Policy Title:

LPS10 - Climate Change, Sustainable Design and Construction

Existing Policies Which adopted Core Strategy or Policies Sites and Places (PSP) policy would eventually be replaced?	**New Policy**
Non-Strategic / Strategic	**Strategic**

Purpose

Our climate is changing, and we need to both limit this change, by reducing emissions (mitigation), and adapt to the changes to the climate that are already going to occur (adaptation and resilience).

The Council declared a Climate Emergency on 17th July 2019, which included a pledge to provide the leadership to enable South Gloucestershire to become carbon neutral by 2030, and also to enable our communities to achieve 100% clean energy across all sectors.

The risks from a changing climate are wide and include flooding, coastal change, extreme temperatures and the growth in pests and diseases new to the UK. However, there can be wider social, environmental and economic benefits from tackling climate change, for example, by providing adaptation measures such as trees that provide shading and also benefit nature.

In a context where we are proposing sustained delivery of new development, including homes to meet our needs, it is vital that new development both mitigates its contribution to the causes of climate change and is designed to be resilient to the further climate impacts that are expected over the plan period and beyond.

This policy sets the overarching context, including BREEAM, with the following policies in this plan setting out further detailed technical requirements.

Policy wording

1. **Development proposals must demonstrate how they will address both the mitigation of climate change and the adaptation to its escalating effects to support the delivery of local and national climate objectives.**

Climate mitigation, adaptation and resilience in development

2. **All development proposals must:**
    a. **Minimise heating and cooling energy demand and associated emissions of greenhouse gas emissions, using layout, orientation and built form and net zero energy (or Passivhaus equivalent) fabric efficiency standards**
    b. **Maximise on-site renewable energy generation with the objective of meeting annual energy demand**
    c. **Minimise embodied carbon and make efficient use of natural resources**
    d. **Ensure the proposal has been designed to be resilient to the effects of a changing climate**
    e. **Include measures to show how they will utilise water efficiently.**
3. **New development will be expected to demonstrate through an Energy and sustainability statement how it would incorporate these measures, including the detailed technical requirements as set out in the technical policies. These measures should be integrated into the design of new development from the outset and be considered at all stages of the design process.**

BREEAM

4. **For major non-residential development, a BREEAM assessment will be required, using the most up to date BREEAM methodology. A BREEAM 'Excellent' Rating will be required.**
5. **For residential or mixed-use development consisting of more than 100 residential units, a BREEAM Communities scoping assessment will be required to determine whether a partial or full BREEAM Communities Assessment is required. Where a full BREEAM Communities Assessment is applicable an 'Excellent' rating will be required.**

Supporting text

1. Our climate is changing, and we need to both limit this change, by reducing emissions (mitigation), and adapt to the changes to the climate that are already going to occur (adaptation and resilience).
2. By incorporating mitigation, adaptation and resilience measures into development we will reduce emissions and help to meet local and national climate change targets. This policy sets the overarching context, including BREEAM, with the following policies in this plan setting further detailed technical requirements.

Energy and sustainability statements

3. In order to demonstrate compliance with this policy, and the following policies within this plan, information proportionate to the scale of development proposed should be submitted with planning applications. For all development except householder applications an Energy and sustainability statement will be required.
4. These Energy and sustainability statements should set out a comprehensive approach to climate mitigation, adaptation and resilience covering the full range of issues set out in this policy (including water and BREEAM) and in the Energy Management in New Development; Embodied Carbon; and Climate Change Adaptation and Resilience in development proposals policies, as well as any other relevant policy. The application drawings and supporting information should show how the measures proposed form an integral part of the proposed design and should show the approach to green infrastructure.
    a. **LP24 - Energy Management in New Development policy:** This policy sets requirements for energy in new and refurbished development and sets targets for space heating and for total energy use. The policy also requires new buildings to achieve 'net zero energy' on an annual basis. A net zero energy building will generate as much energy as it uses in one year from renewable sources, such as solar photovoltaic (PV) panels, attached to the building.
    b. **LP25 - Embodied Carbon**: The policy sets targets for embodied carbon in new residential and non-residential buildings.
    c. **LP23 - Climate Change Adaptation and Resilience**: This policy requires an adaptation and resilience assessment to consider future climate hazards and risks and the incorporation of suitable adaptation and resilience measures in new development.
5. Incorporating adaptation, resilience and mitigation into development proposals will require the consideration of a wide range of wider issues. The following is intended as a (non-exhaustive) guide to further policies, when the plan was adopted, likely to also need consideration prior to undertaking an Energy and sustainability statement. These should be considered alongside any additional guidance, replacement policies or additional plan policies, as relevant.
    a. **LPS11 - Strategic Green and Blue Infrastructure and the Natural Environment policy and Green infrastructure SPD (Adopted April 2021) - Policy and SPD** which seek to ensure that green and blue infrastructure (GI) is planned, delivered, conserved and enhanced throughout the development process.

b. **LP28 - Ecology and Biodiversity Net Gain policy and Biodiversity and planning SPD** - Policy contains information on biodiversity net gain from development, with detailed information on policy, such as how ecological connectivity provides adaptation and resilience; and specific development suggestions such as the incorporation of bird boxes.

c. **PSP3 - Trees and Woodland policy and Trees and development sites SPD** (Adopted April 2021)- Currently Adopted Policy and SPD. SPD provides guidance and advice on how trees can be incorporated into new development, as well as conserving and enhancing the existing trees, hedgerows, groups and woodlands within a scheme.

d. **PSP20 - Flood Risk, Surface Water and Watercourse Management policy and Sustainable Urban Drainage SPD** - Sets out the policy development proposals should follow in relation to flood risk (including the incorporation of sustainable urban drainage systems) and land drainage and water quality. The SPD sets out more detail on incorporating SUDs in new development, including controlling run off through means such as green roofs, rainwater harvesting and permeable paving.

Water

6. Water should be conserved wherever possible, as it is a limited natural resource. Low summer rainfall and fluctuations due to greater climate instability could lead to water shortages, a decrease in water quality and impacts on the natural environment due to inflows into watercourses having less of a dilution effect on pollutants.
7. There are also emissions associated with its provision to and removal from new development and this policy aims to limit these emissions by ensuring water is conserved to an appropriate level.
8. Methods for conserving water resources may include:
    a. Reduction in water demand, for example through low water-use planting and efficient fixtures and fittings;
    b. Increased use of reclaimed and recycled water; and
    c. Use of sustainable drainage systems to collect and store water.

BREEAM

9. BREEAM is a methodology for assessing, rating and certifying the energy, climate and environmental impact and performance of buildings and other built environment projects, that has been in use since 1990. Using BREEAM to assess major projects will ensure that new development thoroughly considers the wide range of issues that constitute sustainable design and construction by applying a certified and quality assured methodology with assessments carried out by licensed assessors.

Additions	
Key evidence	
Other relevant policies to cross-reference?	LP24 - Energy Management in New Development LP25 - Embodied Carbon LP23 - Climate Change Adaptation and Resilience LPS11 - Strategic Green and Blue Infrastructure and the Natural Environment LP28 - Ecology and Biodiversity Net Gain Saved Policy PSP3 - Trees and Woodland Saved Policy PSP20 - Flood Risk, Surface Water and Watercourse Management