

Planning for Net Zero

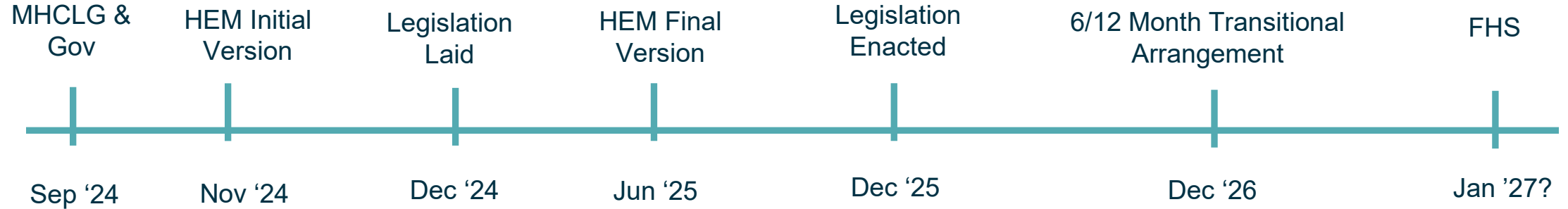


Context

- Legal commitment to ensure the UK reduces its greenhouse gas emissions by 100% from 1990 levels by 2050.
- COP24 - Paris agreement - overarching goal is to hold “the increase in the global average temperature to well below 2° C above pre-industrial levels” and pursue efforts “to limit the temperature increase to 1.5° C above pre-industrial levels.”
- NPPF Paragraph 157 - *The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.*
- Delivery of 1.5 million homes



Future Homes Standard – timeline?



- Recent consultation:
 - Expected to deliver 75% reduction on CO₂
 - No change in fabric efficiency compared to 2021-part L
 - Key issues - Volume of PV, Home Energy Model, and transition arrangements
- New Government still to respond to findings of FHS consultation.
- But they are aligned with the FHS Consultation and intend to implement.
- Could be pushed back a year?



Evolution of local energy efficiency standards in national policy

- **2007** - PPS1 – *“There will be situations where it could be appropriate for planning authorities to anticipate levels of building sustainability in advance of those set out nationally.”*
- **2008** - Planning and Energy Act
(1)A local planning authority in England may in their development plan documents, (a) a proportion of energy used in development in their area to be energy from renewable sources in the locality of the development; (b) a proportion of energy used in development in their area to be low carbon energy from sources in the locality of the development; (c) development in their area to comply with energy efficiency standards that exceed the energy requirements of building regulations.
- **2015** - Deregulation Act and Written Ministerial Statement
- **2019** – PPG 6-012
In their development plan policies, local planning authorities:
Can set energy performance standards for new housing or the adaptation of buildings to provide dwellings, that are higher than the building regulations, **but only up to the equivalent of Level 4 of the Code for Sustainable Homes.**
- **2021** – Part L Building Regulations published – 35% improvement



Planning shapes the places where people live and work and the country we live in. It plays a key role in supporting the Government's wider social, environmental and economic objectives and for sustainable communities.



Evolution of local energy efficiency standards

20% improvement
in CO₂ emissions
on 2013 Building



Net Zero Carbon
homes

Policy SCLP9.2: Sustainable Construction

All new developments of more than 10 dwellings should achieve higher energy efficiency standards that result in a 20% reduction in CO₂ emissions below the Target CO₂ Emission Rate (TER) set out in the Building Regulations. Exceptions should only apply where they are expressed in the Building Regulations or where applicants can demonstrate, to the satisfaction of the Council, that it is not viable or feasible to meet the standards.

Carbon reduction in new-build residential developments (other than householder applications):

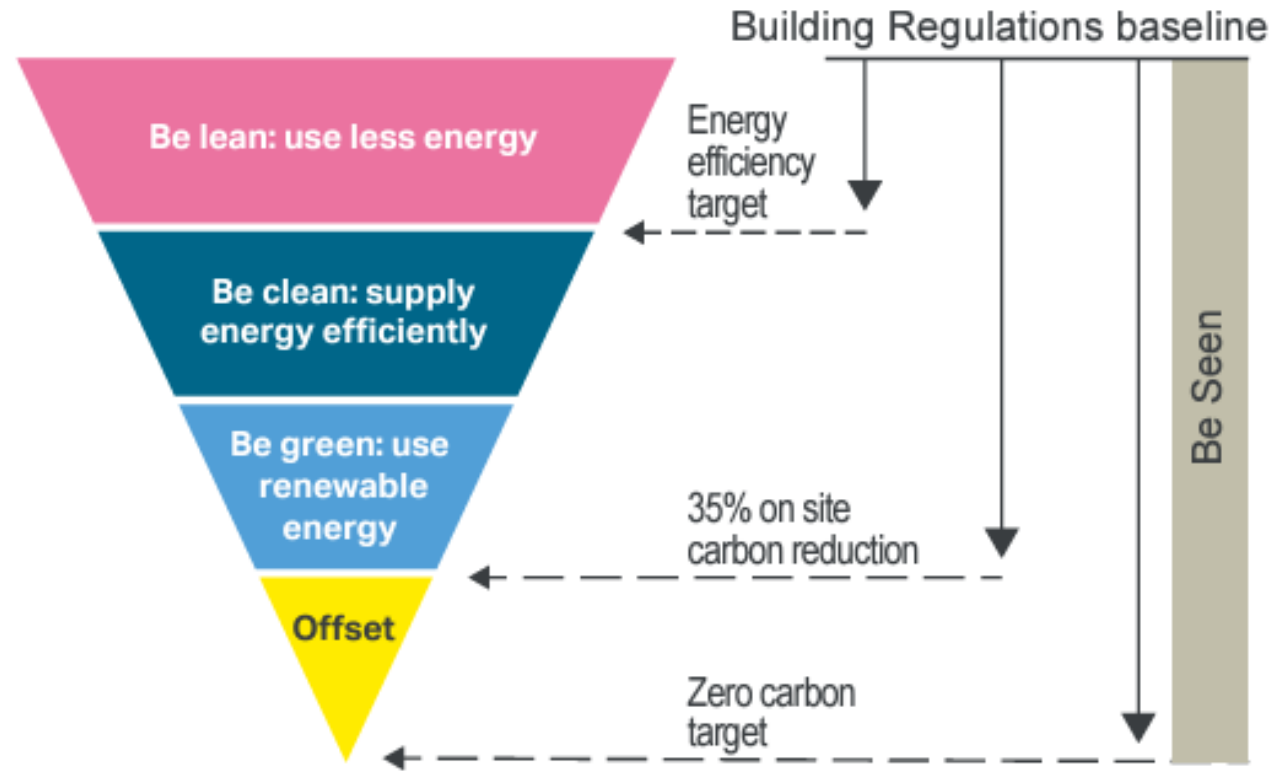
Planning permission will only be granted for development proposals for new build residential dwellinghouses or 1,000m² or more of C2 (including student accommodation), C4 HMO or Sui Generis HMO floorspace which achieve at least a 40% reduction in carbon emissions from a 2013 Building Regulations (or future equivalent legislation) compliant base case. This reduction is to be secured through on-site renewable energy and other low carbon technologies (this would broadly be equivalent to 25% of all energy used) and/ or energy efficiency measures. The requirement will increase from 31 March 2026 to at least a 50% reduction in carbon emissions. After 31 March 2030 planning permission will only be granted for development proposals for new build residential dwelling houses or 1,000m² or more of C2 (including student accommodation), C4 HMO or Sui Generis HMO floorspace that are Zero Carbon.

Policy SI 2 Minimising greenhouse gas emissions

- A Major development should be net zero-carbon.¹⁵¹ This means reducing greenhouse gas emissions in operation and minimising both annual and peak energy demand in accordance with the following energy hierarchy:
 - 1) be lean: use less energy and manage demand during operation
 - 2) be clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly
 - 3) be green: maximise opportunities for renewable energy by producing, storing and using renewable energy on-site
 - 4) be seen: monitor, verify and report on energy performance.
- B Major development proposals should include a detailed energy strategy to demonstrate how the zero-carbon target will be met within the framework of the energy hierarchy.
- C A minimum on-site reduction of at least 35 per cent beyond Building Regulations¹⁵² is required for major development. Residential development should achieve 10 per cent, and non-residential development should achieve 15 per cent through energy efficiency measures. Where it is clearly demonstrated that the zero-carbon target cannot be fully achieved on-site, any shortfall should be provided, in agreement with the borough, either:
 - 1) through a cash in lieu contribution to the borough's carbon offset fund, or
 - 2) off-site provided that an alternative proposal is identified and delivery is certain.
- D Boroughs must establish and administer a carbon offset fund. Offset fund payments must be ring-fenced to implement projects that deliver carbon reductions. The operation of offset funds should be monitored and reported on annually.



Energy hierarchy



Source: Greater London Authority



Local Plan polices – from carbon emissions to energy use

- Next iteration of local policy based on energy use not carbon emissions –
 - heating demand of 15 kWh/m²/yr or less
 - energy Use Intensity (EUI) of no more than 35 kWh/m²/yr
- Assessed against operational energy - Both regulated and unregulated energy
- No home connected to gas grid, no fossil fuels on site for heating, hot water or cooking
- Require more accurate predictive energy modelling – CIBSE54 or Passivhaus Planning Package
- Renewable energy to match or exceed predicted annual energy generation.
- Carbon offsetting required if not feasible to deliver residual energy

Core Policy 22 Net Zero Operational Carbon Development

Part A. New build development (residential and non-residential)
All new buildings (of one or more new dwellings or 100m² or more non-residential floor space) must be designed and built to be Net Zero Carbon in operation. They must be ultra-low energy buildings, fossil fuel free, and generate renewable energy on-site to at least equal annual energy use.

To achieve this, these new buildings are required to comply with requirements 1 to 5 as set out below (to be demonstrated through an Energy Assessment, which for major applications must be a full energy strategy utilising accurate methods for operational energy use prediction, and for minor applications⁸ must use either those same methods or the 'net zero spreadsheet' from Essex Design Guide).

Requirement 1: Space heating demand

- all new residential buildings (apart from bungalows) and all non-residential buildings must achieve a space heating demand of 15 kWh/m² GIA/yr or less, and
- all new bungalows must achieve a space heating demand of less than 20 kWh/m² GIA/yr or less.

Requirement 2: Fossil fuel free

- no new developments shall be connected to the gas grid, and fossil fuels must not be used on-site to provide space heating, domestic hot water or cooking, and
- space heating and domestic hot water must be provided through low carbon fuels.

Requirement 3: Energy Use Intensity (EUI) limits

- residential (Use classes C3 and C4): All new build dwellings (1 dwelling or more) must achieve an Energy Use Intensity (EUI) of no more than 35 kWh/m² GIA/yr
- on larger sites in exceptional circumstances this may be met as a site-wide residential average (weighted by floor area), provided that no single dwelling has an EUI of >60kWh/m²/yr non-residential: The following new build non-residential buildings must achieve an Energy Use Intensity (EUI) of no more than the following where technically feasible by building type or nearest equivalent:
 - Offices - 70 kWh/m² GIA/yr
 - Schools - 65 kWh/m² GIA/yr
 - Light Industrial - 35 kWh/m² GIA/yr



Embodied Carbon

- 2) All new major development should complete a whole life carbon assessment in accordance with RICS Whole Life Carbon Assessment guidance* and demonstrate actions to reduce life-cycle carbon emissions. This should include reducing emissions associated with construction plant.
- 3) New residential developments of 50 homes or more and new non-residential development of 5000m² or more should limit embodied carbon (equating to the emissions covered by Modules A1-A5 of the RICS methodology*, or future equivalent methodology) to:
 - a) Residential (excluding flats): 300 kgCO₂e/m² GIA
 - b) Non-residential and flats: 475 kgCO₂e/m² GIA
 - c) Non-residential and flats (from 2030): 350 kgCO₂e/m² GIA
- 4) Any shortfall to the embodied carbon limits set out in paragraph 3 will be required to offset these emissions through a financial contribution reflecting the most up-to-date valuation of carbon**from national government.
- 5) All new development is encouraged to achieve LETI best practice 2030 embodied carbon targets (or future equivalent targets) (modules A1-A5) set out in the LETI 2020 Design Guide*** (or future equivalent document).

- Issues over deliverability and viability of these standards?
- RICS tool available and Future Home Hub – but still concerns about accurate measurement.



Are these latest policies consistent with national policy?

Written Ministerial Statement – December 2023

“...the Government does not expect plan-makers to set local energy efficiency standards for buildings that go beyond current or planned buildings regulations. The proliferation of multiple, local standards by local authority area can add further costs to building new homes by adding complexity and undermining economies of scale.”

But!

“Any planning policies that propose local energy efficiency standards for buildings that go beyond current, or planned building regulations, should be rejected at examination if they do not have a well-reasoned and robustly costed rationale that ensures:

- That development remains viable, and the impact on housing supply and affordability is considered in accordance with the National Planning Policy Framework.
- The additional requirement is expressed as a percentage uplift of a dwelling’s Target Emissions Rate (TER) calculated using a specified version of the Standard Assessment Procedure (SAP).”



Legal challenge to the WMS

- Three grounds – failed to have due regard to EPPS, Unlawfully restricts powers conferred by statute, unlawfully misleading picture of legal powers to decision maker.
- Claim failed on all three grounds.
- Decision importantly notes the intention of the Government at the time with respect to section 1(1)c of the Planning and Energy Act 2008, which allowed Local Authorities to set standards above those in building regulations. Paragraph 65 states:

“With respect to the current section 1(1)(c) specifically, the Minister confirmed councils “can go further and faster than building regulations, but within the national framework”. The Minister also addressed the overall intention of clause 1(2) in the following terms:

“The intention was for local authorities, in setting energy efficiency standards, to choose only those standards that have been set out or referred to in regulations made by the Secretary of State, or which are set out or endorsed in national policies or guidance issued by the Secretary of State. That approach was taken with a view to avoiding the fragmentation of building standards, which could lead to different standards applying in different areas of the country. Although supportive of the hon. Gentleman’s Bill, that was not an outcome that we wanted to achieve.”

- Intention of the original legislation was to ensure that energy efficiency standards within local plans was to be set within the scope of building regulation to avoid a multiplicity of standard coming forward. The judgment goes on to note in paragraph 66 that the WMS does not stray from this purpose.



What next?

Local Plans

- LPAs are still proposing local plan policies based on energy use.
 - WMS a material consideration not a legal requirement
 - WMS doesn't prohibit use of an alternative assessments
- Replace EUI/ Space heating targets with Target Fabric Energy Efficiency (TFEE) currently used in SAP
- Retain EUI/ Space heating as secondary targets
- Shift to approach used in London Plan
- Deliverability and viability of any approach taken will be key

Nationally

- New Government want to move forward with FHS
- No indication as to how Labour will act on the WMS and local standards
- Politically expedient to allow LPAs to continue setting improved standards?
- HBF continue to push for national building standards only





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