

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.





Leighton Reservoir, Swinton, Ripon

# DEVELOPING A NEW BUSINESS MODEL FOR MULTI-FUNCTIONAL FORESTRY ON THE SWINTON ESTATE

## HIGH LEVEL SUMMARY OF PROJECT



## Habitat and geographical location

-  Woodland
-  Site owned by The Swinton Estate - North Yorkshire



# DEVELOPING A NEW BUSINESS MODEL FOR MULTI-FUNCTIONAL FORESTRY ON THE SWINTON ESTATE




## PROJECT OVERVIEW

**The Swinton Estate is a rural estate in Wensleydale, North Yorkshire with 20,000 acres of moorland and farmland. Most of the land sits within the Nidderdale Area of Outstanding Natural Beauty and borders the Yorkshire Dales National Park.**

The Swinton Estate has a goal of increasing their woodland cover by half, by planting another 350ha in the next 20 years. Unless used for timber, woodland creation is currently loss-making for the Estate. This project was created to offset the cost of woodland creation by selling carbon credits units bundled with additional ecosystem services and offering sponsorship of woodland, alongside timber production. The NEIRF grant was used to explore the viability of these approaches and develop a business case for 'multi-functional' forestry.

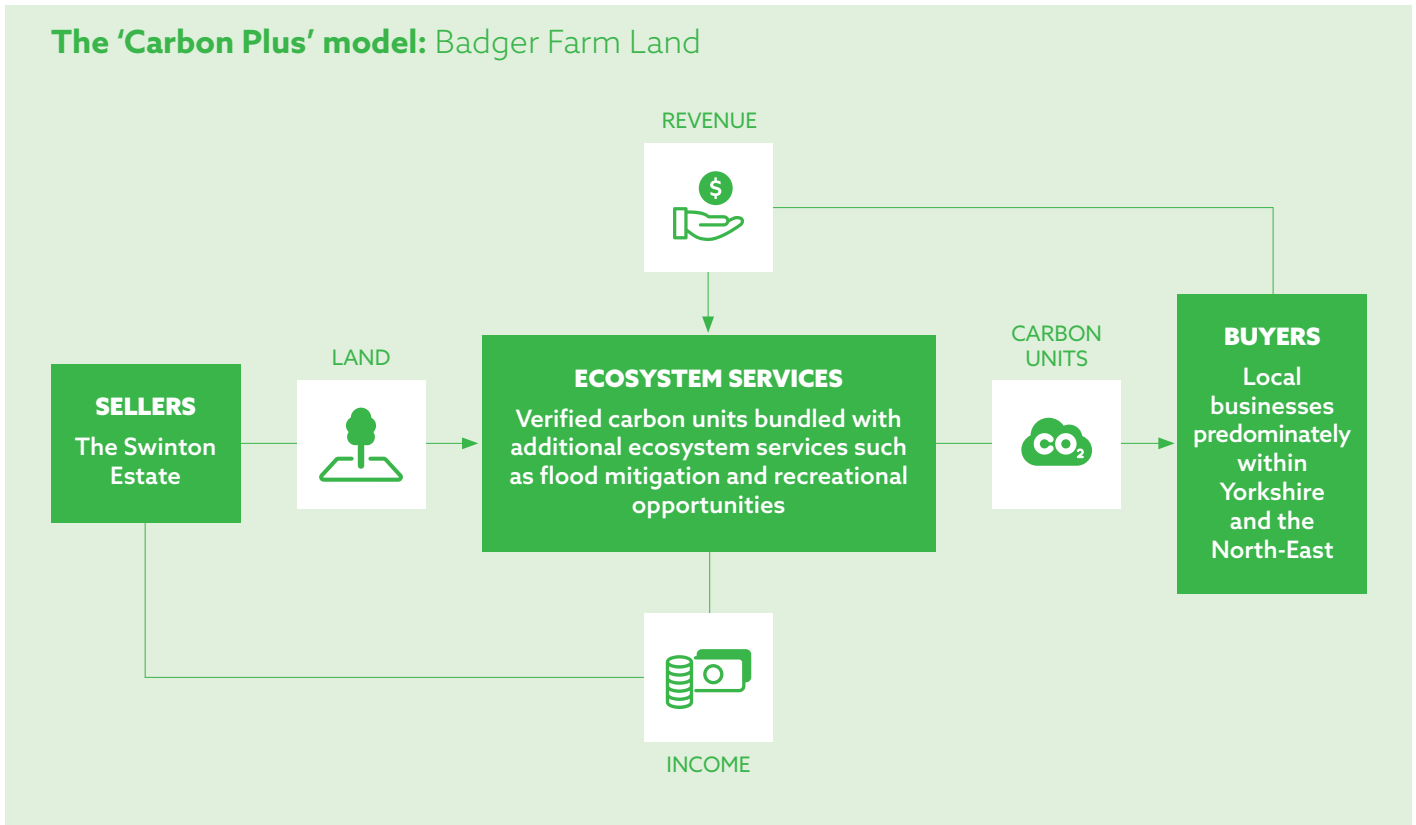
GSC Grays, a rural land and property specialist, was contracted to help produce the business case by identifying planting areas using a scoring matrix based on the benefits of each site and holding focus groups with local businesses, tenant farms, and others local stakeholders on their proposals. The project had initially planned to allocate 200ha of planting with the grant; however, because of the complexity of each assessment and limited carbon benefit models from wood pasture sites, two pilot sites have been selected (9.02ha combined).

## GOVERNMENT ENVIRONMENTAL GOALS

 <p><b>Thriving plants and wildlife</b></p>	<p>The project plans to increase woodland coverage on the Swinton Estate by 350ha. Additionally, the creation of the riparian woodland planned will provide <b>new habitats and enhance freshwater habitats</b>.</p>
 <p><b>Using resources from nature more sustainably and efficiently</b></p>	<p>The 'multi-functional' woodland that will be used by the project is designed to <b>optimise environmental benefits</b> alongside timber production.</p>
 <p><b>Mitigating and adapting to climate change</b></p>	<p>Increasing woodland coverage will <b>increase climate resilience and sequester carbon</b> on The Swinton Estate. Riparian woodland helps maintain temperatures in freshwater which are predicated to rise because of climate change. It also <b>reduces the risks of flooding</b> by reducing surface run off, intercepting rainwater, and acting as a drag on flood water.</p>

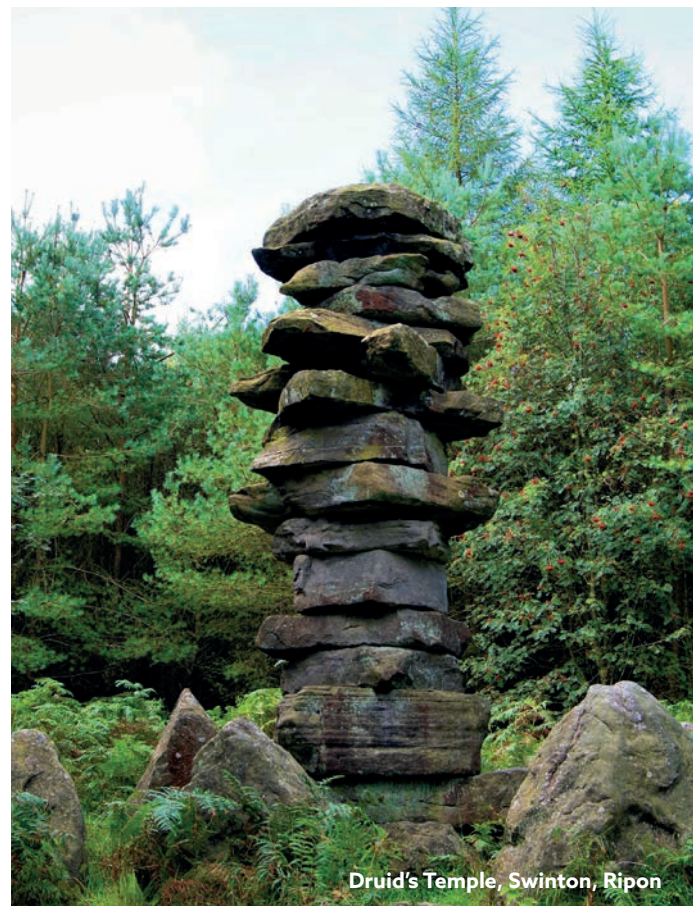
# DEVELOPING A NEW BUSINESS MODEL FOR MULTI-FUNCTIONAL FORESTRY ON THE SWINTON ESTATE

## REVENUE MODEL



The project has proposed two models which will target local business owners and organisations wanting to offset their carbon and/or contribute to wider social and environmental benefits in their local area. The first is the 'Carbon Plus' model which sells carbon units from the creation of woodland on the estate, bundled with the additional ecosystem services delivered by the woodland, such as flood mitigation or recreation. This model will be initially on a site called Badger Farm Land. The aim is to attract buyers who primarily want to offset their emissions but may also want to support wider social and environmental outcomes and feel more connected to a local project. It will likely provide additional benefits for businesses like annual reports, live updates on the project from a website or annual events at the sites which presents numerous publicity opportunities.

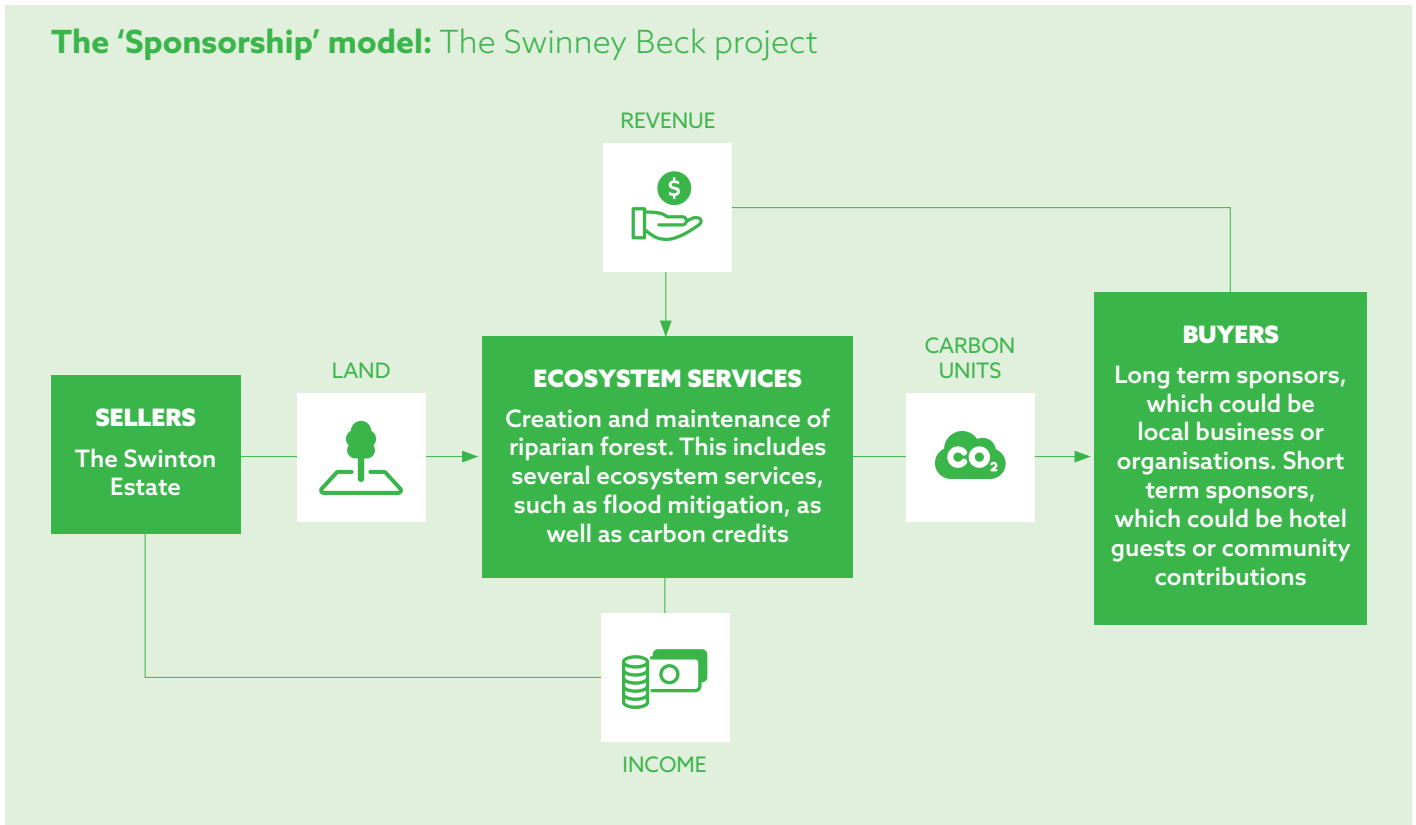
Verified carbon units will be bundled with additional ecosystem services with the aim of raising their value. The focus group suggested buyers should also receive annual reports, live updates and information through a dedicated webpage, email updates and an annual event and visit to the woodland.



# DEVELOPING A NEW BUSINESS MODEL FOR MULTI-FUNCTIONAL FORESTRY ON THE SWINTON ESTATE

## REVENUE MODEL CONTINUED

### The 'Sponsorship' model: The Swinney Beck project



The second is a 'sponsorship' model, designed for businesses who have a greater focus on aligning themselves with environmental and social benefits in their local area, rather than offsetting. Sponsors would be expected to contribute a percentage of the cost of woodland creation, in return for agreed benefits which may include recognition of sponsorship, carbon units and annual events and tours. Sponsors may also have the opportunity to exclusively sponsor one area of the estate. Initially this will be on a site called Swinney Beck Riparian Planting.

Both models are based on The Swinton Estate acting as the initial investor in the project, with the support of public funds such as England Woodland Creation Offer (EWCO) to establish the trees and market the products. Once this initial investment has been made, the two schemes will provide income to the project. The business case was reviewed by The Swinton Estate's Board of Trustees for approval in November 2022.

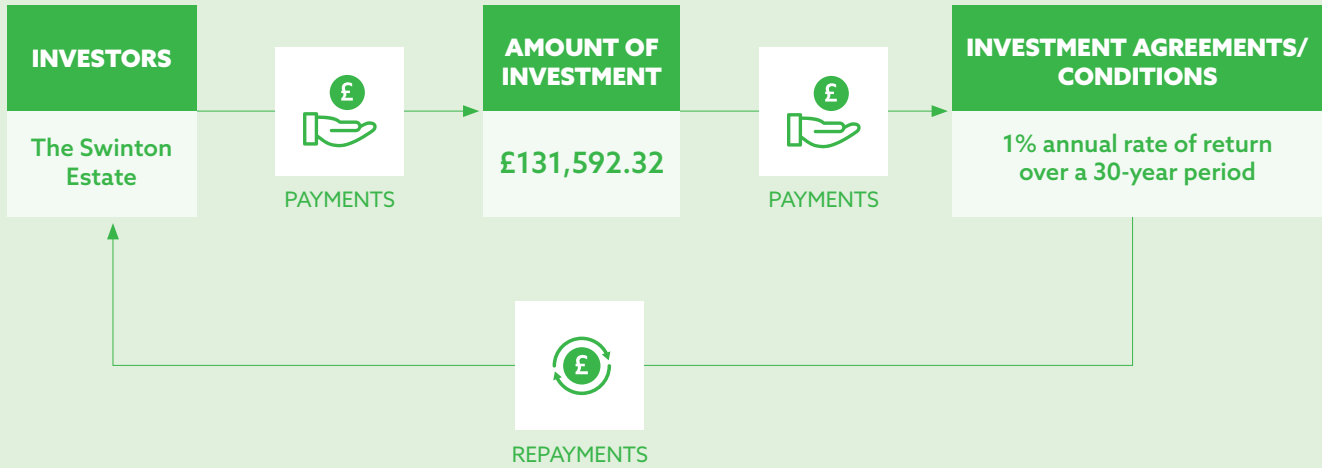
They took the decision to continue to build on the findings from the NEIRF project, and in particular to explore other ways of marketing both the Carbon Plus and Sponsorship models in order to improve the returns. The Estate has since partnered with [CSX Carbon](#) and is about to launch a first tranche of planting which is primarily focussed on riparian zones.

The Swinton Estate will allow business to 'sponsor' parts of the riparian woodland. Sponsors could be both long and short term. Sponsors will be able to contribute through the lifespan of the woodland and will have the opportunity to be involved in the process from before the planting begins. The focus group suggested sponsors should receive recognition of the sponsorship, carbon credits, live updates and information available through the website, an annual event and visit to woodland and annual reports.

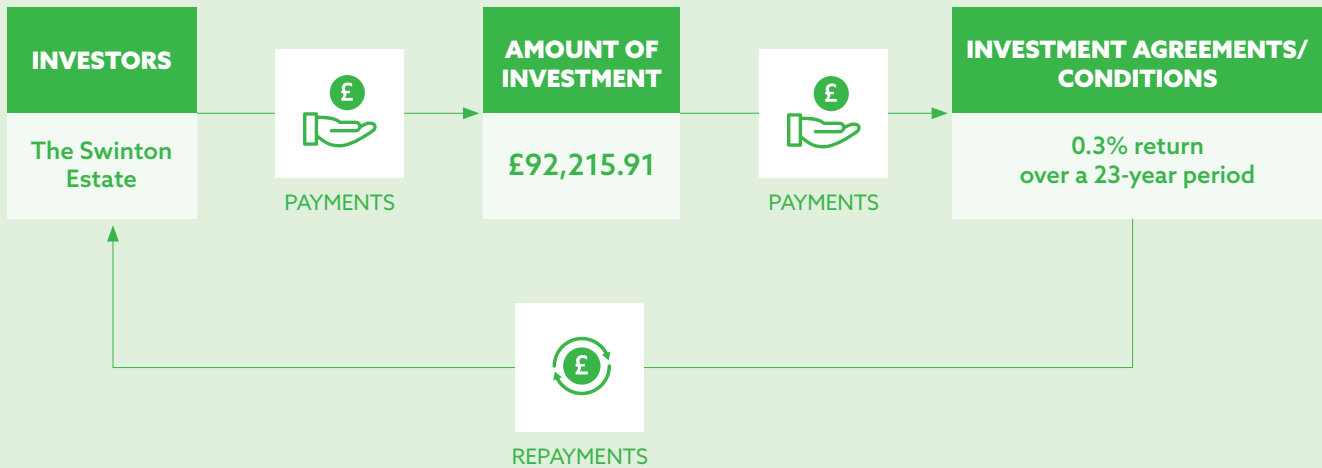
# DEVELOPING A NEW BUSINESS MODEL FOR MULTI-FUNCTIONAL FORESTRY ON THE SWINTON ESTATE

## INVESTMENT MODEL

### The 'Carbon Plus' model: Badger Farm Land



### The 'Sponsorship' model: The Swinney Beck project



The Swinton Estate will act as the primary investor, with some assistance from public grants to initially plant trees. It will then attract sponsors and market carbon units to create a return on this investment. The investment model is split into two sites currently. The first site, Swinney Beck will require investment from the Swinton Estate to become established, but

will then provide carbon credits for their Carbon Plus model. The second site, Badger Farm Land will also initially be created by an investment from the Swinton Estate but then will attract sponsorship from local businesses. They hope to raise £60,000 in year 1 of sponsorship.

# DEVELOPING A NEW BUSINESS MODEL FOR MULTI-FUNCTIONAL FORESTRY ON THE SWINTON ESTATE

## INNOVATION

The Swinton Estate business model is using a little-explored technique to add value to carbon units through reporting on the additional ecosystem benefits of forestry. Their project highlighted a current gap between the estimated value of ecosystem services to society and the realisable income that could be generated from marketing these services. The project is eventually hoping to show that the same, if not more, profit can be generated through 'multi-functional' forestry than solely timber production.

The 'Carbon Plus' model creates the opportunity for buyers to meet their carbon offsetting targets whilst gaining additional benefits through identifiable ecosystem services. Results from focus groups found that buyers would be willing to pay a higher price for this kind of carbon credit, compared to a carbon only offer.

The sponsorship model offers sponsors a more exclusive partnership opportunity, allowing businesses to demonstrate their commitment to environmental and social impacts in their local area.

## SCALABILITY AND REPLICABILITY

The business model created by The Swinton Estate could be replicated by other private landowners in England. As the project considered many different approaches and sites on the estate, the funding models have been developed so they can be targeted and tailored to different contexts. For example, the Carbon Plus model can be adjusted depending on the ecosystem services from the specific site. For example, one site might produce more recreational benefits whilst others have more benefits for flood mitigation, and these could be marketed and priced in different ways.

Whilst the model may not be profitable for investors who do not already own the land due to the low return of investment, it could be attractive for investors who want a high degree of control, exclusivity, and soft benefits for meeting their carbon or other environmental targets.



## LEARNING POINTS

- **Balancing outcomes for different environmental priorities:** more time and funding resource should be allocated to this stage for more extensive surveying and analysis to refine site selection.
- **The portfolio approach:** site selection can be refined by prioritising certain environmental outcomes, selecting a mixed variety of tree species which suit the site and considering the most suitable funding model.
- **Effectiveness of direct personal engagement:** providing participants with direct engagement with beneficiaries made them more inclined to engage with the project.
- **Valuing ecosystem services**
  - Project specific data is costly, and it can make iterative decision making difficult.
  - The benefit (and hence income generation potential) takes significant time to 'mature'.

There is a significant gap between market value and value to society (as expressed in natural capital accounting).

## WOULD YOU LIKE TO KNOW MORE?

If you would like to learn more about the development of a new business model for multi-functional forestry on the Swinton Estate, please get in touch with Laura Angel, Rural Estate Manager, [laura.angel@swintonestate.com](mailto:laura.angel@swintonestate.com) or Holly Story, Head of Environment and Sustainability at GSC Grays, [has@gscgrays.co.uk](mailto:has@gscgrays.co.uk). For questions regarding NEIRF, please contact [NEIRF@environment-agency.gov.uk](mailto:NEIRF@environment-agency.gov.uk).

This case study was produced by Ecorys.