

## Future Homes Standard Consultation

### Draft WDC Response

The Consultation on the Future Hoes Standard seeks responses to 95 questions, many of these are detailed and technical. The WDC response has therefore been prioritised to focus on key areas that are directly relevant to the Low Cost, Low Carbon Energy strategic priority in the Corporate. As a result, the responses have been confined to some questions within the following sections of the consultation:

- performance requirements for new buildings;
- metrics;
- fabric and fixed building services;
- Real-world performance of homes;
- approach to setting standards;
- Transitional arrangements

The full consultation document is here: [The Future Homes and Buildings Standards: 2023 consultation - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/the-future-homes-and-buildings-standards-2023-consultation)

## 1 Introduction

Q1: Local Authority

Q2: N/A

Q3: N/A

Q4: Warwick District Council

Q5: West Midlands

Q6: Dave Barber

## 2 Performance Requirements for new homes

**Q7:** *Which option for the dwelling notional buildings (for dwellings not connected to heat networks) set out in The Future Homes Standard 2025: dwelling notional buildings for consultation do you prefer?*

- Option 1 (higher carbon and bill savings, higher capital cost)*
- Option 2 (lower carbon savings, increase in bill costs, lower capital cost)*

Response: We support option 1 as this provides the greatest carbon and energy savings, as well as lower bills for occupiers. This is essential in the context of climate change, cost of living challenges and energy security issues.

**Q8.** *What are your priorities for the new specification? (select all that apply)*

- *low capital cost*
- *lower bills*
- *carbon savings*
- *other (please provide further information)*

Response: Lower bills and carbon savings

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**Q9.** Which option for the dwelling notional buildings for dwellings connected to heat networks set out in The Future Homes Standard 2025: dwelling notional buildings for consultation do you prefer?

- a. Option 1 (higher carbon and bill savings, higher capital cost)
- b. Option 2 (lower carbon savings, increase in bill costs, lower capital cost)

Response: We support option 1 as this provides the greatest carbon and energy savings, as well as lower bills for occupiers. This is essential in the context of climate change, cost of living challenges and energy security issues

**Q10.** Which option do you prefer for the proposed non-domestic notional buildings set out in the National Calculation Methodology modelling guide?

- a. Option 1
- b. Option 2

Response: We support option 1 as this provides the greatest carbon and energy savings, as well as lower bills for occupiers. This is essential in the context of climate change, cost of living challenges and energy security issues.

**Q11.** What are your priorities for the new specification?

- low capital cost
- lower bills
- carbon savings
- other (please provide further information)

Response: Lower bills and carbon savings

## 3 Metrics

**Q12.** Do you agree that the metrics suggested above (TER, TPER and FEE) be used to set performance requirements for the Future Homes and Buildings Standards?

- a. Yes
- b. Yes, and I want to provide views on the suitability of these metrics and/or their alternatives
- c. No, I think delivered energy should be used
- d. No, I think FEE should be changed
- e. No, for another reason (please provide justification)

We conditionally support option b). These measures are practical in the context of delivering improved energy performance through buildings regulations. However, they can only work effectively if they are applied alongside a system that significantly improves on the current SAP which is a poor indicator of energy performance therefore cannot provide a sound basis. Our view on this therefore needs to be understood in the context of our responses to the section on “**Real-world performance of homes**”. If our suggestions around real world performance cannot be realised, that we consider delivered energy (option c) should be used.

## 4 Updated Guidance and Minimum Standards

**Q13.** Do you agree with the proposed changes to minimum building services efficiencies and controls set out in Section 6 of draft Approved Document L, Volume 1: Dwellings?

- a. Yes
- b. Yes, and I want to provide additional suggestions or information to support my view
- c. No (please provide justification)

Response: a. Yes

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**Q14.** Do you agree with the proposal to include additional guidance around heat pump controls for homes, as set out in Section 6 of draft Approved Document L, Volume 1: Dwellings?

- a. Yes
- b. Yes, and I want to provide additional suggestions or information to support my view
- c. No (please provide justification)

Response: a. Yes

**Q15.** Do you agree that operating and maintenance information should be fixed to heat pump units in new homes?

- a. Yes
- b. Yes, and I want to provide additional suggestions or information to support my view
- c. No (please provide justification)

Response: a. Yes

**Q16.** Do you think that the operating and maintenance information set out in Section 10 of draft Approved Document L, Volume 1: Dwellings is sufficient to ensure that heat pumps are operated and maintained correctly?

- a. Yes
- b. Yes, and I want to provide additional suggestions or information to support my view
- c. No (please provide justification)

Response: No comment

**Q17.** Do you agree with the proposed changes to Section 4 of draft Approved Document L, Volume 1: Dwellings, designed to limit heat loss from low carbon heating systems?

- a. Yes
- b. Yes, and I want to provide additional suggestions or information to support my view
- c. No (please provide justification)

Response: a. Yes

**Q18.** Do you agree with the proposed sizing methodology for hot water storage vessels for new homes?

- a. Yes
- b. Yes, and I want to provide additional suggestions or information to support my view
- c. No (please provide justification)

Response: No comment

## 5 Updated guidance and minimum standards for non-domestic buildings

**Q19.** Do you agree with the proposed changes to minimum building services efficiencies and controls set out in Section 6 of draft Approved Document L, Volume 2: Buildings other than dwellings?

**Q20.** Do you agree with the proposed guidance on the insulation standard for building heat distribution systems in Approved Document L, Volume 2: Buildings other than dwellings?

**Q21.** Do you agree that the current guidance for buildings with low energy demand which are not exempt from the Building Regulations, as described in Approved Document L, Volume 2: Buildings other than dwellings should be retained without amendment?

**Q22.** Do you agree that lifts, escalators and moving walkways in new buildings (but not when installed within a dwelling) should be included in the definition of fixed building services?

**Q23.** Do you agree with the proposed guidance for passenger lifts, escalators and moving walkways in draft Approved Document L, Volume 2: Buildings other than dwellings?

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**Q24.** Do you have any further comments on any other changes to the proposed guidance in draft Approved Document L, Volume 2: Buildings other than dwellings?

Response: Q19 to Q24 - No comment

## 6 Material Change of Use

**Q25.** Should we set whole-building standards for dwellings created through a material change of use?

a. Yes

b. No, an elemental standard should be set with an option to use a notional building if the designer prefers

c. No, for another reason (please provide justification)

Response: a. Yes

**Q26.** Should the proposed new MCU standard apply to the same types of conversion as are already listed in Approved Document L, Volume 1: Dwellings?

a. Yes

b. No, standards should also apply to non-dwelling accommodation e.g., student or patient accommodation, care homes, and hotels

c. No, the standard should be clearer that it applies to houses of multiple occupation (please recommend specific building types you think the standard should apply to and provide justification)

d. No, for another reason (please provide justification)

Response: b. The standard should be applied as widely as possible.

**Q27.** Should different categories of MCU buildings be subject to different requirements?

**Q28.** Which factors should be taken into account when defining building categories?

**Q29.** Do you agree with the illustrative energy efficiency requirements and proposed notional building specifications for MCU buildings?

**Q30.** If you answered no to the previous question, please provide additional information to support your view.

**Q31.** Do you agree with using the metrics of primary energy rate, emission rate and fabric energy efficiency rate, if we move to whole dwelling standards for MCU buildings?

**Q32.** Under what circumstances should building control bodies be allowed to relax an MCU standard?

**Q33.** Do you have views on how we can ensure any relaxation is applied appropriately and consistently?

**Q34.** Should a limiting standard be retained for MCU dwellings?

**Q35.** If a limiting standard is retained, what should the limiting standard safeguard against?

**Q36.** Do you wish to provide any evidence on the impacts of these proposals including on viability?

**Q37.** Do you agree that a BREL report should be provided to building control bodies if we move to energy modelling to demonstrate compliance with MCU standards?

**Q38.** Do you agree that consumers buying homes created through a material change of use should be provided with a Home User Guide when they move in?

**Q39.** Do you agree that homes that have undergone an MCU should be airtightness tested?

Response: Q27 to Q39 - No comment

## 7 Real-World Performance of Homes

**Q40.** Do you think that we should introduce voluntary post occupancy performance testing for new homes?

- a. Yes
- b. Yes, and I'd like to provide further information
- c. No (please provide justification)

Response: b. Yes. Ideally post occupancy testing should be mandatory but we recognise that this may be hard to enforce. In this context a voluntary scheme may have some value and we would recommend that the bar is set high and is clearly defined to give consumers genuine confidence. However, it is essential that post construction testing is enhanced as a requirement as the basis for ensure the built performance of homes minimises the gap to designed performance – see comments on the Home Energy Model (Q69 to Q74).

**Q41.** Do you think that the government should introduce a government-endorsed Future Homes Standard brand? And do you agree permission to use a government-endorsed Future Homes Standard brand should only be granted if a developer's homes perform well when performance tested? Please include any potential risks you foresee in your answer.

- a. Yes
- b. Yes, and I want to provide additional suggestions or information
- c. Yes, but I think there are risks associated with introducing a government-endorsed brand
- d. No (please provide justification)

Response: Yes. Subject to meeting a high bar. Having a clearly defined standard of performance will ensure the brand is not misused and can therefore provide confidence to consumers. Anything else will undermine the brand and potentially result in the brand being abused to the detriment of the whole system.

**Q42.** Do you agree with the proposed changes to Approved Document F, Volume 1: Dwellings to improve the installation and commissioning of ventilation systems in new and existing homes?

- a. Yes
- b. Yes, and I'd like to provide further information
- c. No (please provide justification)

Response: a. Yes

**Q43.** Do you agree with the proposal to extend Regulation 42 to the installation of mechanical ventilation in existing homes as well as new homes?

- a. Yes
- b. Yes, and I'd like to provide further information
- c. No (please provide justification)

Response: a. Yes

**Q44.** Do you think the guidance on commissioning hot water storage vessels in Section 8 of draft Approved Document L, Volume 1: Dwellings is sufficient to ensure they are commissioned correctly?

**Q45.** Are you aware of any gaps in our guidance around commissioning heat pumps, or any third-party guidance we could usefully reference?

**Q46.** Do you think the guidance for commissioning on-site electrical storage systems in Section 8 of draft Approved Document L, Volume 1: Dwellings is sufficient to ensure they are commissioned correctly?

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**Q47.** Do you agree with proposed changes to Approved Document L, Volume 1: Dwellings and Approved Document F, Volume 1: Dwellings to (a) clarify the options for certifying fixed building services installations and (b) set out available enforcement options where work does not meet the required standard?

**Q48.** Do you think the additional information we intend to add to the Home User Guide template, outlined above, is sufficient to ensure home occupants can use their heat pumps efficiently?

**Q49.** If you are a domestic developer, do you use, or are you planning to use, the Home User Guide template when building homes to the 2021 uplift? Please give reasons in your response.

**Q50.** Do you have a view on how Home User Guides could be made more useful and accessible for homeowners and occupants, including on the merits of requiring developers to make guides available digitally? Please provide evidence where possible.

**Q51.** Do you think that there are issues with compliance with Regulations 39, 40, 40A and 40B of the Building Regulations 2010? Please provide evidence with your answer.

**Q52.** Do you think that local authorities should be required to ensure that information required under Regulations 39, 40, 40A and 40B of the Building Regulations 2010 has been given to the homeowner before issuing a completion certificate?

Response: Q44 to Q52 - No comment

## Heat Networks

**Q53.** Do you agree that new homes and new non-domestic buildings should be permitted to connect to heat networks, if those networks can demonstrate they have sufficient low-carbon generation to supply the buildings' heat and hot water demand at the target CO2 levels for the Future Homes or Buildings Standard?

a. Yes

b. Yes, and I'd like to provide further information

c. No (please provide justification)

Response: a. Yes

**Q54.** Do you agree that newly constructed district heating networks (i.e., those built after the Future Homes and Buildings Standard comes into force) should also be able to connect to new buildings using the sleeving methodology?

**Q55.** Do you agree with the proposed guidance on sleeving outlined for Heat Networks included in Approved Document L, Volume 1: Dwellings and Approved Document L, Volume 2: Buildings other than dwellings?

**Q56.** Do you agree that heat networks' available capacity that does not meet a low carbon standard should not be able to supply heat to new buildings?

**Q57.** What are your views on how to ensure low-carbon heat is used in practice?

**Q58.** Are there alternative arrangements for heat networks under the Future Homes and Building Standards that you believe would better support the expansion and decarbonisation of heat networks?

Response: Q54 to Q58 - No comment

## Smart Meters

**Q59.** Do you agree that the draft guidance provides effective advice to support a successful smart meter installation in a new home, appropriate to an audience of developers and site managers?

**Q60.** Do you agree that voluntary guidance referenced in draft Approved Document L, Volume 1: Dwellings is the best approach to encouraging smart meters to be fitted in all new domestic properties?

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Response: Q59 to Q60 - No comment

### Accounting for exceptional circumstances

**Q61.** *Do you agree that it should be possible for Regulation 26 (CO2 emission rates) to be relaxed or dispensed with if, following an application, the local authority or Building Safety Regulator concludes those standards are unreasonable in the circumstances?*

- a. Yes
- b. No (please provide justification)

Response: b. No. This will result in developers seeking ways to avoid the standards and without clear criteria, this would result in Local Authorities having to make difficult judgements. This in turn will lead to inconsistency and poor outcomes for some consumers. If any exceptions are to be made, those exceptions should be clearly set out in the regulations rather than being subject to a judgement.

**Q62.** *[If yes to previous question], please share any examples of circumstances where you think it may be reasonable for a local authority to grant a relaxation or dispensation?*

**Q63.** *Do you think that local authorities should be required to submit the applications they receive, the decisions they make and their reasoning if requested?*

Response: Q62 to Q63 - No comment

**Q64.** *Are there any additional safeguards you think should be put in place to ensure consistent and proportionate use of this power?*

Response: The exceptions (if necessary at all) should be specified in the regulations

### Legislative Changes to the energy efficiency requirements

**Q65.** *Do you agree that Part L1 of Schedule 1 should be amended, as above, to require that reasonable provision be made for the conservation of energy and reducing carbon emissions?*

- a. Yes
- b. Yes, and I'd like to provide further information
- c. No (please provide justification)

Response: a. Yes

**Q 66.** *Do you agree that regulations 25A and 25B will be redundant following the introduction of the Future Homes and Buildings Standards and can be repealed?*

Response: No comment

### A review of our approach to setting standards

**Q67.** *Do you agree that the Home Energy Model should be adopted as the approved calculation methodology to demonstrate compliance of new homes with the Future Homes Standard?*

- a. Yes
- b. Yes, and I'd like to provide further information
- c. No (please provide justification)

Response: Yes. We support the basic concept of replacing SAP and introducing a Home Energy Model (HEM). From the information outlined, we consider that the changes being made to the SAP will better support the transition to net zero by improving the time resolution of energy performance of homes, allowing for more energy flexibility and smart technologies. In the HEM, heat pumps will be simulated in a

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home's specific context, rather than as a generic test simulation. This will be made more accurate with a 30-minute time resolution, as opposed to one measurement being taken a month, which currently occurs with the SAP. Being able to measure the energy performance of those homes more accurately will lead to better data and provide more support for the transition to net zero.

However, the HEM is such an important element of the Future Homes Standard, that without knowing its final shape, it is impossible to know whether the HEM and indeed the whole of the Future Home Standard is likely to deliver the aims that have been set. It is disappointing that the HEM has not been developed as an integral part of the FHS as it directly relates to the proposals around performance requirements, metrics, real-world performance etc. Whilst the emerging HEM appears to be an improvement on SAP, we do not consider that it is sufficiently clear and robust to achieve truly net zero homes and could lead to ongoing poor thermal design and performance.

Our view is that the HEM needs to minimise the performance gap. The simplest way for this to work is to set clear, unambiguous absolute targets which can then be used as the basis for assessing actual building performance. Whilst we note the point about flexibility in design, we consider this is still achievable and indeed will be necessary to respond to different site conditions. In contrast, the notional building approach risks inefficient building designs and thermal bridges that cannot meet designed performance. To meet our national net zero targets, we need to change housebuilders' approaches and consumer expectations to place more value on energy, cost and carbon performance. Absolute energy targets can achieve that, whilst notional standards may not.

**Q68.** *Please provide any comments on the parameters in the notional building.*

Response: See comments above. Notional building standards should not be used. Instead absolute standards should be put in place.

**Q69.** *Minimum standards already state that heat pumps should have weather compensation and we would like to understand if stakeholders think this is enough to ensure efficiency of heat pumps under the varying weather conditions across England. Should the notional building use local weather?*

**Q70.** *Do you agree with the revised guidance in The Future Homes Standard 2025: dwelling notional buildings for consultation no longer includes the average compliance approach for terraced houses?*

**Q71.** *Do you agree with the revised guidance in Approved Document L, Volume 1: Dwellings which states that you should not provide a chimney or flue when no secondary heating appliance is installed?*

Response: Q69 to Q71 – No Comment

**Q72.** *Do you agree with the proposed approach to determine U-values of windows and doors in new dwellings?*

- a. Yes
- b. No

Response: a. Yes

**Q73.** *Do you agree with the proposal to remove the default  $\gamma$ -value for assessing thermal bridges in new dwellings?*

- a. Yes
- b. Yes, and I'd like to provide further information
- c. No (please provide justification)

Response: a. Yes

**Q74.** *Do you have any information you would like to provide on the homes built to the Future Homes Standard using curtain walling?*

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Response: No comment

**Q75.** Do you agree with the methodology outlined in the NCM modelling guide for the Future Buildings Standard?

- a. Yes,
- b. No (please provide justification)

Response: a. Yes

**Q76.** Please provide any further comments on the cSBEM tool which demonstrates an implementation of the NCM methodology.

**Q77.** Please provide any further comments on the research documents provided alongside the cSBEM tool and which support the development of the NCM methodology, SBEM and iSBEM.

Response: Q76 to Q77 - No comment

## Transitional Arrangements

**Q78.** Which option describing transitional arrangements for the Future Homes and Buildings Standard do you prefer? Please use the space provided to provide further information and/or alternative arrangements.

- a. Option 1
- b. Option 2

Response: a. Option 1. The FHS has been in the pipeline for several years, and including this consultation, there have been at least two layers of development. This ensures the industry has had ample time to adjust their supply chain and design practices ahead of the introduction of the FHS. A 6 month transitional period is therefore adequate

**Q79.** Will the changes to Building Regulations proposed in this consultation lead to the need to amend existing planning permissions? If so, what amendments might be needed and how can the planning regime be most supportive of such amendments?

- a. Yes (please provide further information)
- b. No

Response: There is a possibility that during the transitional period proposals which have planning permission will need to seek approval for connected works such as heat pumps, solar PV, plus potentially some changes to building designs where these are not consistent with the energy performance requirements. In these circumstances it is proposed that the planning system treats revisions to schemes pragmatically as minor variations wherever possible. The government should actively support local planning authorities to do this through clear guidance. Where listed buildings are concerned, the planning system will need to strike a balance between public benefits and harm to listed buildings in line with the NPPF.

**Q80.** Do you agree that the 2010 and 2013 energy efficiency transitional arrangements should be closed down, meaning all new buildings that do not meet the requirements of the 2025 transitional arrangements would need to be built to the Future Homes and Buildings Standards?

- a. Yes
- b. No (please provide justification)

Response: a. Yes

**Q81.** What are your views on the proposals above and do you have any additional evidence to help us reach a final view on the closing of historical transitional arrangements?

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Response: No comment

### Part O – Call for Evidence

**Q 82.** *Part O does not apply when there is a material change of use. Should it apply?*

- a. Yes
- b. Yes, but only for some types of conversion (please list from reg 5a-k or describe the type)
- c. No

Response: a. Yes. Overheating is just as much a risk in existing buildings

**Q83.** *Apart from material change of use, is there anything missing from the current scope of Part O?*

**Q84.** *Can you provide evidence on how the addition of extensions or conservatories to domestic buildings can impact overheating risk on an existing building?*

**Q85.** *We are currently reviewing Part O and the statutory guidance in Approved Document O. Do you consider there to be omissions or issues concerning the statutory guidance on the simplified method for demonstrating compliance with requirement O1, for buildings within the scope of requirement O1?*

**Q86.** *Do you consider there to be omissions or issues concerning the statutory guidance on the dynamic thermal modelling method for demonstrating compliance with requirement O1 for all residential buildings?*

**Q87.** *Do you consider there to be omissions or issues concerning the statutory guidance on ensuring the overheating mitigation strategy is usable for buildings within the scope of requirement O1?*

**Q88.** *Do you consider there to be omissions or issues concerning the statutory guidance on protection from falling?*

**Q89.** *Are you aware of ways that Approved Document O could be improved, particularly for smaller housebuilders?*

**Q90.** *Does Regulation 40B require revision?*

**Q91.** *Do you consider there to be omissions or issues concerning the statutory guidance on providing information?*

**Q92.** *Are there any improvements that you recommend making to the information provided about overheating in the Home User Guide template?*

**Q93.** *Are there any omissions or issues not covered above with the statutory guidance in Approved Document O that we should be aware of?*

Response: Q83 to Q93 - No comment

### Equalities Impact Assessment

**Q94.** *Please provide any feedback you have on the potential impact of the proposals outlined in this consultation document on persons who have a protected characteristic. If possible, please provide evidence to support your comments.*

**Q95.** *Please provide any feedback you have on the impact assessments.*

Response: Q94 to Q95 - No comment