Supporting the creation of local carbon credits

HEP Committee

25th February 2026

Winchester City Council

Contents

1. Strategic context
2. Carbon credits and markets
3. Supporting the creation of local carbon credits

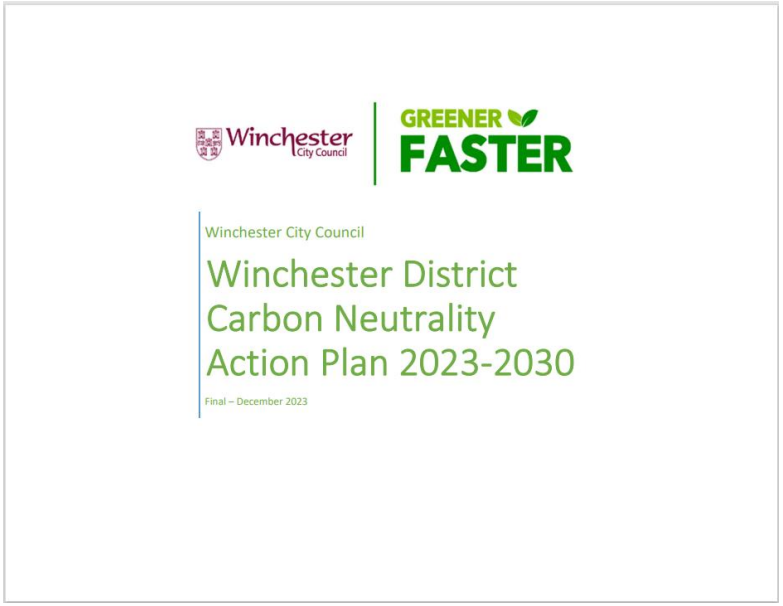
Winchester City Council

Part 1 – Strategic Context

Strategic Context

Climate Emergency

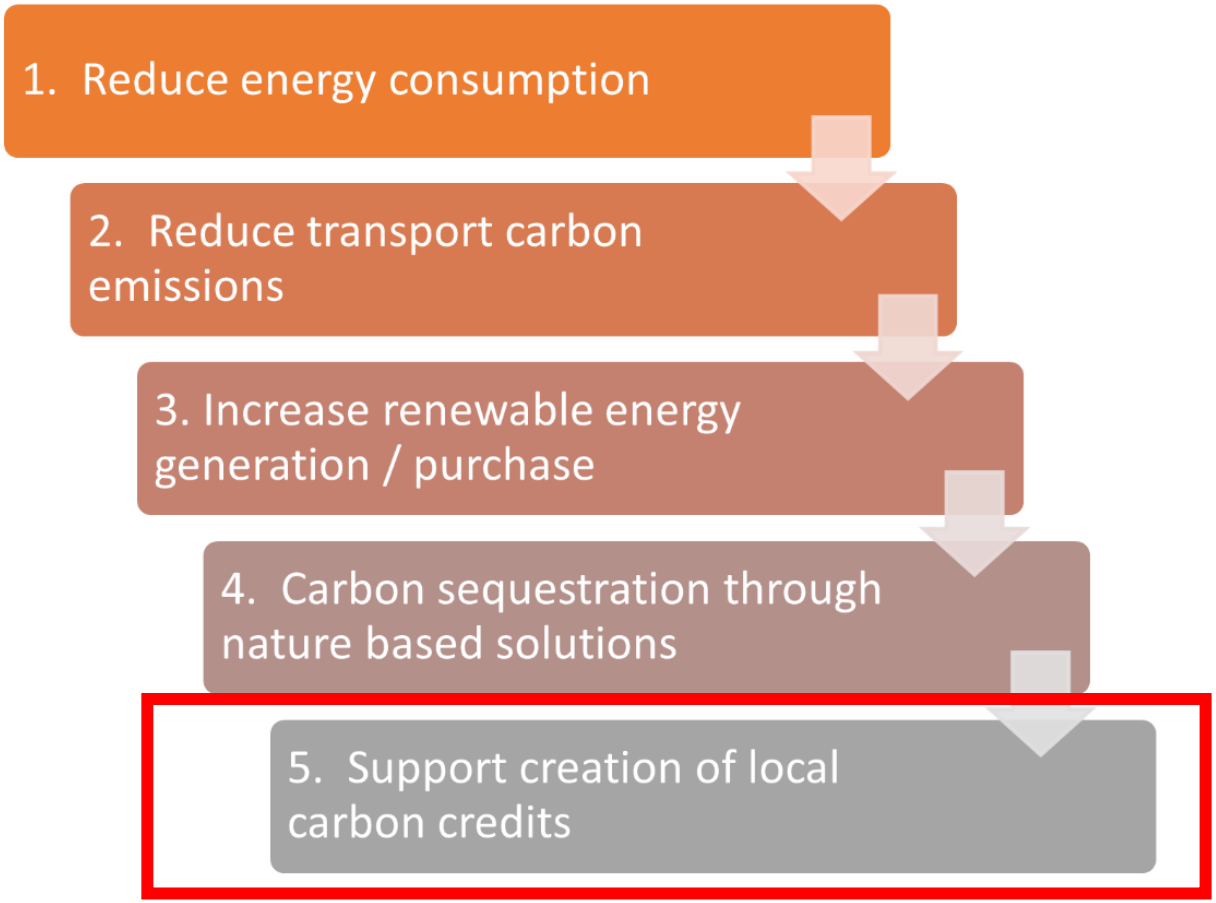
- Council declared a climate emergency in 2019
- Set ambitious target to become a carbon neutral district by 2030
- Carbon Neutrality Action Plan (CNAP) 2023-2030 sets out the key actions and activities required to achieve carbon neutral target
- Supporting the creation of local carbon credits is a key pathway within the CNAP (Pathway 5)



Winchester City Council

Strategic Context

CNAP Pathways



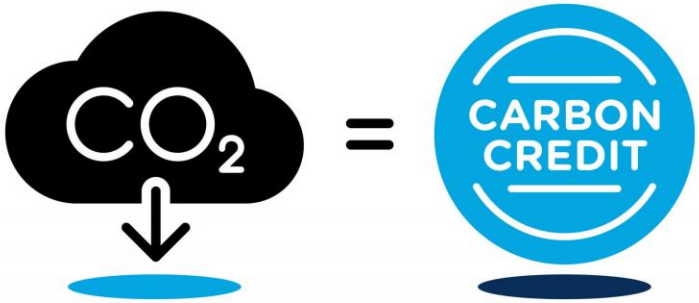
Winchester City Council

Part 2 – Carbon credits and markets

Carbon credits

Definition: *"a tradeable certificate that represents an emission reduction or removal of one metric tonne of CO2, or an equivalent amount of greenhouse gases (CO2e)"*

- Purchasers of a carbon credit can **'retire'** carbon credits on a registry to claim the underlying reduction or removal towards their own carbon reduction goals
- The buying and selling of carbon credits takes place within **carbon markets**
- Two types of carbon market – voluntary and compliance
  - **Voluntary carbon market (VCM)** - enables organisations to voluntarily purchase and sell carbon credits that represent the avoidance, reduction, or removal of GHGs from the atmosphere. Operates not because of legal obligation but as a way of demonstrating corporate social responsibility and/or making voluntary climate claims such as carbon neutrality or net zero
  - **Compliance carbon market** – mandatory, government-regulated systems, such as the UK Emissions Trading System (UK ETS), that set a cap on GHG emissions for specific industries



Winchester City Council

Carbon credit types

Carbon credits can be generated through a variety of different projects or activities – categorised into two main types:

Carbon reduction	Carbon removal

• Generated by activities that reduce or avoid greenhouse gas (GHG) emissions that otherwise would have occurred.
• This includes methods such as improving energy efficiency, increasing renewable energy generation, or preventing deforestation.
• Whilst these activities help to reduce the rate of new GHG emissions entering the atmosphere, they do not remove GHGs that are already in the atmosphere.
	• Generated by activities that remove GHGs directly from the atmosphere and store it.
	• Emissions removal methods can be divided into two sub-categories:
	  • Nature-based solutions such as afforestation, peatland restoration, and soil carbon sequestration that store the carbon in the biosphere; and
	  • Engineered solutions such as bioenergy with carbon capture and storage (BECCS), direct air carbon capture and storage (DACCS), and enhanced weathering that store the captured carbon in the geosphere.

Winchester City Council

Carbon credit types

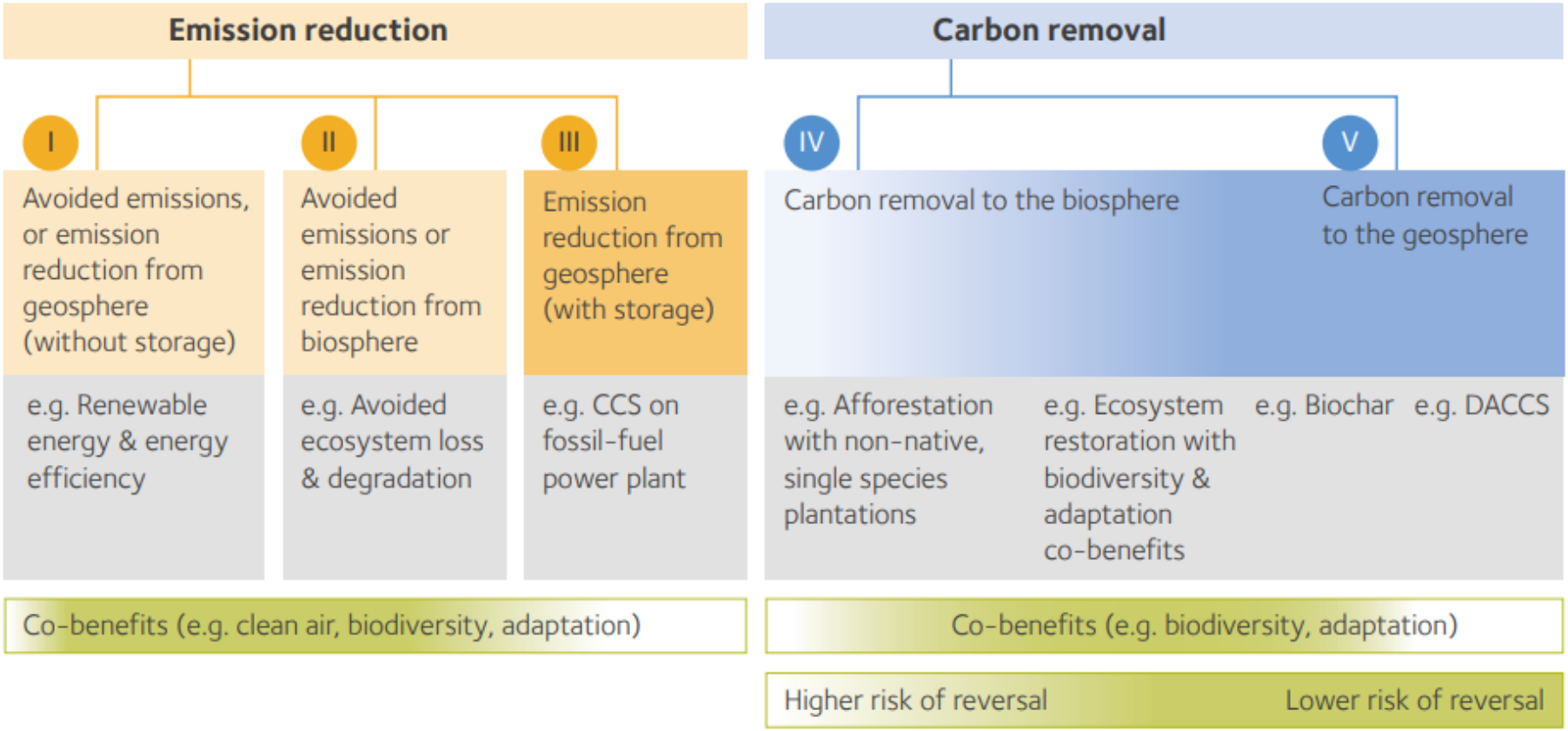
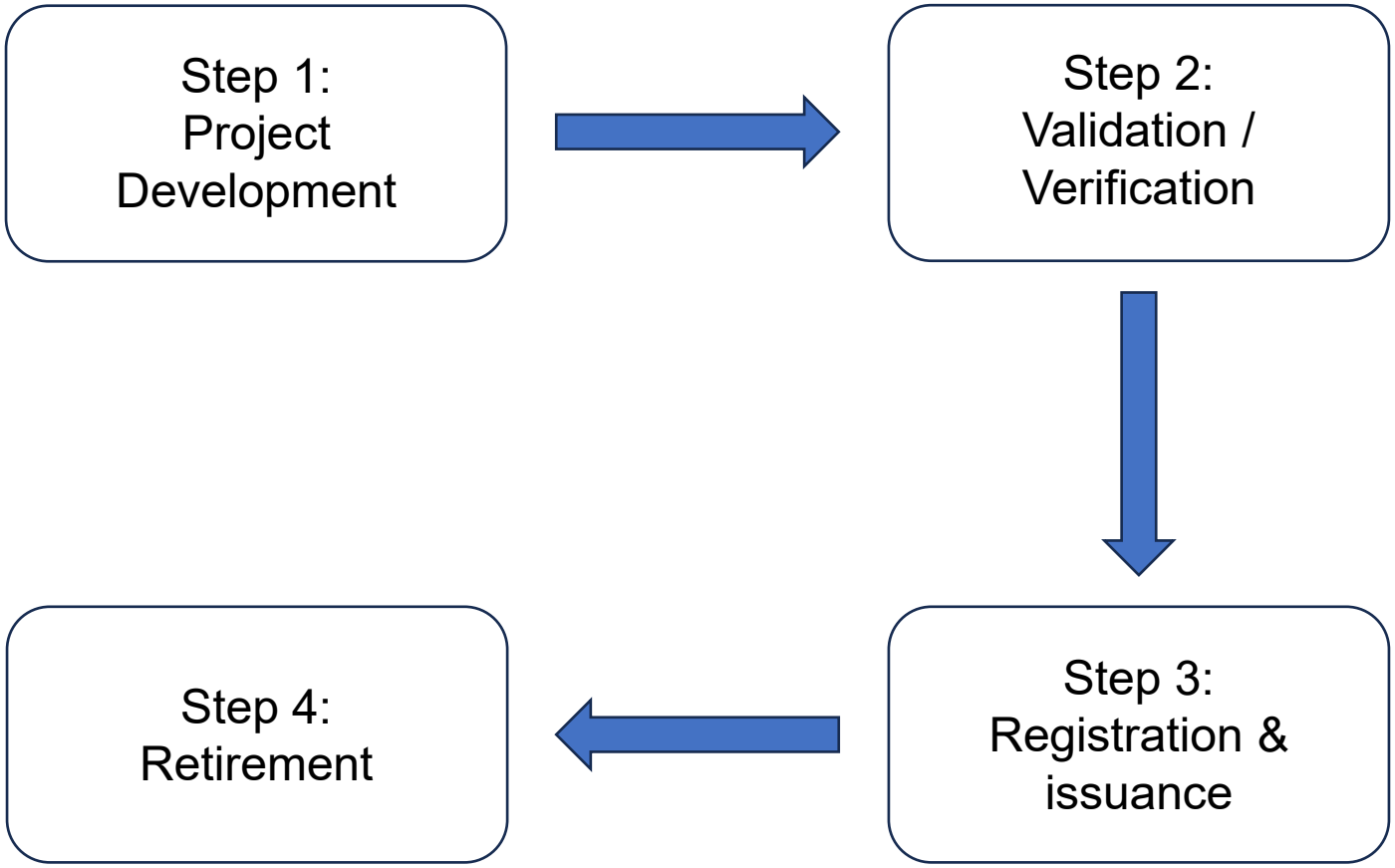


Image: [The Oxford Principles for Net Zero Aligned Carbon Offsetting (Revised 2024)]

Winchester City Council

Carbon credit lifecycle



Winchester City Council

Carbon standards/codes

Active

Woodland Carbon CO_2de®

PEATLAND CODE

Wilder Carbon
Native habitats. Natural solutions.

In development

- Seagrass Carbon Code
- Saltmarsh Carbon Code
- Soil Carbon Code

Winchester City Council

Example: Woodland Carbon Code

- The UK's voluntary carbon standard for woodland creation projects
- Provides confidence around the carbon savings that woodland projects can achieve by providing:
  - A high quality, robust voluntary carbon standard
  - A transparent UK Land Carbon Registry
  - Robust science to predict and monitor carbon sequestration
  - Independent validation and verification of projects

Project Developers	End Buyers
Project developers have recognised procedures and standards for woodland management and carbon accounting	Carbon buyers have confidence that they have invested in a responsible scheme and can see the benefits that it will provide.
Project developers can sell the carbon sequestered in their woodland through woodland carbon units	Woodland carbon units from verified WCC projects can help organisations compensate for their unavoidable emissions

Best practice

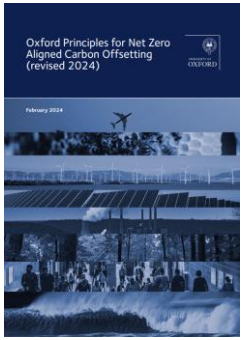
Standards and Guidance

INTEGRITY COUNCIL

UK CARBON CODE OF CONDUCT · MEASURE - REPORT - VERIFY ·

Woodland Carbon CO_2de

PEATLAND CODE



VCMI Voluntary Carbon Markets Integrity Initiative

SCIENCE BASED TARGETS

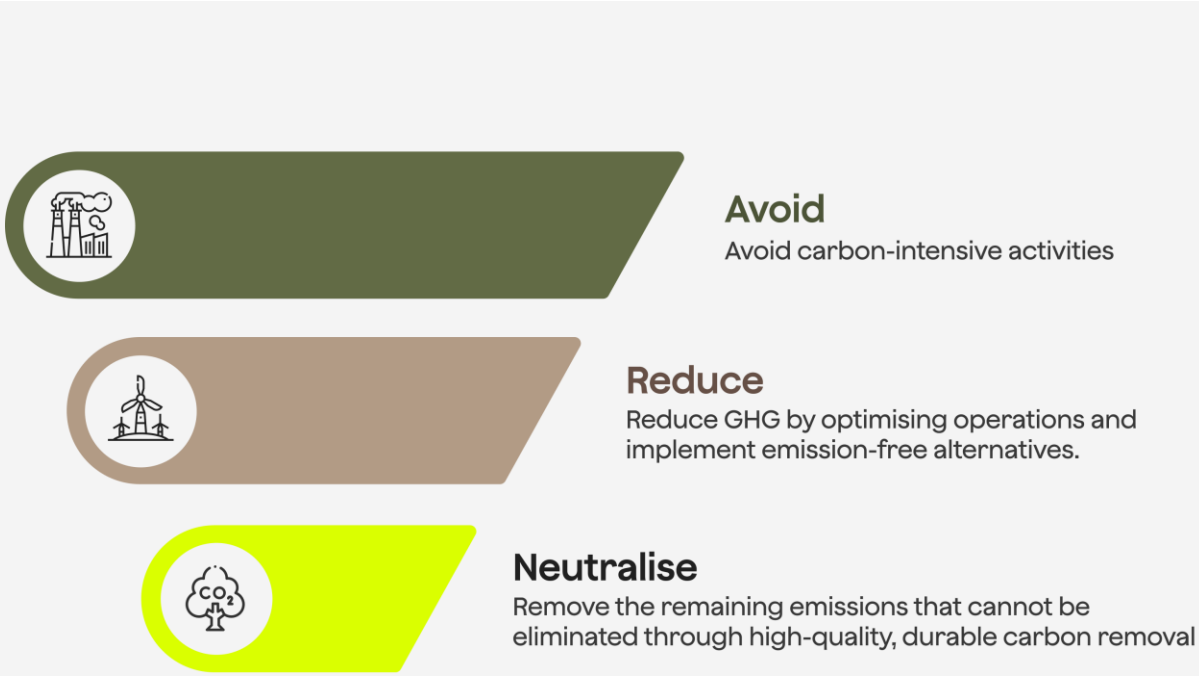
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Supply-side → Demand-side

Winchester City Council

Best practice

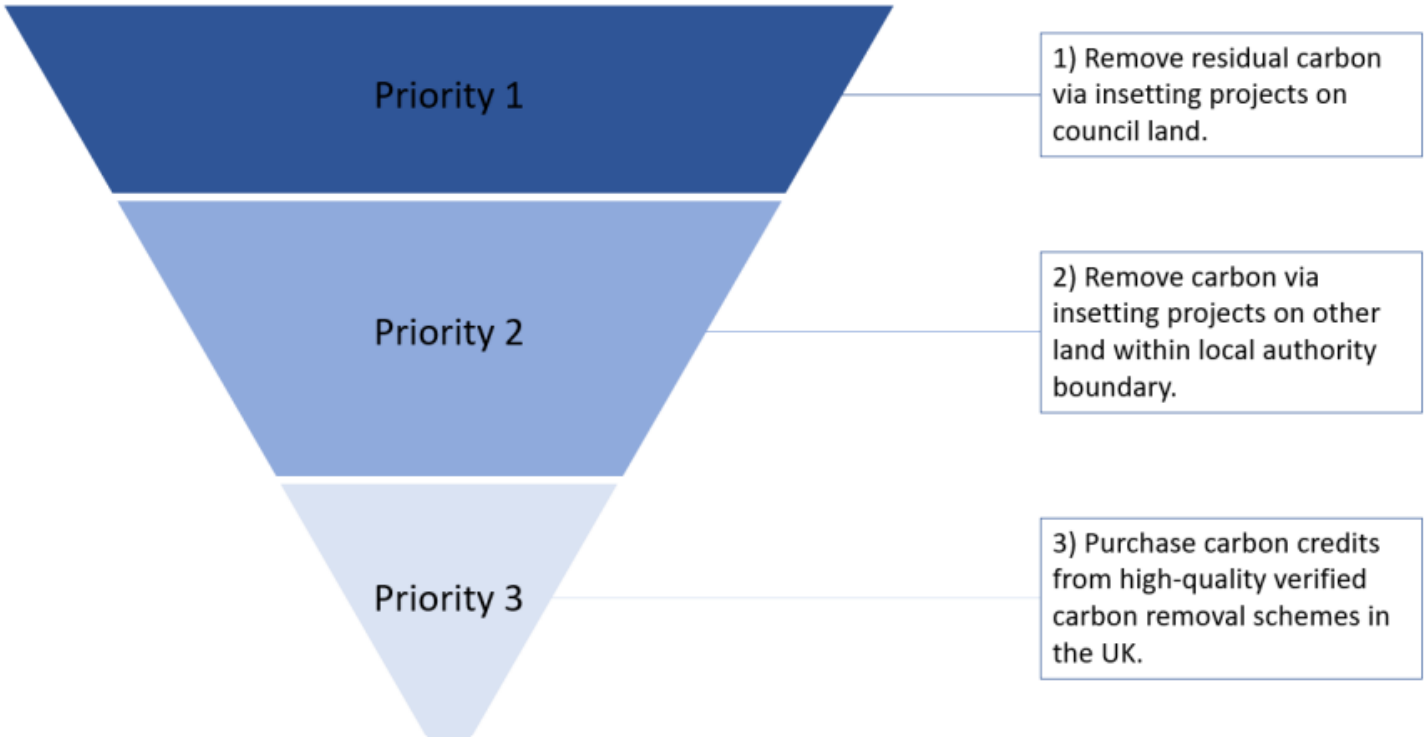
Mitigation hierarchy



Winchester City Council

Best practice

Spatial hierarchy



Winchester City Council

Best practice

WCC Offsetting Policy

Cabinet approved the WCC Carbon Offsetting Policy in January 2023 (CAB3386)

Policy sets out a hierarchical mitigation approach in line with best practice:

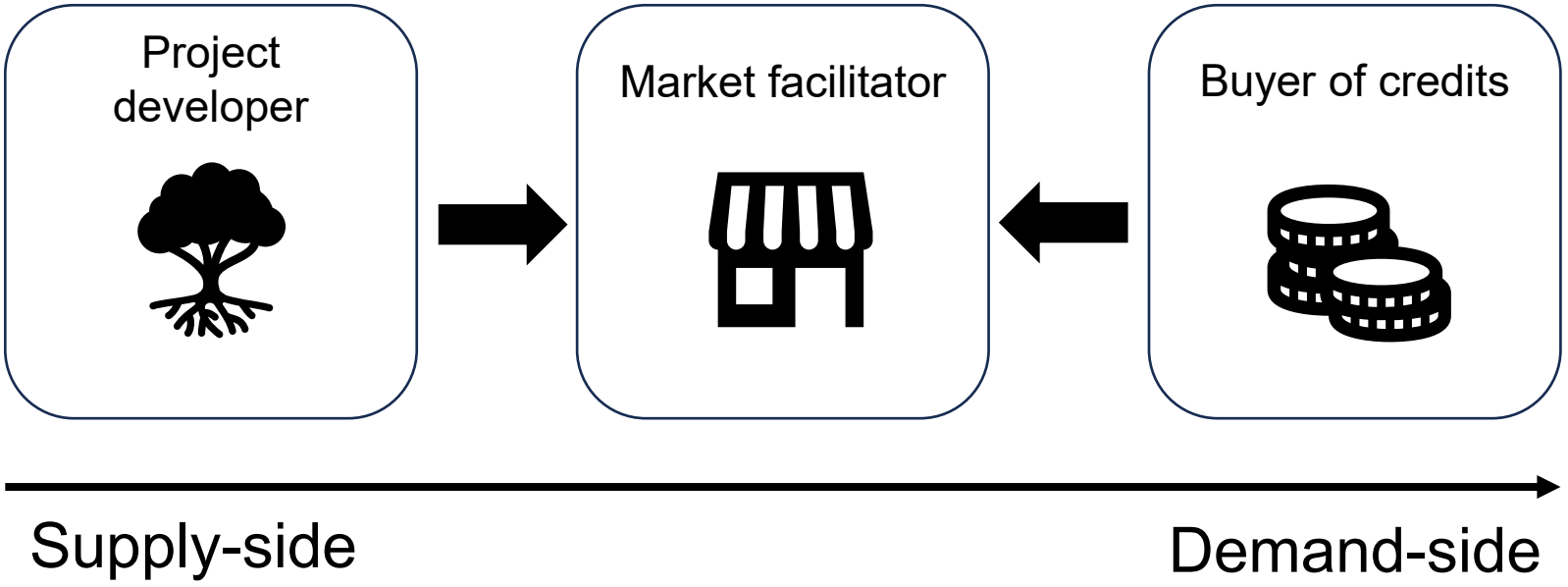
1. Prioritise carbon emission reduction
2. Invest in delivering carbon removal projects on council land to generate credits
3. Invest in third party carbon removal projects on land within the Winchester district to generate credits
4. Purchase credits from accredited nature-based projects in the UK, as a last resort

Winchester City Council

Part 3 – Supporting the creation of local carbon credits

Role of the council

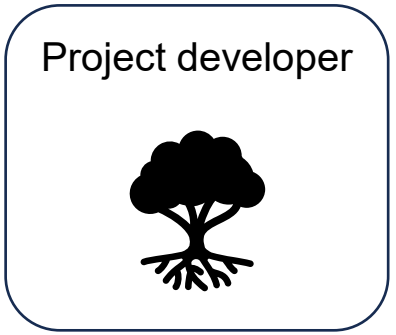
What role could the council play in supporting the creation of local carbon credits and fostering local carbon markets?



Winchester City Council

Role 1: Project developer

- Councils are increasingly using their land to generate supply of carbon credits
- Using nature-based solutions like tree planting/woodland creation and soil management (i.e., woodland carbon code)
- Some local authorities are proactively purchasing additional land specifically to deliver nature-based carbon removal projects (e.g., Devon and York)
- Projects can provide a new source of income if sold or provide source of credits to offset the council's own unavoidable residual emissions ('insetting')
- Delivery mechanisms - council can take on role of project developer or partner with third party project developers



Winchester City Council

Role 1: Project developer

Case Study: City of York Council

- Council purchased 78 hectares of former agricultural land in 2020
- Partnered with Forestry England the White Rose Forest to create and manage the woodland
- Officially opened to public in August 2024
- Over 200,000 trees planted and developed in line with Woodland Carbon Code
- Removes 18,500 tCO2e over the next 100 years
- Multiple co-benefits in addition to carbon sequestration

Winchester City Council

Role 1: Project developer

Case Study: Shropshire Council

- Approved £2 million spend on the installation of a pyrolysis unit to produce biochar and carbon credits
- Delivered via a Joint Venture with a local pyrolysis unit manufacturer (Woodtek Ltd) to develop a pyrolysis unit to remove carbon
- Estimated annual returns for council from sale of biochar and carbon credits are £115,000 per annum
- Carbon sequestration of 1600 tCO2e per annum
- Initially trading carbon credits to pay off £2m commercial loan, but intend to use to offset emissions in the future

Winchester City Council

Role 1: Project developer

Winchester City Council approach

The council is currently undertaking baselining and opportunity mapping to identify potential opportunities for nature-based projects.

- **Baselining** – mapping and assessing council-owned nature sites to determine carbon removal capability
- **Opportunity mapping** – identifying opportunities for nature-based projects on council-land and/or third-party land with the potential to achieve carbon removal
- **Detailed site assessments** – to identify the best opportunities, and to screen out unsuitable sites
- **Business case development** – baseline data, opportunity mapping and site assessments will support with identifying opportunities for capital investment in nature projects.

Aim is to develop business cases for viable sites prior to LGR – shovel-ready schemes for delivery by the new unitary council

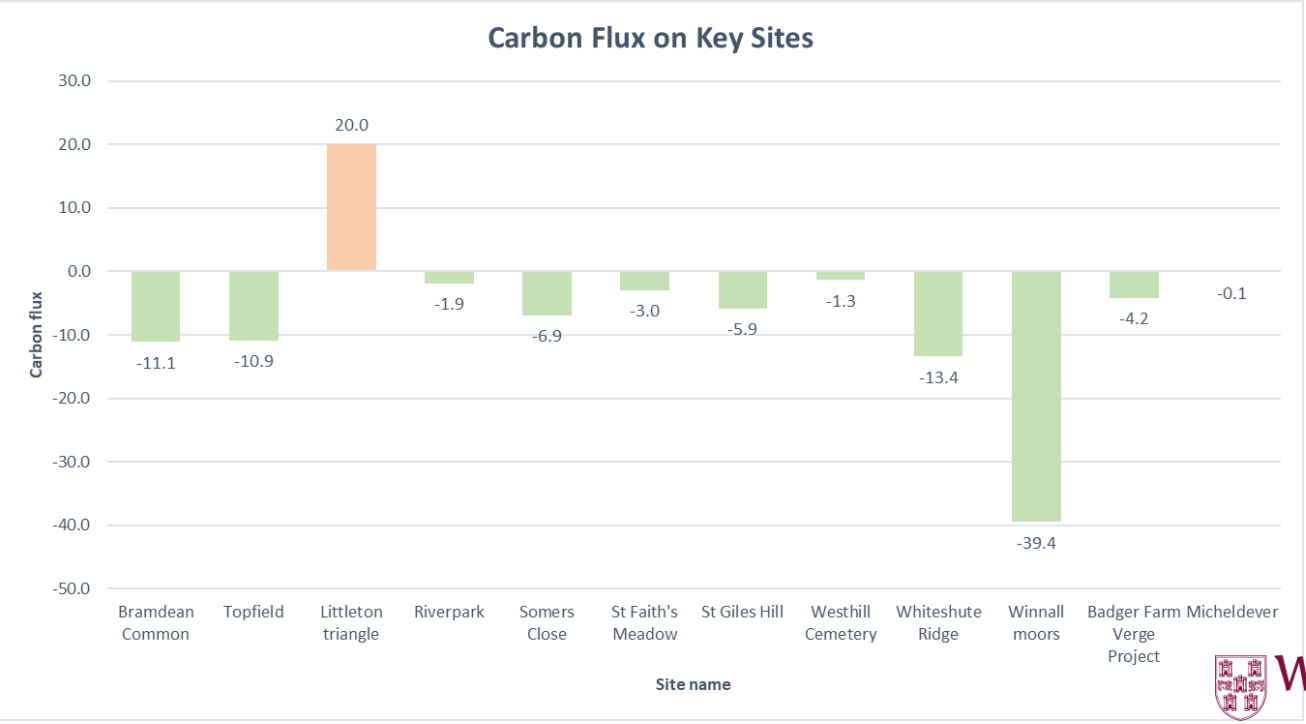
Sale of carbon credits could be used to fund the creation of additional carbon saving projects.

Winchester City Council

Role 1: Project developer

Arcadian carbon assessment

- WCC Commissioned Arcadian (HIWWT) to undertake assessment of council landholdings for carbon sequestration
- Overall carbon sequestration from WCC land is approximately 125tCOe/yr
- Further investigation of 12 key sites to better understand their current sequestration rates and the potential increase in annual carbon sequestration that could be achieved



Winchester City Council

Role 2: Market facilitator

To ensure a functioning local market and facilitate transaction of units between buyers and sellers, some local authorities have started acting as **market facilitators**

This could involve:

- Acting as matchmaker for carbon project developers and project funders seeking to voluntarily offset their residual emissions or meet CSR goals
- Setting up local carbon market matching services/platforms whereby local authority acts as intermediary and helps structure investments and attract funding – e.g. Area Based Insetting (ABI)

Focuses investment on developing supply of carbon credits within the local authority area rather than outside the district

Winchester City Council

Role 2: Market facilitator

Winchester City Council approach

- There have been attempts by local authorities to develop and facilitate local/place-based carbon markets as an alternative to traditional voluntary carbon markets
- For example, Anthesis developed a mechanism called ‘Area-Based Insetting’ which aimed to develop a platform for local authorities to connect project developers with end buyers of credits to finance carbon reduction and removal projects within their geographic boundaries
- No solution currently exists that is sufficiently mature to facilitate a complete end-to-end transaction between project developer and funder (support for ABI has been withdrawn)
- UKSPF funding allocated to SDNP in 2023/24 to work with Revere to engage Winchester Farm Cluster to assess woodland in the district and produce a woodland plan to enable woodland creation and credit trading
- Developing bespoke market platform for trading carbon credits in the Winchester district is very resource-intensive and not considered a priority
- **Therefore, council will focus on project developer role and developing a supply of carbon credits for the district**

Winchester City Council

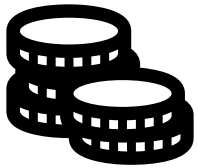
Role 3: Buyer of credits

Some local authorities purchasing carbon credits to offset their own unavoidable residual emissions within their local area.

Case Study: Devon County Council

- Identified need for offsetting via credit purchases to address residual emissions by 2030 carbon neutral target
- Attempted to purchase carbon credits from certified schemes on the open market via a RFQ – unsuccessful
- Purchased woodland carbon credits from The Woodland Trust and the North Devon Biosphere Foundation's Natural Capital Marketplace
- Purchased credits more recently from regenerative farming projects certified to the UK Code of Carbon Conduct (UKCCC)

Buyer of credits



Winchester City Council

Role 3: Buyer of credits

Winchester City Council approach

Council's approach to buying credits is set out within the WCC Carbon Offsetting Policy

Policy sets out a hierarchical mitigation approach with purchasing credits as a last resort option:

1. Prioritise carbon emission reduction
2. Invest in delivering carbon removal projects on council land to generate credits
3. Invest in third party carbon removal projects on land within the Winchester district to generate credits
4. Purchase credits from accredited nature-based projects in the UK, as a last resort

Winchester City Council

Local carbon credits

Summary

- Council recognises the value of local carbon credits as a mechanism to finance carbon reduction and removal projects within the district and achieve carbon neutral target (see CNAP Pathway 5)
- Council can play a range of roles to support the creation of local carbon credits – i.e., project developer, market facilitator, buyer of credits
- Key focus is on identifying opportunities for the council to develop local nature-based projects to generate a source of carbon credits and enhance the natural environment
- Aim to identify project opportunities and develop business cases for viable sites prior to LGR – shovel-ready schemes for delivery by the new unitary council
- Council's approach is informed by best practice and agreed within the WCC Carbon Offsetting Policy

Winchester City Council

HEP is asked:

How can we best engage with Parish Councils to explore potential opportunities in their areas?

Winchester City Council