COUNCIL BUSINESS COMMITTEE

The Future Homes and Buildings Standards: 2023 Consultation

The Future Homes and Buildings Standards: 2023 consultation on changes to Part 6, Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for dwellings and non-domestic buildings and seeking evidence on previous changes to Part O (overheating)

29th February 2024

Report Chief Officer - Planning & Climate Change

PURPOSE OF REPORT

To advise Members of the Government's consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for non-domestic buildings and dwellings; and overheating in new residential buildings.

The consultation commenced on 13th December 2023 and runs until 6th March 2024.

The government is seeking views on:

1. The government's position on improving the energy efficiency and reducing the carbon emissions of new homes and non-domestic buildings.
2. Energy efficiency requirements for new homes and non-domestic buildings set by Part L (Conservation of Fuel and Power) and Part 6 of the Building Regulations 2010 ("the Building Regulations").
3. Plans for achieving the Future Homes Standard and Future Buildings Standard.
4. Technical proposals for changes to the Building Regulations, the associated Approved Document guidance and calculation methods.
5. Implementation of Part O of the Building Regulations introduced in 2021

Much of the consultation impacts new homes and new non-domestic buildings. Sections which relate to existing buildings are: Material Change of Use; Some elements of Updated Guidance and Minimum Standards; Real-world performance of homes: changes to Approved Document L, Volume 1: Dwellings and Approved Document F, Volume 1: Dwellings to improve the commissioning of fixed building services in new and existing homes; Part O (Call for Evidence).

The consultation refers to regulated energy only. This means that other areas of carbon emissions from buildings and sustainability measures are not in scope. Out of scope of this consultation are: embodied carbon, the carbon emissions generated from the production and transportation of building materials, construction process and maintenance of a building, unregulated energy, water efficiency, SuDS and BNG.

This report is public.

RECOMMENDATIONS

(1) That the draft response to the consultation, at Appendix 1 of the Report, is submitted as a formal response from Lancaster City Council.

1.0 Introduction

1.1 The minimum energy efficiency requirements for new homes and non-domestic buildings are set through Part L (Conservation of fuel and power) of Schedule 1 and Part 6 of the Building Regulations. In 2021 the government implemented an uplift to Part L and introduced regulations to reduce overheating risk in new residential buildings (Part O), which came into effect on 15 June 2022. As a result of the uplift, new homes and non-domestic buildings are now expected to produce lower carbon emissions compared to those built to the 2013 standards. The government's position is that the uplift represents a step towards a cleaner, greener and safer built environment. While progress has been made, the Heat and Buildings Strategy outlines the need to eliminate virtually all emissions arising from heating, cooling and energy use in buildings.

1.2 The 2025 Future Homes and Buildings Standards aim to build on the 2021 Part L uplift and set requirements for energy efficiency and heating for new homes and non-domestic buildings.

1.3 When the Government consulted on the 2021 Part L uplift, it also outlined its overarching vision for the Future Homes and Buildings Standards. It published responses to the 2 stages of that consultation in January 2021 and December 2021. This consultation builds on the feedback the Government received during that process and sets out more detailed proposals for the 2025 Future Homes and Buildings Standards.

1.4 The Building Safety Regulator (BSR) within the Health and Safety Executive was established by the Building Safety Act 2022 and has a key legal duty to keep the safety and standards of all buildings under review. The BSR provides the Department with technical advice on new proposals related to buildings. The BSR has worked together with DLUHC on the development of these proposals and produced the technical specifications for the Future Homes and Buildings Standards.

1.5 The consultation seeks views on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for dwellings and non-domestic buildings; and overheating in new residential buildings.

1.6 These changes are aimed at:

- Reducing carbon emissions and improving the energy efficiency of buildings.
- Ensuring work done to existing homes and non-domestic buildings is done to a standard of energy efficiency.
- Allowing time for changes in specifications, skills and supply chains needed to stimulate innovation and learning in the sector, to prepare industry for the Future Buildings Standard from 2025.
- Providing adequate ventilation provisions to align with more airtight construction.
- Improving indoor air quality
- Protecting the welfare of occupants who may be at risk of overheating in

- residential buildings
- Collecting evidence supporting Part O of the Building Regulations

1.7 Heating and powering buildings accounts for 30% of the UK's energy usage. The majority of emissions result from heating: 79% of buildings emissions and about 23% of all UK emissions. Decarbonising buildings is outlined in the Heat and Buildings Strategy as essential to ensure that the UK reaches net carbon zero by 2050. The Future Buildings Standard is intended to support the UK in reaching this target.

1.8 In 2021 the Government brought in new requirements related to overheating in new buildings. Over the heatwaves in 2022 an estimated 4,500 deaths (were associated with the hottest days in England. The impact of heat is expected to increase as a result of climate change overtime. The new standards are aimed at protecting homes from overheating.

1.9 The consultation seeks responses to 95 questions, as posed in the consultation document. The outcomes of the consultation will have implications for the Local Plan Review and the direction that local planning policy can take in relation to energy efficiency measures. Officers have provided a draft response to the consultation document at Appendix 1. Subject to this committee's agreement, the response, or a version amended to reflect Members' specific concerns, will be submitted as Lancaster City Council's formal response to the consultation.

2.0 Details of Consultation

2.1 The Future Homes and Buildings Standard Consultation ends on 6th March 2024. The full documentation can be viewed using the following link:

The Future Homes and Buildings Standards: 2023 Consultation

3.0 Options and Options Analysis (including risk assessment)

	Option 1: To formally respond to the Future Homes and Buildings Standard Consultation with the comments provided in Appendix 1 of this report	**Option 2:** To formally respond with any other comments	**Option 3:** To provide no response to the consultation
Advantages	The views of the Council will be considered by the Government when the policy details are formulated.	The views of the Council will be considered by the Government when the policy details are formulated.	No advantages
Disadvantages	While the Council may submit comments, they may not result in the issues raised being reflected in the final policy.	While the Council may submit comments, they may not result in the issues raised being reflected in the final policy.	That the views/opinions of the Council will not be taken into account and future opportunities to feed into the process will be lost.
Risks	The Future Homes and Buildings Standard Consultation	The Future Homes and Buildings Standard Consultation	That the views/opinions of the Council will not be

	policy may not be revised to reflect the views of the Council.	may not be revised to reflect the views of the Council.	taken into account and future opportunities to feed into the process will be lost.

4.0 Officer Preferred Option (and comments)

4.1 Option 1 is the preferred Officer opinion. This option ensures that Lancaster City Council provides its views and will be able to make further comments should revisions and further consultation be carried out.

5.0 Conclusion

5.1 It is recommended that subject to members consideration the response set out in Appendix 1 is submitted as Lancaster City Council's formal response to the consultation.

CONCLUSION OF IMPACT ASSESSMENT
(including Health & Safety, Equality & Diversity, Human Rights, Community Safety, Sustainability and Rural Proofing):

Responding to the consultation is Lancaster City Council's opportunity to ensure that sustainability considerations are taken into account in the development of the policy.

LEGAL IMPLICATIONS

There are no legal implications stemming from this report.

FINANCIAL IMPLICATIONS

There are no financial implications resulting directly from the recommendations.

OTHER RESOURCE IMPLICATIONS, such as Human Resources, Information Services, Property, Open Spaces

Compliance with national energy standards in approved development is undertaken as part of building control process. Developers pay to for building control services, which are provided at commercial rates by private sector approved inspectors or the City Council's building control service. Changes to national standards would not affect these arrangements, thus implementation of the government's proposed new standards will not have resource implications for the council. Building Control functions are carried out by the Council and private Approved Inspectors.

SECTION 151 OFFICER'S COMMENTS

The Section 151 Officer has been consulted and has no further comments to add.

MONITORING OFFICER'S COMMENTS

The Monitoring Office has been consulted and has no further comments to add.

BACKGROUND PAPERS The DLUHC Future Buildings Standard Consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for non-domestic buildings and dwellings; and overheating in new residential buildings can be viewed at the following link: The Future Buildings Standard consultation (publishing.service.gov.uk)	**Contact Officer:** Diane Neville **Telephone:** 01524 582335 **Email:** dneville@lancaster.gov.uk **Ref:** N/A

Appendix 1 – Proposed Lancaster City Council response to the consultation

Summary of proposals from the Government:

- Will apply to all new dwellings and non-domestic buildings to ensure 'carbon zero ready' (this means that buildings are not net zero today, but will become net zero as the electric grid decarbonises)
- No changes to the current metrics
- No change proposed to the required min fabric efficiency ratings over Part L 2021 apart from air tightness
- Seeking views on how this will apply to 'change of use' developments
- Gathering evidence of real-world performance of homes
- Supporting the expansion of cleaner heat networks
- Allowing local authorities to relax (or dispense) the energy efficiency requirements in instances where they are seen to be unreasonable
- Changes to BR to repeal redundant regulations
- Consulting on the Home Energy Model (HEM) to replace the Standard Assessment Procedure (SAP) for energy rating of new homes. A draft tool has been released for HEM which can be accessed here
- Consulting on options for transitional arrangements
- A call for evidence on overheating (part O) in order to extend this standard to homes created through conversions
- All requirements must be met at a building level, there is no allowance for a site-wide approach or offsetting of emissions within FHS 2025
- Gas boilers, hybrid boilers, hydrogen-ready boilers and biomass heating systems will not be allowed at all under FHS 2025 as all homes must be 'net zero ready' meaning only electrification or pure hydrogen heating systems can be used.
- All notional building requirements are based on ASHP technology (or a 4th gen heat network running off ASHP technology)
- New low carbon communal and district heat networks will likely be the preferred way of providing heating and hot water to blocks of flats under the Future Homes Standard.
- Consulting on two options for the notional building
    - Option 1: Solar PV, Waste water heat recovery system, increased air tightness, decentralised mechanical ventilation (dMEV) system
    - Option 2: none of the above, but reduced upfront cost – oddly, option 2 seems worse than the current 2021 regs while also being more expensive? (see table 4.2)
- Reason given for not improving fabric requirements is that the cost/carbon saving ratio gets too high, and that more carbon can be saved at lower cost using other methods

For non-domestic buildings:

- Radiant electric heating will be supported for top-lit spaces such as sports halls and warehouses
- Two options for solar in non-domestic buildings
    - Option 1 (recommended): Solar PV panel coverage equivalent of 40% of the building's foundation area for side-lit spaces and 75% for top-lit spaces.
    - Option 2 (not recommended): Solar PV panel coverage equivalent of 20% of foundation area for side-lit spaces and 40% for top-lit spaces.

Out of Scope

The Future homes standard will not cover:

- Embodied Carbon

- Unregulated Energy
- Water Efficiency
- SuDS
- BNG
- Offsetting

Building Fabric Standards Comparison table for reference

Building Element	FHS Option 1	FHS Option 2	Part L 2021	Indicative FHS spec from 2021 consultation*	LETI**
Roof U-value (W/m^2K)	0.11	0.11	0.11	0.11	0.10 – 0.12
External wall U-value (W/m^2K)	0.18	0.18	0.18	0.15	0.13 – 0.15
Floor U-value (W/m^2K)	0.13	0.13	0.13	0.11	0.08 – 0.10
Window U-value (W/m^2K)	1.2	1.2	1.2	0.8	0.8 (triple glazing)
Door U-value (W/m^2K)	1.0	1.0	1.0	1.0	1.00
Wastewater heat recovery	Yes (removed for single storey dwellings)	No	Yes	No	
Heat source (no DHN connection)	A notional air source heat pump equivalent to ErP A++	A notional air source heat pump equivalent to ErP A++	Gas boiler	Low-carbon heating (e.g. heat pump)	No gas, open to developer provided space heating and EUI targets achieved
Heat source (DHN connection)	Heat network with emissions factor of 0.033kg/kWh and primary energy factor of 0.75kWh/kWh	Heat network with emissions factor of 0.033kg/kWh and primary energy factor of 0.75kWh/kWh	Heat network, carbon factor depends on whether network is 'new' or 'existing'		
Airtightness	4	5	5	5	<1

Building Element	FHS Option 1	FHS Option 2	Part L 2021	Indicative FHS spec from 2021 consultation*	LETI**
(m3/m2.h @ 50Pa)					
Ventilation	dMEV	Natural ventilation with intermittent extract fans	Natural ventilation with intermittent extract fans	Natural with extract fans	MVHR 90% (eff) ≤2m (duct length from unit to ext wall)
Fixed lighting efficacy (lm/W)	120	120	80	Not specified – though suggested that 80 would be max	Not specified
Renewable energy	For houses: High efficiency solar PV panels covering equivalent of 40% of ground floor area. For flats PV area equivalent to 40% of dwelling floor area divided by number of storeys. For flats about 15 storeys, this is removed.	None	For houses: Standard solar PV panels covering equivalent of 40% of ground floor area. For flats PV area equivalent to 40% of dwelling floor area divided by number of storeys.	None (listed as 'PV' in consultation notional spec doc)	Maximise renewables so that 100% of annual energy req't is generated on-site

*The Future Homes Standard: 2019 Consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for new dwellings (Jan 2021) https://assets.publishing.service.gov.uk/media/60114c6c8fa8f565494239a7/Government_response_to_Future_Homes_Standard_consultation.pdf

**LETI Climate Emergency Design Guide https://www.leti.uk/_files/ugd/252d09_3b0f2acf2bb24c019f5ed9173fc5d9f4.pdf

Consultation Questions & Answers

Question	Answer
Question 1. Are you responding as / on behalf of (select all that apply)	Local Authority
Question 2. If you are responding as a member of the public/a building professional, what region are you responding from? [drop down list of England regions + other]	N/A
Question 3. If you are responding as a member of the public, are you a [checklist: private tenant, housing association/local authority housing tenant, private landlord, homeowner]	N/A
Question 4. If you are responding on behalf of a business/organisation, what is the name of your business/organisation? [free text]	Lancaster City Council
Question 5. If you are responding on behalf of a business/organisation, where is your business/organisation based/registered? [drop down list England regions + other]	Lancaster, Lancashire, LA1
Question 6. When you respond it would be useful if you can confirm whether you are replying as an individual or submitting an official response on behalf of an organisation and include: • your name, • your position (if applicable), • the name of organisation (if applicable), • an address (including post-code), • an email address, and • a contact telephone number	TBC
Question 7. 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? a. Option 1 (higher carbon and bill savings, higher capital cost) b. Option 2 (lower carbon savings, increase in bill costs, lower capital cost)	(a) Option 1 is the preferred option as this option is of greater benefit to homeowners and greatest carbon savings. However, we would like to stress how restrictive this question is. It does not provide meaningful choice. While option 1 is preferable to option 2, it is far from a desirable outcome for the Future Homes Standard as it represents a step back from what was proposed in the 2021 FHS consultation. It is LCC's opinion neither option will deliver meaningful improvement on current building fabric standards. The government should reconsider its options.
Question 8. What are your priorities for the new specification? (select all that apply)	Priorities are as follows:

☐ low capital cost ☐ lower bills ☐ carbon savings ☐ other (please provide further information)	Lower Bills Carbon Savings Under other we suggest that **Reducing Energy use intensity** is most important. **Improved indoor air quality** is critical and should be combined with mechanical ventilation with heat recovery. **Improved general health** should be metric which is included as buildings are a key aspect of improving population health. **Climate adaptation** should be included as buildings will needs to provide for extremes in temperature and building services are a key part of this. Buildings should be designed for the climate projections over the full lifespan of the building not just the date of commissioning. In terms of whether low capital cost should be included, LCC's viability work for its Climate Emergency Local Plan Review concluded that all of the above can be achieved without sacrificing build viability. LCC would therefore suggest that a low capital cost does not have to be a priority.
Question 9. 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)	(a) Option 1 is the preferred option as this option as of greater benefit to homeowners. However, we would like to stress how restrictive this question is. While option 1 is preferable to option 2, it is far from a desirable outcome for a "Future Homes Standard" as it represents a **step back** from what was proposed in the 2021 FHS consultation. In the council's opinion this will deliver no meaningful improvement on current building fabric standards.
Question 10. Which option do you prefer for the proposed non-domestic notional buildings set out in the NCM modelling guide? a. Option 1 b. Option 2	(a) Option 1 is the preferred option as this will provide more solar renewable generation on site and thereby reduce the net energy requirement of the site.
Question 11. What are your priorities for the new specification?	Priorities are as follows: Reduced energy usage

☐ low capital cost ☐ lower bills ☐ carbon savings ☐ other (please provide further information) [Note that unlike Q8, this question is referring to non-domestic specifications.]	Carbon savings Other **Reducing Energy use intensity** is most important. **Improved indoor air quality** is critical and should be combined with mechanical ventilation with heat recovery. **Improved general health** should be metric which is included as buildings are a key aspect of improving population health. **Climate adaptation** should be included as buildings will needs to provide for extremes in temperature and building services are a key part of this. Buildings should be designed for the climate projections over the full lifespan of the building not just the date of commissioning.
Question 12. 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)	(e) No, for another reason (justification provided below). Once again, we would stress that the question format is very restrictive. Despite EUI values being mentioned in the main text, they are not presented as an option. LCC's response is that we do **not** think that the three current metrics (TER, TPER and FEE) are the best measure of the priorities outlined in section 5.2 of the FHS consultation, and that a more desirable metric would be **Energy Use Intensity (EUI)**. The reason for this is that the EUI (unlike the metrics above) is a measure of how a building performs in-use and does not account for carbon emissions (which are tied to the decarbonisation of the national power grid). This metric can also be very easily measured and therefore verified in a real-world setting. As the grid continues to decarbonise, carbon-based metrics such as the TER will show that buildings are improving, even if they are staying the same or even growing worse in terms of fabric and energy efficiency. This can result in higher household bills despite low TER values.

	Clearly then, the asserted number one priority of the FHS metrics as stated in section 5.2 is **not** in fact the household bills of the homeowners, as the TER value is ill-suited to indicate or predict household bills.
Question 13. 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)	(b) Yes, as these are the only options offered in the consultation and at least provide some moderate improvements which is better than the status quo. LCC consider that they do not represent the most ambitious possible targets and the Council question if the government should be setting standards based on "current systems available on the market" rather than setting policy to help improve the options on the market for improved building energy efficiency and building occupant health (particularly for ventilation).
Question 14. 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)	(a) Yes
Question 15. 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)	(a) Yes
Question 16. 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	LCC is not providing a response on this question.

suggestions or information to support my view c. No (please provide justification)	
Question 17. 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)	(a) Yes, improvements to the minimum standard are a good thing. The minimum standards should be improved at least to the level of the notional dwelling if not further.
Question 18. 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)	LCC is not providing a response on this question.
Question 19. 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? a. Yes b. Yes, and I want to provide additional suggestions or information to support my view c. No (please provide justification)	(a) Yes
Question 20. 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? a. Yes b. Yes, and I want to provide additional	(a) Yes

suggestions or information to support my view c. No (please provide justification)	
Question 21. 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? a. Yes b. Yes, and I want to provide additional suggestions or information to support my view c. No (please provide justification)	LCC is not providing a response on this question.
Question 22. Do you agree that lifts, escalators and moving walkways in new buildings (but not when installed withing a dwelling) should be included in the definition of fixed building services? a. Yes b. Yes, and I want to provide additional suggestions or information to support my view c. No (please provide justification)	LCC is not providing a response on this question.
Question 23. 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? a. Yes b. Yes, and I want to provide additional suggestions or information to support my view c. No (please provide justification)	LCC is not providing a response on this question.
Question 24. 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?	LCC is not providing a response on this question.

a. Yes (please provide comments) b. No	
Question 25. 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)	(b) No, LCC considers that the standards may be difficult to achieve in some instances, particularly in listed buildings. This approach may also deter the repurposing and renovation of certain buildings.
Question 26. 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)	(b) No, standards should also apply to non-dwelling accommodation e.g., student or patient accommodation, care homes, and hotels
Question 27. Should different categories of MCU buildings be subject to different requirements? a. Yes b. No (please provide justification)	(a) Yes, however this variation in standards should be only to allow for differing circumstances, and not be used to hold some categories of MCU to lower standards than others.
Question 28. Which factors should be taken into account when defining building categories? (check all those that apply)	LCC is not providing a response on this question.

☐ height of the building, i.e., low versus mid- to high-rise buildings ☐ floor area of the building ☐ the expertise of those carrying out the work ☐ whether the conversion is a part- or whole-building conversion ☐ Other (please state) Please provide additional information to support your view.	
Question 29. Do you agree with the illustrative energy efficiency requirements and proposed notional building specifications for MCU buildings? a. Yes b. No	(b) No
Question 30. If you answered no to the previous question, please provide additional information to support your view. Select all that apply. The requirements are: ☐ too stretching ☐ not stretching enough ☐ not economically viable ☐ not practical/technically feasible ☐ other (please provide further details)	Not stretching enough. It is our view that the allowance of storage heaters and direct electric immersion hot water vessels for mid-rise buildings is poor in terms of efficiency. These options are not necessary and highly efficient alternatives have been proven to work for midrise buildings. It is also unclear why the external walls and roof insulation should be held to such dramatically lower standards in the low-rise than the mid-rise equivalents. LCC would also stress that although it is a less efficient placement, a solar panel can easily be mounted on the façade of a mid-rise/high-rise building, or even along a balcony.
Question 31. 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? a. Yes b. Yes, and I want to provide additional	(c) No – as stated in LCC's response to question 12 above, EUI values are a more practical method of measuring the performance of a building. This also applies to MCU living spaces such as flats, student living, hotels etc.

suggestions or information to support my view c. No (please provide justification)	
Question 32. Under what circumstances should building control bodies be allowed to relax an MCU standard? a. None, building control bodies should not be able to relax MCU standards b. Building control bodies should be able to relax under the following circumstances (please provide further details)	(b) LCC consider that there should be very limited circumstances where building control bodies are allowed to relax an MCU standards.
Question 33. Do you have views on how we can ensure any relaxation is applied appropriately and consistently? Please select all that apply: ☐ there should be guidance on circumstances where relaxation of the notional standard may be appropriate ☐ there should be monitoring of how relaxation is applied ☐ only formal relaxation or dispensation through the local authority should be possible ☐ other (please provide further details)	If relaxation is applied, then this should only be under exceptional circumstances, in consultation with the local planning authority, and should be based on a detailed feasibility report which is assessed by an independent party. It should be made clear that viability should not be used as grounds for relaxation of standards, as this would create a precedent for relaxation of standards.
Question 34. Should a limiting standard be retained for MCU dwellings? a. Yes (please provide further details) b. No, it is too strict c. No, it is not strict enough d. No, there is not enough information e. No, for another reason (please provide further details)	(c) No, it is not strict enough
Question 35. If a limiting standard is retained, what should the limiting standard safeguard against? Please select all that apply: ☐ risk of moisture, damp and mould ☐ high energy demand and energy bills (please	Risk of moisture and mould High energy demand

provide recommended values referring to ADL volume 1 Table 4.3) ☐ other (please provide further details)	
Question 36. Do you wish to provide any evidence on the impacts of these proposals including on viability? a. Yes (please provide evidence) b. No	(b) No
Question 37. 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? a. Yes b. Yes, and photographic evidence is needed c. Yes, and I'd like to provide further information d. No (please provide justification)	(b) Yes, and photographic evidence is needed
Question 38. 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? a. Yes b. Yes, and I'd like to provide further information c. No (please provide justification)	(a) Yes
Question 39. Do you agree that homes that have undergone an MCU should be airtightness tested? a. Yes b. Yes, and I'd like to provide further information c. No (please provide justification)	(a) Yes

Question 40. 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)	(b) Yes – However, LCC consider this testing should be mandatory for 2 primary reasons: 1. If the testing is voluntary, it is unlikely to be taken up at scale. As mentioned in section 8.2 of the consultation text simply, there is additional risk of assessments not being undertaken as it could risk demonstrating the performance gap. 2. Given the variation in the use of unregulated energy within a household, and variation between users for regulated energy these results could be averaged over buildings of the same build specification for each development.
Question 41. 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)	(d) No If the intention is to help inform buyers of the energy efficiency of their homes, then the EPC rating system is already in place to accomplish this. The FHS will be a **minimum building standard**, not an exemplar of build quality. This means that all houses built after the introduction of the FHS would need the logo (assuming they are built correctly), regardless of whether they were minimum building quality, or Passivhaus equivalent standards. There is potential that this could create a perception that no home built before the introduction of the FHS will be of the same quality as those built after it. This is even though many homes already built are made to far higher standards than the minimum standards of the building regulations or indeed the marginally improved proposed minimum standards represented in this consultation.
Question 42. 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)	(a) Yes

Question 43. 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)	(a) Yes
Question 44. 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? a. Yes b. Yes, and I'd like to provide further information c. No (please provide justification)	LCC is not providing a response on this question.
Question 45. Are you aware of any gaps in our guidance around commissioning heat pumps, or any third-party guidance we could usefully reference? a. Yes (please provide further details) b. No	LCC is not providing a response on this question.
Question 46. 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? a. Yes b. Yes, and I'd like to provide further information c. No (please provide justification)	LCC is not providing a response on this question.
Question 47. Do you agree with proposed changes to Approved Document L, Volume 1:	LCC is not providing a response on this question.

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? a. Yes b. Yes, and I'd like to provide further information c. No (please provide justification)	
Question 48. 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? a. Yes b. Yes, and I'd like to provide further information c. No (please provide justification)	(c) No. The inclusion of additional information to the home user guide is very helpful and should be included. However, the home user guide template should include a quick, visual, how to guide at the front before having the detail at the back should people need to read in detail about a section. The home user guide needs to be able to deliver meaningful information and support to all people. The current template is not an easy to use or read document and is not inclusive. It would be helpful for the government to provide a simple, illustrative guide for developers to be able to use that is applicable to the areas covered in the template. It should also highlight the quick wins for improving energy efficiency and indoor air quality or could have an easy to read/illustrated do/don't list for the different sections. Translations should also be available for the home user guide and the government should support delivery of this.
Question 49. 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. a. Yes (please provide further details) b. No (please provide further details)	LCC is not providing a response on this question.
Question 50. 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.	(a) Yes –LCC agree that digitally available home user guides would be a sensible addition for the reasons outlined in section 8.4. They could also be supported by video resources. As outlined in the answer to Q48, it would be valuable to incorporate infographics and to provide online translations of each user guide. They should however not exclusively be delivered in digital

a. Yes, (please provide further details) b. No	format rather both print and digital versions should be provided. While the government has outlined that paper copies can get misplaced, it is questionable if digital copies will be as easy to find particularly as the home changes hands from the original occupant.
Question 51. 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. a. Yes (please provide justification) b. No (please provide justification)	LCC is not providing a response on this question.
Question 52. 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? a. Yes b. Yes, and I'd like to provide further information c. No (please provide justification)	(b) Yes However, LCC would suggest an additional requirement that this information must be provided to the first buyer/renter of the property. This is because requiring this information is issued *before* a completion certificate can be issued could result in this information being issued to the developer who is constructing the homes, instead of the future occupant.
Question 53. 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)	(a) Yes
Question 54. 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?	(a) Yes

a. Yes b. Yes, and I'd like to provide further information c. No (please provide justification)	
Question 55. 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? a. Yes b. Yes, and I'd like to provide further information c. No (please provide justification)	LCC is not providing a response on this question.
Question 56. 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? a. Yes b. No (please provide further details regarding how this unused higher carbon capacity should be accounted for)	LCC is not providing a response on this question.
Question 57. What are your views on how to ensure low-carbon heat is used in practice?	LCC is not providing a response on this question.
Question 58. 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?	It is clear that, in terms of decarbonisation, existing buildings will experience greater from heat networks than new builds will. The focus should be on linking more energy intensive buildings (which are generally older buildings) to heat networks. Connecting older buildings to heat networks could be encouraged through subsidisation, or the taxation of carbon.
Question 59. 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?	LCC is not providing a response on this question.

a. Yes b. No If not, please provide suggestions for how the draft guidance could be improved. Please provide evidence and sources for your statements where appropriate.	
Question 60. 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? a. Yes b. No If not, is there anything else you think the government should be doing to ensure that smart meters are fitted in all new build properties?	(b) No It is LCC's view that a more effective measure to ensure that smart meters are installed in all new-build homes would be to make the installation of smart meters mandatory in all new-build homes.
Question 61. 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)	(b) No It is not acceptable to relax standards. This would ultimately result in higher carbon emissions overall. Additionally, the reason given in the consultation why a proposal for relaxation has been brought forward is that the UK has left the EU. It is not clear how the proposal to relax standards is an evidence-based or evidence-led decision. No evidence is given for how this would impact the UK meeting its own legal obligations to meet net zero by 2050. It is also contradictory to at least one of the stated objectives of this consultation to reduce carbon emissions of buildings.
Question 62. [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?	None
Question 63. Do you think that local authorities should be required to submit the applications they receive, the decisions they make and their reasoning if requested?	(a) Yes

a. Yes b. Yes, and I'd like to provide further information c. No (please provide justification)	
Question 64. Are there any additional safeguards you think should be put in place to ensure consistent and proportionate use of this power?	LCC do not agree that standards should be relaxed. However, should standards be relaxed, and despite it being stated at the beginning of the consultation that carbon offsetting is beyond the scope of the FHS consultation, relaxation should only be alongside a requirement to offset the difference in carbon emissions. This would help to negate any financial incentive to pursue relaxation of standards, and simultaneously maintain a net zero ready development.
Question 65. 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)	(a) Yes
Question 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? a. Yes b. Yes, and I'd like to provide further information c. No (please provide justification)	(c) No LCC are of the strong opinion that these should remain enshrined within the Building Regulations as a valid option. 'Nearly zero-energy' homes described in regulation 25B should be followed instead of the 'net-zero-ready' homes proposed by the FHS. These are superior to the Future Homes Standard with its 'net zero ready' proposals and retaining them will produce a much more all-round energy efficient and compliant home. For fully electric homes, reducing energy use it critical particularly as the grid decarbonises carbon will increasingly be less reflective of energy use. A 'nearly energy-zero' home with enough renewable generation to cover its remaining energy needs will not only achieve net zero in

	terms of carbon emissions but could also attain net carbon zero status at the point of construction. Critically it will not be reliant upon the decarbonisation of the national grid as the FHS homes will be. It is also worth noting that a home with lower energy demand will also put less of a capacity burden on the national grid than the proposed 'net zero ready' homes the government is proposing.
Question 67. 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)	LCC is not providing a response on this question.
Question 68. Please provide any comments on the parameters in the notional building.	LCC is not providing a response on this question.
Question 69. 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? a. Yes b. No Please provide any evidence you have on the unintended consequences that could arise as a result of using local weather in the notional building. If possible, please comment on the impact on the construction industry in terms of design and building feasibility. We also welcome views on whether weather compensation is sufficient to ensure heat pump efficiency.	(a) Yes, however the heat pump size and efficiency should be decided based on the predicted space heating demand for the dwelling, and not based on any single attribute such as the local climate or the fabric efficiency.
Question 70. Do you agree with the revised guidance in The Future Homes Standard 2025: dwelling notional buildings for consultation no	LCC is not providing a response on this question.

longer includes the average compliance approach for terraced houses? a. Yes b. No Please provide any evidence you have on the unintended consequences that could arise as a result of these changes.	
Question 71. 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? a. Yes b. No Please provide any further evidence.	(a) Yes LCC consider that no chimney or flue should be provided, as these are highly carbon intensive heat sources.
Question 72. Do you agree with the proposed approach to determine U-values of windows and doors in new dwellings? a. Yes b. No Please provide any further evidence.	LCC is not providing a response on this question.
Question 73. Do you agree with the proposal to remove the default y-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)	(b) Yes It is LCC's position that removing 'default' values such as these will produce a more accurate build, will help ensure housing designers and builders consider thermal bridging more closely and will help reduce the performance gap.
Question 74. Do you have any information you would like to provide on the homes built to the Future Homes Standard using curtain walling?	No
Question 75. Do you agree with the methodology outlined in the NCM modelling guide for the Future Buildings Standard?	LCC is not providing a response on this question.

a. Yes, b. No (please provide justification)	
Question 76. Please provide any further comments on the cSBEM tool which demonstrates an implementation of the NCM methodology.	LCC is not providing a response on this question.
Question 77. 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.	LCC is not providing a response on this question.
Question 78. 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 Please provide further information or suggest alternative transitional arrangements with your rationale and supporting evidence.	(a) Option 1 It is LCC's view that the shorter, 6 month period is preferable over the second option as it would result in a more rapid implementation of the new standards. LCC also highlight that given the lack of any substantial uplift in fabric requirements from current standards, it should be a far simpler transition than the 2021 version and therefore it is our position that this time period could comfortably be shortened even further. As the previous FHS consultation in 2021 had higher building standards, developers have had a significant amount of time to familiarise themselves with those higher standards and should therefore be fully prepared to deliver on the latest (and less ambitious) FHS consultation standards of building fabric.
Question 79. 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	(a) Yes Changes in the building regulations could lead to changes to the look of a building or the size/shape of its footprint which may require an amendment to the planning permission. Examples of this might include the installation of solar panels (particularly in conservation areas or within the setting of a listed building), increasing the footprint of the building to allow suitable space for aspects such as a hot water tank, the removal of a chimney stack, new windows, removal of windows, new external heat pump and more.
Question 80. Do you agree that the 2010 and 2013 energy efficiency transitional arrangements should be closed down, meaning	(a) Yes

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)	
Question 81. 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?	LCC is not providing a response on this question.
Question 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 Please provide more details about why Part O should/should not apply to a material change of use and, if possible, point to existing evidence/examples that demonstrates your view.	(a) Yes For all types of conversion. It is LCC's position that part O is vital not just for residential spaces, but also commercial and industrial spaces. The impact of the combination of higher levels of insulation and the warming climate could be even more considerable if overheating is not carefully considered from the outset. LCC consider that there is no reason why this should not be applied to change of use projects, as the end use of the building will remain unaffected by its previous use. In 2022 there were record high temperatures in the UK, with some areas exceeding 40 degrees Celsius in the UK for the first time in recorded history. However, under a high warming scenario the Met Office predict that by the 2070s this could be a comparatively cool summer, with a maximum estimated temperature increase of 6.8 degrees Celsius in the UK (UKCP18 report August 2022). The UK housing and building stock is not prepared for this magnitude of temperature rise, and any future builds or conversions must be built with a rapidly warming future in mind.
Question 83. Apart from material change of use, is there anything missing from the current scope of Part O? a. Yes, (please provide justification) b. No, (please provide justification)	LCC is not providing a response on this question.
Question 84. Can you provide evidence on how the addition of extensions or conservatories to	(a) Yes LCC are experiencing high volumes of planning

domestic buildings can impact overheating risk on an existing building? a. Yes, (please provide justification) b. No	applications being submitted for converting conservatories into extensions due to overheating issues in the summer (and issues with winter cold). This demonstrates the effect that an overly glazed extension (a conservatory for example) can have on a dwelling.
Question 85. 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? a. Yes (please provide justification) b. No	LCC is not providing a response on this question.
Question 86. 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? a. Yes, (please provide justification) b. No	LCC is not providing a response on this question.
Question 87. 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? a. Yes, (please provide justification) b. No	LCC is not providing a response on this question.
Question 88. Do you consider there to be omissions or issues concerning the statutory guidance on protection from falling? a. Yes, (please provide justification) b. No	LCC is not providing a response on this question.

Question 89. Are you aware of ways that Approved Document O could be improved, particularly for smaller housebuilders? a. Yes, (please provide justification) b. No	LCC is not providing a response on this question.
Question 90. Does Regulation 40B require revision? a. Yes, (please provide justification) b. No	LCC is not providing a response on this question.
Question 91. Do you consider there to be omissions or issues concerning the statutory guidance on providing information? a. Yes, (please provide justification) b. No	LCC is not providing a response on this question.
Question 92. Are there any improvements that you recommend making to the information provided about overheating in the Home User Guide template? a. Yes, (please provide justification) b. No	LCC is not providing a response on this question.
Question 93. Are there any omissions or issues not covered above with the statutory guidance in Approved Document O that we should be aware of? a. Yes b. No If you answered yes, please provide more details including suggestions on ways to improve the statutory guidance and point to existing evidence/examples that demonstrates why the gaps or issues you have identified should be reviewed as a priority.	LCC is not providing a response on this question.
Question 94. Please provide any feedback you have on the potential impact of the proposals	LCC is not providing a response on this question.

outlined in this consultation document on persons who have a protected characteristic. If possible, please provide evidence to support your comments.	
Question 95. Please provide any feedback you have on the impact assessments.	LCC is not providing a response on this question.