

Farming for Carbon and Nature

Agriculture accounts for 11% of UK GHG emissions and is a big contributor to the UK being one of the world's most nature-depleted countries. Meanwhile, Scope 3 emissions are a key challenge, particularly with the lack of credible carbon offsets available. Farming for Carbon and Nature (FCN) is an innovative programme, with ambitious targets for the tertiary education sector, that offers a key opportunity to address these issues in unison.



Programme Overview

FCN enables universities and colleges to be sector leaders by supporting farms on university and college owned land to implement more regenerative practices - reducing emissions, sequestering carbon and improving biodiversity.



Follows SBTi guidance on achieving net zero with co-benefits for nature and people

Regenerative farming delivers significant benefits (e.g. for pollination, soil and water quality and flood regulation).



Increases the resilience and viability of university and college owned farmland

Support for farmers through Farmer Knowledge Exchange sessions and financial help.



Creates opportunities for pioneering multi-institution research into soil carbon storage

Analysis of soil carbon vs. farming methods, soil type and aggregate size.



Enriches student experience through informal curriculum learning and access to nature

Green skills development through soil sampling and biodiversity data collection.

The Pilot Project

Since 2021, we've worked with over 35 universities, colleges, farms, and food & farming organisations to develop FCN, ensuring it meets the needs of the tertiary education sector. During the pilot project, we:

- 1 Developed a scientifically robust methodology for soil sampling and testing with a team of experts.
- 2 Supported over 50 students to collect soil samples at 10 farms.
- 3 Paid 12 student interns to test 2000+ samples at Loughborough University and the British Geological Survey.
- 4 Supported 125 students to do biodiversity monitoring, for citizen science datasets.
- 5 Facilitated regular online Farmer Knowledge Exchange sessions. Feedback shows that this provided valuable support in transitioning to more regenerative practices.
- 6 Commissioned Farm Carbon Toolkit to write a report on the 'financial and climate impacts of regenerative farming practices'.



- 7 Found that soil carbon quantification is currently not robust enough for selling credits to offset unavoidable scope 3.
- 8 Sent Freedom of Information requests to understand farmland ownership in the tertiary education sector.
- 9 Shared an online quiz about food, farming and environment, with 100+ student responses.
- 10 Organised an event for senior sustainability staff at 22 universities and colleges to help shape the new programme.

The Business Case

Signal to investors, funders, students, and other stakeholders that your institution is resolute on achieving its strategic plans.

Common aims across the sector that FCN contributes to:

Environmental Sustainability

Delivering significant benefits **across ecosystem services** and strengthening national biodiversity datasets.

Social and Civic Responsibility

Demonstrating best practice through **long-term positive social, economic and environmental change**, and supporting food security through increased farm resilience.

Research Impact

Advancing understanding of the impacts of farming practices on soil carbon, helping inform approaches to **key environmental challenges**.

Student Experience

Improving **accessibility** to agricultural landscapes and to the **wellbeing benefits of greenspace** through immersive learning opportunities.

Graduate Employability

Equipping students with **hard and soft skills** through a project with **real-world application** - useful for students across disciplines.

Leadership and Partnership

Collaborations between universities, industry, and government to foster **innovation and entrepreneurship in the approach towards university scope 3 and farming**.

There are not enough credible carbon credits for all UK universities and colleges to offset Scope 3 emissions.

SBTi, Gold Standard, UN and WWF recommend adopting Beyond Value Chain Mitigation to fund impactful projects, like FCN, alongside purchasing some credible offsets (for which we recommend the UK Carbon Coalition).

Support SDG's



Measuring Impact

Sector targets for 2030



15,000 ha of university and college owned land regeneratively farmed



12,000 farm soil samples tested for carbon



1,500 students engaged with FCN sustainable food production activities



150 farm biodiversity surveys completed



Verification

The theory of change for the FCN programme has been verified through the pilot phase. The pilot tested the programme's design, feasibility, scientific robustness, cost, and potential impact. The pilot produced reliable data showing that FCN can achieve its 2030 targets, addresses identified challenges, and can be delivered on the allocated budget.

Endorsements

“EAUC are pleased to support the Farming for Carbon & Nature programme. We have been involved in the project since the start and sit on the advisory group. This programme tackles a much-forgotten area of farming in the higher and further education sector and is driving critical innovation, research and science.”

Fiona Goodwin, Deputy CEO, EAUC

“I would like to express my support for this project. If fully implemented, beyond demonstrable environmental benefits, it has the potential to deliver several additional benefits for participating institutions.”

Dr John Brenton, Head of Carbon Reduction, The Energy Consortium

Programme cost

FCN for further and higher education institutions (core programme)

- **Payment to farm** (made directly) to accelerate the transition to more sustainable practices on university and college owned farmland.
- **Farmer Knowledge Exchange sessions** to facilitate implementation and innovation of new practices.
- **Soil sampling:** full training and on-farm soil sampling provided for students. FCN digital badges awarded to students. Baseline and follow-up student surveys conducted. Annual results provided.
- **Soil testing:** a Standard Operating Procedure provided. Testing can be done in your own labs or at Loughborough University for an additional charge.
- **Student engagement activities** to raise awareness and support action for sustainable food and farming.
- **Opportunity for initial institutions to join a Leadership Council**, showcasing an innovative and forward-thinking approach to emissions reduction.

Annual Cost: TBC

Biodiversity monitoring (optional bolt ons)

- **Full training and 4 on-farm biodiversity monitoring surveys** (farmland birds, hedgerow species, flying insects and earthworms) provided for students.
- **Baseline and follow up** student surveys.
- **Students awarded** with FCN digital badges.
- **Results provided** annually.

Annual Cost: TBC



Beyond Value Chain Mitigation (BVCM)

Beyond Value Chain Mitigation (BVCM) can be used to fund FCN participation. This is when an internal carbon fee is charged and then used to fund credible emissions reduction activities such as Farming for Carbon & Nature. BVCM is not an offset, but it allows institutions to take responsibility for unabated Scope 3 emissions. The University of Oxford flight levy provides an example of this.

Resources

- [SBTi BVCM Report](#)
- [Gold Standard BVCM Report](#)
- [Understanding the financial and climate impacts of regenerative farming practices](#)
- [IPCC AR6 Synthesis Report: Climate Change 2023](#)
- Full Programme Outline (to be added soon)

Thank you to the following organisations for their support in delivering the FCN pilot project and developing the new programme:



With particular thanks to our funder:



Contact Us

Please email foodandfarming@sos-uk.org with any queries

