

*Minimum requirements for farm soil carbon projects
poised to unlock investment for UK farmers and support the transition to regenerative farming*

December 5 2022, World Soils Day: The prospect of a scalable, high-integrity market for farm soil carbon took an important step forward today with the publication of a report recommending minimum requirements for soil carbon codes. By vetting and signposting the highest quality soil carbon schemes, the Environment Agency funded project hopes to prevent greenwashing and drive significant environmental benefits as well as investment for farmers.

The recommendations for Minimum Requirements have been created by a consortium of academics, NGOs and businesses, with funding provided to the Farming and Wildlife Advisory Group Southwest from the Environment Agency's *Natural Environment Investment Readiness Fund*. The aim was to address a number of the technical, legal and practical aspects of soil carbon projects – reliable, consistent soil carbon measurement, reporting and verification, as well as critical challenges such as permanence and additionality.

Bringing integrity to an unregulated market

The group's guidance can be used to assess existing and future farm soil carbon schemes, in order that those that meet them are recognised as 'high integrity'. It is the consortium's hope that their minimum requirements for soil carbon codes will be used as a blueprint for developing similar guidance for other ecosystem markets, as part of wider efforts by UK governments to regulate and enhance the integrity of these markets.

As it stands, the fledgling market for soil carbon - whereby farmers are paid for a combination of carbon storage and reduced GHG emissions through improved soil management - is up and running but largely unregulated, with businesses using a variety of techniques for measuring and estimating change over time, and different contractual mechanisms for managing the inherent risk and uncertainty.

"The starting point for our work was that, when it comes to farm soil carbon, there was massive widespread inconsistency and uncertainty as to what is actually being bought and sold", says Dr Helaina Black of the James Hutton Institute. "A unit or credit of carbon achieved on one farm would not be equivalent – or even comparable with a unit from another. This opens the door to confusion, greenwash and even fraud."

Removing market barriers – and unlocking demand

"Our work embraced all aspects of farm soil carbon projects – the science of establishing change in soil carbon stocks over time using a balance of measuring and modelling, and more practical – even philosophical questions around fairness, transparency and risk – how to ensure any carbon that goes into the ground stays there for as long as possible."

Market inconsistency was a critical barrier for potential investors, said Professor Mark Reed, Co-Director of the Thriving Natural Capital Challenge Centre at Scotland's Rural College:

"We know that there is considerable demand for nature-based carbon credits, and while there are codes in place for woodland and peatland, there is nothing equivalent for soil. We hope our work will send clear signals to the market that rigorous, high integrity farm soil projects are out there – and that this will in-turn unlock demand, focussing investment on those projects with the highest standards.

“This private investment is desperately needed to fill the financial gap needed to tackle the twin challenges of climate change and biodiversity loss in the UK. Indeed, governments are very keen to see public and private income sources for farmers align to help drive this transition- estimated at £56bn [over the next 10 years](#).”

The need for high-integrity credits

Professor Guy Ziv, University of Leeds said: “As their name suggests, the minimum requirements sets a bar we, and the stakeholders with whom we consulted in developing them, believe is sufficient for generating robust, trust-worthy carbon credits. However, our guidance also allows and encourages schemes to consider stacking and bundling of carbon benefits with other co-benefits such as water quality or other ecosystem services.”

The minimum requirements were largely based on an analysis of 12 farm soil MRV methods and associated programmes from around the world. Co-author of the review, Robert Parkhurst of Sierra View Solutions explained: “None of the Codes we researched would be directly applicable for the unique circumstances of the UK – the cropping systems, size and types of farms, the variety of soils and even the unique role that public money plays in supporting farmers who want to transition to regenerative farming.

“Our minimum requirements look to reflect these circumstances without being too prescriptive – telling farmers how to manage their most valuable asset – their soil. We have also looked to balance the need to achieve high integrity without burdening projects with extraneous costs and overheads. This is a fledgling market and we hope our approach will enable it to thrive.”

A stepping stone to government intervention?

The minimum requirements on their own won’t be enough to unlock UK farm soil’s potential when it comes to achieving Net Zero, says Matthew Orman, Director at the Sustainable Soils Alliance. “We hope that governments across the UK will reflect these guidelines in future policy, but also understand the broader lessons learnt from this project.

“Farmers need clear signals from governments, they need to be able to access investment with minimal costs and overheads and they need farm support that is sympathetic to the overall costs of transitioning to nature-friendly, regenerative farming practices – in particular the successful blending of public and private finance.”

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Editors Notes:

- To find out more about the UK Farm Soil Carbon Code Consortium, including the consortium members and the stakeholder consultation process that informed the creation of the Minimum Requirements, visit the website of the Sustainable Soils Alliance [here](#).
- The Natural Environment Investment Readiness fund ([NEIRF](#)) is a Environment Agency initiative which aims to stimulate private investment and market based mechanisms that improve and safeguard the domestic natural environment by helping projects get ready for investment.
- The review of 12 MRV methods and associated programmes from around the world, which was accepted and will be published shortly by Carbon Management with the title: *What makes an operational Farm Soil Carbon Code? Insights from a global comparison of existing soil carbon codes using a structured analytical framework* Article ID: TCMT 2135459, is available [here](#).