

# INCREASING CARBON CAPTURE THROUGH CROPPING



## CENTRE FOR HIGH CARBON CAPTURE CROPPING

Input-efficient crops that can increase carbon capture will help farming and associated industries address climate change. However, there must be confidence in achieving profitable and sustainable outcomes.

The **Centre for High Carbon Capture Cropping (CHCx3)** is a four-year, multi-partner project that started in 2023. It will demonstrate how diversification of arable and forage cropping can help build farm resilience and target Net Zero, whilst supporting enhanced value chains in fibre and construction.

### Project objectives

- Evaluate food, forage, and industrial cropping options with potential to enhance carbon capture, and sequestration in the soil and crop-based products
- Quantify carbon removals, consistent with emerging standards for measurement, monitoring, reporting and verification
- Develop a platform for tracking soil carbon, to facilitate insetting or offsetting of emissions, enabling new revenue opportunities for farmers, and supporting corporate sustainability
- Build value chains for optimised production of renewable biomaterials for fibre, textiles, or construction
- Establish a UK Knowledge Hub providing resources to support effective uptake and utilisation of crops with high carbon capture potential.

The research is focused on the the economic and environmental potential of four cropping options and their associated tillage systems: rotational cover crops; annual fibre crops (industrial hemp, flax); perennial food, forage, and feed cropping (including cereals and herbal leys); and perennial biomass crops (miscanthus, willow, poplar). Practical outputs will include crop guides, web-based resources and apps, with crop trials, field demonstrations, and events supporting opportunities to discover more.

### GET INVOLVED

Look out for our free CHCx3 webinars, field demonstrations and workshops

Sign up to receive the CHCx3 e-newsletter at [chcx3@niab.com](mailto:chcx3@niab.com)

Find out more at [www.carboncapturecropping.com](http://www.carboncapturecropping.com) or from a project partner



### The Centre for High Carbon Capture Cropping partners are:

NIAB, Biorenewables Development Centre, British Hemp Alliance, Bitrez, Cotswold Seeds, Crops for Energy, Elsoms Seeds, Energy Crops Consultancy, Farm Carbon Toolkit, FarmED, F C Palmer & Sons, National Farmers Union of England & Wales (NFU), Natural Building Systems, Northern Ireland Hemp Association, Rothamsted Research, Terravesta, UK Hempcrete, University of York, Unyte Hemp

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