

INCREASING CARBON CAPTURE THROUGH CROPPING



CENTRE FOR HIGH CARBON CAPTURE CROPPING

Farmers and associated industries can address climate change through input-efficient crops that are able to increase carbon capture, but they must have confidence in achieving profitable and sustainable outcomes.

The **Centre for High Carbon Capture Cropping (CHCx3)** is a four-year, 22-partner project, starting in 2023. It will demonstrate how diversification of arable and forage cropping systems can target Net Zero and build farming resilience, whilst supporting enhanced value chains in textiles and construction.

Project objectives

- Evaluate food, forage, and industrial cropping options with potential to enhance atmospheric carbon capture, and sequestration in the soil and crop-based products
- Optimise production of renewable biomaterials for fibre, textiles and construction
- Establish a UK Knowledge Hub providing resources to support effective uptake and utilisation of crops with high carbon capture potential
- Quantify carbon removals, consistent with emerging standards for measurement, monitoring, reporting and verification
- Develop carbon insetting/offsetting platforms, achieving revenue generation for farmers and supporting corporate sustainability

The project will focus on four cropping options: cover crops; annual fibre crops (industrial hemp, flax); perennial food, forage and feed cropping (including herbal leys); and perennial biomass crops (miscanthus, willow/poplar).

The effect of cultivation systems and agronomy on economic returns and environmental outcomes will be examined. Practical outputs will include crop guides, web tools and apps, with crop trials, field demonstrations, and events supporting opportunities to discover more.

GET INVOLVED

Participate in the project: tell us if you are interested in growing these crops

Sign up to receive the CHCx3 e-newsletter at chcx3@niab.com

Attend CHCx3 webinars, workshops, and field demonstrations

Find out more at niab.com or from a project partner



The Centre for High Carbon Capture Cropping partners are:

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

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