

8 November 2023

# Sustainability Statement

Planning reference

23/04057/F - 131 Highridge Road Bishopsworth Bristol BS13 8HT

## Introduction

This document is presented as part of a planning application for the specified site. It has been crafted in accordance with the guidelines from Policies BCS13 through BCS16 as outlined in the Bristol Development Framework Core Strategy (adopted in June 2011) and considers the principles set forth in the Bristol City Council Practice Note regarding Climate Change and Sustainability (published in September 2011). The proposed development is elucidated through the attached illustrations and the design and access statement.

It is pertinent to consider the guidance from paragraph 4.13.6 of the core strategy with respect to the scale of the project:

4.3.16 To ensure adherence to this policy, applicants must provide Sustainability Statements that are reflective of the size of the development alongside planning submissions. These statements are to present a holistic strategy for mitigating and adapting to climate change which encompasses not only the employment of renewable and low-carbon energy solutions (Policy BCS14) and sustainable design and construction practices (Policy BCS15) but also includes measures to manage flooding risks (Policy BCS16), as well as other climate change adaptation strategies.

Additional clarification on what constitutes 'proportionate' is available in section 2.4 of the Practice Note on Sustainability, which notes that Sustainability Statements for less extensive developments may be comparatively succinct when detailing the various sustainable measures that might be incorporated.

Given that the proposed undertakings at this location are of a lesser magnitude, it follows that the expected level of detail in the accompanying documents should be appropriately concise.

## Energy Strategy

Given the fact that the proposed development is small scale, certain sustainability measures and renewable energy technologies were deemed unfeasible. Notwithstanding this, substantial improvements are proposed to the building fabric and to the operational aspects of the proposal that will result in significant reductions in energy use and carbon emission (Relative to the existing this will reduce carbon emissions by at least 20%)

The proposed development will feature renewable energy technologies in the form of solar panels (minimum of 20% from renewable sources) together with energy efficient measures that have been incorporated into the proposals so as to achieve savings where practicable. The proposed development features the following key energy efficient design measures.

- 1) High Levels of insulation provided in the roof space, ceilings, walls and building fabric generally
- 2) electric heating and heat water or ashp provided to the dwelling.
- 3) Time and zone heating control.
- 4) 100% low energy lighting
- 5) Draft proofing
- 6) Solar panel to roof area (large area to roof)

The above measures will achieve significant reduction in energy use and carbon emissions.

### Sustainability Statement

The following provides a summary of the approach to the proposed development.

### Climate Change adaption, mitigation and energy

- 1) High levels of insulation to be provided throughout the fabric of the building.
- 2) Attention given to minimise (where possible and practicable) thermal bridging and air leakage.

- 3) 100% of new internal fixed lighting and external lighting to be dedicated low-energy.
- 4) Min 31% less co2 emissions to comply with revised building regulations
- 5) Electric car charging point

## Materials

- 1) Consideration will be given to using materials and construction that have a low environmental impact.
- 2) Where possible, materials will be chosen that are responsibly sourced (such as FSC timber), recycled or reclaimed.
- 3) All insulation materials will have a GWP (Global Warming Potential) of 5 or less.

## Water Use

1) Indoor use will be restricted by use of fittings with lower flow rates, dual flush toilets, and (where applicable) washing machines and dishwashers with low water usage.

## Waste

The front of the building incorporate dedicated general and recyclable materials storage in accordance with the local authority waste contractor collection requirements.

## Health and wellbeing

- 1) Rooms will have good levels of day lighting, and décor will enhance this (also reducing the need for artificial lighting)
- 2) Materials with low VOC emissions will be used.
  - 3) Improved acoustic insulation between units.

## Base Energy demand

Baseline energy demand (kwh pa) 10100 Regulated emissions (kg pa) 2290

The summary figures based on the total scheme emissions and energy use

	Energy demand (kWh h/a)	Energy saving achieved (%)	Regulated CO2 emissions (kg pa)	Saving achieved on residual CO2 emissions (%)
<b>Building Regulations Part L compliance (“Baseline” energy demand &amp; emissions)</b>	<b>10100</b>		<b>2290</b>	
<b>Proposed scheme after energy efficiency measures and CHP, (“Residual” energy demand &amp; emissions)</b>	<b>10100</b>	<b>0.0%</b>	<b>2290</b>	
<b>Proposed scheme after onsite renewables</b>	<b>9218</b>	<b>8.74%</b>	<b>1682</b>	<b>31%</b>
<b>Proposed scheme offset for financial contribution or other “allowable solution”</b>			<b>N/A</b>	<b>N/A</b>
<b>Total savings on residual emissions</b>				<b>31%</b>