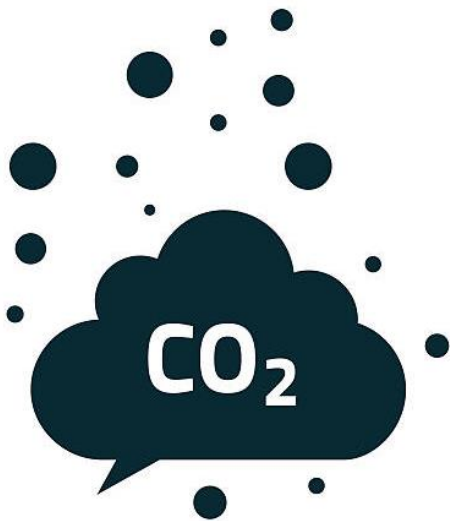


# Sustainable Construction Technical Advice Note



November 2019



## INTRODUCTION

### **1 What is this note, how can I use it and why will it help me?**

- 1.1** This note will help those applying for planning permission for single dwellings and all other types of relevant development to comply with Policy SD48 of the South Downs Local Plan, which is the National Park Authority's policy on Climate Change and Sustainable Use of Resources. Policy SD48 sets minimum energy efficiency and water use standards for residential and non-residential uses. Policy SD48 also requires development proposals to incorporate proportionate measures to address climate change adaptation and mitigation. This note explains what sustainable measures are needed for each development type to meet these requirements.
- 1.2** Associated with this document are a series of checklists which set out what an applicant is expected to provide or encouraged to consider to comply with policy SD48.
- 1.3** To make a planning application valid every applicant must submit a sustainability assessment. This needs to be proportionate to the size of the development. Single dwelling applications would only need a simple report. The sustainability assessment needs to set out how the scheme's design and specifications will meet the requirements of Policy SD48. The relevant sustainability checklist for the type of development proposed, can be used as the basis of a sustainability assessment.
- 1.4** The relevant sustainability checklist can also be used as a reference when setting out the evidence demonstrating compliance with planning conditions relating to policy SD48 if planning permission is granted for the development.
- 1.5** Table I provides a summary of what sustainable measures will be expected for each development type.
- 1.6** A Glossary provides some explanations for some of the acronyms and terms used in the document

### **2 How are the different development types defined for the purposes of this policy?**

- 2.1** Policy SD48 needs to be applied proportionately which means that some development, such as residential extensions will be exempt completely, larger residential developments will be expected to achieve higher sustainable performance than single dwellings and minor non-residential development will not be expected to meet BREEAM standards.
- 2.2** For the purposes of this Technical Advice Note the definition of 'dwellings' includes self-contained tourist accommodation.
- 2.3 Single Dwelling** development includes:
  - All new single dwelling applications.
  - A residential conversion (from a non-residential use to a single home).
- 2.4 Small Residential Development** includes:

All new developments and residential conversions of more than one home (that are not defined as 'multi-residential development' below) and less than ten homes.
- 2.5 Large Residential Development** includes:

All new developments and residential conversions of ten homes or more (that are not defined as 'multi-residential development' below).
- 2.6 Minor non-residential** development includes:

All new non-residential development which has a net gross external area above 250 sqm but below 1000 sqm of external floor space **and** on a development site below 0.5ha.

**2.7 Major non-residential** development includes:

All new non-residential development which either has a net gross external area of at least 1000 sqm **or** is on a development site of at least 0.5ha.

**2.8 Major multi-residential** development includes:

All new development which either has a net gross external area of at least 1000 sqm **or** is on a development site of at least 0.5ha **and** is 'Multi-Residential' as defined by the Building Research Establishment (BRE) which can include: student halls of residence; key worker accommodation; care homes; sheltered housing; and other multi-residential buildings that have communal areas making up more than 10% of the total net internal floor area.

**Strategic Policy SD48: Climate Change and Sustainable Use of Resources**

1. The Authority will encourage all new development to incorporate sustainable design features, as appropriate to the scale and type of development.

2. All development proposals will be required to achieve the minimum standards as set out below unless it can be demonstrated that doing so is not technically feasible or would make the scheme unviable:

Residential:

i. Energy efficiency: 19% carbon dioxide reduction improvement against Part L (2013) through the energy efficiency of the building and;

ii. Water: Total mains consumption of no more than 110 litres per person per day.

Non-Residential and Multi-Residential:

iii Major: BREEAM Excellent

3. All development proposals, including retrofitting, will be required to demonstrate, proportionately, how the development addresses climate change mitigation and adaptation through the on-site use of zero and/or low carbon technologies, sustainable design and construction, and low carbon materials.

4. Major development proposals should also include an energy assessment to demonstrate how carbon dioxide emissions are to be minimised on-site.

**3 Other Climate Change Local Plan Policies****3.1** Climate change mitigation measures are also required for the delivery of the following SDNP local plan policies:

SD2.1e (Ecosystem Services)

SD3.3 (Major Development)

SD22.2 (Parking Provision)

**3.2** Adaptation to climate change measures are also required for the delivery of the following SDNP local plan policies:

SD2.1e (Ecosystem Services)

SD3.3 (Major Development)

SD4.1d and SD4.4 (Landscape Character)

SD5e (Design)

SD9 (Biodiversity)

SD45 (Green Infrastructure)

SD49 (Flood Risk Management)

SD50 (Sustainable Drainage Systems)

Local Plan Policy	Sustainability issue	Development type				
		Single Dwelling (1 unit)	Small Residential Development (2-9 units)	Large Residential Development (10 homes and above)	Minor Non-Residential Development (250m <sup>2</sup> ≤ 1000m <sup>2</sup> & < 0.5ha)	Major Non- & Multi-Residential Development (>1000m <sup>2</sup> & >0.5ha)
<b>Climate Change Mitigation</b>						
SD48.2i SD48.2ii	Energy Efficiency CO <sub>2</sub> reductions	19%	19%	19%	10%	BREEAM NC excellent
SD48.3	On-site Green Energy CO <sub>2</sub> reductions	10%	20%	20%	10%	20%
SD48.3	Passive Design	Passive House principles encouraged	Passive House encouraged	Passive House principles encouraged, 5% of units and at least 1 unit certified passive house	Passive House principles encouraged	Passive House principles encouraged BREEAM Ene 04 (passive design analysis) credit expected
SD22.2 SD48.3	EV Charge Points	Required	Required	Required	Encouraged	Required. At least 1 & cabling for 1 in 5 spaces
SD48.3	Waste	Recycling domestic waste kitchen bins; Compost bin	Recycling domestic waste kitchen bins; Compost bins	Recycling domestic waste kitchen bins; Compost bins SWMP	Sustainable waste measures encouraged	BREEAM NC Excellent At least 2 of the BREEAM NC Wst 01 credits SWMP
SD48.3	Materials	Use of greener materials	Use of greener materials	Use of greener materials Grown in Britain timber	Use of greener materials	BREEAM NC excellent with at least half Material credits achieved. Grown in Britain timber
<b>Adaptation to Climate Change</b>						
SD48.2ii	Water Use	No more than 110 litres	No more than 110 litres	No more than 110 litres	Water efficient measures	BREEAM NC excellent
SD48.3 SD2 SD4.1d SD4.4 SD5e SD9 SD45 SD49 SD50	Adaptation to Climate Change	Landscape Water use	Multi-functional SuDS; Green Roofs encouraged; Tree cover retained and enhanced; Low water Landscape Design.	Multi-functional SuDS; Tree cover retained and enhanced; Low water Landscape Design. 10% Green Roofs	SuDS	Multi-functional SuDS; Tree cover retained and enhanced; Low water Landscape Design. 10% Green Roofs BREEAM NC: At least 1 flood resilience and 2 SuDS Pol 03 credits; Wst 05 credit

Table 1: Summary of Sustainable Construction Requirements for Each Development Type

## **GLOSSARY**

### **BRE**

The Building Research Establishment (BRE) is a multi-disciplinary, building science centre which is focused on how to improve buildings and infrastructure, through research and knowledge generation. The BRE is the owner of the BREEAM assessment method.

### **BREEAM NC**

The Building Research Establishment Environmental Assessment Method (BREEAM) New Construction is an assessment method covering a wide range of sustainable performance issues in new development, namely: Management, Health and Wellbeing, Energy, Transport, Water, Materials, Land Use and Ecology and Pollution. There are different standards relating to the percentage of points achieved, namely Pass (30%), Good (45%), Very Good (55%), Excellent (70%) and Outstanding (85%).

### **DER and TER**

The Dwelling Emission Rate (DER) and the Target Emission Rate (TER) are the headline CO<sub>2</sub> figures which SAP Calculations measure. These figures will determine whether a new dwelling passes or fails on its carbon emission targets set within Part L of the building regulations.

### **EV**

Electric Vehicle

### **PASSIVE HOUSE CERTIFICATION & PHPP**

All proposed Passivhaus (or 'passive house') designs for residential or non-residential buildings must undergo energy modelling conducted via the [Passivhaus Planning Package](#) (PHPP.) Tests ensure these targets are met, completing the quality assurance process. A certificate is only issued if the exactly defined [criteria](#) have been met without exception. Learn more about the different classes & [certification process for Passivhaus buildings](#). For more general information on passive house buildings see <http://www.passivhaustrust.org.uk/>

### **SAP**

The Standard Assessment Procedure (SAP) is the methodology used by the Government to assess and compare the energy and environmental performance of dwellings in Part L of the building regulations.

### **SBEM**

Simplified Building Energy Model (SBEM) is a software tool developed by BRE that provides an analysis of a building's energy consumption. It is used for non-residential buildings like SAP is for new homes.

### **SuDS**

Sustainable Drainage Systems (SuDS) are designed to reduce the potential impact of new and existing developments with respect to surface water drainage discharges. The Authority expects there to be an emphasis on multi-functional SuDS which also have water quality, biodiversity and amenity enhancement values wherever possible.