



Sustainability statement and checklist for planning applications Interim guidance note

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Introduction

Dorset Council declared a climate and ecological emergency in 2019. The Climate and Ecological Emergency Strategy was adopted in 2020 and updated to the Natural Environment, Climate and Ecology Strategy in 2023. The strategies recognise the importance of planning to achieve the ambitions to tackle the issues associated with climate change. The Council has prepared an Interim Guidance and Position Statement in relation to planning for climate change, which notes that climate change is a material consideration in planning decision making.

Paragraph 39 of the Dorset Council National and Local List of Requirements (adopted 1 October 2022)¹ (the 'Local List'), states that a Sustainability Statement is required to support planning applications to demonstrate how sustainable design and construction have been addressed in the proposal.

This guide sets out the requirements for the sustainability statement and includes a checklist to ensure all relevant matters are considered. The role of the checklist is to encourage applicants to take sustainable design and construction matters into consideration at an early stage and for decision makers to be able to clearly see what has/hasn't been taken into consideration or incorporated and why – and so how the application responds to climate change. The checklist is a consistent way for applicants to provide the information needed for the sustainability statement.

Adopted policies relevant to the items within the checklist questions are referenced in the checklist itself. Please refer to full policy wording for the former District area your application sits within. Some adopted policies may have a full requirement to meet the sustainability objective stated. Where this is the case, the objective will be mandatory. Where this is not the case, the sustainability objective is a best practice objective.

A table of the relevant adopted policies including commentary and application requirements in relation to each forms Appendix B of the Interim Guidance and Position Statement.

What does the checklist cover?

The checklist focuses on the following key areas where new development has an impact on the climate emergency, as set out in the Local List and reflecting adopted local policies:

- 1. reducing energy consumption and carbon emissions,
- 2. maximising the use of sustainable materials,
- 3. minimising waste and increasing recycling,
- 4. conserving water resources,
- 5. incorporating green infrastructure,
- 6. sustainable drainage and pollution,
- 7. adaptation to climate change, and
- 8. sustainable travel.

Buildings contribute to climate change through their construction, how they are used, and where they are located. Managing the location of development is a key role of the Local Plan and is being considered through the preparation of the Dorset Council Local Plan. The focus

¹ Dorset Council Local List – see: <u>Submit a planning application - Dorset Council</u>

of this checklist is on sustainable design and construction of buildings under the headings listed.

Transport clearly is a key contributor to climate change. A question is included in the checklist in relation to sustainable travel, but wider transport considerations are not included because existing planning policies and information requirements regarding sustainable transport are well established. Adopted local policies and the Local List require that planning applications should detail how proposals are maximising opportunities for sustainable transport modes (see paragraph 40 of the Local List).

The Council has taken the decision not to include flood risk and ecological aspects within the checklist and sustainability statement requirements. This is not because these issues are any less significant; rather it is because regulations and adopted policy, and information requirements relating to these matters already comprehensively cover the issues for planning applications. For further information on assessments required in relation to flood risk, see paragraph 21 of the Local List and for further information on information required in relation to biodiversity, see paragraph 20 of the Local List, our Ecology Guidance for Planning Applications, and guidance on Biodiversity Net Gain.²

Who is the checklist for?

In accordance with Paragraph 39 of the Local List, a sustainability statement should be prepared, and this checklist should be completed for all applications for:

- new residential/the creation of additional residential units including change of use/conversion, replacement dwellings, and holiday accommodation including hotels.
- new non-residential development including commercial, office, storage and distribution, retail, industrial, waste, community or leisure and educational development including extensions of over 10% additional gross internal floorspace including proposals for a change of use to any of these uses new or replacement agricultural buildings
- mixed use development

Please refer to the Dorset Council's Local List.

Prior notification and permission in principle applications do not need to be accompanied by a sustainability statement or checklist.

A sustainability statement and checklist should be prepared for outline and reserved matter applications as well as applications for technical details consent following a grant of permission in principle.

Information included in the checklist should be proportionate and relevant to the scale and nature of the development proposed, as well as to the application type. The checklist should be completed as fully as practicable at outline stage. Where further detail will be provided at the reserved matters stage, this should be noted and explained.

It should be noted that consideration of the checklist at an early stage can inform the design process by highlighting matters that are best considered at the outset of the process. This includes layout, orientation and making best use of the site for sustainable design and

² Both documents are available at: <u>The Dorset Biodiversity Appraisal Protocol - Dorset Council</u>

construction measures as well as considerations relating to the fabric of the building. This will be more cost effective and time efficient than addressing such matters later on in the planning process. Including the best practice objectives in the design of proposals will also result in benefits for the occupiers of buildings, such as through lower energy bills.

Householder applications, alterations, and extensions to existing non-residential buildings that fall under the 10% threshold are not required to submit a completed checklist. Such applications are however encouraged to consider relevant parts of the checklist and submit either a completed checklist or include within their planning statement information to demonstrate how climate change has been taken into consideration.

For proposals relating to listed buildings, please refer to the council's additional guidance: <u>'Listed Buildings and energy efficiency – What you can do for climate change'</u>, which explains what can be achieved to save energy and at the same time conserve the special interest of a listed building in the context of climate change. The document sets out what retrofitting and sustainable construction measures may or may not be appropriate for a listed building, as well as providing potentially suitable alternatives, and giving an overview of relevant case studies. This may also be relevant to other buildings of traditional construction.

What are you expected to do?

Applicants should prepare:

- A completed checklist to indicate which sustainability objectives your development complies with answering the Yes/No column as well as the reasoning column where relevant.
- A sustainability statement detailing the required information in relation to each of the checklist questions, cross referencing other assessments where appropriate.

If answering Yes to a Checklist question, a full explanation should be provided and/or a signpost to other relevant application documents (such as the Design & Access Statement) should be provided within the sustainability statement. If answering No to a checklist question, brief reasoning should be outlined in the subsequent column and a full explanation provided in the sustainability statement.

The checklist includes a column titled 'Further useful information' which includes links to industry guidance. There may be additional standards in such guidance – it should be noted however that any external guidance documents are signposted as useful information and resources only.

1. Reducing energy consumption and operational carbon emissions

Adopted local plans all seek to ensure that the energy performance of new buildings is considered as part of planning proposals, including encouraging the provision of renewable energy to be used during the building's operation. Until recently the emphasis at the national level has been on building regulations. However, there remains a need and a desire for new buildings to be built at the highest energy performance standards. In general, this means buildings being either zero carbon in their operational use or being zero carbon ready for when the UK's energy grid decarbonises.³

³ Development can be considered to achieve operational net zero if its energy use (power and heat) is wholly sourced by renewable energy, whether supplied via the grid or onsite. In lieu of the full decarbonisation of the

As standard, Building Regulations (Part L) require the energy and carbon intensity of buildings to be measured through specific calculations⁴, and whilst there are some benefits to this approach in that they set clear requirements which are not overly onerous, there are some limitations in terms of achieving the lowest levels of energy demand and reaching net zero carbon emissions⁵. Recent Building Regulations changes (in 2021) for improved ventilation and a new overheating requirement⁶ have provided benefits, but do not result in ultra-low energy performance⁷. Indications are that the Future Buildings Standard 2025 will provide further uplifts in the energy performance of buildings but will likely continue with similar methods of calculation, meaning that resulting buildings are unlikely to be net zero carbon.

The London Energy Transformation Initiative (LETI) have published guidance⁸ on alternative metrics for driving net-zero carbon design, which have been recognised by local planning authorities as an approach that would be resilient to changes in national policy.⁹ The metrics help to ensure that all energy use is considered, and when addressed together, they allow all resulting buildings to be truly net zero in their carbon emissions, or net zero ready for when the UK's energy grid decarbonises. The main targets set out by LETI's guidance are those relating to:

- Ultra-low operational energy use of buildings (for example less than or equal to 35 kWh/m²/yr for residential buildings)
- Building fabric, in the form of space heating demand metrics such as 15kWh/m²/yr for all building types
- Reduction of construction impacts through assessment and reduction of embodied carbon in developments
- Low carbon energy supply through no use of fossil fuels for heating and hot water
- Zero fossil fuel generated energy through use of on-site or off-site renewable energy technologies¹⁰ to match a building's energy use. In this regard it is important that factors such as the orientation of buildings are considered, to maximise opportunities for solar.

Additionally, the risk of overheating is an important issue¹¹. The appropriate passive ventilation of buildings¹², the orientation of buildings to allow for passive (solar) shading,

electricity grid a development which is capable of fully meeting its power and heating needs from the grid may be considered operationally 'net zero ready'.

⁴ Standard Assessment Procedure (SAP) and Simplified Building Energy Model (SBEM)

⁵ For example, the SAP/SBEM calculations used in this process do not calculate real life energy (i.e., unregulated energy from ICT equipment, lifts, refrigeration systems, cooking equipment etc.) and can be inaccurate in terms of a building's heating demand

⁶ <u>New Approved Documents and new compliance guides supporting Part L: circular 04/13 - GOV.UK</u> (www.gov.uk)

⁷ Ultra-low levels of energy performance are considered to be the lowest possible to enable a development to be net-zero in its operation, and are reflected in the Energy Use Intensity and space heating demand metrics we are recommending.

⁸ <u>https://www.leti.uk/one-pager</u>

⁹ See Cornwall Council, Somerset West & Taunton Council, Bath and Nort East Somerset, and West Oxfordshire Council

¹⁰ The main renewable energy technologies include the use of solar panels as a form of low carbon energy generation, or air source heat pumps as a form of low carbon energy supply for heating. The distinction between these technologies should be noted. Other technologies may also be relevant.

¹¹ See the Climate Change Commission's report on the risks to health, wellbeing, and productivity from overheating in buildings -

https://www.theccc.org.uk/publication/addressing-overheating-risk-in-existing-uk-homes-arup/

¹² Passive ventilation is the process of supplying air to and removing air from an indoor space without using mechanical systems

glazing ratios, and the provision/appropriate siting of green infrastructure can help to address this issue.

Through their sustainability statement, applicants are encouraged to take account of these targets and ensure schemes are designed accordingly to maximise the potential for achieving net zero development. The council recognises that whilst it may not be practicable for a proposal to meet ultra-low energy demand at this time, any move towards improving the energy efficiency of development is important. Where practicable, planned energy performance relating to operational energy use and heating demand (per dwelling or building) should be included in sustainability statements in order to demonstrate how a development is working towards meeting ultra-low energy demand, or to set out the extent to which a proposal seeks to improve upon current building regulations. Details on how energy supply, embodied carbon, renewable energy provision, and managing risk of overheating should also be included in the checklist, as these factors all contribute towards achieving net-zero. Applicants may wish to note whether a proposed development is 'net zero ready', meaning that it will achieve net zero without further retrofitting once the grid is fully decarbonised.

Some work on the costs associated with implementing the measures recommended by LETI (for residential development) has been undertaken by Cornwall Council as part of the preparation of the adopted Cornwall Council Climate Emergency Change DPD.¹³ The work highlighted that space heating target of 15 kWh/m2/year and an energy use target of 35 kWh/m2/year would be viable in most cases, albeit there is acknowledgement the situation may vary by region in terms of local requirements, and labour/ material costs.

Building to BREEAM standards¹⁴ for non-residential development can provide benefits for the energy performance of buildings, and these standards are widely used. Where these standards are applicable, the proposed standard (i.e. Excellent or Outstanding) and relevant calculations should be provided within the sustainability statement.

Modelling tools such as the Passive House Planning Package, or CIBSE TM54 can be used to calculate energy use figures for proposed development. A predictive BREL or EPC¹⁵ report can also be used to demonstrate a building's proposed energy performance. For proposals where it is not possible to provide this level of information, applicants should detail the measures being proposed to achieve energy efficiency in their development. Further information and guidance on these best practice objectives can be found in LETI's Climate <u>Emergency Design Guide</u>, and the <u>Net Zero Carbon Toolkit</u> has been published for use nationally to provide best practice design advice. Applicants are encouraged to use the Net Zero Carbon Toolkit as a guide when preparing applications.

As noted, the spirit of adopted local plan policies is to ensure that the energy efficiency of buildings is considered through the fabric, layout, and orientation of buildings. Whilst now considered out of date due to Building Regulations having been updated since the Plan's adoption, Policy D of the Purbeck Local Plan (PLP) sets specific targets for major development in terms of reducing greenhouse gas emissions to below Building Regulations requirements, and for non-residential development, to meet specific BREEAM targets. Policy ME3 of the Christchurch and East Dorset Local Plan requires that development will ensure

¹³ A summary of this work is presented in guidance produced by the South West Energy Hub (in section 6) -<u>West of England Net Zero New Build Policy Evidence - South West Net Zero Hub (swnetzerohub.org.uk)</u> and the evidence itself can be found on the Cornwall Council website - <u>Climate Emergency Development Plan Document</u> (DPD) - Cornwall Council.

¹⁴ https://bregroup.com/products/breeam/breeam-technical-standards/

¹⁵ Building Regulations England Part L report, or Energy Performance Certificate report

CO2 emissions are minimised to practical and viable levels by following the hierarchy for regulated energy, which includes maximising building fabric performance, scheme layout and building orientation, and provision of on-site renewable energy. Non-residential proposals should be guided by BREEAM standards. Elsewhere all adopted local plan policies (including supporting text) encourage the use of renewable energy provision within developments to achieve energy efficiency.

In terms of overheating of buildings, Policy 3 of the North Dorset Local Plan requires that development makes the best use of solar radiation and passive cooling through the incorporation of passive solar design principles, and that development should reduce impact of excessive heat through Green Infrastructure, passive shading, and ventilation.

2. Maximising the use of sustainable materials and cutting embodied emissions

Using renewable and low impact materials has been an integral part of sustainable construction for some time, with the BREEAM Green Guide having first been published in 1996 to provide a tool to consider the environmental impacts of building materials. Applicants are encouraged to use materials that will not deplete non-renewable resources wherever possible, and therefore reduce the level of embodied carbon associated with developments. Use of recycled materials is also encouraged, Policy ME3 of the Christchurch and East Dorset Local Plan requires this and policies of the other Local Plans refer to high sustainability standards. Use of local materials is also important.¹⁶ Within their sustainability statement applicants should wherever possible state the origins of materials used and any intention to use recycled and low impact materials, in order to demonstrate compliance with adopted policy (such as Christchurch and East Dorset Local Plan Policy ME3) or the spirit of adopted sustainability policies.

For proposals constituting demolition and rebuild, applicants should provide reasoning for demolition and rebuild as opposed to the refurbishment of a building. Whilst there may be visual and placemaking benefits to an approach that constitutes demolition and rebuild, consideration should be given to the fact that reuse of materials can save a significant proportion of the embodied carbon emissions compared to using a new product.

3. Minimising waste and increasing recycling

Waste minimisation and recycling play an important role in climate change mitigation. Waste management on development sites can reduce the amount of waste arisings generated, and both Policy 22 of the Bournemouth, Christchurch, Poole and Dorset Waste Plan (BCPDWP) (2019) and the National Planning Policy for Waste (Paragraph 8) require that waste arising from construction, demolition and excavation works is minimised and managed in accordance with the waste hierarchy. The preparation of site waste management plans is good practice for construction projects and would demonstrate how a proposal complies with Policy 22 of the Waste Plan. Such information would usually be more readily available at the construction phase and so would be prepared for submission following grant of planning permission and secured by condition.

The National Planning Policy for Waste (Paragraph 8) and the BCPDWP (Policy 22) require that new development make sufficient provision for waste management. Applicants should incorporate adequate on site indoor and outdoor storage facilities into the design to allow occupiers to separate and store waste for recycling and recovery. For residential development this should take account of the Council's guidance note.¹⁷ A summary of how

¹⁶ As advocated by the National Design Guide

¹⁷ Dorset Council Guidance notes for residential developments (May 2020)

provision has been made in the design of the development should be outlined in the sustainability statement.

4. Conserving water resources

Many areas of England will face water shortages by 2050 if action isn't taken. The Environment Agency's National Framework has set out that an additional 25% of the current daily volume put into our public water supply will be needed in England by 2050 to meet future pressures, and sets out ambitions to reduce personal water consumption to 110 litres per person per day.¹⁸ The Government has responded with a statement setting out measures it will be taking to reduce personal water consumption.¹⁹ Local authorities are encouraged to adopt a minimum building standard of 110 litres per person per day in all new builds where there is a clear local need, such as in water stressed areas. This is in comparison to the minimum building standard of 125 litres per person per day,²⁰ and requires the installation of more efficient fixtures and fittings. Dorset falls within the Wessex Water area, which the Environment Agency has classified as an area of 'serious' water stress.²¹ Improving water efficiency in new development will also be of benefit when addressing nutrient pollution of marine and freshwater protected habitats sites.

In order to encourage greater water efficiency in new homes and to demonstrate compliance with adopted local plan policies requiring water efficiency (i.e. Policy ME3 of the Christchurch and East Dorset Core Strategy and Policy 3 of the North Dorset Local Plan), applicants should include in their sustainability statement indicative specifications for how dwellings will reduce internal water usage or where practicable calculations of water efficiency, together with an explanation of fittings/technologies to be implemented, demonstrating that water consumption will be limited to 110 litres per person per day wherever practicable. Any water recycling measures should be set out.

It may also be appropriate to consider rainwater harvesting on a locale basis rather than an individual property basis. If this is the case, please include details in the checklist.

The checklist provides an interpretation as to what would constitute a water efficient development. Although West Dorset and Weymouth & Portland, and Purbeck do not specifically state water efficiency in Policy ENV13 and Policy D respectively, applications in these areas are encouraged to address this through the checklist to demonstrate best practice.

Many water companies currently offer developers discounts on their new connection charges for meeting certain standards of water efficiency or sustainable drainage. Ofwat has consulted on a proposed 'common framework' for such incentives through changes to their charging rules, with the aim that they result in greater water efficiency across new development²². Should this come into effect, there will be an incentive for developers to build to at least 110 litres per person per day, to install SuDS and for the installation of a water saving measure (rainwater harvesting, greywater recycling or water reuse).

¹⁸ <u>National_Framework_for_water_resources_summary.pdf (publishing.service.gov.uk)</u>

 ¹⁹ Written statements - Written questions, answers and statements - UK Parliament 'Reducing demand for water
 – Statement made on 1 July 2021' (Statement UIN HCWS140)

²⁰ Building Regulations (2010) Part G2 (36) states the potential consumption of wholesome water by persons occupying a dwelling must not exceed 125 litres per person per day' or the optional requirement of 110 litres per person per day if that is specified in the development's planning permission.
²¹ The Environment Agency has looked across current and future water usage and climate change scenarios to

²¹ The Environment Agency has looked across current and future water usage and climate change scenarios to provide a water stress situation for each water company area. Dorset falls within the Wessex Water area. <u>Water</u> stressed areas – 2021 classification - GOV.UK (www.gov.uk)

²² Ofwat: Consultation on environmental incentives to support sustainable homes (June-August 2023).

5. Incorporating green and blue infrastructure

Green infrastructure ranges from the provision of trees, landscaping, and residential gardens; to local greenspaces and community spaces such as parks, play parks, and allotments; rights of way; and also larger strategic spaces such as country parks, green corridors, and environmentally designated sites.²³ Natural England's <u>Green Infrastructure Framework</u> provides guidance on the principles and standards for green infrastructure in England. Blue infrastructure relates to watercourses, ponds, and water drainage systems (such as drainage ponds).

In the context of climate change, it is important that development proposals incorporate green infrastructure on a range of scales (relevant to the proposal) to provide wide ranging benefits. Within their sustainability statement, applicants should demonstrate compliance with adopted policies by demonstrating that sufficient green infrastructure has been incorporated into their proposal to serve the development site. All adopted local plans require green infrastructure to be addressed (Policy HE4 of the Christchurch & East Dorset Local Plan, Policy 15 of the North Dorset Local Plan, Policy GI of the Purbeck Local Plan and Policy ENV3 of the West Dorset, Weymouth & Portland Plan).

Green/blue infrastructure:

- Provides shading and cooling effects, therefore minimising the overheating of buildings through tree planting and landscaping
- Helps to absorb carbon dioxide through provision of appropriate amounts of vegetation
- Provides effective surface water management through sustainable drainage provision
- Links to existing green infrastructure networks to maximise environmental benefits of wildlife green corridors and sustainable travel

6. Sustainable drainage and minimising pollution

Sustainable drainage systems are designed to control surface water run off close to where it falls and mimic natural drainage as far as possible, incorporating elements such as soakaways and ponds. Delivering sustainable drainage systems (SuDS) as part of a development has many benefits including mitigating and adapting to climate change, as well as managing flood risk, contributing to green/blue infrastructure and ecological networks and helping to prevent new development from contributing to water pollution. National policy requires that SuDS are incorporated into major developments unless there is clear evidence that this would be inappropriate.²⁴ The Local List reflects this, with paragraph 38 requiring the submission of surface water drainage details for major applications and stating that applicants should use sustainable drainage systems to manage run-off.

For the purposes of the checklist it should be demonstrated that an appropriate and deliverable SuDS scheme has been incorporated into the development proposal with appropriate accompanying plans and assessments within the application signposted. All adopted local plans require sustainable drainage to be addressed (Policy ME3 and Policy ME6 of the Christchurch & East Dorset Local Plan, Policy 13 of the North Dorset Local Plan, Policy FR of the Purbeck Local Plan and Policy ENV5 of the West Dorset, Weymouth & Portland Plan).

²³ <u>http://publications.naturalengland.org.uk/publication/35033</u>

²⁴ National Planning Policy Framework (Paragraph 169)

7. Adapting to climate change

Adapting to climate change in respect of built development is about reducing the risks posed by climate change through the construction of climate resilient buildings and developments. Adaptation is wide ranging and is already included above in respect of green/blue infrastructure, SuDS and building to avoid overheating. Additional adaptation measures might include green roofs, increased trees and vegetation, cool/white roofs, triple glazing and raised floor levels and measures against heat such as shutters, awnings, shading, cross-ventilation and night-time ventilation. Such measures are encouraged where appropriate and should be noted in the sustainability statement.

8. Sustainable travel

Sustainable travel is central to addressing climate change since vehicles are a key source of carbon emissions. This is addressed through locational considerations in strategic planning, and decision making by ensuring development is located where it would reduce the distance people need to travel and reducing the reliance on cars by providing access to sustainable alternative travel options.

The Local List requires that proposals that will generate significant amounts of traffic or movements are supported by a transport assessment and travel plan. For the purposes of the checklist, applicants should state the public transport, cycleways and footpaths that will serve the development. They should also state any new or enhanced footpaths or cyclepaths, or improved access to them, to demonstrate compliance with adopted local plan policies (Policy KS11 of the Christchurch & East Dorset Local Plan, Policy 13 of the North Dorset Local Plan, Policy IAT of the Purbeck Local Plan and Policy COM7 of the West Dorset, Weymouth & Portland Local Plan).

The inclusion of electric vehicle charging points in new development is an important issue and it should be noted that in June 2022 this requirement was incorporated into the Building Regulations.²⁵

²⁵ Requirement S1 of Schedule 1 and Regulation 44D of the Building Regulations 2010.

Sustainability Checklist

Checklist question	Sustainability objectives for consideration	Relevant policies ²⁶	Have you met the sustainability objectives? (Yes/No)	If you haven't met the sustainability objectives, please summarise the reasoning (full explanation should be provided within the Sustainability Statement)	Further useful information - Industry guidance, good practice and case studies
 Reducing energy consumption and operational carbon emissions 1.1 Have you designed the fabric of the development to maximise energy efficiency? 	 Explain in the Sustainability Statement how the proposal intends to maximise energy efficiency and reduce energy demand, including by settling out relevant calculations. You should: Outline the measures being proposed to achieve energy efficiency through the fabric of the building. Where practicable, demonstrate whether the proposal is working towards ultra-low energy demand, for example through aspiring to meet the best practice objectives below, or by setting out the extent to which a proposal improves upon current building regulations requirements. Applicants may wish to undertake predictive energy modelling in order to illustrate this, such as through: undertaking a predictive BREL²⁷ or Energy Performance Certificate report, or using the Passive House Planning Package, CIBSE TM54, or equivalent tool. Best practice objectives for nesidential buildings For residential development, to achieve ultra-low energy demand through design, predicted energy modelling should demonstrate a target of <35kwh/m2.yr Best practice objectives for non-residential buildings²⁸ For non-residential development the following energy use targets are recommended: Office/retail <55kwh/m2.yr Light industrial – 110 kWh/m2/yr. Community space (e.g. health care) <100 kwh/m2.yr School <65kwh/m2.yr 	C&EDLP - Policy ME3 NDLP – Policy 3 PLP – Policy D WD,W&P – Policy ENV13			Net Zero Carbon Toolkit https://www.levittbernstein. co.uk/site/assets/files/369 4/net-zero-carbon-toolkit- v2.pdfLETI Climate emergency Design Guide (January 2020) - 252d09 3b0f2acf2bb24c0 19f5ed9173fc5d9f4.pdf (leti.uk)SW Energy Hub - Net Zero New Buildings - West of England Net Zero New Build Policy Evidence - South West Net Zero Hub (swnetzerohub.org.uk)

 ²⁶ C&EDLP = Christchurch & East Dorset Local Plan Part 1 (2014); NDLP = North Dorset Local Plan Part 1 (2016); PLP = Purbeck Local Plan Part 1 (2012); WD,W&PLP = West Dorset, Weymouth & Portland Local Plan (2015); BCPD Waste Plan = Bournemouth, Christchurch, Poole & Dorset Waste Plan (2019). Please refer to full policy wording and supporting text.
 ²⁷ Building Regulations England Part L report
 ²⁸ It should be noted that different uses may have different requirements and therefore the figures should be used as a guide.

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	Alternatively, BREEAM standards may be provided for non- residential development. Please indicate the relevant level which applies to the proposed development. For all buildings For all building types a space heating demand of less than 15		
	kWh/m2 /yr should be aimed for.29		
1.2 Does the proposal incorporate low carbon heating technologies?	Explain in the Sustainability Statement whether the proposal intends to enable the building to be heated from non-fossil fuel sources using net zero (or net zero ready) heating technology, for example through the use of:	C&EDLP - Policy ME3 NDLP – Policy 3	
	Air or ground source heat pumps	PLP – Policy D	
	 Solar water heating Connection to a low carbon community heat network 	WD,W&P – Policy ENV13	
1.3 Will the onsite renewable energy generation match the total energy consumption of the development?	Explain in the Sustainability Statement whether renewable energy technologies (such as solar panels) are incorporated into the proposal and whether onsite renewable energy generation will match the total energy consumption.	C&EDLP - Policy ME3	
	Where possible, include an estimate of the total kWh/yr of	NDLP – Policy 3	
	energy generation by renewables compared with anticipated energy consumption of the building.	PLP – Policy D WD,W&PLP –	
		Policy ENV13	
1.4 Has the risk of overheating been considered in the design of the development?	Explain in the Sustainability Statement how the development reduces the risk of overheating, for example through layout and erioptation, adequate passive ventilation, passive	C&EDLP - Policy ME3	
	and orientation, adequate passive ventilation, passive shading, and green infrastructure provision. If the development intends to use active ventilation methods,	NDLP – Policy 3	

²⁹ These best practice objectives reflect those recommended in the LETI Climate Emergency design guide - <u>https://www.leti.uk/cedg</u>

Net Zero Carbon Toolkit
https://www.levittbernstein. co.uk/site/assets/files/369 4/net-zero-carbon-toolkit- v2.pdf
Useful information for connecting low carbon technologies to the electricity network - <u>https://www.energynetwor</u> <u>ks.org/operating-the-</u> <u>networks/connecting-to-</u> <u>the-networks/connecting-</u> <u>electric-vehicles-and-heat-</u> <u>pumps</u>
LETI Climate emergency Design Guide (January 2020) - <u>252d09_3b0f2acf2bb24c0</u> <u>19f5ed9173fc5d9f4.pdf</u> (leti.uk)
SW Energy Hub - Net Zero New Buildings - <u>West</u> of England Net Zero New Build Policy Evidence - South West Net Zero Hub (swnetzerohub.org.uk)
CIBSE TM59 - <u>Technical</u> <u>Memorandum 59: Design</u> <u>methodology for the</u> <u>assessment of</u>

	please explain the compatibility of this with energy performance targets.	PLP – Policy D WD,W&PLP – Policy ENV13	
2. Maximising the use of sustainable materials and cutting embodied emissions			
2.1 Will the development use sustainable materials and methods in its construction?	 Explain in the Sustainability Statement how the development makes use of sustainable/recycled construction materials. Provide a schedule of materials and construction technologies proposed to be used with details of: Locally produced and sourced materials Confirmation of reuse of onsite materials where relevant (or link to site waste management plan); or explanation of why this is not possible. Explain in the Sustainability Statement how the BRE Green Guide Specification has informed design decisions, where 	C&EDLP - Policy ME3 NDLP – Policy 3 PLP – Policy D WD,W&PLP – Policy ENV13	
2.2 Have embodied carbon emissions been considered?	applicable. For demolition and rebuild proposals, provide information on the reasons for demolition.	C&EDLP - Policy ME3	
	Consider use of lifecycle modelling to assess embodied carbon where practicable.	NDLP – Policy 3 PLP – Policy D WD,W&P – Policy ENV13	
3. Minimising waste and increasing recycling			
3.1 Will the construction company that you use be registered with the Considerate Construction Scheme?	If the construction company is known, confirm in the Sustainability Statement whether they are registered with the Considerate Construction Scheme	BCPD Waste Plan Policy 22	

overheating risk in homes
LETI Climate emergency Design Guide (January 2020) - <u>252d09_3b0f2acf2bb24c0</u> <u>19f5ed9173fc5d9f4.pdf</u> (leti.uk)
BRE Green Guide to Specification: <u>https://www.bregroup.com/</u> <u>greenguide/podpage.jsp?i</u> <u>d=2126</u>
Industry Proposed Document Z UK Whole Life Carbon Assessment for the Built Environment (rics.org) Embodied and whole life carbon assessment for architects sustainable design (architecture.com) https://carbonleadershipfor um.org/tools-for- measuring-embodied- carbon/
Considerate Constructors Scheme: <u>https://www.ccscheme.org</u> .uk/

 3.2 Will you be preparing and adhering to a Site Waste Management Plan (SWMP) as a way of reducing and managing construction waste? 3.3 Have you provided sufficient space and safe and convenient access for waste recycling? 	 Confirm in the Sustainability Statement that a SWMP will be prepared and adhered to. The SWMP should include information on: Sustainable procurement measures used to minimise the generation of waste during the construction process The types and quantities of waste that will be generated during the demolition and construction phases and the measures to ensure that the waste is managed in accordance with the waste hierarchy Provide details of space within the development for recycling/waste sorting and storage and details of safe and convenient access for waste recycling in the Sustainability Statement. Cross reference application form and layout plans. 	BCPD Waste Plan Policy 22 NPPW (Paragraph 8) BCPD Waste Plan Policy 22 NPPW (Paragraph 8)	
4. Conserving water resources			
4.1 Can you demonstrate that water consumption will be minimised?	Explain in the Sustainability Statement how water consumption will be minimised, with reference to proposed fittings where appropriate. Include indicative specifications for how dwellings will reduce internal water usage; or Include relevant water efficiency calculations, with an explanation of the technologies used to achieve this, reflecting Government guidance of reducing from 125 litres to 110 litres per person per day for dwellings.	C&EDLP - Policy ME3 NDLP – Policy 3 NPPF – Para 154	
4.2 Do you include measures to conserve water through rainwater harvesting and/or water recycling?	Describe water conservation measures in the Sustainability Statement.	C&EDLP - Policy ME3 NDLP – Policy 3 WDWP – Policy ENV13 NPPF – Para 154	
5. Incorporating green and blue infrastructure			
5.1 Do you incorporate green/blue infrastructure as part of the proposal?	Describe what level and types of green infrastructure are provided and how this is incorporated into the proposal. Include details of on-site and off-site provision and any information about how this contributes towards addressing climate change (both adaptation and mitigation).	C&EDLP Policy HE4 NDLP - Policy 15 PLP - Policy GI	

Wrap: http://www.wrap.org.uk
Dorset Council Guidance notes for residential developments (May 2020) <u>cf0f517c-9a18-038d-54a5-</u> <u>4a7b8180d7f3</u> (dorsetcouncil.gov.uk)
The Unified Water Label (water calculator): <u>Home - Unified Water</u> <u>Label (uwla.eu)</u> Sanitation, hot water safety and water efficiency: Approved Document G: <u>ADG_ONLINEx.pdf</u> (publishing.service.gov.uk) BREEAM Non-domestic Buildings Technical Manual: <u>https://www.breeam.com/</u> <u>NC2018</u> RHS Guidance on water collecting, storage and re- using - <u>https://www.rhs.org.uk/gar</u> den-jobs/water-collecting- storing-and-using
Investing in Green places – South East Dorset Green Infrastructure Strategy (2011) <u>https://www.dorsetcouncil.</u> <u>gov.uk/w/south-east-</u>

	Confirm how any existing green infrastructure is being retained in the development.	WD,W&PLP Policy ENV3	
		NPPF – Para 154	
6. Sustainable drainage			
6.1 For major developments: do you include sustainable drainage measures as part of the proposal?	Within the Sustainability Statement, state the approach to SuDS incorporated within the site in accordance with the hierarchy of drainage options, with reference to the drainage strategy as appropriate.	C&EDLP - Policy ME3; Policy ME6	
		NDLP– Policy 13	
		PLP – Policy FR: Flood Risk	
		WD,W&PLP – Policy ENV5, ENV13	
7. Adaptation to climate change			
7.1 Have you incorporated any specific climate change adaptation measures into the proposal?	Describe any specific measures incorporated to address this issue and/or cross refer to other relevant application documents.	C&EDLP - Policy ME3, ME6, HE2, HE4	
	This could include: green roofs, increased trees and vegetation, cool/white roofs, triple glazing and raised floor levels and measures against heat such as shutters, awnings, shading, cross-ventilation and night-time ventilation.	NDLP – Policy 3, Policy 13, Policy 15, Policy 24	
		PLP – Policy FR, Policy D, Policy GI	
		WD,W&PLP – Policies ENV3, ENV5, ENV7, ENV13	
		NPPF – Para 154	
8. Sustainable travel			
8.1 Are there public transport and/or active travel options to and from the site proposed?	State any public transport links that would serve the development.	C&EDLP - Policy KS11	
	Show any existing cycle paths or footpaths that provide links to the developments or any that are proposed as part of the development.	NDLP - Policy 13 (Requirement for walking and cycling)	

dorset-green- infrastructure-strategy Natural England's Green Infrastructure Framework - https://designatedsites.nat uralengland.org.uk/GreenI nfrastructure/Home.aspx	
Dorset Council – Surface Water Planning web page - https://www.dorsetcouncil. gov.uk/w/surface-water- planning?p_l_back_url=% 2Fsearch%3Fq%3Dsustai nable%2Bdrainage	
National Design Guide - https://www.gov.uk/govern ment/publications/national- design-guide	
Cycle Infrastructure Design (publishing.service.gov.uk)	

State measures included to support active travel, such as bicycle storage and parking.	PLP – Policy IAT	
Cross refer to other relevant application documents, such as travel plans, as appropriate.	WD,W&PLP – Policy COM7	
	NPPF – Para 110	

Glossary (key definitions)

Biodiversity: Biological diversity among and within plant and animal species in an environment.

BREEAM standards: A technical standard which enables consistent and comparable assessment and verification across the entire built environment lifecycle.

BREL report: A report that will be produced for building projects, using SAP assessments to show if buildings use less energy and produce lower carbon emissions.

Building fabric: Refers to the roof, walls, windows, floors and doors.

Carbon emissions: A term used to refer to both carbon dioxide (CO_2) emissions released into the atmosphere from burning fossil fuels (coal, oil, natural gas) and other greenhouse gas emissions. The full term is carbon dioxide equivalent emissions (CO_2e) .

Carbon intensity: The carbon intensity of electricity is a measure of how much CO2 emissions are produced per kilowatt hour of electricity consumed.

Climate change: The long-term change of climate typically measured over decades or longer.

Climate change adaptation: Adjustments made to natural or human systems in response to the actual or anticipated impacts of climate change, to mitigate harm or exploit beneficial opportunities.

Climate change mitigation: Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.

Change of use: A change in the way that land or buildings are used. Planning permission is usually necessary in order to change from one 'use class' to another – as set out in the Town and Country Planning (Use Classes) Order 1987 (as amended).

Community energy: any energy project completely or partially controlled or owned by a group of people identifiable as a community, for instance co-operatives. Community energy projects have an emphasis on local engagement, local leadership and control and the local community benefiting collectively from the outcomes.

Conversions: This generally means the physical work necessary to change the use of a building from a particular use, classified in the use classes order, to another use. Can also mean the subdivision of residential properties into self-contained flats or maisonettes.

Ecological network: A system of core areas connected by ecological corridors, of existing and future habitat needed to allow populations of species and habitats to survive in fluctuating conditions.

Electric vehicle charging point: A charging socket which is connected to an electric vehicle via a charging cable to allow the battery to be recharged with electricity.

Embodied carbon: Embodied carbon is the carbon dioxide (CO_2) emissions associated with materials and construction processes throughout the whole lifecycle of a building or infrastructure. The embodied carbon of a building can include all the emissions from the construction materials, the building process, all the fixtures and fittings inside, as well as from deconstructing and disposing of it at the end of its lifetime.

Energy consumption: All the energy used to perform an action, manufacture something or simply used to inhabit a building.

Energy performance: Summary of the energy efficiency of buildings.

Fossil fuel generated operational energy: Energy produced from carbon-rich fuel (coal, oil and natural gas) formed from the remains of ancient animals and plants, such as using a gas cooker or

gas-fired boiler/heating system. Their combustion is considered to contribute to the 'greenhouse effect'.

Future buildings standard: A policy document that sets out proposed changes to Building Regulations (Part L and Part F) to provide a pathway to highly efficient non-domestic buildings which are zero carbon ready, better for the environment and fit for the future.

Greenhouse gas: A layer of gases in the atmosphere which absorb and release heat and maintain the Earth's temperature. Naturally occurring examples include water vapour, carbon dioxide, methane, nitrous oxide and ozone. Some human activities increase these gases, including fossil fuel combustion within motor vehicles and some power stations.

Green infrastructure: A network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity.

Householder application: An application for planning permission used for proposals to alter or enlarge a single house, including works within the boundary and garden of a house.

Local list: A list of local information requirements necessary to determine a planning application before it can be registered as a valid application. See: <u>Dorset Council's Local List</u>

Net zero: When the UK's total greenhouse gas emissions are equal to or less than the emissions the UK removes from the environment.

Operational energy usage: The energy needed to run buildings.

Passive solar shading: A technique for shading a building leading to natural cooling and energy conservation, by blocking the sun from the building. For example, an overhanging roof or appropriately located trees/planting.

Passive ventilation: The process of supplying air to and removing air from an indoor space without using mechanical systems.

Rainwater harvesting: The collection and storage of rainwater, rather than allowing it to run off. For example collecting rainwater from a rooftop into a water butt or surface run-off into a reservoir.

Renewable Energy: Covers energy which occur naturally and repeatedly in the environment - from wind, the fall of water, the movement of the oceans, from the sun, and also from biomass and deep geothermal heat.

SAP calculations: Standard Assessment Procedure calculations assess and compare the energy and environmental performance of dwellings

Sustainable design: An environmentally responsible and resource-efficient building design approach encompassing, construction, maintenance, renovation, and reuse.

Sustainable drainage systems (SuDS): Sustainable drainage systems are designed to control surface water run off close to where it falls and mimic natural drainage as far as possible. The measures for managing the rainwater aim to:-

- Reduce the causes & impacts of flooding,
- Remove Pollutants from surface water runoff at source,
- Combine water management with green space with benefits for amenity, recreation and wildlife.

Sustainable transport modes: Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, ultra-low and zero emission vehicles, car sharing and public transport.

Sustainability statement: A report for planning which details a proposed buildings commitment and strategy to address climate change as set out in its local authority planning policy.

Ultra low energy demand/performance: To maximise the energy efficiency potential of a building to be the lowest possible to enable it to be net-zero in its operation.

Wildlife green corridors: Areas of habitat connecting wildlife populations.

Zero carbon (building/development): Development can be considered to achieve operational net zero if its energy use (power and heat) is wholly sourced by renewable energy, whether supplied via the grid or onsite.

Zero carbon ready (building/development): In lieu of the full decarbonisation of the electricity grid a development which is capable of fully meeting its power and heating needs from the grid may be considered operationally 'net zero ready'.