dioxide equivalent which are expected to be reduced over the next [XX] years to [date]. These units, if verified, will compensate for X[X]tCO<sub>2</sub>e/[X]% of our planned emissions over the same period.

A landowner who wishes to 'buy their own' carbon units to use against the residual emissions of their land holding or against the emissions of wider business interests could make a statement such as:

We/Company [XXXX] have created Project [Name/Number] to reduce the net greenhouse gas balance of our estate/business. The project has listed [XXXX] Pending Issuance Units representing tonnes of carbon dioxide equivalents which is expected to be saved between [Start and End Date].

For all claims: In all cases of claims about Pending Issuance Units, this could be strengthened with the following:

This represents an expected emission reduction of carbon dioxide equivalents that, if verified and converted to Peatland Carbon units, will have a positive

impact on our climate. Peatland Carbon Units are monitored and verified to the Peatland Code.

### Claims about Peatland Carbon Units

A Peatland Carbon Unit (PCU) is a tonne of CO<sub>2</sub>e which has been saved from a PC-verified peatland restoration project. It has been independently verified, the emission reduction is guaranteed to have happened, and can be used by companies to report against UK-based emissions for their current claim year.

Peatland Carbon Units can be used to offset, compensate for, or balance a company's current Greenhouse Gas emissions. To do this, you need to:

- Retire the number of Peatland Carbon Units you want to use from the UK Land Carbon Registry. This means they will be tagged as 'used', with a comment clarifying the purpose so no-one else can use them again.
- Ensure that any claims are accurate whether in your annual report, on signage, your website or other promotional material. For example, you could make claims such as

'We/Company [XXXX] have offset/compensated for [XXXX] tCO<sub>2</sub>e of our 2025 emissions with Peatland Carbon Units from project [Name/Number]. This represents a direct and quantifiable benefit to our climate which is monitored and verified to the Peatland Code.

- Ensure that annual reports follow the 'best practice' guidance on reporting carbon units. This could be the UK Government's Environmental Reporting Guidelines: including mandatory greenhouse gas emissions reporting guidance

### Bundling or Stacking of ecosystem service credits/ units in peatland restoration projects

#### *Current situation: Bundled units*

With the Peatland Code, wider benefits of peatland restoration projects are 'bundled' with the carbon unit when they are sold (the landowner sells the carbon unit with the other benefits 'attached').

#### *Future possibilities: Stacked units*

In the future, it may be possible to 'stack' multiple voluntary credits generated from a peatland restoration project (e.g. where payments are made/ units generated for other ecosystem services such as biodiversity or water), provided

- There is a credible voluntary standard/methodology for other ecosystem service
- These standards/methodologies are approved for use by the Peatland Code
- All income streams are declared in the Peatland Code additionality calculator
- Claims made are clear and explicit.

**Peatland Code Levy**

A per unit administration fee is payable when setting up PIUs through the Peatland Code online registry. This is collected by the registry provider (IHS Markit, now part of S&P Global) and is used to offset the costs of hosting and developing the registry and as a contribution to the management of the Peatland Code. Details of the current fees are available to download from [www.iucn-uk-peatlandprogramme.org/peatland-code/introduction-peatland-code/projects](http://www.iucn-uk-peatlandprogramme.org/peatland-code/introduction-peatland-code/projects).