

This is one of a suite of case studies of NEIRF funded projects, to highlight efforts to protect and enhance the natural environment, while generating revenue from ecosystem services.



Tollesbury, Essex

SALTMARSH CARBON CODE

HIGH LEVEL SUMMARY OF PROJECT



Habitat and geographical location



Saltmarsh



Once developed the code will be piloted using sites already planned for restoration through Managed Realignment. The revenue model will be piloted using two sites: Royal Society for the Protection of Birds (RSPB) Old Hall Marshes (Essex), and Wildfowl & Wetlands Trust (WWT) Steart Marshes (Somerset).



PROJECT OVERVIEW

Since the mid-1800s the UK has lost around 85% of its saltmarshes. Currently, saltmarshes make up only 45,000ha of land in the UK. Despite ambitions to accelerate saltmarsh restoration, targets are unlikely to be met using public funding alone.

The Saltmarsh Code project aims to develop a UK domestic Saltmarsh Code that will provide a significant pipeline of private finance for saltmarsh restoration through the managed realignment of coastal defences. Like the Woodland and Peatland Codes, the Saltmarsh Code will be a rigorous voluntary certification standard for UK projects to sell the climate benefits of habitat restoration and provide assurances to buyers that carbon units sold are real, verifiable and permanent.

The UK Saltmarsh Code project team consists of scientific, conservation delivery, and investment finance experts across the charity, finance, and academic sectors. The project is led by the UK Centre for Ecology & Hydrology in partnership with Bangor University, Scotland's Rural College (SRUC), Finance Earth, Wildfowl and Wetlands Trust (WWT), RSPB, University of St Andrews, Jacobs, and IUCN National Committee UK.

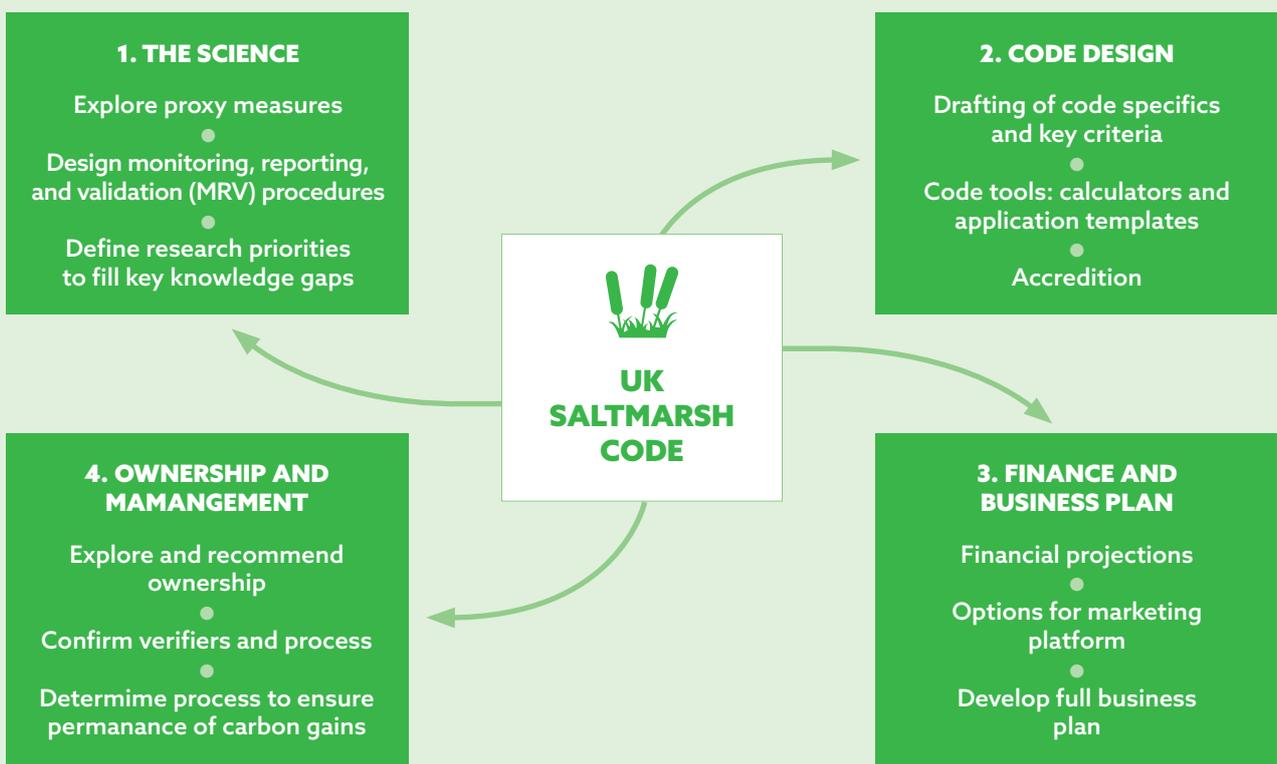
In its first stage, the project used NEIRF funding to conduct a feasibility study about applying international Codes in the UK.

The project determined that a new UK code would be lower-cost and therefore more commercially viable for UK saltmarsh restoration, compared to using an existing international code like the VM0033 (a tidal wetland and seagrass code developed in the USA).

The project also consulted with the RSPB, WWT and Environment Agency to understand the potential and cost of saltmarsh restoration in the UK. It then developed a high-level business case for two pilot sites to better understand the role private finance could play in saltmarsh restoration based on the sale of carbon units, and conducted reviews of UK and global scientific literature to shape recommendations for a UK Saltmarsh Code.

A fully funded second stage of the project is currently being negotiated. Anticipated to last around 3 years, this stage would see the development and delivery of a UK Saltmarsh Code; initially to be launched in pilot form before being refined and finally accredited for full launch. This work will be split into four key areas:

1. The Science
2. Code Design
3. Finance/Business Plan
4. Ownership and Management



GOVERNMENT ENVIRONMENTAL GOALS



Clean air

Vegetation on saltmarshes removes particulates and aerosols from the atmosphere, which **regulates and improves local air quality**. Coastal margin habitats including saltmarsh are also an effective sink for ammonia.



Thriving plants and wildlife

Saltmarsh is an important, wildlife-rich habitat and so restoration will help to **reverse biodiversity loss and recover threatened and economically important species**, such as bass, sprat, and herring.



Reducing the risks of harm from environmental hazards

Saltmarshes function as natural buffer zones, providing protection to coastal land and settlements. Saltmarsh vegetation also **reduces wave force and stabilises shorelines reducing erosion**.



Enhancing beauty, heritage, and engagement with the natural environment

Saltmarshes are iconic landscapes depicted in art and literature. Restoring saltmarsh areas **safeguards and enhances natural scenery**, while restoration sites can improve public access and engagement with the environment.



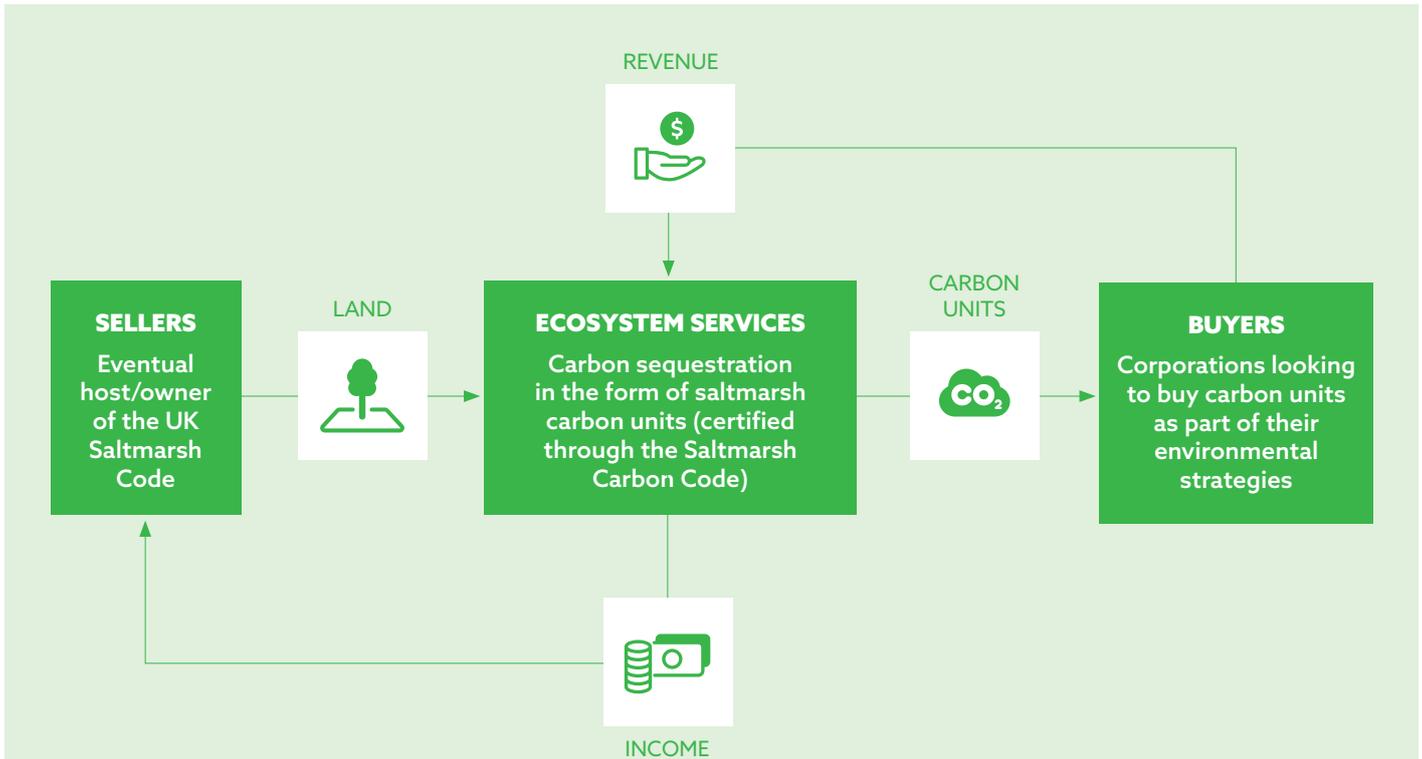
Mitigating and adapting to climate change

Saltmarshes help to **regulate the climate by sequestering carbon and storing** it over the long-term. Appropriate management and restoration can enhance saltmarsh carbon sinks.



Old Hall Marshes, Essex

REVENUE MODEL



The Code's revenue model will be based on the sale of carbon units to corporations and those looking to support the blue carbon sector, with the longer-term aim to sell official offsets. Carbon sales will be conducted using standard contracts such as the ones used in the Woodland and Peatland Codes. The revenue generated through the sale of carbon units will provide returns to investors funding restoration projects registered with the Code. The UK Saltmarsh Code is also expected to include a threshold for

financial additionality (like the Woodland and Peatland Codes) allowing public or charitable funding to support the high restoration costs involved with managed realignment projects.

The Code will be designed so only UK companies, or UK arms of international companies, will be allowed to invest. Project costs may vary significantly due to site-specific factors (e.g., ground conditions and design complexity).

INNOVATION

The project will fill a major gap in carbon markets by creating a tool currently missing in the UK to unlock capital for saltmarsh restoration. Key barriers to developing the blue carbon market previously have been the lack of methods for calculating carbon capture, and of infrastructure to facilitate the trade of saltmarsh carbon. The Code will address some of these challenges by establishing a saltmarsh verification framework.



LEARNING POINTS

- **Understand global carbon markets.** Developing a code is complex and requires scientific knowledge of monitoring, reporting, and validation procedures as well as an appropriate governance structure. A new code should be mindful of existing codes and frameworks, and where appropriate learn from what they have put in place to avoid the duplication of work, and ensure longevity should rules or guidance change.
- **Consider the extent to which existing or previous codes can be used as a blueprint for future codes.** As voluntary carbon markets evolve, existing codes do not necessarily set a precedent for how new codes should be developed.
- **Be realistic about the data available.** Providing confidence to buyers is important, therefore a transparent and evidence-based approach is key.
- **Timelines need to be realistic.** Developing a code through to launch can take years, as was the case for the Woodland and Peatland Codes.
- **Engage with various organisations** to plan the ownership, validation and registry of carbon units and how these processes will work. Allow time for these discussions.
- **Conduct community consultations.** Explain the rationale for the approach to ensure buy-in and mitigate any potential adverse consequences such as risks for shore-based industries in the case of saltmarsh.



BSI NATURE INVESTMENT STANDARDS PROGRAMME

The British Standards Institution's (BSI) UK Nature Investment Standards Programme, sponsored by Defra, launched in March 2023. This programme aims to support UK markets for ecosystem services by creating a consensus-based standards framework for nature markets, and developing a suite of new investment standards, including an overarching principles standard with how-to methodologies for demonstrating high integrity. This draws on the Government's policy framework for Nature Markets.

The programme covers the full range of nature solutions and will drive the application of principles to guard against greenwashing and apply consistent approaches to quantifying ecosystem services, providing a benchmark by which methodologies can be recognised as sufficiently robust and credible.

The BSI are working with a wide spectrum of public body, land management, environmental and financial stakeholders, including NEIRF projects which are exploring the case for, or creating, new credit or unit issuing schemes. More information can be found here: [The Nature Investment Standards Programme | BSI \(bsigroup.com\)](#)

WOULD YOU LIKE TO KNOW MORE?

If you would like to learn more about the UK Saltmarsh Code project, please get in touch with Annette Burden, Wetland Biogeochemist and Blue Carbon Lead for UKCEH at anrd@ceh.ac.uk. For questions regarding NEIRF, please contact NEIRF@environment-agency.gov.uk.

This case study was produced by Ecorys.