

Iceni Briefing Note

FUTURE HOMES STANDARD 2025 AND PART L:2020 | OCTOBER 2019





Future Homes Standard 2025 and Part L:2020

BACKGROUND

On the 27th June 2019, the UK committed to achieving net zero greenhouse gas emissions by 2050. Currently, both new and existing homes account for 20% of the UK's greenhouse gas emissions. Whilst considerable improvements have been made within this sector, there is still a way to go to fully decarbonise homes to help meet the 2050 target.

Within the Spring Statement 2019, the Chancellor announced the Future Homes Standard 2025, which builds on the Grand Challenge Mission to at least halve the energy use of buildings by 2030. The Standard will mandate the end of fossil fuel heating systems in new homes from 2025 onward, and will target "world-leading levels of energy efficiency". As the electricity grid continues to decarbonise, homes built to the Future Homes Standard will become net zero carbon over time, with no need for carbon offset payments, future adaptations or changes as they will not rely on fossil fuels for heating.

TIMELINE OF PROPOSED CHANGES

Late 2019 until early 2020	Initial consultation on the Future Homes Standard Further consultation on work to existing buildings, overheating in new dwellings, and new non-domestic building standards	
Mid 2020	Part L:2020 published	
Late 2020	Part L:2020 comes into force	
Mid 2021 until early 2024	Further research on Future Homes Standard	
Mid until late 2024	Future Homes Standard consultation	
2025 onward	Future Homes Standard comes into force	

FUTURE HOMES STANDARD POLICY OPTIONS

In order to achieve the 2050 net zero greenhouse emissions target, an uplift to the current energy performance requirements in the Building Regulations will need to be implemented. As a stepping stone to the Future Homes Standard being implemented in 2025, two main policy options have been proposed, which are likely to come into force in late 2020:

- Option 1: A 20% reduction in carbon dioxide (CO₂) emissions over Part L:2013 baseline
- Option 2: A 31 % reduction in carbon dioxide (CO₂) emissions over Part L:2013 baseline

These are proposed to be achieved using the following building specification:

	Part L:2013	Part L:2020 Option 1	Part L:2020 Option 2
External wall u-value (W/m²K)	0.18	0.15	0.18
Roof u-value (W/m²K)	0.13	0.11	0.11
Floor u-value (W/m²K)	0.13	0.11	0.13
Window u-value (W/m²K)	1.40	0.80 (triple glazing)	1.20 (double glazing)
Window g-value	0.63	0.57	0.63
Ventilation system	Intermittent extract fans with trickle vents		
Air permeability (m³/h.m² at 50Pa)	5		
Space heating source	Condensing gas boiler		
Domestic hot water source	89.5% (SEDBUK)		
Heat emitters	Standard radiators	Large (low temperature) radiators	
Waste water heat recovery (WWHR)	No	Efficiency = 36%; Utilisation of 0.98; Connected to 2 showers if present	
Fixed lighting capacity (lm)	185 x TFA		
Lighting efficacy (lm/W)	80		
PV installation area (% of building foundation area)	0%		40%; SE/SW facing; 45° pitch; No/little over- shading; 6.5m²/kWp; Connected directly to dwelling

Option 2 is stated as the government's preferred option, as it is believed that this will deliver higher savings and lower bills for householders, though with higher associated build costs.

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The projected increase in capital costs of achieving the proposed policy options when compared to the continuation of existing 2013 standards are as follows: L performance target, with primary energy (kWh rather than $kgCO_2$) used as the performance metric. The primary energy rate will measure energy use associated with space heating, water heating, pumps and fans, and internal lighting.

	Part L:2020 Option 1	Part L:2020 Option 2
Detached house	£4,201	£6,524
Semi-detached house	£2,557	£4,847
Mid-terraced house	£2,195	£4,737
Flats	£2,070	£2,256
Average (based on build mix)	£2,866	£4,615

LOCAL POLICY CHANGES

The Planning and Energy Act 2008 (as amended) currently allows local planning authorities to set policies within their Local Plans that require the energy efficiency performance of new homes to exceed Building Regulations standard. Whilst it is recognised that this has led to the delivery of localised improvements, it is also believed to have resulted in labour inefficiencies and inconsistent building quality.

An amendment will therefore be made to the Act to restrict local planning authorities from setting individual targets that exceed Building Regulations requirements. In this way, all local planning authorities will require new homes to be built to the same national standard.

Based on this proposal, London projects that currently have to meet London Plan targets of 35% onsite emissions reduction, plus carbon offset payments to zero will only be required to meet the standards set out by Part L.

It is currently unclear when this change will be implemented; it may be introduced in line with the uplift to the energy efficiency standards in 2020, or it may be delayed until 2025, when the Future Homes Standard comes into force.

CHANGES TO PART L OF THE BUILDING REGULATIONS

Performance-based targets Performance-based targets are to be set by Part L1A:2020, using the following four metrics:

1. Primary Energy Target

As the electricity grid is projected to continue to decarbonise, CO₂ emissions will become a less important measure of performance, as new dwellings will be required to use electricity only from 2025 under the Future Homes Standard. It is therefore proposed that, from 2020, the energy efficiency of new dwellings should be assessed as the basis for the Part

2. CO₂ Emission Target

Despite the focus on improving the energy efficiency of new dwellings, CO_2 emissions targets and measures will continue to be used alongside primary energy targets, in order to drive low carbon choices in all scenarios.

3. Householder Affordability Rating

The householder affordability rating will be introduced to reduce the risk of energy bills becoming unaffordable for homeowners, considering the move towards electric only heating systems. Although the specifics of how this metric will be calculated are not yet clear, it is indicated that householder affordability may be achieved through: increased fabric efficiency; heat recovery devices; renewable generation; and on-site energy storage.

4. Minimum Standards for Fabric and Fixed Building Services

With the introduction of the primary energy target and householder affordability rating, there are concerns that the continued use of the fabric energy efficiency standard (FEES) will result in the new standards becoming overly complex. It is therefore proposed that the FEES is removed as a performance metric. However, to ensure that new dwellings are built with efficient fabric, and do not rely on just one highly efficient element or only low carbon technology to meet regulatory targets, it is proposed that the minimum standards for individual fabric elements (walls, roofs, floors, windows, etc.) are retained and improved. It is suggested that these minimum fabric energy standards will become regulatory minima through new regulation.

Transitioning to the New Standards

Currently, a development must conform to the energy standards in place at the time the planning permission was granted, and when work on-site begins.

Under the new standards, it is proposed that where a building notice, initial notice or full plans deposit is submitted before the new energy efficiency standards come into force, transitional arrangements may only be applied to individual buildings on which building work has started within a reasonable period. The length of the 'reasonable' period is currently under consultation.

Changes to the Assessment Process

The Standard Assessment Procedure (SAP) is currently being updated to SAP 10.2, which will take account of the changes to be made under the Future Homes Standard. The changes to be made are currently under consultation.

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Low Carbon, Renewable and Alternative Technologies **CONTACT US** Although the installation of gas boilers in new dwellings will continue to be acceptable up until 2025, it is noted that If you have any further queries regarding the proposed these dwellings should be future-proofed to aid the transition changes to the Building Regulations, or what the upcoming implementation of the Future Homes Standard means for to low carbon heating sources, particularly through the use of large, low temperature emitters. Furthermore, it is your scheme, please don't hesitate to get in touch with a anticipated that the installation of heat pumps and the use of member of our Sustainable Development Team. heat networks will play a major role in delivering low carbon heat, thus new dwellings should be made adaptable to incorporate low carbon technologies like these in the future.

Zero Carbon Homes?

The Future Homes Standard is guite different from the Zero Carbon Homes Standard, dropped by the Government in 2015. As the emissions from homes will decarbonise at the same rate as the national electricity supply, there's no need for additional 'Allowable Solutions' payments to make new homes 'zero carbon'.

OVERHEATING AND FRESH AIR

Overheating in new homes is to be addressed within an upcoming consultation, and an impact assessment will be published in the coming months.

Alongside the changes to Part L, an update to Part F of the Building Regulations is also currently under consultation. This update proposes changes to all ventilation strategies, including only providing guidance for natural ventilation systems in less airtight homes.

BUILD QUALITY

Following the Hackitt Review of Building Regulations and Fire Safety, it is proposed that the guidance documents that accompany Parts L and F of the Building Regulations are restructured, in order to more clearly set out the expectations of home builders and developers in complying with the regulatory requirements.

Furthermore, it is recognised that Building Control Bodies currently receive a range of different outputs from SAP software, with varying levels of detail, to be checked against Part L. It is therefore proposed that a new compliance report be introduced, which would be the domestic version of the BRUKL document currently produced for non-domestic buildings. By requiring the submission of this report, which would be called the Building Regulations England Part L (BREL) report, a standard approach to providing building information would be implemented, thus improving compliance.

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