

# UKGBC response to the National Planning Policy Framework and National Model Design Code consultation proposals

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## Introduction

The UK Green Building Council (UKGBC) is an industry network with a mission to radically improve the sustainability of the built environment, by transforming the way it is planned, designed, constructed, maintained and operated. As a charity with over 500 member organisations spanning the entire sector, we represent the voice of the industry's current and future leaders who are striving for transformational change.

We support the changes proposed to the National Planning Policy Framework (NPPF) to reflect the Government's response to the Building Better Building Beautiful Commission, and the introduction of the National Model Design Code. As highlighted in our recent response to the Planning White Paper, and supported by our members, proposed measures, such as the introduction of design codes, are a positive step towards addressing the issues with design quality highlighted by the likes of the Housing Audit 2020.<sup>1</sup>

Whilst we welcome the direction of travel evident across the proposed amendments, we believe many of the changes suggested need to be strengthened and enhanced further, in order for them to fully support their stated goal of delivering significant improvements in design quality and sustainability across the built environment.

Across these amendments and the wider NPPF, there is not currently a sufficiently robust recognition of the planning system as a key strategic vehicle for decarbonising the economy and enhancing climate resilience. As we highlight in our response, this must be rectified by ensuring that these reforms align clearly with the Climate Change Act. Likewise, a strategic, comprehensive approach to tackling the climate crisis, enhancing climate resilience and reversing biodiversity decline must be made a central, indisputable objective of the planning system. In particular, there is a clear need to ensure that these amendments fully reflect, and explicitly integrate, alignment with the goals of the UK's various national, legal and international commitments, including on biodiversity and climate resilience.

We very much welcome the introduction of the National Model Design Code and we support both its broad coverage and intended use to inform the development of local codes and deliver a baseline of coding standards across the country. We also welcome its coverage of a wide range of sustainability issues, including specifically embodied carbon, biodiversity enhancement and climate resilience. However, we would wish to see a much stronger emphasis on the importance of delivering sustainability outcomes throughout the Code, and sustainability should be explicitly added to the list of minimum requirements for all resulting local codes, in line with the imperative to support progress towards the UK's various environment commitments. Likewise, we wish to see much greater detail and guidance on how these sustainability requirements can be successfully integrated and coded for across the various area-types and development archetypes illustrated

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<sup>1</sup> UKGBC, "UKGBC response to "Planning for the Future" White Paper consultation", <https://www.ukgbc.org/wp-content/uploads/2020/10/UKGBC-Planning-for-the-Future-White-Paper-response.pdf>  
Place Alliance et al, "A Housing Design Audit for England", <https://indd.adobe.com/view/23366ae1-8f97-455d-896a-1a9934689cd8>

within the Code, with a level of detail commensurate with that provided for other sections, such as Built Form.

We welcome the opportunity to respond to this consultation – and below are our responses to individual questions which fall within our organisational remit.

## **Chapter 2: Achieving sustainable development**

### **Q1. Do you agree with the changes proposed in Chapter 2?**

Yes.

Whilst we welcome the direction of travel and acknowledgement of the role of planning in protecting and enhancing our natural environment reflected in these amendments, the substance of the proposed changes does not go far enough to effectively align the NPPF with the UK's national commitments, and we would wish to see them duly strengthened further.

The addition of a reference to the 17 Global Goals for Sustainable Development (UN SDGs) is a positive step. However, the absence of any further reference to the UN SDGs or the associated sustainable development definition, beyond this initial acknowledgement, is concerning. The UN SDGs represent a well-recognised pillar of Environmental and Social Governance strategies across our sector, and as such, UKGBC has long been calling for the NPPF's definition of sustainable development to directly align with the 2005 UK Sustainable Development Strategy definition and the obligations of the UN Sustainable Development Goals, as clearly articulated as Government objectives in the 25 Year Environment Plan.<sup>2</sup> Further revisions should be made to Chapter 2 to ensure the definition of sustainable development is strengthened and brought into direct alignment with the UN SDGs, and this emphasis should be maintained throughout the NPPF.

We welcome the changes to Paragraph 8c to strengthen the wording around the environmental objective '*to protect and enhance our Natural environment and improve biodiversity*'. However, we would also recommend the addition of a specific reference to 'waste reduction', in line with the Government's Resources and Waste strategy for England, Waste Prevention Programme for England and associated commitments.<sup>3</sup>

We are very concerned that the wording of the subsequent paragraph risks fundamentally undermining these objectives and the value of these additions. Paragraph 9 suggests that these objectives: '*are not criteria against which every decision can or should be judged. Planning policies and decisions should play an active role in guiding development towards sustainable solutions, but in doing so should take local circumstances into account*'.

This language is especially concerning given the critical importance of planning policy in helping to meet the UK's legal environmental targets and international commitments. It must be made clear

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<sup>2</sup> HM Government, "A Green Future: Our 25 Year Plan to Improve the Environment," <https://www.gov.uk/government/publications/25-year-environment-plan> p.116.

<sup>3</sup> Defra, "Resources and waste strategy for England", <https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england> ;

Defra, "Waste Prevention Programme for England", <https://consult.defra.gov.uk/waste-and-recycling/waste-prevention-programme-for-england-2021/>

that all planning strategies, and the decisions taken in support of them, should directly support the Government's ambitions and legal commitments to build a net zero-carbon future, reverse nature's decline and prepare for the impacts of climate change. Accordingly, it must be directly specified that planning policies, and all planning decisions, must be taken in line with the objectives and provisions of Climate Change Act 2008, including the 2050 net zero carbon target, the UK Climate Adaptation Communication, the objectives of the forthcoming Environment Bill and international commitments to tackle biodiversity decline.<sup>4</sup>

Specifically, changes to both Paragraphs 8c and 11a should include direct mentions of the need to align with, and drive progress towards, the national net zero target, international and domestic commitments on biodiversity enhancement, waste reduction and climate resilience. Additional amendments should also be made to strengthen the wording of Paragraph 9, to ensure it does not undermine these objectives, and adequately reflects the vital role of planning in requiring the delivery of sustainable solutions across the country.

Furthermore, the text should be updated to reflect the important role of local government in meeting the national legal net zero target, in line with the Government response to the Future Homes Standard Consultation which stated:

*"All levels of Government have a role to play in meeting the net zero target and local councils have been excellent advocates of the importance of taking action to tackle climate change. Local authorities have a unique combination of powers... (which) enables them to drive local progress towards our national climate change commitments ..."*<sup>5</sup>

Local authorities should be encouraged and enabled to move faster in achieving net zero where this has been agreed through climate emergency declarations, and they should be free to develop the policies needed, provided that development viability is maintained. As stated by the Committee on Climate Change (CCC) in the context of the Paris Climate Accord, carbon emission reductions secured via local authority action plans should represent 'locally determined contributions' in addition to nationally determined contributions.<sup>6</sup> As per our response to the Future Homes Standard Consultation, a forward trajectory for future uplifts to Building Regulations should be

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<sup>4</sup>HM Government, "Climate Change Act 2008", "<https://www.legislation.gov.uk/ukpga/2008/27/contents> ; HM Government, "The UK's Adaptation Communication to the United Nations Framework Convention on Climate Change (UNFCCC) 2020", <https://www.gov.uk/government/publications/the-uks-adaptation-communication-to-the-united-nations-framework-convention-on-climate-change-unfccc-2020> ; Defra, "The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting", [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/727252/national-adaptation-programme-2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/727252/national-adaptation-programme-2018.pdf) ; UN "UN Convention on Biological Diversity", <https://www.cbd.int/convention/text/> ; Defra, "Environment Bill 2020", <https://www.gov.uk/government/publications/environment-bill-2020>

<sup>5</sup> MHCLG, "The Future Homes Standard: 2019 Consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for new dwellings: Summary of responses received and Government response", [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/956094/Government\\_response\\_to\\_Future\\_Homes\\_Standard\\_consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/956094/Government_response_to_Future_Homes_Standard_consultation.pdf)

<sup>6</sup> CCC, "Local Authorities and the Sixth Carbon Budget", [www.theccc.org.uk/publication/local-authorities-and-the-sixth-carbon-budget/](http://www.theccc.org.uk/publication/local-authorities-and-the-sixth-carbon-budget/)

published to allow local authorities to set higher energy performance standards in line with future national requirements where practical and demonstrably viable.<sup>7</sup>

In addition, alongside references to beauty, we believe the social objective (8b) should include an explicit reference to the concept of social value, and the Public Services (Social Value) Act 2012.<sup>8</sup> Social value has become an increasingly prominent concept in the construction and property industry thanks to the introduction of the 2012 Public Services (Social Value) Act and the responsibility this placed on local authorities in England to consider social value in service contracts above a certain threshold. Driving social value in planning can be a valuable way to support the strategic priorities of local authorities, by ensuring that action to improve the sustainability of the built environment also helps to build stronger communities, improve health outcomes and strengthen local economies.

Social value should be clearly and consistently integrated into the NPPF, drawing on the work of the UKGBC's cross-industry task group to develop a Framework for defining social value across the sector.<sup>9</sup> Delivering social value should be clearly set out as one of the overarching ambitions of the NPPF.

### **Chapter 3: Plan-making**

#### **Q2. Do you agree with the changes proposed in Chapter 3?**

Yes.

We welcome the changes to Paragraph 35(d) to clarify the role of recent Written Ministerial Statements in planning. In particular, we welcome the implications of this clarification for the use of design codes and guides as material considerations in planning, and for local energy and carbon requirements.

A changing national policy context for housing in recent years has led to both confusion and uncertainty about what can and cannot be done at the local level to raise the sustainability of new build homes. Given this historical issue, we welcomed recent confirmation in the Government's response to the Part L/F Future Homes Standard consultation that, for now, local authorities will continue to be able to set standards above the national minimum. However, it was left ambiguous as to whether this ability could be constrained in future via national-level development policies. UKGBC strongly supports local authorities' ability to move faster in achieving net zero, adapting to climate change and reversing biodiversity decline, through powers to set ambitious standards and policies above the national minimum.

To help provide clarity, Chapter 3 should include a specific reference to the ability of local authorities to set standards and policies with requirements above the national minimum. This

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<sup>7</sup> UKGBC, "UKGBC Response to MHCLG Consultation on the Future Homes Standard", <https://www.ukgbc.org/wp-content/uploads/2020/02/UKGBC-Response-to-MHCLG-Future-Homes-Standard-Consultation-FINAL.pdf>

<sup>8</sup> Cabinet Office, "Social Value Act", <https://www.gov.uk/government/publications/social-value-act-information-and-resources/social-value-act-information-and-resources>

<sup>9</sup> UKGBC, "Framework for defining Social Value", <https://www.ukgbc.org/wp-content/uploads/2021/02/Framework-for-Defining-Social-Value.pdf>

should specifically mention both carbon and energy, in order to support local authorities in meeting more ambitious local net zero targets or climate emergency declarations. It should also include a direct link to the Climate Change Act, and the need for plans to be compatible with achieving the national 2050 net zero target.

To help support ambitious local authorities, UKGBC has produced extensive guidance via our [New Homes Playbook](#) on the requirements we believe they should introduce to drive sustainable new homes in their area, should they wish to go beyond what is required by national policy.<sup>10</sup> This includes measures to reduce energy demand and carbon emissions, mitigate overheating risk, reduce embodied carbon, and the cross-cutting issue of assuring performance at the scale of the individual property. We have also produced similar guidance for local authorities on [integrating social value into planning, procurement and land disposal](#).<sup>11</sup>

As per our response to the Planning White Paper, the NPPF should explicitly set out requirements for local plans to be carbon audited and to show emissions reductions in line with the Climate Change Act. It should also set out a clear methodology for carbon handling in the plan preparation and development management process. This should be accompanied by guidance on a process for local authorities to record and report on development-related emissions data, ultimately to include both operational and whole-life carbon data.

In parallel, it is also vitally important that the industry work with Government to develop a consistent metric for measuring the climate resilience/adaptation of buildings, to be subsequently incorporated into the NPPF. This would also provide a valuable basis by which the Government could measure progress towards its National Adaptation Strategy.<sup>12</sup> Local authorities should be required to develop Adaptation Plans, which include a comprehensive climate change risk assessment for their local area and cover all aspects of adaptation, including overheating risks, water supply and flooding. These strategies should be used to inform local plans, wider spatial planning policies and guidance such as Spatial Frameworks or Spatial Development Strategies, and development decisions should avoid adding to the vulnerability of existing or proposed developments.

Local plans should also assess, describe and plan for the energy system transition that will be needed across the entire Local Plan, to ensure that new developments are planned in such a way as to fit within the decarbonisation strategy for the Local Plan area as a whole. Local plans must prepare a positive strategy for renewable and low carbon energy and heat which maximises the potential for suitable development. Strategies must examine the technical potential for all forms of mature, deployable renewable energy, including but not limited to onshore wind, solar, micro-hydro, and clearly identify suitable areas for their development. Neighbourhood plans also should be encouraged to address climate change, including through accelerating the rollout of renewable energy.

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<sup>10</sup> UKGBC, “New Homes Policy Playbook” <https://www.ukgbc.org/ukgbc-work/new-homes-policy-playbook/>

<sup>11</sup> <https://www.ukgbc.org/ukgbc-work/driving-social-value-in-new-development-options-for-local-authorities/>

<sup>12</sup> Defra, “The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting”, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/727252/national-adaptation-programme-2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/727252/national-adaptation-programme-2018.pdf)

Local Area Energy Plans (LAEPs) should therefore become a required component of the evidence base for any Local Plan, to ensure that the energy needs (and therefore carbon emissions) of new developments are planned in such a way as to fit within the decarbonisation strategy for the Local Plan area as a whole. Local Area Energy Plans provide a sound foundation for effective and sustained local action to cut carbon emissions, outlining the changes needed over time to achieve all local commitments on net zero carbon emissions. A LAEP also defines what other actors, such as national government, regulators and energy networks, need to do (and when) for the decarbonisation plan to become a reality.

To comprehensively underpin a Local Plan, a LAEP must provide robust technical evidence through analytical techniques that consider the whole energy system (energy, transport and waste), and make consistent use of available data. For example, the energy system scope of the analysis must include: local generation opportunities for low/zero carbon heat and power; distribution networks for electricity, gas and heat; use of distributed hydrogen where regional/national contexts suggest it may be an option; heat demand in buildings, and the opportunities for managing and meeting it. Transport analysis is likely to include expected demand for EV charging, and its impacts on electricity distribution systems, as well as patterns of modal shift and reduced associated fuel emissions.

#### **Chapter 4: Decision making**

##### **Q3. Do you agree with the changes proposed in Chapter 4? Which option relating to change of use to residential do you prefer and why?**

Yes.

UKGBC has previously expressed strong concerns about the extension of Permitted Development Rights (PDR) given the extensive evidence of their detrimental impact on development quality, sustainability outcomes, and residents' health and wellbeing. We echo the concerns clearly raised by the Building Better Building Beautiful Commission about the quality of development delivered under PDR.<sup>13</sup> Despite the use existing pattern books and standard specifications, permitted development continues to deliver poor quality development across the built environment.<sup>14</sup>

We believe the proposed changes to the NPPF should better reflect the Building Better Building Beautiful Commission's recommendation that:

*"The government should evolve a mechanism whereby meaningful local standards of design and placemaking can efficiently apply to permitted development rights. This is not possible at present under the current legal arrangement. It should be."<sup>15</sup>*

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<sup>13</sup> BBBBC, "Living with Beauty",

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/861832/Living\\_with\\_beauty\\_BBBBC\\_report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/861832/Living_with_beauty_BBBBC_report.pdf)

<sup>14</sup> MHCLG, "Quality standard of homes delivered through change of use permitted development rights", <https://www.gov.uk/government/publications/quality-standard-of-homes-delivered-through-change-of-use-permitted-development-rights>

<sup>15</sup> BBBBC, "Living with Beauty", p.71

Permitted Development Rights should be reformed to specifically include much stronger sustainability requirements, such as achieving higher energy efficiency and air quality standards, access to green spaces, ensuring climate resilience through mitigating overheating risk, and promoting nature-based solutions and urban greening.

We therefore support the expansion of Article 4 directions that restrict the scope of Permitted Development Rights either in relation to a particular area or site, or a particular type of development anywhere in the authority's area. Although neither option presented in the current draft is sufficiently ambitious to address these pervasive quality concerns, the first option is marginally preferable, as it expands the potential use of Article 4 declarations beyond just heritage concerns to encompass a much broader remit in terms of avoiding '*wholly unacceptable adverse impacts*'. This wording should be strengthened to clarify the need to directly avoid negative health, wellbeing, and sustainability outcomes.

## **Chapter 5: Delivering a wide choice of high quality homes**

### **Q4. Do you agree with the changes proposed in Chapter 5?**

Yes.

We agree with the amendments to Paragraph 70 to clarify the scope of Neighbourhood Planning groups. We support the role of Neighbourhood Plans in the planning system, as level of local involvement and co-creation involved means that they are a vital means by which social value outcomes can be maximised in local planning. To realise these benefits, Neighbourhood Plans must have real teeth in the planning system to determine local development. Neighbourhood planning should continue to be able to deal with the full range of spatial planning activities, including allocating sites and local development management policies.

Whilst we support the addition to Paragraph 73 of the need to provide '*genuine choice of transport modes*' for large scale developments, this wording should be refined to specify '*low-carbon and sustainable transport*'. This is vital for ensuring that the transport associated large development is compatible with reaching our national net zero target and local decarbonisation plans. Likewise, it should be specified that such transport infrastructure should be compatible with progress towards other key environmental policy objectives, such as reversing biodiversity decline and tackling air pollution.

Further amendments to Paragraph 73 should be made to specify that large new developments are supported by the necessary net zero compatible, climate resilient infrastructure, to ensure they avoid 'locking in' emissions and do not compromise an area's resilience to the impacts of climate change, through drainage or water supply pressures.

Although local authorities already currently produce Infrastructure Delivery Plans as part of a Local Plan's evidence base, these can vary in quality and do not reflect 'live' cumulative infrastructure capacity. Local authorities also currently have no statutory powers to align utility providers' investment strategies with wider local objectives. Further amendments should recommend local authorities and infrastructure providers develop area-based tools, such London's Infrastructure Mapping Application, to provide a 'live' strategic evidence base for the delivery of net zero

compatible, climate resilient development.<sup>16</sup> Clear requirements should be outlined to ensure that Infrastructure Delivery Plans, Local Plans and Spatial Frameworks take into account local Adaptation Strategies, including a comprehensive assessment of the climate resilience pressures and the implications for development.

We welcome the amendments to Paragraph 73(c) to affirm the possible use of Garden City principles, masterplans and codes for large developments. However, following the recommendations of the Housing Audit 2020, and supported by our members, we would recommend that the wording be amended to directly require site-specific design codes and masterplans be produced for sites over 10 units.<sup>17</sup> The status of these codes should be clarified in the NPPF so that, once prepared, they are fully enforceable by Local Planning Authorities and are not just guidance that can be ignored. These design codes should be produced with local consultation and following meaningful engagement with local communities.

The findings of the Housing Audit 2020 revealed that site-specific design codes, produced via meaningful engagement with the local community, consistently resulted in better design outcomes.<sup>18</sup> These findings have subsequently been echoed by our members and across our social value programme.<sup>19</sup> For more on the relationship with the National Model Design Code and local design codes or guides, see our answer to question 15.

## **Chapter 8: Promoting healthy and safe communities**

### **Q5. Do you agree with the changes proposed in Chapter 8?**

Yes.

We support the changes proposed in Chapter 8 to encourage walkable neighbourhoods and cycling.

We also support the amendments to Paragraph 97 to emphasise the wider benefits of green space for nature and efforts to address climate change. However, the proposed text should also include reference to the importance of green space for mitigating the impacts of air pollution. In addition, we would like to see the wording reflect the need for local green spaces to contribute positively towards delivering environmental net gain.

Chapter 8 should also integrate references to the concept of social value, in terms of reflecting and assessing the benefits of green space for the community.

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<sup>16</sup>GLA, "London Infrastructure Map", <https://www.london.gov.uk/what-we-do/business-and-economy/better-infrastructure/london-infrastructure-map>

<sup>17</sup> UKGBC, "UKGBC response to "Planning for the Future" White Paper consultation", <https://www.ukgbc.org/wp-content/uploads/2020/10/UKGBC-Planning-for-the-Future-White-Paper-response.pdf>

<sup>18</sup> Place Alliance et al, "A Housing design Audit for England", <https://indd.adobe.com/view/23366ae1-8f97-455d-896a-1a9934689cd8>

<sup>19</sup>UKGBC, "Social Value in New Development", <https://www.ukgbc.org/wp-content/uploads/2018/03/Social-Value.pdf>

## **Chapter 9: Promoting sustainable transport**

### **Q6. Do you agree with the changes proposed in Chapter 9?**

Yes.

We welcome the changes to Paragraph 105 D and supporting footnote 45 to promote walking, cycling, and ensure local authorities do not continue to rely on outdated highways guidance.

We also support the additions to Paragraph 109 C that the design of streets, parking areas, other transport elements and the content of associated standards should reflect current national guidance, including the National Design Guide and the National Model Design Code. See also our response to question 15.

However, as per our responses to questions 2 and 3, further amendments should be made to ensure planning policy takes full account of the transport implications of proposed developments, their locations and prospective carbon impacts. The NPPF should explicitly set out requirements for local plans to be carbon audited and to show emissions reductions in line with the Climate Change Act, and should set out a clear methodology for carbon handling in the plan preparation and development management process. Any proposed sustainability assessment should take into account the accessibility of development locations and planning authorities should be empowered to refuse planning applications in that risk locking-in unsustainable transport-related emissions.

## **Chapter 11: Making effective use of land**

### **Q7. Do you agree with the changes proposed in Chapter 11?**

Yes.

Whilst we approve of the acknowledgment that *“Area-based character assessments, codes and masterplans can be helpful tools in helping to ensure that land is used efficiently while also creating beautiful and sustainable places,”* as per our answers to questions 15 and 5, we would like to see requirements around the use and production of codes strengthened further. Site-specific design codes should be produced for all development over 10 units in size, involving community consultation and covering all the key principles outlined in the National Design Guide. Likewise measures to fulfil the recommendations of the sustainability sections in both the National Model Design Code and National Design Guide should be an essential component of all design codes and part of any minimum requirements.

## **Chapter 12: Achieving well-designed places**

### **Q8. Do you agree with the changes proposed in Chapter 12?**

Yes.

We agree with the addition of ‘sustainable and beautiful’ to Paragraph 125 in terms of outlining what kind of buildings and places the planning and development process aims to achieve. We also

welcome the additions to Paragraph 126 that confirm the potential role for Neighbourhood Planning groups in the production of local design codes.

In addition, we support the additions of Paragraph 127 and 128 to incorporate the introduction of local authority design codes and guides, intended to reflect local design preferences and deliver high-quality standards of design. We particularly welcome the specification that all guides and codes should be based on effective community engagement and reflect local aspirations for the development of their area. The evidence from both our members and our social value programme is that effective public engagement, and co-creation with communities, is a vital for delivering good design, and constructive engagement helps to maximise the social value outcomes that can be delivered by a development.<sup>20</sup>

We also support the specification that the production of local codes should take into account the guidance contained in the National Design Guide and the National Model Design Code. We strongly support the Ten Characteristics of Good Design outlined in both the National Design Guide and Model Design Code. However, Paragraph 127 suggests that for local design codes the:

*“level of detail and degree of prescription should be tailored to the circumstances and scale of change in each place, and should allow a suitable degree of variety where this would be justified”.*

Whilst we support the need for local variation, including the ability of local authorities to set more ambitious requirements in key areas, such as sustainability, we would recommend that amendments to Paragraph 127 include a specific requirement for local and site-specific codes to be based on, and address, all Ten Characteristics of Good Design in the National Model Design Guide and Model Design Code. This would help deliver a degree of consistency for the industry, and ensure that key design principles are not omitted or neglected in the production of local or site codes. This in turn will be essential for the successful delivery of the stated aim to deliver a baseline of - and uplift to - design quality across the country. In particular, given the importance of meeting the Government’s various environmental targets and commitments, it should be specifically stated that sustainability considerations must be addressed comprehensively as part of any minimum requirements in local design codes. For more on the National Design Code see our answer to question 15.

We support the addition of Paragraph 130 that all new streets should be tree-lined (unless, in specific cases, there are clear, justifiable and compelling reasons why this would be inappropriate) and that appropriate measures should be put in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. However, this paragraph goes on to say:

*“Applicants and local planning authorities should work with local highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.”*

Our members have highlighted that current highways standards, and associated adoption provisions, can be a considerable obstacle in the delivery of street-trees, and often end up delivering highways dominated streets without trees. Clarification should be put into the NPPF, forthcoming

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<sup>20</sup> UKGBC, “Social Value in New Development”, <https://www.ukgbc.org/wp-content/uploads/2018/03/Social-Value.pdf>

Manual for Streets and Highways guidance to require that highways authorities take a place and people (rather than roads and cars) first approach to new residential areas, which includes a clear emphasis on maximising the potential for street trees.

In addition, to clarify the number of trees required to meet the definition of “tree-lined streets”, we would recommend the NPPF incorporate a mechanism similar to the Urban Greening factor used in the London plan, to allow for the specific calculation, in units, of any greenery required. UKGBC supports an outcome-based approach to the delivery of street trees that seeks to maximise the related environmental benefits, such as air pollution mitigation and urban cooling. This should be supported by supplementary guidance on the types of trees appropriate for the delivery of key environmental benefits, including air pollution mitigation and urban cooling. An extensive review of the underpinning evidence base is available via the work of the IGNITION project in Greater Manchester.<sup>21</sup> Further guidance in this area could potentially be addressed through Natural England’s forthcoming green infrastructure standards intended to accompany the National Model Design Code. Similar guidance should also be provided on the accompanying road surfacing requirements to ensure porous, nontoxic materials are used in the trees’ immediate vicinity.

We also strongly support the additions to Paragraph 133 to make clear that development that is not well designed should be refused, especially where it fails to reflect local design policies and government guidance on design. This amendment will help directly address the kind of poor and mediocre design seen extensively in the [Housing Audit 2020](#), and, in conjunction with design codes and guides, provide a much more rigorous, a very welcome, basis for assessing and deterring poor design.

## **Chapter 13: Protecting the Green Belt**

### **Q9. Do you agree with the changes proposed in Chapter 13?**

N/A

## **Chapter 14: Meeting the challenge of climate change, flooding and coastal change**

### **Q10. Do you agree with the changes proposed in Chapter 14?**

Yes.

We welcome the changes to paragraphs 160 and 161, which clarify that the associated policies apply to all sources of flood risk. Likewise, we support the specific additions to Paragraph 160 c, that plans to manage any residual risk should make as much use as possible of natural flood management techniques and green infrastructure solutions. And we welcome the amendments to Paragraph 166 b in terms of clarifying the definition of a flood resilient property.

However, we would wish to see further amendments to Paragraph 166 to require all properties at risk of flooding include property flood resilience measures specified and installed in accordance with the industry Code of Practice for property flood resilience. The use of Sustainable Drainage

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<sup>21</sup> IGNITION, “Evidence Base”, <https://www.greatermanchester-ca.gov.uk/what-we-do/environment/natural-environment/ignition/>

Systems (SuDS) should also be made mandatory for all development, where applicable, matching with the recommendations of the National Model Design Code. This should be supported by updates to Non-Statutory Technical Standards for SuDS, to include a requirement for multi-functional environmental benefits, such as biodiversity enhancement. An amendment should also be added to clarify the role of Catchment Partnerships in ensuring that holistic consideration is given to flooding and drainage issues as part of the planning process, together with consultation with local water companies.<sup>22</sup>

In addition, we believe amendments should be made to this chapter to directly reference the need for policy and development to align with the aims of the UK's Adaptation Communication and National Adaptation Programme.<sup>23</sup> As a consequence of aligning planning policy with these commitments, this section should be amended further to include additional references and policies to directly address overheating, water use, water supply and water efficiency concerns.

Overheating and the associated excess deaths from heatwaves are predicted to rise considerably as a consequence of climate change in the England.<sup>24</sup> The summer heatwave of 2019 resulted in 900 excess deaths according to Public Health England, and was reportedly made ten times more likely – and 1.5°C to 3°C warmer – by climate change.<sup>25</sup> Roughly 20% of homes in England already experience overheating issues, even during cooler summers, and the proportion of green space, which can provide a local cooling effect, has dropped from 63% to 55% between 2011 and 2016.<sup>26</sup> Likewise, regional water shortages are already becoming increasingly common.<sup>27</sup> Given the severity of these issues, it is essential that planning policy be updated to comprehensively address these concerns. We believe the same level of policy consideration should be extended to overheating and water supply, as is currently the case for flooding and coastal erosion. This specifically should include the introduction of a sequential risk-based, approach to managing overheating risk, similar to that currently in place for considering flood risk. This approach should likewise prioritise the use of green infrastructure to mitigate the heat-island effect, and outline further overheating mitigation steps in line with the recommendations of UKGBC's New Homes Policy Playbook.<sup>28</sup>

Furthermore, Paragraph 152 currently states that:

*“Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. Policies should support*

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<sup>22</sup> For more information, see: Policy Connect, “Bricks & Water: Building resilience for England's homes”, <https://www.policyconnect.org.uk/research/bricks-water-building-resilience-englands-homes>

<sup>23</sup> Defra, “The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting”, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/727252/national-adaptation-programme-2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/727252/national-adaptation-programme-2018.pdf); HM Government, “The UK's Adaptation Communication to the United Nations Framework Convention on Climate Change (UNFCCC) 2020”, <https://www.gov.uk/government/publications/the-uks-adaptation-communication-to-the-united-nations-framework-convention-on-climate-change-unfccc-2020>

<sup>24</sup> Climate Coalition, “Home Truths: how climate change is impacting UK homes”, [https://issuu.com/theclimatecoalition/docs/tcc\\_-\\_document\\_-\\_ac4](https://issuu.com/theclimatecoalition/docs/tcc_-_document_-_ac4)

<sup>25</sup> Climate Coalition, “Home Truths: how climate change is impacting UK homes”; Robert Vautard et al, “Human contribution to the record-breaking July 2019 heat wave in Western Europe”, <https://www.worldweatherattribution.org/wp-content/uploads/July2019heatwave.pdf>

<sup>26</sup> Climate Coalition, “Home Truths: how climate change is impacting UK homes”.

<sup>27</sup> Climate Coalition, “Home Truths: how climate change is impacting UK homes”.

<sup>28</sup> UKGBC, “New Homes Policy Playbook”, <https://www.ukgbc.org/ukgbc-work/new-homes-policy-playbook/>

*appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.”*

We would wish to see this strengthened and supported further through the introduction requirements to specifically consider, and plan strategically for, the impacts of development on local water supplies. These requirements should resemble those currently in place for strategic flood risk assessment and subsequent risk management (Paragraph 160). In addition to strategic planning on water supply, a sequential risk-based approach to address local water supply pressure concerns should be introduced, including requirements for key mitigation measures.

We welcome the statement in the guidance notes to the National Model Design Code that:

*“Design codes can provide guidance and regulation around water saving which may address rainwater harvesting, dual potable and grey water recycling systems and requirements for “water neutrality” for new development and include reference to Optional Technical Standards for water efficiency standards.”*

However, for clarity, we would wish to see this statement also added into the NPPF.

Furthermore, we believe additional wording should be added to clarify the ability of local planning authorities to reject applications if they are found to be incompatible with climate adaptation and resilience concerns, such as via enhanced flood risk, local water supply pressure and overheating.

Paragraph 154 currently considers measures to increase the use of supply of renewable, low carbon energy and heat.

*“a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);  
b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and  
c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.”*

As per our response to question 2, Local Area Energy Plans should become a required component of the evidence base for any Local Plan, to ensure that the energy needs (and therefore carbon emissions) of new developments are planned in such a way as to fit within the decarbonisation strategy for the Local Plan area as a whole.<sup>29</sup> The NPPF should explicitly set out requirements for local plans to be carbon audited and to show emissions reductions in line with the Climate Change Act, and should set out a clear methodology for carbon handling in the plan preparation and development management process.

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<sup>29</sup> TCPA, CSE & UKGBC, “Why the Planning System needs to be at the heart of delivering the UK’s Climate Change targets”, <https://www.cse.org.uk/downloads/reports-and-publications/policy/planning/planning-white-paper-consultation-october-2020.pdf>

As included in the UKGBC's Net Zero Carbon Buildings Framework, we would support the strengthening of the wording in this section to support the maximum possible delivery of onsite renewable energy sources.<sup>30</sup> These specifications should follow and incorporate the principles of industry best practice outlined in UKGBC's Renewable Energy Procurement & Carbon Offsetting Guidance for Net Zero Carbon Buildings.<sup>31</sup> However, the importance of prioritising energy efficiency measures and demand reduction, as part of the 'fabric-first' approach supported in the Government's recent response to the Part L/ F Future Homes Consultation, must be made clear.<sup>32</sup> An additional amendment should be added to this section to reflect the fabric-first approach endorsed in the Government's consultation response.<sup>33</sup>

## **Chapter 15: Conserving and enhancing the natural environment**

### **Q11. Do you agree with the changes proposed in Chapter 15?**

Yes.

We support the changes proposed in Chapter 15. In particular, we strongly support the additions to Paragraph 179 D that:

*“development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around other developments should be pursued as an integral part of their design, especially where this can secure measurable net gains for biodiversity and enhance public access to nature.”*

However, as per our response to question 1, we would like to see clear, explicit alignment between planning policy and relevant UK environmental commitments, such as the obligations under the UN Convention for Biological Diversity.

We support the Wildlife Trust's call for 'wild belts' to be introduced as a new designation with additional protections to safeguard vital nature recovery areas from development.

## **Chapter 16: Conserving and enhancing the historic environment**

### **Q12. Do you agree with the changes proposed in Chapter 16?**

N/A

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<sup>30</sup> UKGBC, “Net Zero Carbon Buildings: A Framework Definition”, <https://www.ukgbc.org/ukgbc-work/net-zero-carbon-buildings-a-framework-definition/>

<sup>31</sup> UKGBC, “UKGBC's Renewable Energy Procurement & Carbon Offsetting Guidance for Net Zero Carbon Buildings”, <https://www.ukgbc.org/ukgbc-work/renewable-energy-procurement-carbon-offsetting-guidance-for-net-zero-carbon-buildings/>

<sup>32</sup> UKGBC, “New Homes Policy Playbook”, <https://www.ukgbc.org/ukgbc-work/new-homes-policy-playbook/>

<sup>33</sup> MHCLG, “The Future Homes Standard: 2019 Consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for new dwellings Summary of responses received and Government response”, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/956094/Government\\_response\\_to\\_Future\\_Homes\\_Standard\\_consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/956094/Government_response_to_Future_Homes_Standard_consultation.pdf) p. 5, 12, 35.

## Chapter 17: Facilitating the sustainable use of minerals

### Q13. Do you agree with the changes proposed in Chapter 17?

N/A

#### Annex 1: Implementation

*Minor changes have been made to update the position on transitional arrangements, and on the Housing Delivery Test.*

#### Annex 2: Glossary

*The definition of “green infrastructure” has been updated to better reflect practice, as already set out in Planning Practice Guidance, published evidence reviews and the new national framework of green infrastructure standards.*

*The definition of the “Housing Delivery Test” has been amended to reflect the rulebook. This clarifies that the test measures homes delivered in a local authority area against the homes required, using national statistics and local authority data.*

*The definition of “minerals resources of local and national importance” has been amended to include coal derived fly ash in single use deposits.*

*Definitions of “mineral consultation area”, “recycled aggregates” and “secondary aggregates” have been added to reflect the changes in chapter 17.*

### Q14. Do you have any comments on the changes to the glossary?

We support the proposed changes to the definition of green infrastructure to reflect its multifunctionality and the wide range of associated environmental economic and health benefits. However, we would suggest further additions to clarify the benefits of green infrastructure for both climate *mitigation* and *adaptation*, as well as the critical role greenery can play in delivering beautiful places, as per our response to – and the recommendations of – the Building Better Building Beautiful Commission.<sup>34</sup>

In addition, a concern raised by our members was that the glossary also does not currently include a guiding definition of beauty, despite the fact this has been added as a specific concept into the NPPF. We would recommend a definition derived from the work of the Building Better Building Beautiful Commission is added into the glossary, reflecting the full findings and recommendations in the final report.<sup>35</sup>

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<sup>34</sup> BBBBC, “Living With Beauty”, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/861832/Living\\_with\\_beauty\\_BBBBC\\_report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/861832/Living_with_beauty_BBBBC_report.pdf) ;

UKGBC, “Building Better, Building Beautiful Commission UKGBC response”, <https://www.ukgbc.org/wp-content/uploads/2019/06/UKGBC-Building-Better-Building-Beautiful-response.pdf> ;

<sup>35</sup> BBBBC, “Creating space for beauty: interim report of the Building Better, Building Beautiful Commission”, <https://www.gov.uk/government/publications/creating-space-for-beauty-interim-report-of-the-building-better-building-beautiful-commission>

## National Model Design Code

### Q15. We would be grateful for your views on the National Model Design Code, in terms of

#### a) the content of the guidance

UKGBC welcomes the introduction of the National Model Design Code. As demonstrated by the findings of the Housing Audit 2020 and our members, subsequently highlighted in our response to the Building Better Building Beautiful Commission, design codes are crucial means by which we can deliver high quality, beautiful, sustainable design. Our feedback is divided below into areas of the Code and accompanying guidance we strongly support, and suggested additions.

#### Areas we support:

We welcome that the National Model Design Code follows the Ten Characteristics of Good Design outlined in the National Model Design Guide. We also welcome the extensive coverage of key sustainability issues in the National Model Design Code and accompanying guidance notes, alongside the illustrations and archetypes designed to support best practice.

In particular, we support the inclusion of embodied carbon and addressing the carbon emissions associated with construction. The carbon impacts related to the product and construction stages of a building are significant, in some cases accounting for half of a new building's whole life carbon impacts.<sup>36</sup> We also welcome the specific inclusion of extensive measures designed to enhance nature and deliver biodiversity net gain, as well as the substantive consideration of both climate adaptation and nature-based solutions.

However, we have several key additions and amendments we would like to see to maximise the potential of the Code to properly address key areas associated with sustainability and delivering good design quality.

#### Suggested additions:

##### 1 – The Code must clearly and consistently align with the UK's environmental objectives

We would like to see the National Model Design Code more explicitly aligned with delivering progress towards the UK's domestic and international environmental objectives. Although the Code's objectives do currently include a reference to the national 2050 net zero target, there is not a wider acknowledgement of the need to support progress towards both the UK's national and international commitments on both biodiversity recovery and climate adaptation.<sup>37</sup>

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<sup>36</sup>UKGBC, "Net Zero Carbon Buildings: A Framework Definition", <https://www.ukgbc.org/wp-content/uploads/2019/04/Net-Zero-Carbon-Buildings-A-framework-definition.pdf>

<sup>37</sup> HM Government, "The UK's Adaptation Communication to the United Nations Framework Convention on Climate Change (UNFCCC) 2020", <https://www.gov.uk/government/publications/the-uks-adaptation-communication-to-the-united-nations-framework-convention-on-climate-change-unfccc-2020> ; Defra, "The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting", [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/727252/national-adaptation-programme-2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/727252/national-adaptation-programme-2018.pdf) ; UN "UN Convention on Biological Diversity", <https://www.cbd.int/convention/text/> ; Defra, "Environment Bill 2020",

Likewise there is no clear exposition of how to effectively ‘Code for net zero’, despite the legal imperative behind the national net zero target.

In order for the focus of the Code to be commensurate with the scale and importance of addressing these challenges, we would like to see a much more comprehensive emphasis on achieving net zero, climate adaptation and reversing biodiversity decline throughout the detail of the Code. As a first step, the section currently called ‘Resources’ should be renamed to ‘*Climate and resources*’ or ‘*Net zero and resources*’ to reflect the significance of this objective. However, if this is not possible, given that the Ten Characteristics of Good Design are also present in the National Design Guide, which is not currently under consultation, then Design Code should make clear the connection between the Resources section and the imperative of coding to meet the national net zero target.

Point 27 of the National model design code currently indicates that:

*“27. All design codes should include as a minimum:*

- *Movement strategy where appropriate*
- *Access and street hierarchy where appropriate*
- *Landscape and open space strategy*
- *Land use and mix*
- *Density*
- *Heights*
- *Number of homes*
- *Identity and character of buildings and public spaces”*

We would strongly recommend that sustainability is included clearly in this list of minimum requirements. Specifically, this should encompass climate mitigation commitments – in line with supporting progress towards our national net zero target – climate adaptation measures and biodiversity enhancement.

Without clear, strategic alignment towards these goals, the National Model Design Code risks embedding the deficiencies currently associated with poor coding around sustainability. Specifically, this includes the problem of codes and masterplans only including piecemeal, tokenistic sustainability measures to meet loose specifications, such as trialling low carbon heat measures on only a handful of properties in a large development. To avoid this issue, the National Model Design Code must embed a comprehensive approach to delivering net zero, sustainable development across its guidance and requirements. (See also point 3 below)

## **2 – The Code should reflect a fabric-first approach**

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<https://www.gov.uk/government/publications/environment-bill-2020> ; HM Government, “A Green Future: Our 25 Year Plan to Improve the Environment”, <https://www.gov.uk/government/publications/25-year-environment-plan>

Whilst the Guidance Notes currently suggest that “design codes *can* [emphasis added] include a local energy hierarchy based on energy efficiency standards, renewable energy sources”, we would like to see this strengthened to emphasise the need to prioritise energy efficiency, demand reduction measures and a ‘fabric-first’ approach.

As highlighted in our response to the Future Home Standard and New Build Playbook, the current fabric energy efficiency standard provides vital means by which both the occupier’s energy demand, and pressure on the grid as it decarbonises, can be reduced.<sup>38</sup> Likewise the need to prioritise the fabric-first was recently endorsed by the Government in its response to the Future Homes Standard: 2019 Consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for new dwellings.<sup>39</sup> We would therefore wish to see demand-reduction explicitly prioritised, and recommended more clearly in both the Code and the Guidance Notes.

### **3 - More detailed and specific guidance is needed on renewables, embodied low carbon energy and energy efficiency**

Although the Code and Guidance Notes currently include limited guidance and accompanying illustrations on both low carbon and renewable energy in development, we would wish to see this area expanded considerably in order to be comparable with the extensive guidance provided in other areas. Likewise, the Code should recommend and support the setting of locally appropriate targets across all the key sustainability areas highlighted, including specifically for: low carbon energy, embodied carbon, operational performance and energy efficiency. It should provide detailed guidance on how these targets can be set and addressed in a manner that is appropriate to different area types.

On low carbon energy, the Code should include comprehensive design guidance relevant to a much greater variety of renewable energy sources, and how these can be integrated successfully into the variety of development-types and area-types illustrated in the Code. This guidance should draw on UKGBC’s Offsets and Renewables guidance for useful information regarding best practice.<sup>40</sup>

Furthermore, the Code does not currently provide relevant information on addressing the issue of the performance gap and operational energy. This refers to the difference between modelled energy use and predicted emissions at the design stage, and the actual ‘as built’ performance of the building in operation.<sup>41</sup> Research shows that actual emissions can be over 2.5 times higher

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<sup>38</sup> UKGBC, “New Homes Policy Playbook”, <https://www.ukgbc.org/wp-content/uploads/2021/01/New-Homes-Policy-Playbook-January-2021.pdf>; UKGBC, “

<sup>39</sup> MHCLG, “The Future Homes Standard: 2019 Consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for new dwellings: Summary of responses received and Government response”, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/956094/Government\\_response\\_to\\_Future\\_Homes\\_Standard\\_consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/956094/Government_response_to_Future_Homes_Standard_consultation.pdf)

<sup>40</sup> UKGBC renewables and offsets guidance, <https://www.ukgbc.org/wp-content/uploads/2021/03/Renewable-Energy-Procurement-Carbon-Offsetting-Guidance-for-Net-Zero-Carbon-Buildings.pdf>

<sup>41</sup> Zero Carbon Hub, “Closing The Gap Between Design & As-Built Performance”, [https://www.zerocarbonhub.org/sites/default/files/resources/reports/Closing\\_the\\_Gap\\_Between\\_Design\\_and\\_As-Built\\_Performance-Evidence\\_Review\\_Report\\_0.pdf](https://www.zerocarbonhub.org/sites/default/files/resources/reports/Closing_the_Gap_Between_Design_and_As-Built_Performance-Evidence_Review_Report_0.pdf)

than modelled estimates.<sup>42</sup> In order to successfully achieve net zero, a clear trajectory must be set and supported so that all new buildings achieve net zero carbon (across regulated and unregulated energy, and in-use performance) by 2030, with dates announced for interim improvements. The National Model Design Code has a vital role to play in supporting this trajectory, through stipulating key associated design requirements and providing guidance on appropriate targets, metrics and relevant design measures.

Specifically, we would wish to see the guidance around R.1.ii Energy Efficiency expanded to include much more detail on the specific measures that can be used, alongside best practice standards and a clear requirement for local targets across the range of associated metrics. The London Energy Transformation Initiative's Climate Emergency Design Guide currently provides a useful example of the level of illustrative detail that it would be beneficial for the Code's guidance to include.<sup>43</sup> However, we believe local authorities must retain their flexibility to set their own targets and the level of ambition appropriate to their area. The National Model Design Code specify a requirement to set appropriate local targets across the sustainability recommendations highlighted, and the accompanying guidance should illustrate how these areas can be addressed, the appropriate metrics, and an indicative range of best practice. UKGBC's New homes Playbook currently provides a recommended range of minimum and stretching requirements for homes.<sup>44</sup> Furthermore, the Code should include specific guidance and requirements on appropriate metering, operational performance monitoring and disclosure, in order to provide the basis for clear requirements to assure performance in-use.

The Code and Guidance Notes should clearly include comprehensive guidance on illustrative pathways for outlined area-types and development archetypes to reach net zero or be '*net zero ready*', in line with the level of detail currently present for Built Form. Such a level of detail, with illustrative value ranges and pathways, will be essential if the Code is to deliver an adequate baseline of standards to support progress towards the UK's net zero target and to avoid costly future retrofit. Likewise this will be essential if the Code is to successfully embed holistic net zero placemaking as a key objective.

As per our answer to question 2, an assessment, and an accompanying methodology for, determining the carbon implications of key types of development, (in line with our suggestions in relation to local plans) should be a key requirement in the baselining work in the production of codes.

#### **4 – The Code must address and provide further guidance on whole-life carbon**

Although the Code and Guidance Notes currently refer to "whole life costs", neither sufficiently explores the issue of whole life carbon. Likewise, R.2.ii Sustainable Construction 209 on states that:

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<sup>42</sup> Innovate UK, "Building Performance Evaluation Programme: findings from domestic projects", <https://www.gov.uk/government/publications/low-carbon-homes-best-strategies-and-pitfalls>

<sup>43</sup> LETI, "Climate Emergency Design Guide", <https://www.leti.london/cedg>

<sup>44</sup> UKGBC, "New Homes Policy Playbook", <https://www.ukgbc.org/wp-content/uploads/2021/01/New-Homes-Policy-Playbook-January-2021.pdf> ; UKGBC, "UKGBC Response to MHCLG Consultation on the Future Homes Standard", <https://www.ukgbc.org/wp-content/uploads/2020/02/UKGBC-Response-to-MHCLG-Future-Homes-Standard-Consultation-FINAL.pdf>

*“All demolition and construction processes and materials production and application have environmental impacts. In addition to embodied energy, issues relate to the impacts of extraction, pollution, ozone, water extraction, and waste disposal. Design codes can include standards and guidance that address these issues.”*

However, we believe the National Model Design Code should provide more guidance on how local design codes can address the issue of whole life carbon, for example, through reference to the need to undertake an assessment to determine the building’s carbon impact in line with the RICS Professional Statement ‘Whole life carbon assessment for the built environment’ and the recommendations of UKGBC’s New Homes Playbook.<sup>45</sup>

Furthermore, R.2.i Embodied Energy: 208 also suggests:

*Reducing embodied energy can be achieved by remodel and reuse of buildings where possible rather than rebuild, using low energy materials, designing to use materials efficiently, reducing the energy use in construction, the re-use of materials and design for disassembly and adaptability so that the carbon locked in the building can be retained or reused in future.*

Additions to R.2.i Embodied Energy should be made to ensure it explicitly references industry best practice in terms of circular economy principles, and the waste hierarchy, as explored in UKGBC’s Circular Economy Guidance.<sup>46</sup>

## **5 – The Code should include reference to the concept of social value**

Neither the Code itself nor the Guidance Notes refer to the concept of social value. Social value is widely recognised across the industry, and is an extremely important means by which the benefits of a development can be maximised for residents, the environment and the local community. The Code and its accompanying guidance should be amended to include the concept of social value and provide advice in line with the latest industry thinking in this area, including UKGBC’s Social Value framework.<sup>47</sup>

## **6 - Overheating & water best practice**

Although the need to consider and avoid overheating is mentioned multiple times in the Code and Guidance Notes, neither document provides detailed guidance on possible mitigation measures, substantive requirements or best practice. The only direction provided is in relation to considering the impacts of glazing and property alignment.

Given the implications of climate change in terms of extreme heat events, overheating and associated excess deaths, it is vital that the National Model Design Code provides much more comprehensive guidance on how to address overheating across its constituent elements.

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<sup>45</sup> UKGBC, “New Homes Policy Playbook”, <https://www.ukgbc.org/ukgbc-work/new-homes-policy-playbook/>

<sup>46</sup> UKGBC, “Circular economy guidance for construction clients”, <https://www.ukgbc.org/wp-content/uploads/2019/04/Circular-Economy-Report.pdf>

<sup>47</sup> UKGBC, “Framework for Defining Social Value”, <https://www.ukgbc.org/wp-content/uploads/2021/02/Framework-for-Defining-Social-Value.pdf>

UKGBC's New Homes Playbook provides an illustration of the level of best practice guidance and standards that it would be useful to incorporate.<sup>48</sup>

Furthermore, although the Code includes illustrated examples of specific water management features, the Code does not provide sufficient detail in terms of best practice targets for water use and efficiency.

R.2.iv Water Saving currently states that:

*“Design codes can provide guidance and regulation around water saving which may address rainwater harvesting, dual potable and grey water recycling systems and requirements for “water neutrality” for new development and include reference to Optional Technical Standards for water efficiency standards.”*

This should be expanded to include clear examples, including best practice measures for the different archetypes and areas, similar to the level of detail provided for other sections.

## **7 – The Code should set out an exemplar greening factor to help deliver tree-lined streets and greenery for the different areas and archetypes outlined**

In line with the levels of detail provided in other sections on built form, height and density, and to help deliver quantifiable improvements in urban greenery, the National Model Design Code should include an exemplar ‘greening factor’ within the nature section, based on the Urban Greening Factor used in the new London Plan.<sup>49</sup> This would provide a valuable means by which quantifiable improvements in urban greening could be achieved, particularly in the conjunction with the aim to deliver tree-lined streets. The guidance should include similar information of the measures equivalent to different greening factor scores, alongside the wider benefits particular greening measures can deliver, such as air pollution mitigation.<sup>50</sup>

### **b) the application and use of the guidance**

We support the proposed application and use of the National Model Design Code, and accompanying Guidance Notes, in supporting the development of local design codes; setting a baseline standard of quality and practice which local planning authorities are expected to consider when developing local design codes and guides; and acting as a point of reference or material consideration in planning in the absence of any local design code.

However, we would like to see greater clarity in terms of how the National Model Design Code can relate to site-specific design codes and net zero area design. We support the use of the National Model Design Code as a template for the parameters of local area codes, which would subsequently inform site-specific design codes. Furthermore, we would like to see this process reflect a degree of consistency in terms of ensuring that the Ten Characteristics of Good Design

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<sup>48</sup> UKGBC, “New Homes Policy Playbook”, <https://www.ukgbc.org/wp-content/uploads/2021/01/New-Homes-Policy-Playbook-January-2021.pdf>

<sup>49</sup> Mayor of London, “The London Plan: March 2021”, [https://www.london.gov.uk/sites/default/files/the\\_london\\_plan\\_2021.pdf](https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf) p.322-324.

<sup>50</sup> See the IGNITION project evidence base <https://www.greatermanchester-ca.gov.uk/what-we-do/environment/natural-environment/ignition/>

are addressed in both local and site-specific codes. Specifically, we would like to emphasise the importance of incorporating a specific requirement for the sustainability principles to be comprehensively addressed and embedded across design codes of all sizes.

Given both the importance and status of the UK's environmental commitments, including our legal net zero target and international obligations on biodiversity, the language of the Code should be strengthened considerably to ensure that its principles and recommendations on sustainability, together with those additions UKGBC have suggested, are an essential, baseline component of the design code that cannot be neglected or omitted.

### **c) the approach to community engagement**

We welcome the stated approach that all codes must be produced with community consultation. Through our social value programme, the work of our members, and the findings at the Housing Audit 2020, it is clear the co-creation and meaningful engagement with communities is a vital component of achieving good design and delivering enhanced social value outcomes.<sup>51</sup> We welcome the commitment to deliver a series of pilot workshops focused on exploring the use of the Code in practice, consultation methods and local code development. We would recommend the workstream on community engagement consider industry best practice in delivering social value, as explored in UKGBC's Social Value in New Development guidance.<sup>52</sup>

### **Public Sector Equality Duty**

**Q16. We would be grateful for your comments on any potential impacts under the Public Sector Equality Duty.**

N/A

**For further information, please contact:**

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<sup>51</sup> UKGBC, "Social value in new development", <https://www.ukgbc.org/wp-content/uploads/2018/03/Social-Value.pdf> ; Place Alliance et al, "The Housing Audit for England", <https://indd.adobe.com/view/23366ae1-8f97-455d-896a-1a9934689cd8>

<sup>52</sup>UKGBC, "Social Value in New Development", <https://www.ukgbc.org/wp-content/uploads/2018/03/Social-Value.pdf>