

Written evidence submitted by BRE Group [FPS 042]

About BRE

BRE is here to contribute to a thriving and sustainable world, by developing science-led solutions to built environment challenges. This includes a rigorous programme of testing products for safety and performance which contributes to the formulation of building regulations, measuring and reporting on issues including energy efficiency, and operating assessment frameworks for the sustainability of buildings.

The UK has a proud track record at the forefront of research and development in the built environment sector which is exported globally and contributes to Britain's soft power. BRE has been working with developers and owners for many years to reduce the environmental impact of construction processes, materials and operations, as well as providing information and advice on all aspects of the sustainability of buildings throughout their lifecycle.

Building on nearly a century of expertise, we are ready to work more closely with government and other stakeholders to fulfil the nation's future requirements across buildings, infrastructure and construction, at a time when safety, quality and sustainability have never been more important.

Key points on proposed changes to the planning system

We welcome the Government's commitment to reforming the planning system and support the broad thrust of the White Paper's proposals towards sustainability and the ambition to address the national housing shortage. In order to ensure the best outcomes for consumers and the environment, as well as supporting fast growing and innovative manufacturers, there are three areas in which greater assurance should be considered:

- **Meeting net zero and beyond:** While greater focus on sustainability in the planning system is welcome, making the link between building homes and other assets, and meeting the UK's net zero target more explicit would ensure that all future design and construction takes into account the need to eliminate net carbon emissions throughout a building's life cycle.
- **Building for the future:** The planning system, and Local Plans, must take into account the imperative to plan for resilience in our homes, both to external threats like climate change and flooding, and to evolving demographic and social issues like ageing, disability and mental health and wellbeing. An important part of delivering the volume of homes needed will be ensuring consumer confidence in the safety and quality of modern methods of construction (MMC).
- **Building safely as well as sustainably:** Standards for safety must be maintained alongside an increased focus on design and beauty, to ensure that all consumers can trust in the comfort and quality of their homes. Strengthening the link between planning and safety regulations and standards, as well as linking the Planning White Paper with other work like the review of building regulations and the Building Safety Bill, will help do this.

BRE can support government and industry in all three of these, to ensure that we deliver homes which are beautiful, low or zero carbon, durable, sustainable and safe.

Introduction

We believe that most of the areas which contribute to making a building sustainable also contribute to building beautiful places in which people want to live and work. Embedding greater certainty around the importance of sustainability in the planning system will create the certainty needed for investment and job creation in the technologies and construction methods which will make homes fit for the future. There is an understandable

focus on housing but there is significant development every year of non-domestic and infrastructure construction to consider; most of our comments below relate to both domestic and non-domestic buildings.

The economic and societal changes brought about by the current pandemic present an opportunity for us to design and build buildings with a focus on design for performance (for example, the lowest possible carbon emissions) rather than compliance (for example, meeting but not exceeding minimum carbon reduction targets). They should be something that people want, and communities celebrate.

BRE supports the further development of a standard for future homes which is complementary to and supported by existing frameworks like the Homes Quality Mark (HQM). We also recognise the value and opportunity offered by the adoption of digital technologies.

Meeting net zero and beyond

As the UK works towards net zero in 2050, the construction industry increasingly recognises that the built environment must make a significant and ongoing contribution to reducing the country's carbon footprint. Setting baselines, through legislation if necessary, in order to hit the Government's net zero target would be helpful. An ideal planning system would contribute to a net zero goal and beyond, as well as supporting biodiversity net-gain, positive social impact, health and wellbeing and the highest quality buildings.

We also hope that the future planning system will explicitly reward a whole-life approach to reducing carbon integral to the building and sustainable over its whole-life. Driving the development of more high quality, truly sustainable new homes will also encourage greater improvements in our existing housing stock, potentially using similar mechanisms, financial drivers and frameworks.

Reforms to the planning system should therefore build in local and national requirements around technologies and systems which will ensure that all future buildings are net zero. Setting frameworks within which those criteria can be assessed, or benchmarking the performance of buildings, enables local authorities to send a clear message about the kind of development that they will prioritise. Compliance with these frameworks also sends a clear signal to industry and to consumers that every aspect of a project has been considered carefully. The areas which could be addressed cover the energy system installed, the life cycle of the materials used and the safety of the finished building.

BRE has extensive experience of developing schemes of this kind, which provide the assurance that required sustainability standards have been met in a finished development, and is happy to share further information with the Committee.

Building for the future

Local plans will need to support the development of homes which are resilient against changing demographics (e.g. age, health and household formation) and the changing climate (e.g. weather events and resource scarcity). These are core elements of the work BRE is currently doing and we are well placed to assist across these areas.

A key focus must be ensuring that these future homes are resilient to people's future needs. Alongside physical health, they should also focus on the importance of mental health, especially if remote working becomes the new normal. BRE's partnership with the Design in Mental Health Network supports this, placing wellbeing and people's safety at the heart of building design. The current Homeof2030 project also aims to take physical and mental health, ageing, the environment and the use of MMC into account in exploring innovative design and construction.

MMC offers new ways of building sustainably, productively and efficiently. The well-rehearsed benefits of modular construction across the supply chain cover a range of issues from faster construction, to more consistent high quality, reduced waste and a more environmentally friendly building process.

However, British consumers continue to have reservations about the quality of MMC homes. With greater assurance about the quality and longevity, as well as safety and security of living in MMC properties, consumers could potentially be persuaded to adopt them in enough volume to make greater investment in it commercially viable. Working with stakeholders across the construction and manufacturing sectors, as well as

in the finance and insurance industries, BRE is developing a standard which would provide assurance about the quality and safety of MMC developments; we would be happy to share further information.

Building safely as well as sustainably

We noted that there is just one mention of safety in the White Paper. Whilst beauty is rightly valued by consumers, and sustainability is vital to tackle the challenge of climate change, this should not be at the cost of downgrading high standards when it comes to issues like fire safety.

Streamlining the planning system to speed up consents and build outs should be possible without compromising intelligent standards which focus on issues like fire safety, structural integrity, liveability, resilience and sustainability. Having a common baseline for these issues provides industry with the certainty they need to be able to deliver the volume of homes which the country needs. Ensuring that the outcome of the Planning White Paper is integrated with other work on, for example, building regulations and the Building Safety Bill, will ensure that the link between planning and safety regulations and standards is stronger.

Detailed responses to questions

BRE does not have a view on all of the questions in the call for evidence, so we have confined our responses to those where our expertise is most relevant.

Question 1. Is the current planning system working as it should do? What changes might need to be made? Are the Government's proposals the right approach?

BRE works across all of the nations and regions of the UK, and, as set out in our introduction, we believe that the top three priorities for the planning system nationally should be:

1. **Meeting net zero:** Making the link between building homes and meeting the UK's net zero target more explicit would ensure that all future design and construction takes into account the need to eliminate net carbon emissions throughout the life cycle of a home. This will include, for example, reducing the energy use of a home by mandating or incentivising the use of technologies such as heat pumps and photovoltaic panels.
2. **Building for the future:** The planning system must take into account the imperative to plan for resilience in our homes, both to external threats like climate change and flooding, and to evolving demographic and social issues like ageing, disability, mental health and the natural environment. An important part of delivering the volume of homes needed will be ensuring consumer confidence in modern methods of construction.
3. **Building safely as well as sustainably:** Standards for safety must be built in alongside design and beauty, to ensure that all consumers can trust in the comfort and quality of their homes. We cannot compromise on issues like fire safety.

Streamlining a process that can take a frustratingly long time could contribute to building significant numbers of additional and much needed homes. However, streamlining must not lead to lower standards when it comes to building safety and adherence to building regulations, or improving the performance of homes on issues like energy efficiency, carbon reduction, daylighting or noise prevention. We also suggest that this should be made explicit in future planning guidance to ensure that all those involved in the planning system, from architects to planners to builders, are clear that standards around issues like fire safety, noise reduction and wind mitigation remain.

Using an approach based on holistic assessment frameworks can both help ensure better outcomes for homeowners and residents, and also contribute to simplifying and shortening a local plan. By specifying that a building or development should reach a particular rating, local authorities can have confidence that all of the assessment criteria will be considered, from energy efficiency to placemaking.

We are very interested in the Government's proposed consolidated test of sustainable development. We would welcome the opportunity to contribute to discussions of the criteria a test would cover, and how it would complement other tests to ensure that consumers have confidence that high standards around, for example,

fire safety, structural integrity, and flood and climate resilience are being met alongside future proofing for climate resilience and aligning to regional environmental objectives.

We have extensive experience of designing assessment frameworks that not only ensure that priorities like energy efficiency and comfort are taken into account at the design stage, but, through the certification process, also provide assurance that these have actually been delivered in the completed building. In the finished developments outcomes include lower energy and water use, better integration with transport links, improved sound and thermal insulation, improved biodiversity and less waste from the construction process.

With the appropriate criteria for safe and sustainable development, focused on clear outcomes informed by science, we agree that decision making could be faster. A significant contribution to speeding up decision making could be made by recognising an objective high standard to which MMC housing could be built, covering issues such as acoustics, insulation and ventilation and stability. BRE would be happy to discuss our work on this further.

Question 3. How can the planning system ensure that buildings are beautiful and fit for purpose?

BRE's work on sustainability is recognised internationally. Based on that experience and expertise, we would identify the following areas as key indicators for local authorities to consider when drawing up their Local Plans which will help ensure that buildings are both beautiful and fit for purpose:

- Net zero carbon, including energy efficiency and whole-life carbon performance
- Health and wellbeing
- Resilience to climate change and bad weather
- Social impact, including contribution to the public realm, supporting all types of mobility
- Ageing and demographic changes
- Natural environment
- Circular economy
- Economic impact

Alongside sustainability, we are also experts in building safety, and we hope to see safety alongside sustainability at the heart of future housing plans.

Beauty should not be the sole criterion on which a project could be fast-tracked. If a project could show that it complied with:

- Sustainability standards covering a range of issues like energy efficiency and embodied carbon,
- Safety standards including fire safety,
- And local design codes and guides based on beauty and the surrounding built heritage

Then it should be eligible for fast-track consideration.

Improved design guides and codes can, drafted correctly, make an important contribution to speeding up development by setting expectations around how to address issues like sustainability, such as technologies contributing to net zero. The idea of a pattern book approach that SME housebuilders could use could potentially make high standards of design and safety accessible to a much wider audience, and give planners confidence in quality of homes to be built in their local areas.

Recognising existing schemes like BREEAM and HQM as best practice under the new National Design Guide and forthcoming National Model Design Code, as well as encouraging or mandating local authorities to recognise them in their evaluation of planning applications, will ensure that they are underpinned by building science, assurance and data.

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