

Matter 22: Climate Change and Managing Natural Resources

Issue 1 – Does the Plan set out positively prepared policies relating to climate change and natural resources which are justified, effective and consistent with national policy?

[Policy ES1: Measures Required to Achieve Reduced Carbon Emissions]

[Policy ES2: Renewable Energy Generation]

[Policy ES3: Renewable Energy Networks and Shared Energy Schemes]

[Policy ES4: Other Requirements for the Sustainable Design of Buildings]

[Policy ES5: Managing Air Quality]

[Policy ES6: Contaminated and Unstable Land]

Questions

Policy ES1: Measures Required to Achieve Reduced Carbon Emissions

22.1 How do the requirements in the first paragraph of Policy ES1 compare with current Building Regulations and the changes expected to be implemented through the Future Homes Standard and the Future Buildings Standard?

1. The first paragraph of this policy expects developments that result in new dwellings to reduce their regulated carbon emissions by at least 75% from 1 January 2025 and be net zero (in terms of both operational carbon and embodied carbon) from 1 January 2030. The justification text highlights that these reductions related to the Building Regulations 2013, however, it also notes that it is unlikely that the national grid will be net zero by 2030.
2. The HBF generally supports the Council in seeking to reduce carbon emissions and to become net zero development. However, the HBF does not consider that the Council setting its own standards is the appropriate method to achieve these outcomes. Whilst the ambitious and aspirational aim to achieve net zero is lauded, the HBF is concerned that the Council is adding to the complexity of policy, regulations and standards that housebuilders are already expected to comply with. The key to success is standardisation and avoidance of individual Councils specifying their own policy approach, which undermines economies of scale for product manufacturers, suppliers and developers.
3. The HBF acknowledges that Section 19 (1A) of the Planning and Compulsory Purchase Act 2004 outlines that development plan documents must (taken as a whole) include policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change. The NPPF¹ looks for all plans to take a proactive approach to mitigating and adapting to climate change. However, The HBF continues to recognise the need to move towards greater energy efficiency via a nationally consistent set of standards and timetable,

¹ NPPF Sept 2023 paragraph 11(a), 20(d), 152-154

which is universally understood and technically implementable. This in line with the Written Ministerial Statement of December 2023 (WMS)², which states that the Government does not expect plan-makers to set local energy efficiency standards for buildings that go beyond current or planned building regulations.

4. Building Regulations Part L 2013 is used as a base line for measuring future building performance in terms of carbon reduction. Part L 2021 sees a 31% reduction in carbon use when compared to that of Part L 2013, it still sees the use of gas or fossil fuel heating used in new properties. The 31% improvement is achieved through enhanced performance to the design of the building fabric and within the appliances used within the home. Part L 2025 (known as the Future Homes Standard (FHS)) is expected to see a 75% to 80% reduction in carbon use when compared to Part L 2013. Any new home built to the Part L 2025 will not utilise any form of fossil fuel heating within the home, it will only contain sources of electric heating and electrical appliances. This means that the homes built to the FHS will be 'zero carbon ready'. This in turn means that as the National Grid decarbonises, no additional work will be needed to be carried out to those properties in order for them to function as 'zero carbon homes'.
5. The WMS clearly states that any planning policies that propose local energy efficiency standards for buildings that go beyond current or planned building regulations should be rejected at examination if they do not have a well-reasoned and robustly costed rationale that ensures: that development remains viable, and the impact on housing supply and affordability is considered in accordance with the NPPF; and the additional requirement is expressed as a percentage uplift of a dwellings Target Emissions Rate (TER) calculated using a specified version of the Standard Assessment Procedure (SAP).
6. The HBF would suggest that as currently worded Policy ES1 goes beyond current and planned building regulations. Therefore, there will be a need for the policy to be properly justified and evidenced in line with the WMS.

22.2 If the required reduction in carbon emissions for new buildings goes beyond current and planned Building Regulations, does Policy ES1 meet the tests set out in the Written Ministerial Statement of 13 December 2023 (Planning – Local Energy Efficiency Standards Update)? Specifically:

• What costs would be associated with the requirements to reduce carbon emissions, and what, if any, would be the effect on housing supply and affordability?

7. The HBF does not consider that the Council have a well-reasoned and robustly costed rationale. The Viability Assessment suggests that this policy does not impose additional costs on development, although it does link to other policies. The Assessment highlights that whilst precise details of the Future Homes Standard are yet to be published the 2019 consultation anticipated that it would achieve a 75% to 80% improvement reduction in CO₂ emissions over 2013 standards for dwellings. Paragraph 8.11 suggests that the 2025 Future Homes Standard is taken to add 7% to the cost of development and is assumed in the base appraisals. The Assessment has also included a scenario where an 11% increase is included. The Viability Assessment has included a couple of

² WMS December 2023 <https://questions-statements.parliament.uk/written-statements/detail/2023-12-13/hcws123>

examples of potential costs for on-site carbon reduction including costs from the Centre for Sustainable Energy (2018) with costs ranging from £4,400 to £14,700 per dwelling, and from Lancaster City Council (2021) with costs ranging from £2,850 to £14,750 per dwelling.

8. The HBF is also concerned that the costs used in the Viability Assessment are not fully reflective of the costs to incorporate the Future Homes Standard or the move to Net Zero. The Future Homes Hub published a report 'Ready for Zero: Evidence to Inform the 2025 Future Homes Standard' in February 2023³. The report drew on expertise from over 170 experts from more than 100 organisations covering home building, supply chain, consumer and public organisations, construction professions and campaign organizations. It identifies 5 contender specification philosophies these range from CS1: consistent with the expectation that the Future Homes Standard should reduce carbon emissions by a minimum of 75% from 2013, to CS5: to improve fabric efficiency to a level that a comfortable temperature is maintained without a heating system, with zero regulated carbon emissions with a SAP energy positive performance for end-terrace, mid-terrace and bungalow house types and close to net zero for apartments, semi-detached and detached homes. The report identifies potential costs for CS1 of £2,580 or 2% above Buildings Regulation 2021 costs, and for CS5 at £19,170 or 17% above Building Regulation 2021 costs. This isn't directly comparable to the Viability Assessment costs but does suggest that the costs may have been underplayed in the Assessment. Therefore, the HBF considers that the potential impact on viability is even greater than that identified by the Council, with even more potential for impact on affordability and supply.
9. The HBF does not consider that development remains viable and the HBF does not consider that the impact on the housing supply and affordability have been fully considered by the Council. The Viability Assessment clearly identifies the viability challenges in Sheffield, including in the base appraisals where the 7% cost increase has been considered.
10. The HBF does not consider that the Council have considered the impact this policy could have on affordability or on housing supply. Paragraph 12.88 of the Viability Assessment clearly states that if SCC wishes to pursue higher environmental standards over and above these to be introduced nationally through the changes to Part L of the Building Regulations, it is necessary to set an affordable housing target that is about 10% less than otherwise. Alternatively, it states that if SCC wishes to develop higher standards and to deliver more affordable housing, the Council could achieve this by allocating greenfield sites.
11. The HBF continues to consider that this policy should be deleted and left for building regulations, avoiding the same set of requirements being considered twice, and potentially reaching differing conclusions. It also avoids any conflict between the requirements of whatever building regulations are in place at 01/01/2025 and 01/01/2030

³ <https://irp.cdn-website.com/bdbb2d99/files/uploaded/Ready+for+Zero+-+Evidence+to+inform+the+2025+Future+Homes+Standard+-+Task+Group+Report+FINAL--280223-MID+RES.pdf>

and the requirements of the planning policy, which may lead to confusing and costly builds to meet both sets of requirements.

• How would the expected reduction in regulated emissions for new dwellings be calculated?

12. The HBF considers that this is a question for the Council. However, the HBF would strongly recommend that the Council does not seek to add any further confusion to the system by seeking to use a calculation different to that currently being used by the Building Regulation process.

• Would the required reduction in carbon emissions for new dwellings be applied flexibly, and if so, in what circumstances?

13. The HBF would expect the Council to ensure that the required reduction in carbon emissions for new dwellings is applied flexibly, as per the WMS. The WMS (Dec 2023) states that where plan policies go beyond current or planned building regulations, those policies should be applied flexibly to decisions on planning applications and appeals where the applicant can demonstrate that meeting the higher standards is not technically feasible, in relation to the availability of appropriate local energy infrastructure and access to adequate supply chains. Therefore, the HBF considers that if this policy is to be retained there is a need for significant amendment to allow for greater flexibility to reflect the issues identified in the WMS.

22.3 In considering whether a development met the requirements set out in the first paragraph of Policy ES1, how would the contribution of any habitat creation or restoration, or improvement in soil management (as referred to in parts e) and f) of the policy), be assessed?

14. The HBF considers that this is a question for the Council.

Policy ES2: Renewable Energy Generation

22.4 The first paragraph of Policy ES2 expects all new developments to use low-carbon energy sources and, where feasible, avoid the onsite combustion of fossil fuels. Are these requirements justified and consistent with national policy? Has the effect on development viability been assessed?

15. This policy states that all new development will be expected to use low carbon energy sources and where feasible, avoid the onsite combustion of fossil fuels. The justification for this policy states that the use of renewable and low carbon energy to heat and power buildings will help to deliver a net zero carbon city and will reduce the need for fossil fuels.

16. It is expected that new legislation will mean that from 2025 all newly built homes will not be able to include a gas boiler. This is part of the UK Government commitment to reducing carbon emissions to net zero by 2050. Therefore, the HBF does not consider that this element of the policy is necessary, it creates unnecessary duplication, and adds a negative tone to the policy, the HBF recommends the element in relation to gas boilers and electric resistive heating is deleted.

17. The HBF does not consider it is clear whether the Viability Assessment has considered costs associated with this policy and therefore whether the effect on viability has been fully considered.

22.5 In the context of part c), what does 'any protected areas' refer to?

22.6 Is the third paragraph of Policy ES2, concerning wind energy, consistent with paragraph 158 and footnote 54 of the NPPF?

22.7 How were the locations for smaller and larger wind turbines selected? What alternatives were considered, and why were they discounted?

Policy ES3: Renewable Energy Networks and Shared Energy Schemes

22.8 With regard to Policy ES3 a), how would the feasibility of connecting new development to an existing network be determined? Has the requirement been costed, and the effect on development viability accounted for?

18. This policy suggests that decentralised renewable and low carbon energy networks will be promoted by requiring connection to either the District Energy Network, the Biomass Combined Heat and Power Network or other renewable energy networks where feasible.
19. It is not clear how the feasibility of connecting new development to an existing network is to be determined by the applicant or the Council.
20. The Viability Assessment states that there are few published costs of District Heating Schemes. It highlights that informal discussions with suppliers suggests that the additional costs may be in the range of £3,000 to £7,000 per unit. The assessment then goes on to consider a system in LB Enfield, it highlights additional costs including £300 more per home for boiler and radiators for the system, costs of £2,000 per flat and £4,000 per house for the secondary heating network, and a cost for extending the Primary Heating Network to a development of £4,300 per home. The assessment states that a cost of £5,000 per house and £3,000 per flat, is tested as an option.

19.39 In Policy ES3 b), how would 'potential network routes' be identified and safeguarded?

21. This policy suggests that decentralised renewable and low carbon energy networks will be promoted by protecting existing networks and safeguarding potential network routes. It is not clear how potential network routes will be identified and safeguarded.
22. The HBF considers that it is important that this is not seen as requirement and is instead implemented on a flexible basis. Heat networks are one aspect of the path towards decarbonising heat.

Policy ES4: Other Requirements for the Sustainable Design of Buildings

[Note – Questions about Sustainable Drainage Systems will be covered under Policy GS11]

22.9 Is Policy ES4 e) consistent with national guidance on development and flood risk? How does it relate to the requirements in Policy GS9?

23. This policy expects all development to maximise the incorporation of sustainable design features including measures to avoid overheating, passive solar design, sustainable drainage systems, requiring compliance with Building Regulation Part G limiting water consumption to 110 litre per person per day, providing green, blue and brown roofs on residential developments comprising 10 or more dwellings in a single block which cover at least 80% of the total roof where viable and compatible. Part e specifically covers flood resistance and resilience measures with an allowance for climate change to be incorporated if located in, or adjacent to, flood risk areas both now and in the future.
24. The PPG⁴ sets out where an assessment shows that flood risk is a consideration for a plan or development proposal the process is avoid, control, mitigate and then manage residual risk. The PPG⁵ also explains what flood resistance and flood resilience is and what needs to be considered in the use of appropriate flood resistance and resilience measures. The NPPF states that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk and that where development is necessary in such areas the development should be made safe for its lifetime.

22.10 With regard to Policy ES4 h), is the requirement for compliance with the optional water efficiency requirement in Building Regulations Approved Document G, which restricts daily wholesome water consumption for a new dwelling to 110 litres per person, justified and supported by evidence? If so, to comply with the optional requirement, should Policy ES4 h) refer to limiting the consumption of wholesome water in new dwellings, rather than buildings?

25. The Building Regulations require all new dwellings to achieve a mandatory level of water efficiency of 125 litres per day per person, which is a higher standard than that achieved by much of the existing housing stock. This mandatory standard represents an effective demand management measure. The Optional Technical Housing Standard is 110 litres per day per person.
26. As set out in the NPPF⁶, all policies should be underpinned by relevant and up to date evidence, which should be adequate, proportionate and focussed tightly on supporting and justifying the policies concerned. Therefore, a policy requirement for the optional water efficiency standard must be justified by credible and robust evidence. If the Council wishes to adopt the optional standard for water efficiency of 110 litres per person per day, then the Council should justify doing so by applying the criteria set out in the PPG. PPG⁷ states that where there is a *'clear local need, Local Planning Authorities (LPA) can set out Local Plan Policies requiring new dwellings to meet tighter Building Regulations optional requirement of 110 litres per person per day'*. PPG⁸ also states the *'it will be for a LPA to establish a clear need based on existing sources of evidence, consultations with the local water and sewerage company, the Environment Agency and*

⁴ PPG ID: 7-004-20220825

⁵ PPG ID: 7-068-20220825 & ID: 7-069-20220825

⁶ Paragraph 31

⁷ PPG ID: 56-014-20150327

⁸ PPG ID: 56-015-20150327

catchment partnerships and consideration of the impact on viability and housing supply of such a requirement'. The Housing Standards Review was explicit that reduced water consumption was solely applicable to water stressed areas. Yorkshire and Sheffield are not considered to be an area of Water Stress as identified by the Environment Agency⁹. Therefore, the HBF considers that requirement for optional water efficiency standard is not justified nor consistent with national policy in relation to need or viability and should be deleted.

22.11 Is the requirement for providing green, blue or brown roofs in Policy ES4 j) supported by evidence and costed?

27. This policy states that where viable and compatible with other design and conservation considerations, providing green, blue or brown roofs which cover at least 80% of the total roof area on residential developments comprising 10 or more dwellings in a single block. The HBF does not consider that the requirement for providing green roofs is supported by evidence. The Viability Assessment states that there are few published costs with regard to green roofs, and suggests that an allowances is made adding 2% to the cost of housing schemes, 1% to the cost of low rise flats and 0.2% to the cost of tall buildings. As has been set out previously, the Viability Assessment also clearly sets out the viability challenges in Sheffield. The HBF would also question whether the use of green, blue or brown roofs, will always be the most sustainable development option, as it may be that the construction is of this is not the most sustainable or the roof may be better utilized in other ways.

Policy ES5: Managing Air Quality

22.12 How have the thresholds for 'significant development' contained in Table 1 been derived?

22.13 For the purposes of Policy ES5, the residential development threshold for an Air Quality Impact Assessment (AQIA) is 80 dwellings.

However, within the Central Sub-Area, Annex A requires the submission of an AQIA for sites with a development capacity of less than 80 dwellings. What is the basis for this lower threshold for some allocated sites and why is it not needed for smaller unallocated sites?

22.14 How would the Plan ensure that appropriate air quality mitigation measures were put in place for other sites below the Table 1 thresholds which may come forward during the Plan period?

Policy ES6: Contaminated and Unstable Land

22.15 Does Policy ES6 clearly set out the circumstances in which an assessment into land contamination or instability would be required, and the form that such an assessment should take?

Issue 2: Does the Plan set out positively prepared policies relating to minerals development which are justified, effective and consistent with national policy?

[Policy ES7: Safeguarding of Mineral Resources and the Exploration, Appraisal

⁹ 2021 Assessment of Water Stress Areas Update: <https://www.gov.uk/government/publications/water-stressed-areas-2021-classification>

and Production of Fossil Fuels]

[Policy ES8: Use and Production of Secondary and Recycled Aggregates]

Questions

Policy ES7: Safeguarding of Mineral Resources and the Exploration, Appraisal and Production of Fossil Fuels

22.16 Is the approach to the safeguarding and extraction of mineral resources consistent with national policy in the NPPF, advice in the Planning Practice Guidance, and the outcome of joint working with neighbouring Mineral Planning Authorities?

22.17 With regard to the first paragraph of Policy ES7, is it clear what is expected of decision-makers or developers in respect of a site with likely surface mineral resources? Is Policy ES7's expectation of investigation of economic potential for extraction clearly defined, justified and effective?

22.18 How would proposals for mineral extraction (including the limited extraction of building stone for the repair of historic buildings) be addressed with regard to other environmental constraints, such as the natural and historic environment, highways, flood risk, and effects on the living conditions of local residents?

22.19 Is the approach to the exploration, appraisal and production of oil and gas consistent with national policy?

22.20 What is the justification for the requirement in Policy ES7 g) that proposals demonstrate that, following public consultation, the planning impacts identified by the affected local community have been fully addressed and the proposal has their backing?

22.21 Where is Map 13, as referred to in paragraph 3.22 of the supporting text?

22.22 Are the Petroleum Exploration and Development Licences shown on the Policies Map?

22.23 Has sufficient account been taken of the need for high quality restoration and aftercare of worked sites, consistent with paragraph 210 h) of the NPPF?

Policy ES8: Use and Production of Secondary and Recycled Aggregates

22.24 Is the approach to the use and production of secondary and recycled aggregates consistent with national policy and justified through the outcomes of joint working, including any Local Aggregates Assessment?

22.25 With regard to paragraph 210 e) of the NPPF, are there any sites for the handling, processing and distribution of substitute, recycled and secondary aggregates within Sheffield's administrative area? If so, should they be safeguarded and mapped as part of the provision for minerals within Sheffield?

22.26 Taking into account Policy ES8 b), how would any new facilities for the handling, processing and distribution of substitute, recycled and secondary aggregates, which came forward on appropriate sites within the Plan period, be safeguarded?