

5.01 Energy and Sustainability

Sustainability Objectives

A series of commitments and goals are set out to facilitate the delivery of a well rounded sustainable development. These include:

BE LEAN: Fabric First Approach

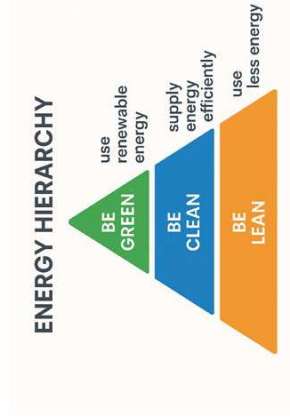
The specification of the building fabric and thermal envelope (insulation, glazing, air permeability etc.) designed to drive down heat losses from the dwellings, minimise energy consumption and reduce running costs.

BE CLEAN: High-Efficiency, all-electric

Ultra high-efficiency heating & hot water systems. Energy efficient LED lighting and appliances.

BE GREEN: Renewable Energy Generation

An energy strategy that can rely on electricity generated from low carbon sources. Air source heat pumps provide the heating and hot water requirements.



Sustainability Approach

Central to the development principles is a sustainability approach that addresses the impacts of climate change through conscious construction and design, ensuring the provision of energy-efficient homes for the future.

Some of the key design moves to achieve these objectives:

1. Retention of existing trees and hedgerow with provision of additional soft landscaping to enhance biodiversity
2. Provision of attenuation pond to support sustainable drainage strategy with BNG provision.
3. Electric vehicle charging points provided for car parking spaces to all dwellings.
4. The layout provides excellent pedestrian connectivity to Hurstpierpoint village centre and local bus services, encouraging low-carbon travel and reducing reliance on the private car.
5. Dwellings are orientated to make the best use of natural daylight and sunlight, and where possible will have roof forms angled for efficient installation of future PV panels.
6. Proposed construction should optimise the individual building forms, fabric, glazing, and structure to minimise energy consumption. This will lower U-values and provide better air tightness, ensuring that the building services systems run as efficiently as possible.
7. Enhancing the thermal performance of the building envelope will help to future-proof the structure and yield the greatest CO2 saving.
8. The development will be solely electric through the use of air source heat pumps for heating. Adding renewable technology should then yield maximum carbon reductions with lower long-term costs for home owners.



Air source heat pumps for efficient heating and cooling



Local play spaces that encourage a connection to nature



Electric Vehicle Charging Point