

Met Office







OVERVIEW

As a leading contributor to United Nations climate research, the Met Office knows first-hand how greenhouse gas emissions are impacting our climate. It has therefore set out on a journey to Net Zero and charted a pathway to neutralise the harmful greenhouse gases from its operational activities and supply chain.

Aiming to substantially reduce these, eliminating them where possible over the next decade, and offsetting residual emissions that are not currently possible to remove in their entirety, a partnership with <u>Beyond Zero</u> is supporting the development of UK nature-based carbon removal projects on three English farms to deliver those unavoidable carbon emissions offsets.

THE CHALLENGE

To understand its carbon position, an initial baseline assessment was conducted of the Met Office $\rm CO_2e$ emissions for the 2019/20 financial year.

Since then, the Met Office has expanded its baseline assessment, to incorporate everything learned since embarking on the journey, which includes a comprehensive view of the emissions from all the equipment and services needed to deliver its essential customer services.

The Met Office baseline assessment divides emissions into four broad components:

View Storymap

- Building management
- Procurement and supply chain
- Scientific data collection / critical infrastructure
- Business travel and commuting

Though significant achievements have already been made in reducing emissions in these four areas, achieving its projections would still leave the Met Office with residual emissions of c. 17,600 tonnes CO₂e by 2030.

Having developed a unique seedfunding model with Nature Broking, Beyond Zero was selected to assist the Met Office in assessing how best to offset these emissions.





THE SOLUTION

The Met Office could simply purchase carbon credits off-the-shelf to offset its unavoidable emissions.

Instead, by partnering with Beyond Zero, the Met Office is co-creating new nature-based carbon removal projects on three English farms to deliver carbon offsets.

A key desire for the Met Office was that their investment would be UK-focused and their involvement and expertise could assist in the project development and monitoring.

Aside from helping progress UK nature-based offsetting, co-benefits exist in that the identified projects will assist the Met Office in the development of its climate models through on-site scientific research, offer staff engagement opportunities, and provide the organisation with high-integrity carbon credits.

Beyond Zero has started the initial natural capital baselining and carbon emissions audit work for the three locations, whose projects will be certified under the <u>UK Carbon Code</u> - a standard which has been developed specifically for whole landholdings, encompassing all carbon emissions

and removal within a farm boundary.

Beyond Zero's projects take a holistic view which considers carbon emissions from all enterprises, and measures carbon removal from all natural capital, including soil, within a farm's boundary. Uniquely in the carbon market, Beyond Zero projects are set apart by insisting that farms are Net Zero first before carbon credits are issued as offsets - essential to decarbonising the entire supply chain by dealing with the farm's Scope 3 emissions.

INVESTMENT IN THREE UK NATURE-BASED CARBON REMOVAL PROJECTS

Hayne Oak Farm is a 45 hectare (110 acre) farm near Butterleigh in Devon, owned and run by the current CEO of the Farm Carbon Toolkit. The farm has some amazing views of the Devon countryside and is currently operated as a grassland farm with sheep and cattle.

The project activity will be to plant trees strategically in an agroforestry enterprise producing renewable timber in a way that maintains the current farm livestock production and the viewpoints but will remove atmospheric carbon dioxide and increase biodiversity connectivity.

Dalditch Farm is a 95 hectare (235 acre) farm on the edge of the village of Budleigh Salterton in Devon - part of the large Clinton Devon Estate near the coast.

The farm is organic and the tenant farmer cares deeply about the impact his business has on the land. He does all he can to farm in harmony with the surrounding environment.

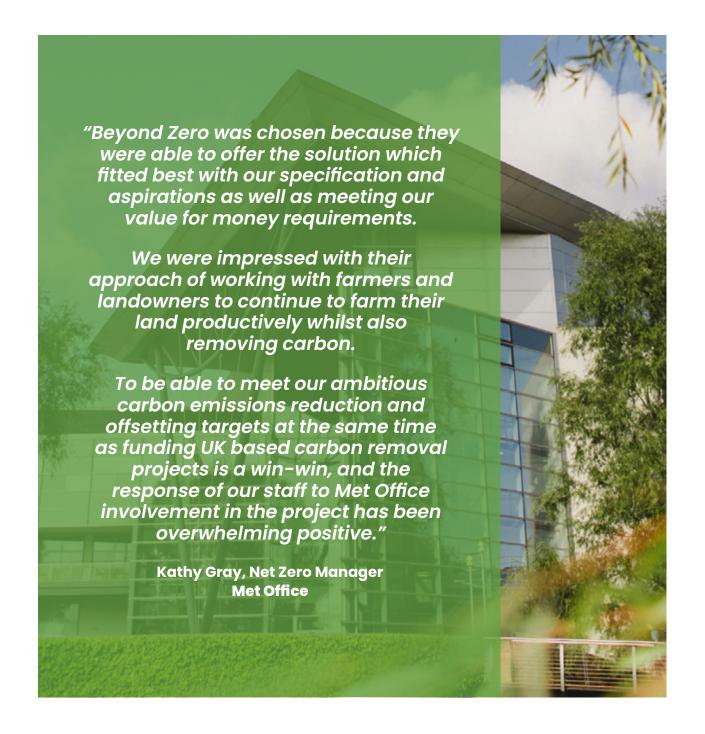
The proposed activity is agroforestry and renewable timber production that will remove atmospheric carbon dioxide and increase biodiversity connectivity.

Cunningarth Farm is a 326 hectare (805 acre) farm near Wigton in Cumbria, just north of the Lake District National Park.

The owner has decided he would like to reverse the trend of peat draining and intensifying livestock production, and return the hills to nature and a range of eco-system services.

This project is likely to remove significant volumes of atmospheric carbon over its lifetime and deliver co-benefits that will change the health of the landscape and its ecosystems for ever. The project will involve the removal of livestock from hills, re-wetting peat bogs, rewilding, agroforestry, woodland creation, habitat creation and additional tree planting.





THE OUTCOMES

Cunningarth Farm

This is a 30-year project where the target outcomes are restoration of depleted peat bogs, increased carbon removals, decreased carbon emissions and increased biodiversity and connectivity. The farm will continue to produce food but in a more nature-friendly way.

Dalditch Farm

This is a 30-year project where the target outcomes are increased carbon removal, improvements in species diversity and connectivity, domestic timber production with renewable species and improved grassland resilience.

Hayne Oak Farm

It is a 30-year project where the target outcomes are increased carbon removal, improvements in species diversity and connectivity, domestic timber production with renewable species and improved grassland resilience.





THE UNLOCKED VALUE

Beyond Zero projects deliver a diverse range of cobenefits including:

- ✓ Support for farm businesses making them more financially and climatically resilient;
- ✓ Restoration of current habitats;
- ✓ Creation of new habitats and improved connectivity;
- ✓ Thriving plants and wildlife all projects enhance and protect wildlife, giving space to nature, allowing it to recover;
- Clean air, e.g. planting of agroforestry and improving habitats improves air quality in surrounding areas;
- ✓ Clean and plentiful water, e.g. riparian planting slows down excess nutrient run off from agriculture, increasing cleanliness of water;
- ✓ Enhanced beauty, heritage and engagement with the natural environment improves health and well-being;

- ✓ Natural flood management;
- ✓ Conversion to regenerative agriculture;
- ✓ Renewable timber production including agroforestry adoption;
- ✓ Improved access and community engagement;
- ✓ Climate change mitigation and adaptation;
- ✓ Enhanced biosecurity;
- ✓ Sustainable Development Goals including:
 - Sustainable Cities and Communities:
 - Responsible Consumption and Production;
 - Climate Action;
 - Life on Land;
- ✓ Certified Net Zero branding and marketing for all farm produce;
- ✓ Certified Regenerative (where applicable); and
- ✓ Project sponsor engagement, e.g. biodiversity surveys and tree/hedge planting.

PARTNERS













