

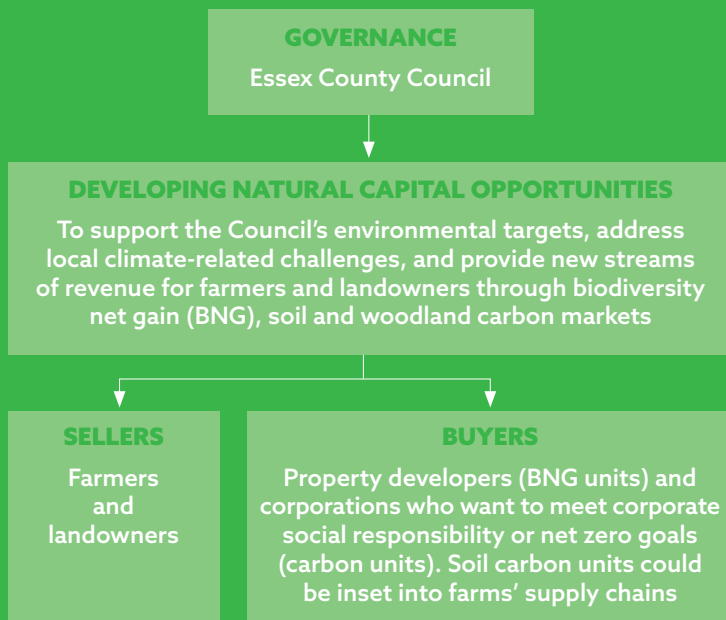
This is one of a suite of case studies of NEIRF funded projects, to highlight efforts to protect and enhance the natural environment, while generating revenue from ecosystem services.



Braxted Park, Essex
 © Essex County Council


ESSEX NET ZERO INNOVATION FUTURES

HIGH LEVEL SUMMARY OF PROJECT



Habitat and geographical location

-  Existing arable
-  Grassland

 4 pilot sites in Essex: Abbots Hall, Braxted Park, Spains Hall Estate and Wildfell

PROJECT OVERVIEW

Over the last century, Essex County has seen woodlands and hedgerows removed, traditional grass meadows ploughed, and freshwater and saltwater marshes drained for agriculture and to build homes.

The resulting shortage of natural areas is contributing to substantial climate change challenges including higher local temperatures, increased flood risk from both coastal and surface water, and soil degradation. As such, Essex County Council (ECC) aims to expand the amount of natural space in the county and improve the sustainable management of local land. Its targets include 100% sustainable land stewardship and doubling the amount of natural green infrastructure from 15% to 30% by 2050, increasing tree cover and improving public access to green spaces throughout the county.

The Essex Net Zero Innovative Futures project saw ECC work with Finance Earth and Downforce Technologies to identify nature-based projects at four pilot estates and produce investment cases for each site. The pilot sites included a Wildlife Trust-owned coastal estate; a landscaping company-owned arable estate; and two other estates; one with extensive areas already dedicated to nature restoration and the other comprising of farmland, venues for hire and a Grade II listed park.

Funded by the NEIRF, the project:

- Assessed ecosystem service opportunities at each estate based on project-level data and alignment with the aims of each estate in collaboration with landowners.
- Developed financial models and investment cases for BNG and woodland carbon (selected due to market maturity) and prospectively, soil carbon.
- Engaged potential buyers and investors to understand appetite to purchase units (e.g. BNG units) and/or invest in the opportunities identified.
- Explored governance options that would support scale by conducting a market review of the infrastructure used by local authorities and other organisations.

The project team identified the scope for habitat creation or improvements on each estate. To quantify the possible outputs from interventions they used: the [Defra Biodiversity Metric](#) to measure biodiversity value; the [Woodland Carbon Code](#) calculator to estimate carbon sequestration rates of woodlands created; and a range of proprietary metrics created by Downforce Technologies to estimate soil carbon sequestration potential and biodiversity uplift at each of the pilot sites.



Rapeseed farming, Essex

KEY LEARNINGS ON THE ROLE OF LOCAL AUTHORITIES IN NATURE-BASED PROJECTS

Having developed an investment case for each of the four pilot sites that estates may choose to progress and established a framework for engaging with natural capital projects, ECC will continue to work with local stakeholders to share learnings from the project. They also identified the following recommendations for local authorities as possible ways to further develop their role in supporting landowners who want to access nature markets:

- Mobilise the convening power of the local authority to connect buyers and sellers of ecosystem services. This could include recruiting a Biodiversity Officer to explore, test and develop an online BNG platform to connect local landowners to potential buyers of BNG, while co-ordinating across Local Planning Authorities.
- Support the creation of farm clusters to help farmers deliver nature-based projects at scale. For ECC, the existing North Essex Farm Cluster is one such example, formed in 2022 and consisting of over 40 farmers and land managers.
- Build capacity and knowledge amongst landowners and buyers to enable market growth, for example via webinars and sharing policy updates through local and regional networks.



Local Investment in Natural Capital programme

OTHER WORK RELATED TO LOCAL AUTHORITIES AND NATURAL CAPITAL OPPORTUNITIES

Local Investment in Natural Capital (LINC): The LINC programme is supporting other local and combined authorities in England to develop the capability to secure private finance for delivery of local priorities for nature. For more information about these projects, and to access the LINC Community of Practice, please visit the GFI [Hive's LINC page](#).

WOULD YOU LIKE TO KNOW MORE?

If you would like to learn more about the Essex Net Zero Innovation Futures, please get in touch with Alex Bogdanov, Environment Project Officer at aleksandar.bogdanov@essex.gov.uk or John Meehan, Head of Climate Adaptation & Mitigation at john.meehan@essex.gov.uk. For questions regarding NEIRF, please contact NEIRF@environment-agency.gov.uk.

This case study was produced by Ecorys.