



MIKE PRINGLE – DEVELOPMENT SERVICES

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Sustainability Statement

**13 Widcombe
Whitchurch
BRISTOL**

Introduction

This statement has been prepared to accompany a planning application for the above. The statement has been developed in response to Policies BCS13 to BCS16 of the Bristol Development Framework Core Strategy (adopted June 2011) and in light of the Bristol City Council Practice Note on Climate change and Sustainability (September 2011)

Details of the proposed scheme are set out in the accompanying drawings and design and access statement.

Given the small nature of the development proposed it is important to note the content of paragraph 4.13.6 of the core strategy, which states:

4.3.16 In order to demonstrate compliance with this policy, Sustainability statements proportionate to the scale of development proposed should be submitted with the planning applications.

These statements should set out a comprehensive approach to mitigating and adapting to climate change which, in addition to the use of renewable and low-carbon energy (Policy BCS14), the use of sustainable design and construction measures (Policy BCS15), and a response to the risk of flooding (Policy BCS16), should include measures to adapt to the effects of climate change.....

Further guidance on what is deemed to be `proportionate` is provided in section 2.4 of the Practice Note and Sustainability. It clearly states that `Sustainability statements for smaller scale developments can be correspondingly brief in their exploration of the different measures that could be included.

It is clear that the works proposed at this site are on small scale, and therefore the level of detail that can be expected need only be limited.

Energy Strategy

Given the fact that the proposed development is small scale, certain sustainability measures and renewable energy technologies were deemed unfeasible. Not with standing 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) Ashp for heating and heat water 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 (%)
Building Regulations Part L compliance ("Baseline" energy demand & emissions)	10100		2290	
Proposed scheme after energy efficiency measures and CHP, ("Residual" energy demand & emissions)	10100	0.0%	2290	
Proposed scheme after onsite renewables	9218	8.74%	1682	31%
Proposed scheme offset for financial contribution or other "allowable solution"			N/A	N/A
Total savings on residual emissions				31%