

1 March 2024

Energy Alton's Response to EHDC's Draft Local Plan 2021-2040

Generally East Hampshire District Council (EHDC) should be complimented on the sentiment and tone of the Draft Local Plan as a response to the Climate Emergency. The Local Plan will affect the environmental standards of thousands of homes (at least 9,082) to be built over the period of the plan, a critical time for achieving net zero. This Plan will have a significant effect on the carbon emissions produced in East Hampshire. It is, however, particularly important that EHDC ensures that the final document will be fully enforceable, and it is in this area that we feel certain serious omissions need to be drawn to EHDC's attention. We set out below the proposed policies and Energy Alton's related comments (in blue text, for clarity):

Policy CLIM 1 Tackling the Climate Emergency

CLIM 1.1 Development must contribute to mitigating future climate change whilst adapting to its impacts and helping society to meet local, national and international climate related objectives.

CLIM 1.2 Buildings and open spaces will be designed to maximise their resilience to extreme weather whilst offering nature-based solutions to a changing climate.

CLIM 1.3 Planning permission will be granted when the following requirements are met:

- a) The operational carbon dioxide emissions of residential development would be reduced to a net zero level through on-site measures that are appropriate to site related constraints and opportunities.
- b) The regulated carbon dioxide emissions of major non-residential development would be reduced to net zero through on-site measures that are appropriate to site related constraints and opportunities.
- c) The embodied carbon emissions of development would be reduced, including through the careful choice, use and sourcing of materials.
- d) Any transport infrastructure (roads, footpaths, cycleways) has been designed to prioritise walking and the use of public transport.
- e) Infrastructure to support the use of zero-emission vehicles would be provided.
- f) Development has been designed to minimise the overheating of building, conserve water supplies, reduce the 'urban heat island' effect and provide or contribute to shaded and sheltered routes through open spaces.

CLIM 1.4 For new-build residential development (other than householder applications) and non-residential developments over 500m², a Sustainability Statement will be submitted to demonstrate a development's compliance with the energy hierarchy, its achievement of net-zero requirements and the ways in which it prioritises sustainable transport and implements climate resilience. The Sustainability Statement will include details of how policy criteria a) to f) are met by a development proposal and how this will be monitored through its implementation.

With respect to CLIM 1.3 a) and b) above there is no definition as to how the term 'appropriate to site related constraints' would be interpreted. Without such a clause the document is wide open to challenge by developers who will be able to use their 'Sustainability Statement' provided under Policy CLIM1.4 to argue that any minor improvements they have suggested meet the criteria required.

With respect to CLIM 1.3 c) whilst it is heartening to see mention of embodied carbon in the document, there is no reference to any specific accepted method of assessing levels of embodied carbon which would be used for calculating reductions in embodied carbon.

We strongly suggest that EHDC adopts or adapts the Net Zero Carbon Toolkit, recently produced by three District Councils as a practical and easy-to-navigate guide on how to plan a Net Zero housing project: <https://www.westoxon.gov.uk/media/2ddb125k/net-zero-carbon-toolkit.pdf>

Policy CLIM 2 Net Zero Carbon Development Operational Emissions

Policy CLIM 2.1

New development will demonstrate how it addresses the climate emergency through implementing the principles and meeting the relevant requirements that are set out below.

- a) All proposals should follow the Energy Hierarchy (set out in the document fig 4.4) when designing new buildings and structures for purposes of minimising their energy demands.

Requirements for all new residential development

- b) All proposals for new homes will be informed by calculations of their predicted energy use intensity (EUI) prepared using an operational energy model. The calculations should be set out in the Sustainability Statement and will be expected to demonstrate that each new dwelling would achieve a space heating demand of not more than 15 kWh/m²/year and a total energy demand of not more than 35 kWh/m²/year.
- c) Developments will generate at least the same amount of renewable energy on-site as their annual electricity demand for the operational energy of new homes (which should accord with criterion b), above.
- d) All heating requirements should be met without on-site use of fossil fuels.

Whilst it is welcomed that CLIM 2.1 b) states that each new dwelling would achieve a laudable space heating demand of not more than 15 kWh/m²/year and a total energy demand of not more than 35 kWh/m²/year, there is no reference to a fabric first approach to energy conservation. Instead, the Policy relies on the generation of on-site energy through solar energy

www.energyalton.org.uk

which in turn increases the amount of embedded carbon dioxide within the development. Such an approach would be extremely difficult for a planning authority to enforce and hence we would suggest that projects employ a fabric first approach to energy conservation and be required to be enforced using the Passivhaus Planning Package design tool to ensure compliance.

The East Hampshire Net Zero Evidence Base Study states that (p28) “an alternative approach might be to give developers the option of showing compliance via some sort of third party assessment scheme. In this case they would simply be asked to show proof of certification, and EHDC would not need to review detailed energy statements.” Passivhaus certification would fulfil that requirement and remove the demand for expertise to assess applications which have an increase in specialism around energy.

Detached dwellings in particular (with a poorer form factor) should be required to have Passivhaus certification to ensure meeting the target of 15 kWh/m²/yr for space heating. This would lead to inherently more thermally efficient design solutions. As a rural area, tendency towards detached dwellings is likely to be strong, but needs to be balanced with appropriate energy measures.

A report on Passivhaus Construction Costs -

[https://www.passivhaustrust.org.uk/UserFiles/File/research%20papers/Costs/2019.10_Passivhaus%20Costs\(1\).pdf](https://www.passivhaustrust.org.uk/UserFiles/File/research%20papers/Costs/2019.10_Passivhaus%20Costs(1).pdf) - references (p11) an analysis that the additional cost of meeting the 15 kWh/m²/year space heating requirement is only around 4% of the average build cost. The benefits of Passivhaus construction go beyond reducing carbon emissions, to also reducing the risk of moisture, noise and other issues, bringing broader improvements in health and wellbeing.

Exemplar Local Plans, produced by other local authorities and drawing on Passivhaus requirements and methodology, can be viewed via

<https://www.passivhaustrust.org.uk/news/detail/?nId=1209>

We suggest that a pre-application design review should be mandatory to ensure appropriate quality schemes reach planning application stage.

With respect to EHDCs background paper

<https://www.easthants.gov.uk/media/7870/download?inline> Energy Alton believes this report to be unduly pessimistic in view of the experience in Ireland which had the same Building Regulations as Britain in 2010 and a very similar building stock. Ireland stayed on their pathway to sustainable, zero carbon homes, however George Osborne cancelled the same approach in Britain in 2015, with his Fixing the Foundations report. Ireland is now building near zero carbon homes with an airtightness of 1 air change per hour at 50 Pascals and ventilated using MVHR systems.

CLIM 2.2

Exceptions to meeting criteria b)-d) will only be made due to site-specific technical constraints or where development would otherwise be rendered unviable as per the outcomes of a project-specific viability assessment. Where exceptions are made, the Sustainability Statement must explain why the requirements of b)-d) cannot be met and the degree to which each requirement will be met, where the objective is to address the requirements as far as practical to do so given the relevant constraint(s).

CLIM 2.2 suffers in the same way as CLIM 2.1 a) & b) above, in that the terms 'site-specific technical constraints' and 'project-specific viability assessment' are too broad and not defined sufficiently to be easily enforceable. Also, if a sustainability statement can justify exceptions to this rule, this compromises the target entirely if offsetting is allowed – new buildings could generally meet this standard with appropriate design approaches.

The East Hampshire Net Zero Evidence Base Study makes several mentions of using offsetting for developments to reach net zero “where this cannot be delivered onsite” (p27). We strongly agree with the suggestion that “there are legitimate concerns about the effectiveness and additionality of offsetting schemes”. For example, a recent investigation found that over 90% of rainforest carbon offsets by the largest global certifier, Verra, were worthless - <https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe>. For new developments, offsetting offsite should not be allowable and becomes a easier temptation to use rather than intrinsically improving a design. Comment should be explicitly made in the local plan to reflect this. This would avoid lower standards in implementing a fabric first approach (as identified in fig. 44 energy hierarchy).

CLIM 2.3

Applicants should confirm a metering, monitoring and reporting strategy as part of a detailed (i.e. full or reserved matters) planning applications.

Requirements for all new non-residential development

- e) All proposals for the development of 500m² or more of non-residential floorspace (measured as gross internal area) should achieve a 100% regulated carbon emissions reduction from Building Regulations Part L 2021 (or future equivalent legislation). On site renewable energy generation should be proposed where this would meet the requirements of Policy CLIM4
- f) All other proposals must demonstrate how they have sought to reduce emissions as far as possible, exceeding the energy efficiency requirements of Part L 2021 (or future equivalent legislation).

CLIM 2.1 e) refers to a 100% reduction on the Building Regulations. This is an unhelpful way of expressing any saving, as a clear quantitative target has not been given.

Requirements for development involving existing buildings

CLIM 2.4

Where development involves the extension, alteration or retention of existing buildings, applicants should aim to meet the above residential or non-residential policy requirements (criteria a)–f) as applicable. If this is not technically feasible or where development would be rendered unviable as per the outcomes of a product-specific viability assessment, the Sustainability Statement must explain why the relevant criteria cannot be met and how criterion a) has been implemented to reduce energy demands to the lowest practical level.

CLIM 2.5

Retrofitting measures to improve the energy efficiency of existing buildings will be supported, subject to other policies of the development plan.

CLIM 3 Net-Zero Carbon Development: Embodied Emissions

CLIM 3.1

All development will be expected to reduce the carbon emissions arising from the production of its building materials, their transportation, installation and maintenance and their disposal at the end of their lifecycle.

CLIM 3.2

For development proposals of 10 or more new homes, estimates for the development's whole life-cycle emissions (excepting operational energy) should be calculated and reported in accordance with a nationally recognised Whole Life Carbon Assessment, Throughout the design, procurement, construction and post-construction stages, decisions should be taken to identify and make reductions in carbon emissions.

CLIM 3.2 should relate to all developments of 4 or more new homes, to include all speculative development other than very small sites. This will also avoid the possibility of developers of larger sites splitting their development into smaller sections to avoid the possibility of enforcement.

CLIM 3.3

For proposals on previously developed land the following hierarchy should be followed in respect of any existing buildings and structures:

- a. Renovate and retrofit
- b. Re-design and re-purpose
- c. Demolish and re-use or recycle the materials on site.

There is a presumption against demolition unless it is demonstrated that steps a) and b) would lead to a similar or higher embodied carbon emissions or that there would be significant planning benefits that outweigh the carbon savings of retaining existing buildings or structures

[CLIM 3.3 is a welcome inclusion.](#)

CLIM 4 Renewable and Low Carbon Energy

CLIM 4.1

Proposals for renewable energy schemes, including ancillary development, will be under a presumption in favour of permission where the direct, indirect, individual and cumulative impacts on the following considerations are or will be made acceptable. This means that:

- a) The impacts are acceptable having considered the scale, siting and design and consequent impacts on landscape character, visual amenity; biodiversity; geodiversity; flood risk; townscape; heritage assets, the settings and the historic landscape including impact on the South Downs National Park and the Surrey Hills Area of Outstanding Natural Beauty and highway safety and rail safety and
- b) Aeronautical and other military considerations have been satisfactorily addressed and
- c) The impacts are acceptable on the amenity of sensitive neighbouring uses (including local residents) by virtue of matters such as noise, dust, odour, shadow flicker, air quality and traffic.

CLIM 4.2 The Local Planning Authority will support schemes for wind-based energy where they are located in potentially suitable areas. The Local Planning Authority will also support schemes for solar-based energy proposals. Site specific assessments and design will still be required.

CLIM 4.3 Where planning permission is needed, the Local Planning Authority will support proposals which are necessary for, or form part of, the transition to a net zero carbon East Hampshire. This could include proposals for energy generating technologies to meet the requirements of Policy CLIM2; energy storage facilities (such as battery storage or thermal storage) and upgrade or new electrical facilities (such as transmission facilities, sub-stations or other infrastructure).

CLIM 5 Climate Resilience

CLIM 5.1

All development should be located and designed to avoid or minimise the risks associated with a changing climate, taking account on the latest available evidence on the nature and extent of these risks.

CLIM 4.2

Development proposals should include site-specific and building-specific measures that ensure the safety, comfort, health and well-of occupiers and visitor. These measures should include:

- a) Building designs that will minimise the risk of overheating (focusing on layout, form, massing, fenestration, materials, roof design and shading devices) whilst also allowing for a level of passive heating so that net zero carbon requirements would be efficiently achieved.
- b) The inclusion of green and blue infrastructure that introduce or augment natural features to provide substantial areas of shade, shelter and cooling within the development and where appropriate on its boundaries. New green infrastructure should provide a mix of species that are resilient to pests, diseases and changes in growing conditions associated with climate change: and
- c) Site and building layouts that will provide comfortable external spaces and internal refuges to mitigate the effects of extreme weather

CLIM 4.3

For new residential development, private or communal space should be of a size, shape and orientation to enable residents to grow food and create space for nature within residential plots or the development site as a whole.

CLIM 4.4

All development that include landscaping must also include some form of rainwater collection to reduce reliance on mains water for irrigation