# Chapter 5

# **Climate Change**



## Introduction

**5.1** This chapter sets out our draft policies for mitigating and adapting to climate change and achieving net zero carbon. The policies seek to support and facilitate the Council's decarbonisation plans, address climate change impacts as well as support the Council's Climate Emergency actions. These include:

- reducing energy use (heat and power demands) in both new and existing buildings;
- reducing the embodied emissions within new and existing buildings;
- increasing the uptake of low and zero carbon technologies;
- decarbonising the transport sector;
- supporting best practice to drive sustainability through accreditation schemes; and
- considering ways to offset any remaining emissions.

**5.2** Climate Emergency priority actions include the Council's operations as well as addressing emissions across the district and addressing these as soon as possible. The operations of Wealden District Council are directly responsible for around 2% of emissions within the district. Therefore, addressing the majority of emissions in the district will rely on people and businesses to take up low carbon solutions.

**5.3** The Council is in the process of developing a new Climate Change Strategy and Action Plan and it is important for our Local Plan to align with its goals and objectives. We are therefore working with consultants to progress our climate change evidence base which will inform both the new Climate Change Strategy and Action Plan and the Local Plan polices as these progress. In progressing our climate change evidence base, we will further test the below policy approaches and our options in order to understand how we can best address climate change in the Local Plan. The evidence will be used to develop the Regulation 19 Local Plan including testing the overall viability of the plan and its policies.

## What you have previously told us

**5.4** As part of the Direction of Travel consultation you told us that it was important for the Council to be ambitious in its approach to tackling climate change but at the same time for any policies and measures put forward in the Local Plan to be balanced in terms of financial viability, design impacts and intention.

**5.5** Ensuring developments are as energy efficient as possible, and therefore contributing to reductions in greenhouse gas emissions, was supported as was the need to include sustainable design features such as grey water recycling, rain-water harvesting, permeable surfaces and tree retention/planting. You also told us that there should be a greater emphasis on alternative energy sources such as wind and solar and that the district needs far more local wind, solar and energy generation and storage solutions. Carbon sequestration was also an important factor, but it was clear that this should not be explored at the expense of pursuing net zero emissions for the district.

**5.6** You also told us that we should go further in our approach to delivering an ultra-low emissions vehicle network and electric vehicle charging infrastructure, taking more proactive steps to reduce vehicle usage other than relying on the conversion of more vehicles to electric and that encouraging active and sustainable transport within major new developments is important. It was clear from responses that growth should be focused in sustainable locations with good transport networks (rail and road) to ensure that the use of sustainable modes of travel can be achieved.

**5.7** Natural solutions to tackling climate change also came to the fore in relation to managing flood risk through SuDS, including strategic SuDS, and the expected higher temperatures through design solutions to achieve non-mechanical ventilation and heating i.e. through the orientation of buildings, the design of the public realm and green infrastructure provision. We have addressed all of these issues in our draft policies as set out below.

#### Local Plan climate change approach

**5.8** Policy SS8 (as above) sets the overarching policy direction for development within Wealden in relation to climate change. The policies provided below build on this by setting out the requirements that applicants are asked to meet to help respond to the climate emergency. The policies will ensure that new development contributes to climate change mitigation by reducing emissions through energy efficiency and the way that fossil fuels are used, as well as addressing the ways in which developments are designed, constructed and operate over their lifetime. They will also ensure that development contributes to climate change adaptation to enable our communities to continue to live and work within their environment in a way that is safe and comfortable in the face of climate change impacts.

**5.9** All developments will be expected to contribute to the mitigation of and adaptation to climate change, as relevant.

#### Net zero development

**5.10** The Climate Change Act commits the UK to reducing greenhouse gas (GHG) emissions by 100% of 1990 levels (effectively net zero) by 2050. Homes contribute significantly to overall emissions, representing 38.5% of all emissions within Wealden in 2021. Non-domestic sources (industrial and commercial) represented 10.6% of all emissions within the district<sup>28</sup>. If the built environment is to reach net zero by 2050, supporting the Government's target, the built environment will drastically need to reduce its carbon emissions.

**5.11** In general terms, there are two types of carbon emissions that relate to the built environment, operational emissions and embodied emissions. Operational emissions are associated with the energy required to run a building, such as the energy used to provide lighting, power, heating, cooling, ventilation, and water services. Embodied emissions are associated with all the non-operational aspects of a building, such as those from the extraction, manufacture and assembly of a building's materials and components, its repair, maintenance and refurbishment, and end of life activities. When considered together, operational and embodied emissions are referred to as 'whole life' carbon emissions.\_

**5.12** The introduction of the Future Homes and Building Standard (FHBS) by government in 2025 will contribute to the net zero goal by ensuring buildings produce 75-80% less carbon emissions than buildings built under the current Building Regulations. The standards will achieve this by focusing on improving heating, hot water systems and reducing heat waste and by replacing current technologies with low-carbon alternatives. Once this comes into place it is unlikely that fossil fuel boilers will meet the standards required for carbon emissions if the proposals set out in the latest Future Homes Standard consultation of 13<sup>th</sup>December 2023<sup>29</sup> are taken forward.

<sup>28 [1]</sup> Data from Table 1.1 Local Authority territorial greenhouse gas emissions estimates 2005-2021 (ktCO2e) – Full dataset. Available at: www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-2021 Published June 2023, Last update July 2023.

<sup>29</sup> The Future Homes and Buildings Standards: 2023 consultation. Available at: <u>https://www.gov.uk/government/consultations/the-future-homes-and-buildings-standards-2023-consultation/the-future-homes-and-buildings-standards-2023-consultation</u>

**5.13** To help facilitate the transition to the FHBS, an interim uplift to Building Regulations came into effect in June 2022. The uplifts are designed to increase energy efficiency (Part L of the Regulations), with new homes now required to produce 31% less  $CO_2$  emissions and non-domestic buildings to produce 27% less. Part L also sets out minimum energy efficiency performance targets for buildings, airtightness requirements and improved minimum insulation standards. Part F of the Regulations introduces new standards for ventilation and Part O relates to overheating in residential building.

**5.14** However, there has been much concern and debate as to whether the current 2022 uplift in Building Regulations is enough to meet the Government's net zero ambitions by 2050. In addition, there is still some uncertainty on how carbon reduction will be enacted via the FHBS.

**5.15** Connected to improving the energy efficiency of buildings, the 'performance gap' is a well-known issue within the built environment industry but one that will continue to hinder efforts to reach net zero if not addressed. Studies<sup>30</sup> have highlighted the true extent of the performance gap, showing that the energy consumption of a building once in use can be 5 to 10 times higher than calculations made at the design stage. To meet Building Regulations, there has long been a 'design for compliance' culture in the UK rather than a 'design for performance' approach, however that is changing.

**5.16** Given the Council's ambitions to be a net zero carbon district as soon as possible, alongside the current uncertainty around the FHBS carbon reduction target approach, the Local Plan seeks to set ambitious net-zero carbon standards for new development. This approach is in line with the Planning and Energy Act 2008 which allows local authorities to set local energy efficiency standards that go beyond the minimum standards provided by the Building Regulations, and was confirmed by the government in its consultation response to the FHBS in 2021.

**5.17** The standards set out in the policy will manage operational energy performance though the energy hierarchy, prioritising carbon savings from optimal fabric efficiency standards, followed by renewable heat supply and on-site renewable energy. The energy hierarchy is more technically robust and designed to lead to better building outcomes through an improved focus on building fabric and the ability to monitor performance, to address the performance gap issue.

<sup>30</sup> Performance gap between building design and operation - Designing Buildings. Available at: www.designingbuildings.co.uk/wiki/Performance\_gap\_between\_building\_design\_and\_operation

## Picture 3 The Energy Hierarchy



**5.18** The focus of the policy is to ensure that new developments are first and foremost as energy efficient as possible through reducing energy demand and then providing energy through renewable generation. Carbon offsetting will be considered, but as a last resort.

**5.19** It is a false economy to provide substandard development now which will only require expensive and destructive retrofitting measures later. As the Government itself stated in January 2021<sup>31</sup> *"it is significantly cheaper and easier to install energy efficiency and low carbon heating measures when homes are built, rather than retrofitting them afterwards".* 

**5.20** It is recognised that embodied carbon (the carbon associated with both building materials and the construction and maintenance of a building throughout its whole lifecycle) is a significant contributor to carbon emissions. As operational emissions reduce, embodied carbon will become more significant in relation to a building's total emissions. National policy currently does not make reference to embodied carbon and there are general low levels of understanding about embodied carbon impacts from new buildings. There is unlikely to be a consistent level of understanding on how to measure whole-life carbon until 2025<sup>32</sup>.

**5.21** However, in association with the Royal Town Planning Institute's (RTPI) and the Town and Country Planning Association's (TCPA) Climate Crisis Guide<sup>33</sup>, there are a number of industry-led frameworks and guidance documents recommending that developments demonstrate actions taken to reduce embodied carbon, through whole life carbon assessment, and setting recommended targets for embodied emissions such as the UK Green Building Council's Net Zero Carbon Buildings Framework<sup>34</sup> and the LETI Climate Emergency Design Guide<sup>35</sup>.

<sup>31</sup> Future Homes Standard: Government Response, January 2021. Available at: <u>www.assets.publishing.service.gov.uk/government/</u> <u>uploads/system/uploads/attachment\_data/file/956094/G overnment\_response\_to\_Future\_Homes\_Standard\_consultation.pdf</u>

<sup>32</sup> RTPI/TCPA The Climate Crisis: A Guide for Local Authorities on Planning for Climate Change, January 2023. Box 5, page 23. Available at: <a href="https://www.rtpi.org.uk/media/14719/tcpa-rtpi-climate-guide-4th-edition.pdf">www.rtpi.org.uk/media/14719/tcpa-rtpi-climate-guide-4th-edition.pdf</a>

<sup>33</sup> UK Green Building Council. Net Zero Carbon Buildings Framework (various documents) 2023. Available at: <u>www.ukgbc.org/resources/</u> net-zero-carbon-buildings-framework/

<sup>34</sup> London Energy Transformation Initiative (LETI) Climate Emergency Design Guide, January 2020. Available at: <u>www.letiuk/cedg</u>

<sup>35</sup> UK Green Building Council, February 2021. The New Homes Policy Playbook. Available at: <u>www.ukgbc.org/resources/new-homes-policy-playbook/</u>

**5.22** The London Energy Transformation Initiative (LETI) puts forward recommended targets for Energy Use Intensity (EUI), space heating standards and embodied carbon to reduce a building / development's energy usage and hence improve its energy efficiency to reduce carbon emissions. The UK Green Building Council (UKGBC) also put forward recommended targets. Both LETI and the UKGBC show clear consensus between the various bodies as to the need to dramatically improve the energy efficiency of buildings, as well as the targets that should be set, and this is detailed within the Climate Change Background Paper.

**5.23** Policy CC1 sets out how new build residential and non-residential development within Wealden will meet the challenge of achieving net zero.

**5.24** It should be noted that similar to other recently adopted Local Plans elsewhere in the country, Policy CC1 proposes EUI and space heating targets in accordance with industry best-practice from UKGBC, RIBA, LETI, etc. However, a Ministerial <u>statement</u> <sup>36</sup> was published on 13<sup>th</sup> December 2023 which sets out that energy efficiency standards in new buildings that go beyond building regulations should be evidenced and expressed as a percentage uplift on the Target Emissions Rate. This appears to disallow separate energy-related targets. The Policy presented below is still our preferred policy approach. However, we will consider our policy approach further to inform our Regulation 19 Draft Submission Local plan taking into account our emerging climate change evidence base as well as the implications from the recent Ministerial Statement. We will consider whether we need to reframe the targets provided in Policy CC1 as supported by our climate change evidence base and other relevant studies, alongside any further information from Central Government, should this become available.

**5.25** Notwithstanding the recent Ministerial Statement publication, it is our intention to retain the level of ambition set out in Policy CC1 to ensure that the Council can meet its climate change objectives. This is also noting that there has been and is likely to continue to be a delay to the introduction of the Future Homes Standard by 2025.

# Policy CC1: Net zero Development Standards - New Build

- 1 All development proposals should embed the Energy Hierarchy within their design from the outset and consider opportunities to provide solar PV and battery storage.
- 2 Development must utilise the landform, layout, building orientation, massing and landscaping to minimise energy consumption and maximise energy efficiency measures.

Residential development

- 3 All residential development will achieve the following building performance standards for operational energy use and carbon emissions:
  - a) A Total Energy Use Intensity (TEUI) of less than, or equal to, 35kWh/m²/year;
  - b) A maximum space heating demand of 15kWh/m<sup>2</sup>per year; and.

c) All residential development is required to achieve the LETI best practice 2020 target for embodied emissions, equating to 500 kgCO<sup>2</sup>/m<sup>2</sup> upfront embodied carbon.

<sup>36</sup> www.questions-statements.parliament.uk/written-statements/detail/2023-12-13/hcws123

This requirement will increase from 2030 to the LETI best practice 2030 target for embodied emissions, equating to  $300 \text{ kgCO}^2/\text{m}^2$  upfront embodied carbon.

4 For all planning applications for residential development, applicants are required to:

a) Demonstrate how the building performance standards will be met using the energy hierarchy in the design, construction, and operational phases. This includes connecting with district heat networks, where possible/available, the installation of renewable energy technologies and the installation of low carbon technologies such as air and ground source heat pumps.

b) Clearly demonstrate that where financial viability, technical constraints (e.g. overshadowing) or other policy reasons (e.g. heritage) mean the building performance targets cannot be met, set out why they cannot be met and the degree to which they are proposed to be met.

c) Detail how any requirements for carbon offsetting are to be delivered, where this is demonstrated to be necessary.

#### Non-residential development

5 All non-residential development (including building conversions but excluding industrial units) will achieve the following building performance standards for operational emissions:

a) A Total Energy Use Intensity (TEUI) of less than, or equal to, 55kWh/m<sup>2</sup>/year. To achieve this target, it may be necessary to install rooftop and/or on-site ground solar PV systems; and

b) A maximum space heating demand of 15kWh/m2 per year.

- 6 For industrial units (including warehouses), applicants should clearly demonstrate the TEUI that is practicably achievable for Operational Energy through a feasibility statement. This should demonstrate that the best energy efficiency outcomes have been achieved to serve the proposal, by maximising opportunities for on-site solar PV systems and optimising building fabric performance, heating and ventilation (see also Policy CC3 Sustainable Design and Construction).
- 7 All non-residential development should achieve the LETI best practice 2020 target for embodied emissions, equating to 600 kgCO<sup>2</sup>/m<sup>2</sup> upfront embodied carbon. This requirement will increase from 2030 to the LETI best practice 2030 target for embodied emissions, equating to 350 kgCO<sup>2</sup>/m<sup>2</sup> upfront embodied carbon.
- 8 For all planning applications for non-residential development, applicants are required

a) Demonstrate how the building performance standards will be met using the energy hierarchy in the design, construction, and operational phases. This includes using excess heat productively on-site or as part of a district heat network, the installation of renewable energy technologies and the installation of low carbon technologies.

b) Clearly demonstrate that where financial viability, technical constraints (e.g. overshadowing) or other policy reasons (e.g. heritage) mean the building performance targets cannot be met, why they cannot be met and the degree to which they are proposed to be met.

c) Detail how any requirements for carbon offsetting are to be delivered, where this is demonstrated to be necessary.

#### All development

- 9 For developments of more than 10 dwellings or more than 1,000 sqm of non-residential floorspace, developers are required to demonstrate using a recognised methodology<sup>37</sup> the actions taken to reduce operational and embodied carbon from the land use change, construction, use of the development over its lifetime and potential decommissioning.
- 10 Where it can be clearly demonstrated that the building performance targets within this policy cannot be met, developments must, as a minimum, be designed and constructed to be 'carbon ready by design'.

The performance gap

11 Proposals for new buildings should demonstrate that they have been tested to ensure the buildings will perform as predicted.

#### Supporting text

**5.26** The Council expects all proposals to strive to achieve the space heating demand and Total Energy Use Intensity (TEUI) targets set out in Policy CC1. However, the policy provides some flexibility for instances where technical, viability or other policy reasons would hinder the ability to deliver the full requirement. Under these circumstances, applicants will need to ensure that developments are as energy efficient as possible, following the energy hierarchy, and be 'net zero carbon ready'.

**5.27** Being 'net zero carbon ready' can include, for example, ensuring a buildings heating network will be able to accommodate lower flow temperatures associated with air/ground source heat pumps and ensuring that a building is highly insulated. It is only then that any carbon offsetting measures will be considered. In all such cases, applications must clearly explain and justify the degree to which the energy standards will be met and, if necessary, the reason the full requirement cannot be achieved.

**5.28** To meet the energy hierarchy, development should (in order of importance):

- 1 Minimise energy demand (using less energy and managing energy demand during construction and operation);
- 2 Maximise energy efficiency (include measures in the development to use energy efficiently);
- 3 Utilise renewable energy (maximise the use of building mounted and local sources of renewable energy);
- 4 Utilise low carbon energy (where renewable energy is not an option);
- 5 Utilise other energy sources (where low carbon and renewable energy is not an option);
- 6 Compensate for, or deliver carbon removal measures to address, residual carbon emissions on-site; and
- 7 Compensate for, or deliver carbon removal measures to address, residual carbon emissions off-site

<sup>37</sup> Currently the RICS Whole Life Carbon Assessment for the Built Environment Professional Statement 2017 but other methodologies will emerge and develop over time

**5.29** The Council recognises that whilst the design and building of ultra-low energy development is happening in the UK the local supply chains and expertise may take time to mature before the industry is capable of delivering all development at net zero using design for performance approaches. Therefore, the expectation is that developers strive to meet the requirements that the Energy Use Intensities requested by Policy CC1 seek and any compensation occurs through the delivery of renewable energy provision.

**5.30** The types of renewable/low carbon energy generation technologies will be dependent on the development proposal. However, any proposed technologies must be robustly justified.

**5.31** Development proposals must, as appropriate, demonstrate that all measures to retain and re-use existing buildings have been taken and justify any loss of existing buildings.

**5.32** The Council will encourage and support proposals for developments that seek to retain and re-purpose existing buildings within the development site, subject to meeting other relevant policies within the Local Plan where this will reduce a developments carbon embodied emissions content.

## **Question 13**

## **Consultation Questions**

- a Do you agree with draft Policy CC1 Net Zero Development Standards New Build?
- b Given the recent Ministerial Statement, how should we address net zero development standards through planning policy?
- c Should we change anything? if so, what should we change and why?
- d Have we missed anything? If so, what have we missed and how should it be included?

## **Reducing Energy Consumption in Existing Buildings**

**5.33** Whilst there is significant new development planned for Wealden, the majority of buildings that will be occupied over the coming decades are those that have already been built, when energy and performance standards were much lower than they are now. It is widely accepted that retrofitting existing buildings to reduce energy consumption is critical if we are to achieve net zero, however, the planning system has little influence over existing, energy-inefficient buildings or development that does not require planning permission (i.e., permitted development). However, there may be opportunities to influence the energy efficiency of existing buildings where applications are made for change of use, conversions, and extensions.

**5.34** LETI's Climate Emergency Retrofit Guide shows how homes can be retrofitted to make them fit for the future and support national and local net zero targets. The guide defines energy use targets for existing homes and provides practical guidance on how to achieve them.

**5.35** Also of value is PAS 2035:2019 Retrofitting Dwellings for Improved Energy Efficiency: Specifications and Guidance. This guidance covers how to assess dwellings for retrofit, identify

improvement options, design and specify Energy Efficiency Measures (EEM) and monitor retrofit projects. Further details available at <u>www.trustmark.org.uk/ourservices/pas-2035/</u>

**5.36** Other measures that seek to try and improve the energy efficiency of existing residential properties include the Energy Performance Certificate (EPC), which is required for properties when constructed, sold or let. In addition, the Minimum Energy Efficiency Standards (MEES) Regulations require all private rented properties to achieve an EPC of E or better. Separately, the Clean Growth Strategy (2017)<sup>38</sup> has set a target for as many residential buildings as possible to achieve an EPC rating of C by 2030/35 and commits to keep energy efficiency standards under review.

**5.37** In the context of the above, Policy CC2 will assist in improving the energy efficiency of existing buildings, complementing the wider policies of this Plan which are primarily aimed at new buildings.

# Policy CC2: Reducing Energy Consumption in Existing Buildings

- 1 For development proposals on land where there are existing buildings and/or structures present, applicants must demonstrate that all possible measures have been taken to retain and reuse the existing buildings before considering demolition. This should be demonstrated through the Sustainability Statement. Where demolition is demonstrated to be necessary, developments must seek to reuse materials on site wherever possible, contributing towards the circular economy.
- 2 For all development proposals which involve the change of use, retrofit, or redevelopment of a building, or an extension to an existing building, the applicant is encouraged to consider all opportunities to improve the energy efficiency of that building (including the original building, if it is being extended).
- 3 Proposals which do consider and take forward viable opportunities to utilise existing built structures as part of a scheme will, in principle and subject to other material considerations and policies in the Development Plan, be supported. In particular, residential properties which, following an extension or conversion, will achieve an improved EPC rating overall will, in principle, be supported. To gain this in principle support, a pre-development EPC should be provided as part of the application, together with evidence as to how a completed development EPC is likely to be rated.
- 4 For any work on a residential property, the use of the PAS 2035:2019 Specifications and Guidance (or any superseding guidance) is encouraged. In addition, applicants are encouraged to use the six principles of best practice within LETI's Climate Emergency Retrofit guidance<sup>39</sup>.

#### Major development

5 Major development will be expected to achieve Excellent BREEAM Standard. Proposals for the refurbishment of 10 dwellings or more are expected to meet BREEAM Domestic Refurbishment Excellent. Where the above cannot be achieved

<sup>38</sup> UK Government. The Clean Growth Strategy (2017) Improving people's homes and reducing bills. Paragraph 1, Page 77. Available at: www.gov.uk/government/publications/clean-growth-strategy

<sup>39</sup> LETI Climate Emergency Retrofit Guide. October 2021. Available at: <u>www.leti.uk-retrofit</u>

due to economic viability the highest alternative BREEAM standard will be required to be achieved. It will be the responsibility of the applicant to demonstrate why Excellent cannot be achieved.

## Supporting text

**5.38** For the purposes of Policy CC2, the term 'retrofit' refers to the upgrading of a building to enable it to respond to the imperative of climate change as per the definition within LETI's guidance. Retrofit may involve repair, renovation, refurbishment and/or restoration of a building(s). The aim is to both mitigate against climate change and ensure the building(s) is well adapted for our changing climate.

**5.39** Particular support will be given to applications where the proposal is for refurbishment.

**5.40** Applicants should apply the following six principles set out in the LETI' Retrofit guidance to their development scheme:

- 1 Reduce energy consumption;
- 2 Prioritise occupant and building health;
- 3 Have a whole building Retrofit Plan;
- 4 Measure the performance;
- 5 Think big! ; and
- 6 Consider impact on embodied carbon.

**5.41** In terms of Principle 5, Think big, LETI states that "We are facing a climate emergency and must be zero carbon by 2050. We cannot afford to do the bare minimum. This would only result in needing to re-retrofit buildings only a few years later. We therefore need to 'think big' and be ambitious now to ensure that refurbishing buildings will avoid the need to undertake further retrofitting at a later date.

**5.42** Further advice on energy efficiency measures that may be appropriate in historic buildings and regarding the avoidance of maladaptation (i.e employing an adaptation measure that may cause harm elsewhere) can be found in Historic England's guidance document 'Energy Efficiency and Historic Buildings: How to improve energy efficiency<sup>40</sup>.

**5.43** The Government has also published its review<sup>41</sup> into the challenges households face when retrofitting in conservation areas and listed buildings. The review has set out a series of commitments to drive energy efficiency and low carbon heating improvements to listed buildings and buildings in conservation areas across England, as part of the Government's commitment to reach Net Zero by 2050. Among the commitments set out is a consultation on new national development management policy specially for historic buildings and a consultation on the greater use of Listed Building Consent Orders to support building improvements.

<sup>40</sup> Historic England, June 2018. Energy Efficiency and Historic Buildings: How to improve energy efficiency. Available at: <u>www.</u> <u>historicengland.org.uk/advice/technical-advice/retrofit-and-energy-efficiency-in-historic-buildings/</u>

<sup>41</sup> Adapting historic homes for energy efficiency: a review of barriers. 3<sup>rd</sup> January 2024. Available at: <u>www.gov.uk/government/publications/</u> adapting-historic-homes-for-energy-efficiency-a-review-of-the-barriers

## **Question 14**

## **Consultation Questions**

- a Do you agree with draft Policy CC2 Reducing Energy Consumption in Existing Buildings ?
- b Do you consider there to be any other reasonable and viable measures for improving the energy efficiency of existing buildings?
- c Should we change anything? if so, what should we change and why?
- d Have we missed anything? If so, what have we missed and how should it be included?

#### Sustainable Design and Construction

**5.44** In addition to energy efficiency considerations, we want to encourage the highest standards of sustainable design and construction in Wealden, improving the overall environmental performance of new developments; minimising their contribution to climate change; and adapting to the effects of climate change over their lifetime. Sustainable construction is about taking a 'life cycle' approach to development. This encompasses location, design, materials, construction management and the life and long-term stewardship of developments. It also includes the demolition of existing buildings as part of a development.

**5.45** The way buildings are designed and constructed will have direct and indirect impacts on the quality of our lives, our health, the amount of energy and water we use, the use of natural resources, as well as an impact on our immediate and wider natural and built environment. There are a number of measures that can be used to address sustainable design and construction including:

- Maximising opportunities presented by natural resources, such as the sun, wind, the ground and natural vegetation to address overheating and cooling. This can include the location, layout and orientation of buildings and the fabric of buildings;
- Conserving natural resources including land, water, energy and materials;
- Creating compact, mixed use and walkable neighbourhoods to minimise car use;
- Providing infrastructure to encourage the take up of electric vehicles and encourage cycling, such as cycling storage;
- Providing storage to encourage recycling;
- The provision of buildings that have a longer life and are adaptable over time to reduce the need to redevelop to suit changing lifestyles or residents requirements;
- Minimising construction and demolition waste and maximising reuse and recycling, including the reuse / repurposing of buildings;
- The selection of materials and the type of construction to minimise environmental impacts and reduce energy use;

- Maximising energy efficiency and the use of renewable energy technologies; and
- The use of landscaping, natural habitats and blue and green infrastructure to help absorb carbon dioxide.

**5.46** Some of the above measures are incorporated into other relevant policies in the Plan.

**5.47** There are various accreditation schemes for sustainable design and construction. Active House and Passivhaus<sup>42</sup> accreditation schemes can be utilised to achieve and demonstrate a developments or building's sustainable design and construction credentials.

**5.48** The Building Research Establishment's (BRE) national Home Quality Mark (HQM) for new housing, allows house builders to highlight the innovative features of their homes and differentiate themselves in the marketplace, giving consumers confidence they are choosing a well built and cost-effective home whilst the Building and Research Establishment Environmental Assessment Method (BREEAM) provides market recognition for low environmental impact non-residential buildings. BREAAM addresses a wide range of environmental issues and enables developers and designers to prove the environmental credentials of their buildings.

**5.49** Sustainable design and construction is inextricably linked to reducing emissions in both new and existing developments (see Policies CC1 and CC2) because a net zero carbon building is first and foremost an energy efficient building. In an energy efficient building, the amount of energy used for heating and cooling is minimised, as is the demand on energy supply. This can be heavily influenced by the design and construction of developments. Therefore, Policy CC3 works with, and should be implemented alongside, Policies CC1 and CC2.

**5.50** A sustainably designed and constructed development and/or building that is also resilient to flooding should also ensure that flood risk is not exacerbated elsewhere. Therefore Policy CC3 works with, and should be implemented alongside, Policy CC7.

**5.51** In relation to waste, the emerging ESCC Waste and Minerals Local Plan, currently subject to consultation on Main Modifications, requires proposals to minimise the quantities of aggregates used in construction and prioritise the use of recycled and secondary aggregate over virgin aggregate<sup>43</sup>. It supports the promotion of sustainable aggregate use policies within Local Plans.

**5.52** Policy CC3 provides a holistic route to achieving net zero development and is in line with the approach taken within national planning policy<sup>44</sup> and planning practice guidance in the National Design Guide<sup>45</sup>. The policy also asks developers to capitalise on passive design, using the location, orientation, design and fabric of a building to maximise the passive energy that can be gained from the sun. Natural approaches such as the incorporation of green infrastructure within developments are also included as these are often cost-effective measures that can provide additional benefits alongside climate adaptation and mitigation i.e., provision of outside space, improvements to people's health and wellbeing and homes for nature.

43 Policy RM0 Sustainable Use of aggregates. Available as part of the Schedule of Main Modifications <u>www.eastsussex-consult.objective.</u> <u>co.uk/kse/folder/95335</u>

44 NPPF paragraph 154 b

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<sup>42</sup> Active House focuses on providing a beneficial indoor environment for the occupant through increased daylight and climate control whereas Passivhaus focuses on achieving thermal comfort indoors by post heating or cooling of fresh air mass

<sup>45</sup> National Design Guide Resources characteristics

# Policy CC3: Sustainable Design and Construction

1 Development proposals will need to demonstrate how they have implemented the principles and requirements set out below;

a) Reuse land and buildings, wherever feasible, prioritising use of brownfield land and existing buildings.

b) Use building materials with high environmental performance ratings including high thermal performance materials for walls, floors, roofs and glazing, to minimise environmental impacts and reduce energy use.

c) Proposals should prioritise the use of locally sourced materials to minimise miles travelled and/or sustainable materials and construction techniques to minimise ecological and carbon footprints. The use of energy intensive building materials with high embodied carbon, such as concrete, should be reduced where possible.

d) Conserve natural resources including land, soil, water, energy and materials.

e) Implement measures to reduce water consumption and increase water recycling e.g. provision of water butts, greywater recycling etc.

f) Contribute to the greening of developments by incorporating green and blue infrastructure into site and building design such as green roofs and walls and using existing or creating new natural habitats where possible.

g) Use natural and permeable surfaces within developments instead of impermeable surfacing. The Council strongly encourages developments to avoid the use of artificial grass within developments.

h) Reuse and recycle materials that arise through demolition and refurbishment, including the reuse of non-contaminated excavated soil and hardcore within the site, to minimise construction waste.

i) Consider the lifecycle of the building and public spaces, including how they can be easily adapted and modified to meet changing social and economic needs and how materials can be recycled at the end of their lifetime.

2 Where possible, developments should provide any heating systems through low carbon heating technologies. Where this is not feasible, heating systems should be designed to accommodate lower flow temperatures to enable the future use of air and ground source heat pumps. Applicants will need to demonstrate their rationale for the chosen heating/cooling system.

#### Overheating and ventilation

3 Development proposals must reduce potential overheating and reliance on air conditioning systems and demonstrate this in accordance with the following cooling hierarchy:

a) Minimise internal heat generation through energy efficient design;

b) Reduce the amount of heat entering the building in summer through orientation, shading, albedo, fenestration, insulation, green roofs and walls and waterbodies;

c) Manage the heat within the building through exposed internal thermal mass and high ceilings;

- d) Passive ventilation;
- e) Mechanical ventilation; and
- f) Active cooling systems.
- 4 Developers are encouraged to use the standards from the Chartered Institute of Building Service Engineers (CIBSE) to evaluate the potential for overheating within the scheme design and demonstrate meeting these requirements.

Accreditation schemes

- 5 Proposals for non-residential development should seek to achieve a BREEAM minimum 'Excellent' rating, and where possible to achieve an 'Outstanding' rating.
- 6 Proposals for residential development, should seek to achieve a 4 Star rating under the Home Quality Mark scheme.
- 7 When seeking accreditation, development proposals should focus on maximising the achievable credits under the energy use category.

Sustainability Statement

8 For development proposals of 5 (net) dwellings or more (including flats) and all non-residential development over 500sqm gross internal floorspace, developers are required to submit a sustainability statement as part of the planning application to demonstrate compliance with this policy.

## Supporting text

**5.53** The Council will support development proposals that demonstrate their sustainability credentials through a recognised accreditation scheme such as BREEAM or Home Quality Mark.

**5.54** Unless agreed otherwise, compliance with this policy should be demonstrated via the following certificates (or future equivalent):

- 1 'Pre-assessment estimator' at application stage;
- 2 'Interim design' (HQM) or 'design stage' certificates prior to construction; and
- 3 Final certificates for all schemes six months post-completion.

**5.55** Developers implementing alternative standards should submit equivalent certificates for each of these stages.

**5.56** Policy CC3 seeks to ensure no retrofit is required later down the line to meet net zero carbon, but that where this will be needed, for the measures to be minimal in terms of scope and cost.

**5.57** The Council recommends all development proposals undertake, and submit as part of the planning application, a Chartered Institute of Building Service Engineers (CIBSE) overheating assessment to evaluate how overheating can be mitigated. In undertaking such assessments, proposals must ensure projected increases in future temperatures are taken into account to ensure that all developments provide for a suitable standard of amenity and quality of life for future occupiers.

**5.58** Developers are encouraged to use the following standards from the (CIBSE) to evaluate the potential for overheating within the scheme design:

- TM59 & TM52: Hours of Exceedance<sup>46</sup>.
- TM52: Daily Weighted Exceedance<sup>47</sup>.
- TM52: Upper Limit Temperature<sup>48</sup>.

**5.59** Where development involves work to heritage assets, or where development may have an impact on a heritage asset, applicants should refer to Historic England's guidance document 'Energy Efficiency and Historic Buildings: How to improve Energy Efficiency<sup>49</sup> and Policy HE2 within the Historic Environment chapter of the Local Plan.

**5.60** The Council acknowledges that in seeking to achieve sustainable design and construction in developments to address climate change adaptation and mitigation, this may involve the use of innovative designs and materials which could impact on the local vernacular. This will likely evolve over time and applicants should read Policy CC3 in conjunction with the Council's design policies.

## **Question 15**

## **Consultation Questions**

- a Do you with agree draft Policy CC3: Sustainable Design and Construction?
- b Should we change anything? if so, what should we change and why?
- c Have we missed anything? If so, what have we missed and how should it be included?

## Carbon sequestration.

**5.61** Carbon sequestration is the long-term removal, capture, or storage of carbon dioxide from the earth's atmosphere. It is one of many approaches that can be used to help address the climate crisis where it can prevent further emissions from contributing to the heating of the planet.

**5.62** Carbon dioxide is naturally captured from the atmosphere through biological, chemical, and physical processes. These changes can be accelerated or decelerated through changes in land use. For example, where natural habitats are lost to other uses (such as development or intensive agriculture) or degraded this can result to the direct loss of carbon stored within them. Likewise, restoring natural systems and carbon sequestration can help to reverse any damage whilst at the same time supporting and enhancing biodiversity and delivering co-benefits for climate change adaptation and soil health.

- 47 The severity of overheating within any one day. The limit is no more than 6 hours a day above the thermal comfort threshold
- 48 Sets an absolute maximum temperature for a room beyond which the level of overheating is unacceptable.

<sup>46</sup> A measure of how often the temperature exceeds a threshold comfort temperature during a typical warm season and sets a limit of 3% of occupied hours.

<sup>49</sup> Historic England. 2018. Energy Efficiency and historic buildings: How to improve Energy Efficiency. Available at: <u>www.historicengalnd.</u> org.uk/images-books/publications/eehb-how-to-improve-energy-efficiency/heag094-how-to-improve-energy-efficiency/ <u>#:~:text=This%20%27whole%20building%20approach%27%20ensures,parties%20involved%20in%20the%20process</u>

**5.63** National policy states that planning policies and decisions should recognise that some undeveloped land can act as a carbon store. Other Local Plan policies provide for the retention, protection, enhancement and creation of biodiversity within the district, including habitats, trees, woodlands and hedgerows. Therefore, carbon sequestration is considered inherent within those policies.

**5.64** The Council is progressing a Climate Change Mitigation and Adaptation Study as part of its local plan climate change evidence base. The study will provide information to help determine the most suitable and appropriate methods of, carbon sequestration within the district to assist the Council's climate change adaptation and mitigation efforts. It is envisaged that the Study will assess and make policy recommendations for nature-based solutions that can assist adaptation and mitigation through carbon offsetting, carbon storage/sequestration and adaptation to climate change risks.

**5.65** Following this work, we will consider our policy approach further to inform the next stage in the plan-making process.

**5.66** Policy CC4 sets out the Councils preferred approach to carbon sequestration, acknowledging the fact that other Plan policies will contribute positively to the process.

# Policy CC4: Carbon Sequestration

- 1 Development will be expected to protect existing carbon stores and take opportunities to provide nature-based solutions for carbon sequestration where relevant.
- 2 Development proposals will be supported in the context of carbon sequestration where:

a) Opportunities are taken to improve soil health and minimise disturbance to soils in order to protect soil biodiversity and carbon storage; and

b) There will be a significant net gain in nature-based carbon sequestration through habitat retention, protection, enhancement and/or creation.

3 Where development is proposed on land containing identified carbon stores, the applicant must consider the potential impacts of the development on the carbon store and seek to maximise opportunities to enhance its sequestration function. Applicants should submit a proportionate evaluation of the impacts and opportunities of the proposal on the identified carbon store as relevant, and in all cases an appropriate management plan must be submitted.

## Supporting text

**5.67** Policy CC4 applies to all development and should be considered and implemented alongside policies NE1; NE2; NE3; NE6; NE7 and NE9 of the Natural Environment Chapter.

**5.68** Applicants are encouraged to refer to Natural England's 'Carbon Storage and Sequestration by Habitat 2021 (NERR094)<sup>50</sup> at the earliest stages in the planning process to ensure their scheme maximises opportunities to support existing carbon stores as well as

<sup>50</sup> Natural England. April 2021. Carbon Storage and sequestration by habitat: a review of the evidence (second edition). Available at: <a href="http://www.publications.naturalengland.org.uk/publication/5419124441481216">www.publication/5419124441481216</a>

provide additional carbon sequestration through nature-based solutions where possible. The Natural England Report identifies long-term and important ecosystems (woodlands, trees and scrub, open habitats and farmland such as heathlands and semi-natural grassland, rivers, lakes and wetland habitats and marine and coastal habitats) that are important for carbon storage.

## **Question 16**

## **Consultation Questions**

- a Do you agree with draft Policy CC3 Carbon Sequestration?
- b Should we change anything? if so, what should we change and why?
- c Have we missed anything? If so, what have we missed and how should it be included?

#### Renewable and low-carbon energy

**5.69** Planning policy has a fundamental role to play in the implementation of successful and long-term sustainable energy solutions, particularly at the local level. There are many options for developing and delivering renewable energy schemes, including district heat networks, biomass fuel, on-shore and off-shore wind farms and solar photovoltaics (solar farms and building level).

**5.70** The NPPF states that the planning system should support the transition to a low-carbon future in a changing climate and that local planning authorities are expected to adopt proactive strategies to mitigate and adapt to climate change, in line with the Climate Change Act 2008.

**5.71** In planning for renewable energy, paragraphs 155 and 156 of the NPPF encourage local authorities to take a positive approach by identifying suitable areas for renewable energy generation and its supporting infrastructure, and by maximising the opportunities for community-led and decentralised energy production.

**5.72** In regard to onshore wind, paragraph 158(b), footnote 54 of the NPPF says:

"Except for applications for the repowering and life-extension of existing wind turbines, a planning application for wind energy development involving one or more turbines should not be considered acceptable unless it is in an area identified as suitable for wind energy development in the development plan or a supplementary planning document; and, following consultation, it can be demonstrated that the planning impacts identified by the affected local community have been appropriately addressed and the proposal has community support".

**5.73** Whether a proposal has the backing of the affected local community is a planning judgement for the local planning authority, and the courts have ruled that 'addressed' does not

mean 'resolved' or 'eliminated'<sup>51</sup>. It is also important to note that plans can allocate areas as suitable for wind turbines and do not have to follow the more onerous route of allocating actual sites, as is sometimes mistakenly assumed.

**5.74** National Policy Statement for Renewable Energy Infrastructure EN-3<sup>52</sup> notes the positive role that large-scale renewable projects play in the mitigation of climate change, the delivery of energy security and the urgency of meeting the national targets for renewable energy supply and emissions reductions. Increasing the proportion of renewable and low carbon energy generated is one of the ways we can contribute to the UK governments target of net zero emissions by 2050, as well as meeting our own net zero target. The Policy Statement was updated in November 2023 and will come into effect in early 2024.

**5.75** In regard to renewable and low carbon energy, the PPG makes it clear that whilst all communities have a responsibility to help increase the use and supply of green energy, this does not mean that the need for renewable energy automatically overrides environmental protections and the planning concerns of local communities. The PPG is clear that in considering locations for renewable and low carbon energy, local planning authorities need to ensure they take into account the requirements of the technology and, critically, the potential impacts on the local environment, including from cumulative impacts.

**5.76** The Council is progressing a Clean Energy Opportunities and Implications Study as part of its local plan climate change evidence base. The study will provide information to help determine the most suitable approach to, and most appropriate methods of, renewable and low carbon energy generation for the district. The study will identify areas of opportunity for the implementation of renewable and low-carbon energy schemes within the district and where opportunities may exist. The study will also assess local opportunities for renewable and decentralised energy generation, distribution and storage within the district and advise on whether local heat networks are appropriate and feasible. Following this work, we will consider our policy approach further including whether it may be appropriate to identify areas for renewable energy schemes. This further work will inform the next stage in the plan-making process.

**5.77** The Wealden Landscape Sensitivity Assessment: Renewable Energy provides an assessment of the sensitivity of the district's landscape to certain sizes of solar farms and wind turbines. This has informed our approach in Policy CC4 and will continue to inform our approach in line with the emerging climate change evidence base.

**5.78** Policy CC5 sets out our draft policy for renewable and low-carbon energy schemes. At this stage in the plan-making process we have provided a criteria-based policy to support renewable and low-carbon energy schemes. Policy CC5 will be considered further alongside our emerging evidence base.

**5.79** Policy CC5 offers flexibility to accommodate new future technologies and advancements in the design and operation of renewable schemes. This will ensure opportunities for greater carbon savings are maximised where they exist, without placing undue pressure on areas

<sup>51</sup> The Court of Appeal considered Written Ministerial Statement HCSW42 on local planning (made by the Secretary of State for Communities and Local Government on 18 Jun 2015 – https://www.parliament.uk/globalassets/documents/commons-vote-office/June-2015/18-June/ <u>1-DCLG-Planning.pdf</u>) and not the policy in the NPPF. The latter omits 'therefore', which was important to the court ('According to the Statement, a planning authority can find a proposal acceptable if they are satisfied that it has addressed the planning impacts identified by the affected local community and therefore has their backing.'). Whether the proposal has the backing of the local community now reads as a separate test and not a consequence of the assessment of impacts. See Holder, R (on the application of) v Gedling Borough Council & Ors [2018] EWCA Civ 214. <u>http://laweuro.com/?p=13384</u>

<sup>52</sup> National Policy Statement for Renewable Energy Infrastructure EN-3, July 2011 (updated 22<sup>nd</sup> November 2023). Available at: <u>www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3</u>

where savings may not be technically or financially feasible. Proposals can be judged on a case-by-case basis taking into account the characteristics of the district, landscape, heritage assets and any other relevant considerations.

## Policy CC5: Renewable and Low Carbon Energy

1 Proposals for renewable and low carbon energy-generating and distribution networks, including heat networks, will be supported in the context of sustainable development and climate change, where:

a) They will not result in significant adverse impacts on the local environment, including landscape character; the AONB; the setting of the South Downs National Park; species and habitats; amenity; agricultural land use and local heritage, that cannot be satisfactorily mitigated. This includes impacts such as noise, shadow flicker, vibration, visual impacts such as glint or glare.

b) They are supportive of land diversification and allow for the continuation of the site for some form of agricultural activity proportionate to the scale of the proposal, where the current use of the land is agricultural.

c) There are appropriate plans and a mechanism in place for the removal of the technology on cessation of generation, and restoration of the site to its original use or an acceptable alternative use.

d) They maximise the use of the available resource by deploying installations with the greatest energy output practicable, taking account of other relevant policies within the Development Plan.

e) They make use, or offer genuine potential for use, of any waste heat produced and where possible, create opportunities for co-location of energy producers with energy users, in particular heating.

- 2 Support will be given to community led energy schemes where evidence of community support can be demonstrated, with administrative and financial structures in place to deliver/manage the project and any income from it.
- 3 The Council will support district heat networks where feasible and where one exists, new development will be expected to connect to it.
- 4 The assessment of the impacts of proposals for renewable and low carbon energy schemes will need to be based on the best available evidence, including landscape capacity and sensitivity studies.

#### Energy Storage

5 There is a presumption in favour of energy storage where it meets one or more of the following:

a) It is co-located with an existing or proposed renewable energy development.

b) It can be shown that it alleviates grid constraints or contributes to meeting Wealden's renewable energy supply; and

c) It allows further renewable developments to be deployed.

## Supporting text

**5.80** Policy CC5 applies to all schemes under 50MW. Proposals over 50MW, other than for battery storage, are considered Nationally Significant Infrastructure projects (NSIPs). These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant i.e., NPPF. However, the PPG states that it is the Government's intention to amend legislation so that all onshore wind energy development is dealt with by local authorities<sup>53</sup>.

**5.81** The Policy sets no floor or cap on the scale of renewable energy targeted to be generated, preferring, instead, an approach which supports all appropriate proposals that meet the policy requirements set out as well as other relevant policies within the local plan such as those relating to landscape, heritage, the environment, biodiversity including biodiversity net gain and green infrastructure.

## **Question 17**

## **Consultation Questions**

- a Do you agree with draft Policy CC5: Renewable and Low Carbon Energy?
- b Subject to the Council's renewable energy study, would you support the identification of areas within the district for locating solar farms? Please explain your answer.
- c Should we change anything? if so, what should we change and why?
- d Have we missed anything? If so, what have we missed and how should it be included?

## Water Efficiency

**5.82** Through the Building Regulations all developments are required to achieve a mandatory water efficiency / use standard of 125 litres per person per day. The optional technical standard for housing allows local authorities to apply a more stringent standard of 110 litres per person per day as described in Part G of Schedule 1 to the Building Regulations where there is a clear local need. Wealden is identified as being within an area of serious water stress<sup>54</sup>. A higher standard is therefore justified.

**5.83** South East Water, who supply the district's drinking water, have confirmed in their Water Resources Management Plan 2020 to 2080 that climate change will increase the demand for water in the future and note the importance of resilience planning moving forward. There is

<sup>53</sup> PPG Renewable and Low Carbon Energy. August 2023. Available at: <a href="http://www.gov.uk/guidance/renewable-and-low-carbon-energy#particular-planning-considerations-for-hydropower-active-solar-technology-solar-farms-and-wind-turbines">www.gov.uk/guidance/renewable-and-low-carbon-energy#particular-planning-considerations-for-hydropower-active-solar-technology-solar-farms-and-wind-turbines</a>

<sup>54</sup> Water stressed areas – final classification 2021. July 2021. Available at: <u>www.gov.uk/government/publications/water-stressed-areas-2021-classification</u>

also the challenge to meet the water demands of both population increases and economic growth in the southeast area.

**5.84** Whilst it is the responsibility of water companies to plan for increases in water demand, the NPPF requires local plans to take into account the long-term implications of climate change on water supply. On this basis there is a role for us to play our part in tackling water stress and sustainability and ensuring that water is used efficiently.

**5.85** Policy CC6 seeks to ensure developments are as efficient in their water usage as possible to minimise impacts on the districts water resources.

# Policy CC6: Water Efficiency

- 1 Applicants will be required to demonstrate, through the Sustainability Statement or the Design and Access Statement, that the development has been planned positively to minimise its impact on, and make efficient use of, water resources, taking into account the impacts of climate change.
- 2 Development proposals, including the retrofit / refurbishment of existing buildings, should demonstrate that water reuse and recycling and rainwater. harvesting measures have been incorporated wherever possible in order to reduce demand on mains water supply as part of an integrated approach to water management.
- 3 All new residential development must be designed and built to achieve the Building Regulation mains water consumption standard of 110 litres per person per day or the highest water efficiency standard that applies at the time of the planning application.
- 4 All proposals for non-residential development should maximise water efficiencies under the mandatory water credits category in the BREEAM Water Consumption assessment methodology.

## Supporting text

**5.86** The 110-litre standard can be achieved fully through low flow fixtures and fittings; however, all developments should seek to reduce water consumption as far as possible through additional water efficiency measures wherever possible. This can include rainwater harvesting and water reuse/recycling.

**5.87** The aim of the BREEAM Water Consumption assessment methodology (WAT 1) is to reduce potable water demand in non-residential development through the installation of energy efficient sanitary fittings, rainwater collection and water recycling systems. Up to 5 credits are available plus an additional credit for exemplary performance.

**5.88** The standard approach is the default method for calculation. It uses the buildings actual component specification and default usage patterns for the building type and its activity areas. The output is compared with the same output for a baseline component specification and the percentage improvement used to determine the number of BREEAM credits achieved. The standard building types are:

• Office

- Retail
- Industrial and
- Education

## **Question 18**

## **Consultation Questions**

- a Do you agree with draft Policy CC6: Water Efficiency?
- b Should we change anything? if so, what should we change and why?
- c Have we missed anything? If so, what have we missed and how should it be included?

## Reducing flood risk

**5.89** New development should be sustainable and in flood risk terms this means that development should be directed to areas at the lowest risk of flooding, should not make existing flood risk worse and should reduce existing overall flood risk where possible. Climate change and extremes of weather have made what were once irregular flooding events more regular and more unpredictable.

**5.90** The Wealden Strategic Flood Risk Assessments identify that the district is susceptible to all sources of flooding including fluvial, sea level rise, surface water and groundwater. Fluvial flood risk is most notable in the Pevensey Levels, posing a risk to Hailsham, Westham and Pevensey but there are also threats from rivers in Uckfield, Crowborough, Forest Row and Horam as well as in rural parts of the district. Large areas of Wealden are also identified as areas of groundwater concern, particularly in the south of the district.

**5.91** Development patterns without the right mitigation can have distorting effects on the water cycle and drainage systems, for example, from artificial features and hard surfaces, which can create channels for surface water run-off. The risk of flooding from surface water is more difficult to predict and is heavily dependent upon local conditions during the passing of a storm. The likelihood of surface water flooding is dependent not only on the permeability of the surface, but also saturation of the receiving soils, the groundwater levels and the condition of the surface water drainage system (i.e. surface water sewers, highway's authority drains and gullies, open channels, ordinary watercourses and SuDS).

**5.92** Rainfall events are likely to increase in intensity and potentially duration, which may result in surface water flooding becoming more frequent, as well as increasing the potential for groundwater flooding through emergence at the surface. It is therefore important for us to address this as part of our development and growth strategy and this will require close partnership working with the Environment Agency; East Sussex County Council as Lead Local Flood Authority and Southern Water and South East Water.

**5.93** National policy is clear that development should be avoided and directed away from those areas at the highest risk from all sources of flooding, including both existing and any

future risk. Where development is necessary in areas at higher risk of flooding, then development should be made safe for its lifetime without increasing flood risk elsewhere.

**5.94** In accordance with the NPPF, PPG and our Strategic Flood Risk Assessments (SFRAs), Policy CC6 seeks to ensure that development does not place itself, or others, at increased risk of flooding and actively seeks to improve flood risk where possible.

# Policy CC7: Managing Flood Risk

- 1 Development proposals will follow a sequential approach to flood risk management and will be guided to areas with the lowest risk of flooding from all sources, considering both existing and future flood risk.
- 2 Flood Zone 3b will be protected as the functional floodplain and its capacity to attenuate periodic flood events must not be compromised. Essential infrastructure that has passed the Exception test and water compatible uses will be permitted within Flood Zone 3b provided the development is designed and constructed to:
  - a) Remain operational and safe for users in times of flooding;
  - b) Result in no net loss of floodplain storage;
  - c) Not impede water flows; and
  - d) Not increase flood risk elsewhere.
- 3 Flood risk must be considered at an early stage in the design and layout of development to ensure that opportunities are maximised to reduce flood risk within the development.
- 4 All relevant development must demonstrate that it complies with the tests, recommendations and guidance specified by the Council's Strategic Flood Risk Assessment (SFRA), the NPPF and PPG. Proposals will need to:

a) Demonstrate that the development has been designed to be flood resilient and resistant and safe for its users for the lifetime of the development.

b) Use the latest climate change allowances for peak river flows, peak rainfall intensity and sea levels applicable to the catchment within which the development is located and the relevant epoch for the climate change allowance; and

c) Ensure that any proposals involving modifications of ground levels are fully assessed and the findings clearly set out.

- 5 Where required, flood mitigation must be implemented in accordance with the Council's SFRA, the NPPF and PPG. Developers must ensure that mitigation does not increase flood risk elsewhere and that floodplain compensation is provided where necessary.
- 6 All new development close to rivers should consider, working with partners, the opportunity to improve, enhance and restore floodplain and river environment, including opportunities to create, enhance and improve the linking of green/blue infrastructure.

- 7 Where possible, developments should seek to open up existing culverts to create a green/bluecorridor. New culverts will not be permitted, unless it is 1. demonstrated that the culvert is essential infrastructure and there is no viable alternative.
- 8 The Council will support natural flood management measures and schemes that help to reduce flood risk in the wider catchment.

## Sequential and Exceptions Test

- 9 The development of sites at a greater risk of flooding (from any source) will only be considered where they comply with the requirements of the NPPF and associated PPG, specifically in regard to the application of the Sequential, and where required, Exceptions Tests.
- 10 Where schemes are located in flood risk areas, the Sequential approach must be used to ensure that the most vulnerable parts of the development site are in the areas of lowest flood risk. Developers will be expected to undertake early discussions with the Council, Environment Agency, Lead Local Flood Authority and Southern Water.
- 11 Where schemes are located within the Pevensey Levels catchment, developers will also be expected to undertake early discussions with the Pevensey and Cuckmere Water Level Management Board.

## Supporting text

**5.95** All relevant development proposals, where appropriate, should be discussed with the Council in liaison with the Environment Agency, Water Services Provider, Pevensey and Cuckmere Water Level Management Board (where appropriate) and the Lead Local Flood Authority at the earliest opportunity, preferably at pre-application stage. This should ensure flood risk and drainage solutions, particularly where required on site, can be factored into the development process as early as possible.

**5.96** All development will be required to demonstrate that regard has been given to existing and future flood patterns from all flooding sources, including the latest climate change allowances, and that the need for effective protection and flood risk management measures, where appropriate, have been considered as early on in the development process as possible.

**5.97** Proposals must apply a sequential risk-based approach to the location of development, including within the site and taking account of the flood risk vulnerability classifications within the PPG, to steer new development to areas with the lowest probability of flooding. If, following the application of the sequential test, it is not possible, consistent with wider sustainability objectives, for development to be located in areas with a lower probability of flooding, the exception test may be applied.

**5.98** Proposals for development in locations identified as being at risk of flooding, now and in the future, should demonstrate how flood risk will be managed, taking into account climate change and having regard to the vulnerability of different land uses to flood risk.

**5.99** Where land raise is proposed as part of flood risk mitigation, applicants must consult with the Lead Local Flood Authority at the outset of the design of development. Where deemed to be appropriate, any scheme for land raising must be appropriately designed, supported by sufficient and robust evidence and must demonstrate that flood risk will not be increased

elsewhere. If land raising is proposed within the functional floodplain, applicants must provide robust evidence that level-for-level compensatory flood storage is provided, and that there are no detrimental impacts on or off site. Where development is proposing land raise within the Pevensey Levels catchment, applicants are expected to consult with the Cuckmere and Pevensey Levels Water Level Management Board.

**5.100** In addition, for sites located in catchments identified in the SFRA as highly sensitive to the cumulative impact of development, schemes should also consider the cumulative effects of the proposed development and should demonstrate that flood risk downstream will not be made worse as a result of cumulative development.

**5.101** Where developments are located in areas benefitting from defences, an assessment should consider the residual risk considering the impact of breach, including the effect on safe access and egress, as well as potential for flood risk to increase in the future due to overtopping.

**5.102** Developers should refer to the relevant SFRA covering their site as they provide guidance for the application of the Sequential and Exception Tests at a site level within Wealden and for detailed site-specific Flood Risk Assessments.

**5.103** For sites that are not strategic allocations, developers will need to use the SFRA to help apply the Sequential Test as well as provide evidence to show that other reasonably available sites have been adequately considered.

## **Question 19**

## **Consultation Questions**

- a Do you agree with draft Policy CC7: Managing Flood Risk?
- b Should we change anything? if so, what should we change and why?
- c Have we missed anything? If so, what have we missed and how should it be included?

#### Sustainable drainage

**5.104** Sustainable Drainage Systems (SuDS) are designed to maximise the opportunities and benefits that can be secured from surface water management practices and provide a means of dealing with the quantity and quality of surface water and can also provide other benefits:

- Reduce the risk of flooding from surface-water run-off;
- Reduce the risk of sewer flooding during heavy rainfall;
- Recharge groundwater to help prevent drought;
- Prevent water pollution by filtering runoff;
- Provide valuable habitats for wildlife; and
- Create and provide green and blue spaces for people

**5.105** Given the flexible nature of SuDS they can be used in most situations within new developments as well as being retrofitted into existing developments. SuDS can also be designed to fit into most spaces. For example, permeable paving could be used in parking spaces or rainwater gardens as part of traffic calming measures.

**5.106** Current national planning policy states that major developments should incorporate SuDS unless there is clear evidence that this would be inappropriate. There is also a requirement for development in flood risk areas to also incorporate SuDS unless inappropriate.

**5.107** In January 2023, the government stated that SuDS will become mandatory for all new development from 2024<sup>55</sup>. In advance of this, they will consult on the scope, threshold and process. Depending on the outcome of that consultation, changes may affect the Council's proposed approach to SuDS and subsequently the SuDS policy. The Council will continue working with our neighbouring authorities on cross boundary issues, including SuDS, as well as the Lead Local Flood Authority (LLFA) to ensure a consistent approach to SuDS requirements.

**5.108** Policy CC8 seeks to ensure that developments manage their drainage requirements, including through a surface water drainage strategy, so as to reduce the risk of flooding from surface water as well as protect the water quality of the districts waterbodies and provide wider benefits to the natural environment and people.

# Policy CC8: Sustainable Drainage

- 1 All development proposals should include adequate drainage provision and seek to reduce flood risk and contribute to flood alleviation.
- 2 Applicants must demonstrate that sustainable drainage systems (SuDS) are an integral part of the proposed development and its design unless they are demonstrated to be inappropriate.
- 3 Development proposals should:

a) Be designed and implemented having regard to the latest local, regional and national guidance on sustainable drainage and SuDS systems.

b) Ensure that sufficient space is provided within a site so that the SuDS can be accommodated within the layout. SuDS should be discussed with a) the LLFA early in the design process to ensure they can be fully integrated into the overall design and layout of the scheme.

c) Demonstrate that arrangements are in place for the ongoing maintenance of SuDS schemes over the lifetime of the development.

d) Be designed and implemented to be 'multi-functional' and contribute to wider Council objectives including enhancing biodiversity and Biodiversity net gain (where appropriate), recreational opportunities, landscape character and improving the green/blue infrastructure network.

e) Deliver the lesser of either the greenfield rate in terms of volume and flow; or the existing rate/volume of discharge.

<sup>55</sup> The review for implementation of Schedule 3 to the Flood and Water Management Act 2010. January 2023. Available at: <a href="http://www.gov.uk/government/publications/sustainable-drainage-systems-review">www.gov.uk/government/publications/sustainable-drainage-systems-review</a>

f) Ensure that surface water is managed as close to its source as possible, using the following discharge hierarchy:

i. Discharge into the ground; then

ii. Discharge to a surface water body; and then

iii. Discharge to a surface water sewer, highway drain, or other drainage system.

g) Be designed and implemented to prevent surface water runoff entering the foul water drainage system.

h) Ensure adequate drainage connectivity.

i) Provide for emergency ingress and egress.

- 4 For phased development, it should be demonstrated that a strategic approach to drainage provision across the entire site and incorporates adequate provision for SuDS within each phase of development will be followed.
- 5 All developments should demonstrate that surface water will pass through at least two treatment stages. For development in the Pevensey Levels hydrological catchment, a minimum of three stages of treatment will be required.
- 6 Approval from the Lead Local Flood Authority of the design and long-term maintenance of any SuDS / drainage scheme will be required prior to development commencing.
- 7 Any planning application, including in outline, that triggers a Habitats Regulation Assessment (HRA) will need to provide sufficient details of an appropriate surface water drainage scheme to satisfy the HRA.

#### Supporting text

**5.109** Drainage should be considered as an integral part of the development design process. Applicants should submit sufficient information to enable proper consideration of drainage proposals. Any SuDS proposals should have due regard to East Sussex County Council's guidance and must clearly set out the management and maintenance regimes for the scheme.

**5.110** For major schemes, seeking pre-application advice from the LLFA is strongly recommended. For minor development, the LLFA's 'SuDS Decision Support Tool for Small Scale Development' should be used.

**5.111** Applicants must demonstrate that the proposed surface water drainage strategy for their site is consistent, and integrated with, other relevant planning policies, including Policy CC6 Managing Flood Risk.

**5.112** Sustainable Drainage Systems (SuDS) should be integrated into the design of all development sites and the techniques used should be appropriate to local conditions. The SuDS scheme should be proportionate to the development proposed.

**5.113** SuDS have various stages of treatment. Guidance from the LLFA states that rainfall should pass through at least two stages of treatment to ensure water quality is improved before being infiltrated or otherwise discharged off site. Applicants are advised to follow the LLFAs guidance to provide the maximum improvement to water quality through the use of the SuDS Treatment Train

**5.114** There is a particular need to ensure that development within or near the Pevensey Levels SAC and Ramsar site is appropriate in terms of drainage. This is because poor quality water draining into the Pevensey Levels could have an adverse impact on the environment and ecology. This means that within the hydrological catchment of the Pevensey Levels, more stages of SuDS treatment are required, three at a minimum. A Habitats Regulation Assessment will be required for development within this catchment, and it could be that more stages of treatment are required to avoid harm.

## Map 6 Pevensey Levels



**5.115** When considering planning applications, the Council will take into account the LLFAs technical standards for SuDS and seek advice from the relevant flood risk management bodies on the management of surface water and the suitability of the proposed SuDS scheme.

**5.116** Developers are encouraged to also refer to 'non-statutory technical standards for sustainable drainage systems' published by Defra, which provides guidance on minimum standards for design, maintenance, and operation of SuDS systems, and sits alongside the Planning Practice Guidance. The Construction Industry Research and Information Association's (Ciria's) SuDS Manual 2015<sup>56</sup> also includes advice on suitable development design.

## **Question 20**

## **Consultation Questions**

- a Do you agree with the draft Policy CC8: Sustainable Drainage?
- b Should we change anything? if so, what should we change and why?
- c Have we missed anything? If so, what have we missed and how should it be included?

<sup>56 &</sup>lt;u>www.ciria.org/ItemDetail?iProductCode=C753F&Category=FREEPUBS</u>