



# New Homes Policy Playbook – Summary of recommendations for local authorities

Part 1 - Advancing Net Zero – reducing energy demand and carbon emissions

# Introduction

The building and construction sector is crucial in the race to keep carbon emissions below dangerous levels for our planet. Globally, buildings consume 36% of energy produced, and are responsible for 39% of global carbon emissions, making them the largest contributing sector to climate change.

Councils up and down the country have recognised that they have a duty to act. Nearly three-quarters of UK councils and combined authorities have declared climate emergencies and committed to delivering net zero carbon by 2050. In addition, a number of authorities are setting strong ambitions on a range of other sustainability goals.

The Climate Change Committee have made clear that Government policies for new homes are not driving change at the pace required and that they are failing to clarify how far local and regional authorities are permitted to go in setting their own tighter standards for new-build homes.

We believe that there is much that local authorities can legally do to help speed up the journey towards net zero carbon new homes. We have therefore developed the following recommendations about the requirements we believe local authorities should introduce to drive sustainable new homes in their area.

# Resource overview

This resource summarises the policy recommendations outlined in UKGBC's [New Homes Policy Playbook](#) (2021) relevant to: **Advancing Net Zero – reducing energy demand and carbon emissions**

These recommendations are divided into two types:

- Our proposed **minimum requirements** – which all LAs can and should introduce now; and
- Our proposed **stretching requirements** – which LAs wishing to go further should consider implementing at the next available opportunity. Like the minimum requirements, our recommended stretching requirements are both realistic and achievable, but represent a greater level of ambition.

We believe local authorities should introduce these recommended requirements to drive sustainable new homes in their area. *All the recommended requirements go beyond what is required by national policy.*

To see the rationale behind our recommended requirements and some local authority examples, please access the full document here: [New Homes Policy Playbook](#)

# Reducing energy demand

## Minimum requirements:

- *A 31% reduction on the Dwelling Emission Rate (DER) against the Target Emission Rate (TER) based on the 2013 Edition of the 2010 Building Regulations (Part L). A fabric first approach shall be prioritised, ensuring that at a minimum the thermal performance of the whole envelope exceeds that of the notional specification by 5%.*
- *The energy use intensity for new homes should be reported on a kWh/m<sup>2</sup>/year (GIA) basis.*

## Stretching requirements:

- *An energy use intensity (EUI) target of <70 kWh/m<sup>2</sup>/year operational energy use in GIA excluding renewable energy contribution shall be met. This target includes both regulated and unregulated energy consumption.*
- *New build homes shall deliver ultra-high levels of energy efficiency consistent with a space heat demand of 15-20kWh/m<sup>2</sup>/year.*
- *Designers shall evaluate the operational energy use using realistic information on the intended use, occupancy, and operation of the building to minimise any performance gap. They shall demonstrate this through compliance with the above targets using a design for performance methodology such as Passivhaus PHPP or CIBSE TM54 Operational Energy.*



# Reducing embodied carbon

## Minimum requirements:

- *All developments shall demonstrate actions taken to reduce embodied carbon and maximise opportunities for reuse through the provision of a Circular Economy Statement.*
- *Major developments (defined as those with 10 or more dwellings or 1000 square metres of floor space) shall calculate whole lifecycle carbon emissions (including embodied carbon emissions) through a nationally recognised Whole Lifecycle Carbon Assessment methodology and demonstrate actions taken to reduce lifecycle carbon emissions.*

## Stretching requirements:

- *All developments shall calculate whole lifecycle carbon emissions (including embodied carbon emissions) through a nationally recognised Whole Lifecycle Carbon Assessment methodology and demonstrate actions taken to reduce lifecycle carbon emissions. Data gathered will serve as the basis for the introduction of carbon reduction targets in due course.*
- *Major developments should target <math><500\text{ kgCO}\_2\text{e/m}^2</math> upfront embodied carbon emissions (equating to the emissions covered by Modules A1-A5 of the RICS methodology).*



# Measuring in-use performance

## Minimum requirements:

- *Demonstration that the principles of Soft Landings will be followed and a recognised performance gap / assured performance tool<sup>18</sup> will be used to minimise the potential performance gap between design aspiration and the completed development. The effectiveness of measures will be reviewed and ratified as part of the post-completion discharge of conditions.*

## Stretching requirements:

- *All major developments shall implement a soft landings approach from ‘Phase 1: Inception and Briefing’ as per BSRIA BG 54/2018 Soft Landings Framework 2018, to ensure any building requirements set at the beginning are maintained throughout the project from inception to completion and beyond.*
- *All developments shall put in place a recognised monitoring regime to allow the assessment of energy use, indoor air quality and overheating risk for 20% of the dwellings and at least 90% of the common parts for the first five years of their occupancy, and ensure that the information recovered is provided to the applicable owners and the planning authority.*



# Low carbon energy supply

## Minimum requirements:

- *All new developments should not have onsite combustion of fossil fuel. Where it can be demonstrated that there is no other viable alternative, the rationale must be clearly provided with supporting information as to how the design had considered low-carbon heating sources.*
- *All developments shall assess the viability for onsite renewable generation. For developments with SE/SW facing roof(s), a minimum 40% solar technologies installation as a percentage of building footprint area shall be met unless it can be clearly demonstrated that this is not practically viable, e.g. on a heavily overshadowed site or where there are conflicting spatial limitations due to the use of heat pumps.*
- *For large-scale major developments, proposals will be expected to consider the integration of new energy networks in the development. This consideration shall form part of the development proposals and take into account the site's characteristics and the existing cooling, heat and power demands on adjacent sites where readily available. Similarly, any new energy networks should prioritise non-combustible, non fossil fuel energy as the primary heat source.*

## Stretching requirements:

- *Major developments shall match their total annual energy demand through a combination of renewable generation capacity, energy storage and smart controls.*  
The above requirement has been designed to complement the stretching targets as outlined in 'Reducing Energy Demand' and therefore should not be included into local planning policy independently of such.





# Zero carbon balance – addressing residual emissions

## Minimum requirements:

- *Where it is clearly demonstrated that net zero carbon cannot be fully achieved through on-site measures, all developments shall be required to make a financial contribution to the LPA's carbon tax fund equal to the residual regulated emissions at a rate of £X/tCO<sub>2</sub> over 30 years.*
- *Alternatively, developments can make up the shortfall off-site by funding a carbon reduction or removal project directly, provided the LPA has approved this approach.*

## Stretching requirements:

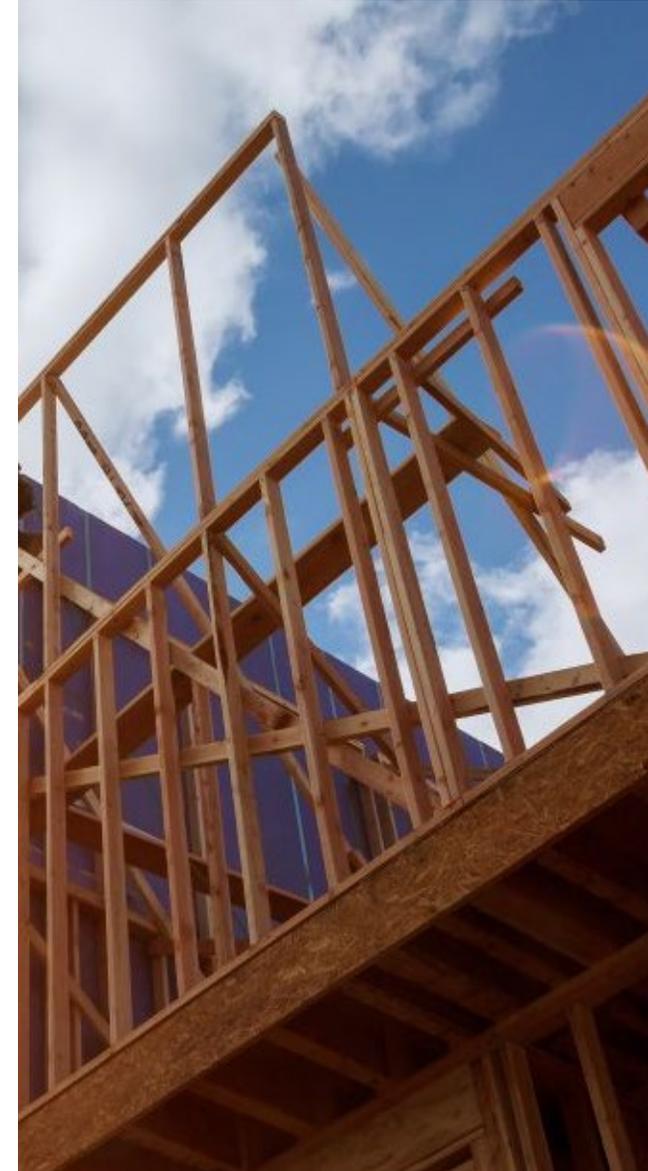
- *Where it is clearly demonstrated that net zero carbon cannot be fully achieved through on-site measures, all developments shall be required to make a financial contribution to the LPA's carbon tax fund equal to the residual regulated and unregulated emissions remaining at a rate of £X/tCO<sub>2</sub> over 30 years.*

*For clarity, the residual regulated and unregulated emissions should be calculated using a design for performance methodology such as Passivhaus PHPP or CIBSE TM54 Operational Energy.*

The above requirement has been designed to complement the stretching targets as outlined in '1. Reducing Energy Demand' and '3. Measuring In-use Performance', and therefore should not be included in local planning policy independently of such.

- *Major developments shall be required to make a financial contribution to the LPA's carbon tax fund equal to the residual upfront embodied carbon (equating to the emissions covered by Modules A1-A5 of the RICS methodology) of the development at a rate of £X/tCO<sub>2</sub> at the point of completion.*

The above requirement has been designed to complement the stretching target as outlined in '2. Reducing Embodied Carbon', and therefore should not be included in local planning policy independently of such.





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Access full report here:

[New Homes Policy Playbook](#)