

GOODACRES, BARNHAM

Sustainability and Energy Statement



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Croudace
HOMES.CO.UK



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1. Introduction

A core value set out in the National Planning Policy Framework (NPPF) is achieving sustainable developments and states there should be a presumption in favour of sustainable developments.

It is a requirement of the outline planning permission that the development is to achieve a minimum of Code level 3 and that 10% of the energy supply for development will come from a decentralised and renewable or low carbon energy source.



2. Sustainable Design

Passive Solar Design

Where possible, houses have been orientated with a southern aspect which will utilise the energy from the sun and reduce the demand for non renewable energy to provide heating and lighting.

Natural Ventilation

Windows will be fitted with trickle ventilation (where necessary) in accordance with Part F of Building Regulations. Windows will also be of a size that will meet the requirement for purge ventilation contained within Part F.

Heat Loss

To eliminate heat loss, Croudace will build to a high fabric efficiency with target U-values of:-

Walls – 0.22 W/m ² k	Floor – 0.18 W/m ² k
Roof – 0.16 W/m ² k	Windows – 1.7 W/m ² k

Walls will be built with 50mm insulation within the cavity and windows will be double glazed and argon filled as a minimum. Roofs will be built with a minimum of 250mm insulation at ceiling level and floors will have 75mm rigid insulation with 30mm rigid perimeter upstands minimum.

Energy Efficient Appliances

All homes will be fitted with 'A' rated appliances.



3. On-Site Renewable/Energy Generation

It is proposed that, where required, photovoltaic (PV) panels will be fitted to the roof to contribute towards the 10% energy production if improved fabric efficiency is not able to account for the total reduction.



The Figure above illustrates the potential location of PV panels.

4. Water Resource Management

Water Saving Devices

The chart below describes the fitting options that will be taken to meet Part G of the building regulations:

Water Efficiency Measures – flows in litres	
Item	Output
W.C.	4/2.6 litre dual flush
Taps	6 litres per minute (l/m)
Shower	9 l/m restricted flow
Bath	170 litre max capacity
Kitchen Taps	6 l/m restricted flow
Washing Machine	52 litre per cycle (Normal)
Dishwasher	13 litre per cycle (Normal)

Any water-using appliances supplied such as washing machines and dishwashers will be 'A*/A=' rated according to the DEFRA labelling scheme to minimise energy and water use. These efficient appliances will also save energy.

Every house will be provided with a rain water butt to provide irrigation for gardens.

5. Biodiversity

All significant trees are to be retained and planting is to be provided around new dwellings. New planting is to be selected from native species that are to attract local wildlife and increase biodiversity within the scheme.

An ecology statement was produced in support of the outline planning permission and the recommendations contained within will be incorporated into the scheme.

6. Waste, Recycling and Composting Facilities

Designing for enhanced recycling and waste management

Where possible, pre-fabricated components will be used for the development. This is likely to be in the form of Floor joists, Roof trusses, Door Canopies and Staircases.

Careful planning will be carried out before the development commences and materials will only be ordered in the quantity required, reducing the amount of waste created during construction.

Storage and Composting Facilities

All dwellings on site will have a location within their curtilage where bins for refuse and recycling can be stored. A smaller bin will be able to be stored within the kitchen, usually under the sink.



7. Sustainable Transport

Safe and Easy Access to Public Transport

Bus stops are located within 200m from the site and the railway station is within 400m, both of which are accessible by footpath.

Cyclist Facilities

Secure cycle storage will be provided to all dwellings on the development. In most cases this will be within a garage, however for those units without a garage, storage will be in the form of a secure shed provided within the rear garden.

8. Health, Safety and Well-being

Air Pollution

The proposed development has a layout that will allow safe access to and from the surrounding area by walking, cycling and public transport and therefore reduce carbon emissions of residents. The use of renewable energy sources and high fabric efficiency will also reduce the carbon footprint of the development.

Noise Pollution

The development is unlikely to increase noise pollution within the area. A noise mitigation strategy was produced during the outline application to protect residents from noise disturbance from the railway and this is to be incorporated into the scheme.

Light Pollution

Individual lights will be fitted to dwellings with PIR to reduce energy consumption and compact fluorescent lamps will be fitted.



9. Sustainable Construction

All timber on the site will be sourced from FSC sources and materials will have a BRE green guide rating as high is feasibly possible.

All dwellings will meet a minimum of Code for Sustainable homes rating of 3.

A template Site Waste Management Plan will be produced prior to the start of the development.

