

PEATLAND CODE



Unlocking private finance for peatland restoration

Situation

Peatlands are a type of wetland; they provide many benefits to people. They can tell us about our past, support our lives in the present and help secure our future. Peatlands are critical to mitigating and adapting to the effects of climate change and conserving global biodiversity.

Peatlands are the terrestrial ecosystem with the highest carbon density on Earth. Global peatlands contain at least 550 gigatonnes of carbon. Near-natural peatlands cover over three million km² world-wide and sequester 0.37 gigatonnes of carbon dioxide (CO₂) a year – approximately equal to the CO₂ sequestration of 18.5 billion trees a year.

In the UK, peatlands cover approximately 12% of the land surface. This represents and account for 13% of the world's blanket bog, as well as raised bog and fenland habitats.

The waterlogged soils of these wetland habitats slow the decomposition of plants that grow in them; this plant material, rich in carbon, accumulates as peat.



Eroding peatland gully (© North Pennines AONB)

Over millennia this has created a significant store of carbon, estimated to be over **3 billion tonnes** in the UK, which is almost 3 times more than the carbon stored in UK forests.

Complication

Damaged peatlands are a major source of greenhouse gas (GHG) emissions, releasing approximately 5% of annual global anthropogenic GHG emissions.

Unfortunately, 80% of UK peatlands are in a damaged state. When no longer waterlogged, the benefits that healthy peatlands provide to people and nature are reduced – so much so that they start to present risks instead. Damaged peatlands are harmful to our environment for several reasons:

- It is currently estimated that damaged UK peatlands are releasing more than 23 million tonnes of carbon dioxide equivalent (CO₂e) emissions – equal to the average emissions from **5 million petrol cars** – annually, making it harder for the UK to meet its target of reducing emissions by 78% by 2035.
- Where peatlands have dried out, because of historic drainage for example, they are at greater risk of wildfire which is likely to be exacerbated by climate change.
- Degraded and eroding peatlands reduce water quality in peat-covered catchments, with impacts including damaging the health of downstream freshwater habitats and increasing the costs of drinking water purification.
- Damaged peatland habitats cannot adequately support the unique wildlife that depends on them – contributing to the decline in biodiversity across the UK.



Survey and monitoring of restoration is vital
 (© North Pennines AONB)

Solution

Thankfully, we can fix the problem, and the UK is one of the leading nations tackling peatland restoration. Restoring damaged peatlands to healthy, functioning, wetland landscapes can significantly and rapidly reduce GHG emissions. But with 80% of UK peatlands needing restoration (the equivalent of nearly 4.5 million football pitches) the challenge is huge and public finance alone cannot fund the speed and scale of work needed. This is where private finance can help – the voluntary UK carbon market allows landowners to sell carbon units from their peatlands to private businesses to help fund restoration work.

The Peatland Code

The Peatland Code provides a mechanism to support private finance for the restoration and long-term maintenance of damaged peatland sites. The Code provides a standard for quantifying and verifying climate benefits from reductions in greenhouse gas emissions brought about by the restoration works.

Peatland Carbon Units represent measurable amounts of greenhouse gases that are no longer being released into the atmosphere. Peatlands emit several different greenhouse gases (e.g. methane, carbon dioxide, nitrous oxide), so to simplify this and still account for the different global warming potentials for each greenhouse gas, every tonne of greenhouse gas is measured in carbon dioxide equivalents (CO₂e). Every tonne of CO₂e that a restoration project prevents from being released into the atmosphere, is awarded one carbon unit.

The Peatland Code quantifies the greenhouse gas emissions that are released into the atmosphere from peatlands in damaged and restored states.

Ecosystem Services in a Healthy Peatland

golden plover

sundew

CO₂e

+C

HEALTHY

- Net carbon sink
- Carbon store
- Supports unique biodiversity
- Supports good water quality
- A historic, cultural and environmental encyclopaedia
- Supporting sustainable land-use

One tonne of carbon dioxide equivalent (CO₂e) emissions reduction achieved through peatland restoration is equal to one carbon unit.

Comparing emissions before and after restoration provides an accurate measure of how many tonnes of CO₂e will be saved over time; the post-restoration scenario will release a lot less greenhouse gases than leaving the peatland in its damaged state, thereby providing a greenhouse gas emission saving.

The Peatland Code is based on robust scientific estimates of emissions from specific types of peatlands in known condition categories. As the availability and scientific confidence of data increases for peatlands in new condition categories or types of peatland, their eligibility for inclusion in the Peatland Code will be reviewed.

The Peatland Code provides a quality control process and is the UK's only Government-backed standard to quantify, validate and verify peatland carbon units. These carbon units can be sold to private businesses to help fund the restoration and management of degraded peatland sites. The owners of carbon units can use them to voluntarily report on climate mitigation.

The Peatland Code has checks and balances in place, including regular long-term monitoring, to ensure that restoration work is delivered effectively and is well maintained – ensuring the long-term sustainable management of a peatland site. This also assures buyers of carbon units that their purchase will result in a climate benefit that is permanent, additional, and verifiable. Through the Peatland Code, carbon buyers can be confident in the climate benefits being derived.

Carbon Markets

Peatland carbon units can only be sold on the voluntary carbon market not the regulatory compliance market.

Compliance market

“The compliance market is used by companies and governments that by law have to account for their GHG emissions. It is regulated by mandatory national, regional or international carbon reduction regimes.”

Voluntary market

“Carbon credits on the voluntary markets ...are traded on a voluntary basis. ...Voluntary carbon credits are mainly purchased by the private sector. Corporate social responsibility (CSR) and public relations are the most common motivations for buying carbon credits. Other reasons are considerations such as certification, reputation, and environmental and social benefits. The value of carbon units is usually considerably less on the voluntary market”

- Food and Agriculture Organization of the United Nations

Impact on Ecosystem Services in a Damaged Peatland



By using the Peatland Code, a landowner can receive private financial investment through the sale of carbon units (carbon finance). Carbon finance can be used flexibly to help with capital costs and/or long-term management costs. Funds can be released at different times throughout the project, depending on the needs of the buyer and seller. Money from the sale of carbon units does not replace existing finance mechanisms including public funding and philanthropic giving. Under the Peatland Code a project can be entirely funded through carbon finance or blended with public funding sources. The amount of carbon finance needed will vary depending on the amount of alternative funding available, the condition of the peatland, the type of restoration needed, and the long-term management requirements of the site.

Projects under the Peatland Code must run for a minimum of 30 years, to ensure the benefits of the restoration works are realised, maintained, and protected through sustainable management.

All projects are validated and verified by an independent certification body. Carbon units accumulated by projects following the Peatland Code are visible on the UK Land Carbon Registry hosted by IHS Markit, now a part of S&P Global. This provides transparent accounting and visible project information. The register also transfers or assigns carbon units at the point of sale, avoiding any double-counting of carbon units.

Project developers can be employed to assist with designing restoration works, completing documentation and some can also find a buyer for the carbon units. Brokers may be employed to support buyer-seller negotiations (see <https://www.iucn-uk-peatlandprogramme.org/peatland-code/useful-contacts> for more details).



Airlifting brash digger bare peat, Cotherstone (© DEFRA)

Related publications:

- Buying carbon units from peatland restoration
- Creating peatland restoration projects eligible for the Peatland Code

PEATLAND CODE



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The Peatland Code is issued by the IUCN UK National Committee and is managed on its behalf by an Executive Board facilitated by IUCN UK Peatland Programme staff.

The IUCN UK Peatland Programme exists to promote peatland restoration in the UK and advocates the multiple benefits of peatlands through partnerships, strong science, sound policy and effective practice.

This publication has been developed by the IUCN UK Peatland Programme in collaboration with, and funded by, the partners in the Pennine PeatLIFE project, in support of the Peatland Code - helping to unlock private finance to scale-up peatland conservation in the UK.



Pennine PeatLIFE delivery partners



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