



MALTKILN Climate Strategy Overview

Caddick.



Introduction

This document provides an overview of the climate change strategies for Maltkiln New Settlement. It should be read alongside the Masterplan Framework Document (Stantec, 2025), which sets out the framework to guide detailed masterplanning and planning applications. The Masterplan Framework Document includes guidance on all aspects of design to ensure a high-quality development and incorporates sustainability considerations, including measures that address climate change.

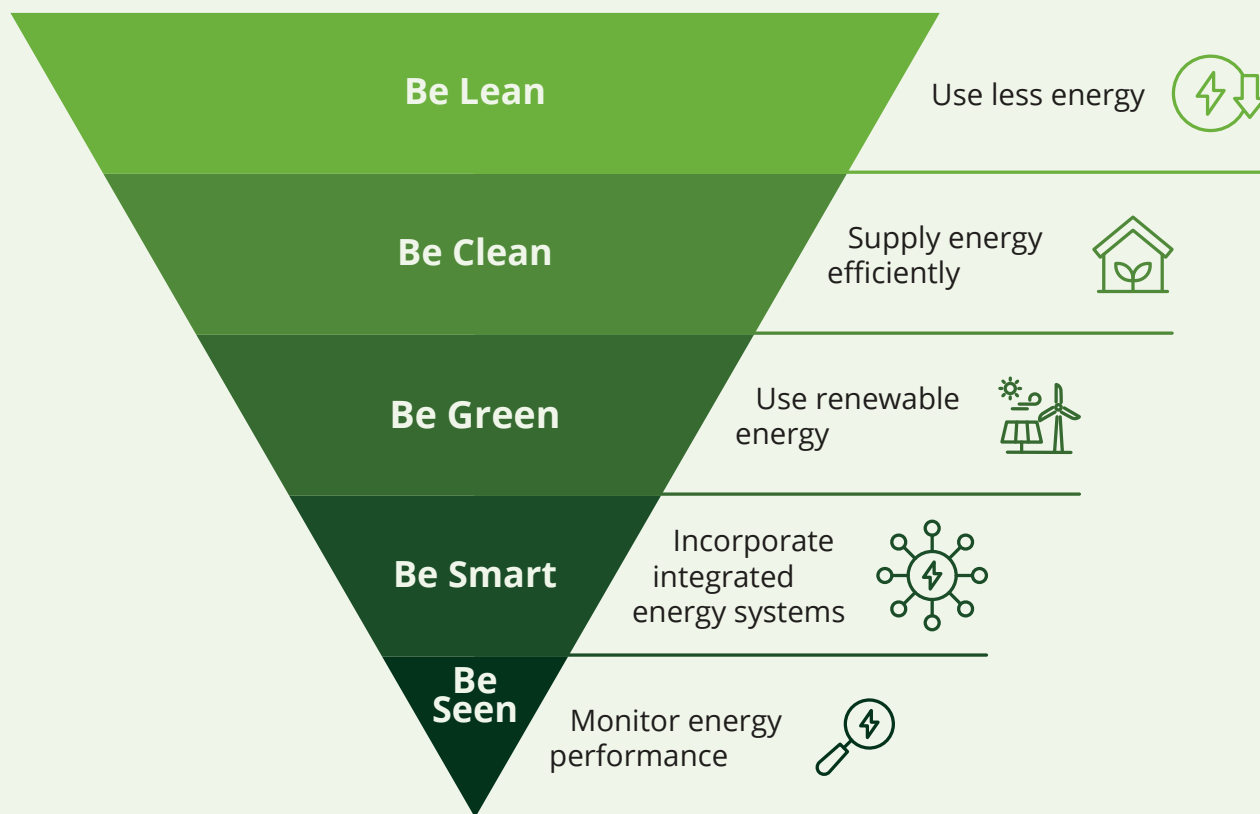
Policy Context

The New Settlement (Maltkiln) Development Plan Document (Draft, August 2025) includes policies relating to climate change, which seek to achieve the “delivery of net zero carbon by 2038 and a climate resilient place”. These policies address climate impacts from transport, energy supply and demand, embodied carbon, and climate resilience. They also cover technology to enable a smart settlement and support flexible, inclusive living and working. The following sections summarise the masterplan principles that will inform future design development and planning applications.





Energy and Carbon



Energy Supply and Demand

Design will follow the principles of the Energy Hierarchy (to the left).



Dwellings will be designed to minimise energy consumption through an efficient building fabric.



Energy will be supplied efficiently via decentralised systems, which could be achieved through a district heat network with community heat hubs to provide space heating and domestic hot water. Solar photovoltaic (PV) panels can offer secondary energy generation where required, primarily on south-east, south or south-west facing roof spaces.



Low and renewable sources will provide on-site energy generation, such as Solar PV panels.



Energy systems will integrate with other on-site infrastructure, including EV charging and telecoms, to manage peak demand.



Peak energy demand will be controlled through smart heating controls and metering.



Construction quality will be assessed, with 'as built' performance assessments to demonstrate achievement of expected design performance.



Post-occupancy monitoring will be undertaken to assess a sample of dwellings and other buildings to report on performance relating to energy, carbon, indoor air quality and overheating.





Dwellings will exceed Part L 2021 requirements through improved fabric performance (reducing energy demand) and the use of low and zero-carbon technologies for efficient, clean energy supply.



The Future Homes Standard is expected to be introduced in early 2026, and dwellings will comply with the latest regulatory standards as relevant at the time of application.

Embodied Carbon and Circular Economy



Design measures will minimise material use, maximise reuse and recycling, and design for longevity and adaptability.



Resources will be conserved by prioritising sustainable sourcing and facilitating reuse and recycling.



Waste will be managed and monitored through Site Waste Management Plans, pre-demolition audits, and local recycling initiatives.



Buildings will be designed for disassembly, maintenance, and future flexibility.



A Whole Life Carbon Assessment will be undertaken to evaluate dwelling designs and minimise associated carbon impacts.

Travel and Transport



Design principles will prioritise walking, wheeling and cycling, as well as access to public transport, reducing the reliance on trips by private car and enabling residents to embrace 20 minute neighbourhood principles.



All homes have EV charging, with fast charging provided at the local centre.



Last mile deliveries with a distribution hub to manage associated emissions.



Efficient networks for pedestrians and cyclists will link community facilities, including schools, shops, healthcare, and recreation.



Flexible workspaces will be provided within the local centre, offering options for local employment.

Digital Infrastructure and Smart Settlement



Where achievable, provision of high-speed fibre broadband and 5G will support remote and agile working and a reduced need to commute.

Climate Resilience



Deliver extensive green infrastructure, including open spaces, community gardens, tree planting, and ecological corridors.



Open spaces will be designed to be climate resilient, including the specification of trees and other shading measures, drought resistant planting, and water conservation measures. Provision of areas of blue infrastructure also offers a cooling effect.



Mitigate flood and overheating risks by avoiding impermeable surfaces, ensuring buildings are safe from flooding, and applying passive design principles.



Apply the cooling hierarchy to minimise overheating risk. Overheating assessments will demonstrate compliance with Building Regulations Part O.



Achieve water efficiency standards of 110 litres per person per day for all dwellings. Non-domestic buildings will meet BREEAM Excellent standards for water and energy.

Sustainable Design



Non-residential buildings will achieve a BREEAM rating of 'Excellent' in line with Local Plan policy requirements. BREEAM covers a range of topics, and key targets required by the DPD are included here.

Further Information

The Landscape section of the Masterplan Document provides information on the landform and flooding factors which have informed the masterplan development.

