CIH response to the Future Homes Standard technical consultation

Introduction and summary of our response

The Chartered Institute of Housing (CIH) is the professional body for people who work or have an interest in housing. We welcome the opportunity to respond to the Department for Levelling Up, Housing and Communities' (DLUHC) technical consultation on the Future Homes Standard.

In the last ten years, government data shows that over 100,000 homes have been built that are EPC Band D or below, and will require retrofitting under current EPC measurement. We therefore warmly support the ambition of the Future Homes Standard and its intention of ensuring that no new homes are built with fossil fuel heating or will require retrofitting to be zero carbon in the future. The Future Homes Standard is also critical to tackling fuel poverty and ensuring that current and future generations have homes to live in that are warm, safe, affordable, accessible and decent.

In preparing our response to this consultation, we have consulted extensively with CIH members working in a range of different roles in the housing sector. This includes CIH members working in interlinked areas of housing supply and development; sustainability and net zero; and policy in housing associations, local authorities, and the private sector. The Future Homes Standard cuts across all of these areas, and has significant implications for housing policy, understood in its broadest sense. We have also consulted with other partner organisations across the housing, energy, and built environment sectors to inform our view. Accordingly, we have only responded to those questions where we can offer an informed and evidence-based response, and hope that the evidence we have provided can support the finalisation and implementation of the Future Homes Standard.

We have responded to individual questions below, but our main points across our response are:

- Of the two performance specifications presented in the consultation document, we prefer Option 1 in both the main national building specification and the specification for buildings connected to heat networks. Option 2 would constitute a missed opportunity to tackle fuel poverty, especially for social housing residents, because of the higher heating and hot water bills relative to Option 1 and the Part L 2021 uplift. However, feedback from our members has suggested that DLUHC should also consider additional contender specifications (3-5) detailed by the Future Homes Hub's Ready for Zero report, and we would encourage DLUHC to

consider proposals that might be put forward by other organisations in response to this consultation.

- We have reservations about the real-world accuracy of the costings presented in the impact assessment. Feedback from CIH members suggests the capital cost uplift for developers associated with Option 1 (£6,200/4 per cent) is not reflective of estimated real-world costs for meeting the specification, which are estimated to require a capital cost uplift of £10,000-£15,000. The calculation of EANDCB costs over 10 years is also misaligned with the calculation of repair and maintenance costs in the social housing sector, which are undertaken over a longer time period. Given the wider financial pressures facing the social housing sector, it is imperative that the modelled capital cost uplift is as accurate as possible and reflected in future grant rates for affordable housing.
- We support the extension of Part O and a whole-dwelling standard to homes created through material change of use. These homes can often be poor quality, with government data and independent research evidencing low levels of energy efficiency that places their occupants at significant risk of excess cold and excess heat hazards. Material change of use can play a meaningful role in providing good quality, energy efficient homes, but only if these standards are introduced.
- We 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.
- While we broadly agree with the updated Section 10 of Approved Document L, Volume 1: Dwellings, we have concerns that the provision of documentation is not sufficient to ensure that everyone can use and operate their heat pumps and low-carbon technologies optimally. We would welcome the development of research, good practice, and non-statutory guidance to ensure that, on request, people can receive personalised, accessible, and tailored support to use their heat pumps and low-carbon technologies effectively.
- We support a longer transitional period to give the social housing sector the time it needs to adapt to the new regulations. CIH members have told us that 18 months is too short a timeframe to adjust internal business plans and policies to meet the Future Homes Standard, and that a longer transitional period will enable design assessments and development pipelines to be fully compliant. In addition, clear guidance, support, and the timely laying of regulations in 2024 will be essential for giving the sector clarity on the changes it needs to make, and by when.
- The introduction of new regulations and associated obligations will create several new roles and responsibilities that local authorities and housing associations, as well as other actors in the housing sector, will need to fulfil. They will need to be resourced appropriately to be able to meet any changes brought in as a result of the consultation, including those associated with ensuring compliance.
- We have provided some evidence in response to the questions on Part O, specifically on:

- The increased overheating risk in homes with extensions or conservatories, which is apparent through existing research.
- Amendments to Appendix C in Part O, which we feel should be expanded to cover a larger geographical area than some parts of London and Manchester.
- The need for a further call for evidence on Part O at a later date, to give relevant staff in the housing sector more time to assess the real-world application of Part O to their developments.
- The need to consider occupant vulnerability in overheating policy more generally.

- Lastly, we would encourage DLUHC to move forward with parallel work to mandate Part M 4(2) of the Building Regulations as the minimum standard in all new homes.

We would also like to make two broader points. Firstly, our priorities for the new specification are low capital cost, lower bills, and carbon savings. We do not agree with the way these are set out in the consultation as competing priorities that must be rated. These priorities can all be met if government commits to a long-term plan for housing that tackles the undersupply of affordable housing in England. The timescale and transitional arrangements for the Future Homes Standard will provide sufficient time for a long-term plan to be established to meet these priorities. Accordingly, instead of considering Future Homes Standard specification options that will cost less but place more residents at risk of fuel poverty, and/or introducing exceptions that will increase the risk of poor quality, energy inefficient homes being developed *en masse*, we support the establishment of a genuinely long-term plan for housing that can enable the social housing sector to deliver more decent, safe, accessible, and affordable homes for social rent.

Secondly, however they are finalised, the Future Homes Standard regulations will represent a significant change for the housing sector. The sector, especially housing associations and local authorities, will require clear guidance and support to be able to comply with the new regulations, including on how the regulations will affect standards for future homes and buildings that have been (or may be) adopted as local plan policy requirements. We would welcome the opportunity to work with DLUHC to ensure our members are prepared for the new regulations and can implement changes across their organisations to meet them.

Answers to consultation questions

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?

Of the two options set out in the consultation document, we prefer Option 1.

The consultation document states that Option 2 will increase the annual heating and hot water bill from £640 (in the 2021 uplift specification) to £1,220. This is an effective doubling of heating and hot water costs between the current Part L uplift and Option 2. Even if this is an overestimate, or it is decreased through wider government adjustments to electricity and energy policy, it would represent a missed opportunity to protect current and future generations from the negative impacts of fuel poverty.

As the professional body for housing with a substantial proportion of our members working in social housing, we have more specific concerns that Option 2 would not adequately protect social housing residents moving into new affordable homes from fuel poverty. Government fuel poverty statistics have consistently shown that social housing residents have a much lower household income (after housing costs, equivalised) than other tenures. Its latest statistics show that social rented households have a median income of £17,685, compared to £22,692 in the private rented sector and £34,552 in the owner-occupied sector. The latest English Housing Survey also shows that social housing is the tenure with the highest proportion of households containing someone with a disability (56 per cent). This means that people living in social housing are more likely to have health-related needs for warmth, and need to spend a higher-than-average amount on heating and hot water to maintain good health and wellbeing at home. Lastly, government data from 2017-18 shows that new social housing lettings for different types of priority has consistently been high in the past, with 37 per cent of lettings associated with homelessness and 25 per cent of lettings associated with medical welfare. Given rising homelessness and the use of temporary accommodation, and the health impacts of the Covid-19 pandemic, we do not expect these figures will have decreased, and more recent government proposals to introduce an 'income requirement' as part of reforms to social housing allocations will only serve to further increase the number of low-income households in the social housing sector.

This evidence shows that social housing residents would be likely to be disproportionately affected by moving into a home with a notional building matching Option 2, compared to Option 1. In our view, the risk of Option 2 not adequately protecting occupants from fuel poverty, both generally and in social housing specifically, renders it the more unfavourable of the two options.

Lastly, CIH members we have consulted with have suggested that Option 1 does not go far enough, and that government should consider views on the other contender specifications (3-5) set out in the Future Homes Hub's Ready for Zero report.

Question 8. What are your priorities for the new specification?

Our priorities for the new specification are low capital cost, lower bills, and carbon savings.

We do not think it is adequate that these options are set out in a way that implies competing priorities. All these priorities can be met if government commits to a long-term plan for housing that tackles the undersupply of affordable housing in England. The timescale and transitional arrangements for the Future Homes Standard will provide sufficient time for a long-term plan to successfully meet these priorities.

We would like to provide further evidence on the validity of the costings and assumptions in the impact assessment and how government can ensure that future homes achieve significant carbon and running cost savings without compromising housing supply. Our focus here is predominantly on affordable housing.

Firstly, the consultation document states a capital cost uplift for developers of £6,200 (4 per cent) to meet Option 1, against the 2021 uplift baseline. Feedback from CIH members working in local authorities and housing associations suggests that this figure is likely not reflective of the real-world costs of meeting the specification. While the specification has just been released, meaning that our members have not had much time to model the specification, their feedback suggests an actual cost of between £10,000 and £15,000 to meet Option 1, with one member noting that installing MVHR is costing £2,000 on its own in some homes they are developing. As noted in the impact assessment, it is essential that future grant levels for social rented sector homes are set at a level that adequately meets the actual costs of building to any new specification.

Secondly, we note that the impact assessment models EANDCB costs over 10 years, in line with the Treasury's Green Book guidance. The impact assessment acknowledges that this means maintenance costs incurred in the following 60 years have not been included in the EANDCB calculation. This is misaligned with existing practices in the social housing sector, primarily because social housing providers plan and model maintenance costs over much larger timeframes. For example, one CIH member we consulted with to inform our response to this consultation shared a stock investment analysis with us, which featured an annual 30 year cost per home and an average 30 year net present value per home. We acknowledge the drawbacks of calculating EANDCB over 70 years, as described in the impact assessment, but the calculations as they are currently articulated likely underestimate the costs that will be incurred by the social housing sector in maintaining new homes. As above, it is essential that future grant levels for social rented sector homes adequately take this into account, and incorporate the actual cost of maintaining homes built to the Future Homes Standard over their lifetimes.

Thirdly, these challenges exist in the broader context of more general financial pressures on the social housing sector, with the ongoing LUHC inquiry into the finances and

sustainability of the sector highlighting the significant costs associated with meeting new and forthcoming requirements in existing homes. These include repairs and maintenance costs, building safety costs, retrofitting and decarbonisation costs, and the wider costs of compliance with new consumer regulations and competence and conduct standard. These costs are generally not being met by income; social rents were capped at 7 per cent for 2023/24 (and prior to this in 2015/16) due to the cost-of-living crisis, which, while necessary to protect residents from the crisis, has meant that rents have not kept pace with cost increases. The sum of these challenges has led to a cumulative impact on the sector's ability to invest, both in new development and in the existing stock. This means that prioritisation is having to occur, and feedback from CIH members suggests that many are directing the investment they can afford into improving their existing homes rather than developing new homes.

This means that, for social housing providers, the capital costs and maintenance costs associated with the Future Homes Standard will add more financial pressures into an already challenging operating environment. At one level, this will be exacerbated if these costs are not adequately assessed in the impact assessment. But more broadly, this shows the need for wider reforms to government policy that can deliver a sufficient number of new homes to meet affordable housing need and have adequate standards of decency and energy efficiency. Currently, the lack of investment means the supply of new social homes in England lags far behind the numbers needed - falling by 85 per cent since 2010. The investment required is far above current investment levels but will be partly offset by substantial savings in the housing benefit costs of low-income residents being able to move out of the private sector, by NHS savings through lower levels of cold-related illness, and by reducing and eventually removing the need to use expensive, private sector temporary accommodation. Research by the National Housing Federation and Shelter found that building 90,000 social rent homes could add £51.2 billion to the economy over the next 30 years and the investment would break even after three years.

In CIH's housing strategy, we have set out a series of reforms that are necessary to accomplish this, including:

- Increasing investment and redirecting subsidies
- Allowing flexibility in grant programmes
- Providing a long-term rent settlement for the social housing sector
- Changing the way that government accounts for housing debt to unlock investment
- Maximising developer contributions for affordable housing provision
- Reforming hope value
- Restoring strategic level planning.

Put differently, instead of considering Future Homes Standard specification options that will cost less but place more residents at risk of fuel poverty, and/or introducing a list of exceptions that risk allowing the construction of more poor quality, energy inefficient homes in the future, we support the establishment of a genuinely long-term plan for housing that can enable the social housing sector to deliver more decent, safe, accessible, and affordable homes for social rent.

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?

We prefer Option 1. The points made in our response to Question 7 and Question 8 above also apply here.

Question 15. Do you agree that operating and maintenance information should be fixed to heat pump units in new homes?

Yes, we agree, but subject to caveats which we set out in response to Question 16 below.

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?

No. The challenge here is not that the operating and maintenance information is incomplete. Rather, it does not adequately consider the diverse ways that people learn about their new homes and how to live in them in a way that allows for modelled efficiencies to be realised.

There is now sufficient evidence from research and evaluation to demonstrate this. With regards to heat pumps, evaluations of fuel poverty retrofit schemes have shown that some occupants, especially vulnerable occupants, often require additional support to use and operate wet central heating systems effectively after installation. One evaluation has noted that some of these issues are specific to the use and operation of heat pumps, and its findings are therefore relevant to the new build market. Some participants in this evaluation described being left with difficult-to-understand manufacturer instructions, and felt that organisations responsible for their installation had not incorporated sufficient time and resources to help them understand their new heating systems. For example, one interviewee quoted by this evaluation described their new thermostat as "*a bit of an enigma*", and that although they were handed operating instructions, "*I thought they would hand over and explain things a bit for me, and they didn't do that*." This can be exacerbated when occupants have specific communication requirements. For example,

one interviewee quoted by this evaluation "*described being given 'loads and loads of information', but could not access it because they were visually impaired*".

These findings have been echoed in Future Homes Standard pilots undertaken by housing associations. One pilot, which carried out post-occupancy research with occupants, found that:

> "Even with manuals, webinars and visits, some occupants said they were not fully conversant with the space heating controls, especially when it came to heat pumps. They said they were unsure about the most efficient settings to use to ensure space heating is most effective both for their thermal comfort and implications for energy costs. Some had managed to improve their user settings through "trial and error" and had become confident in the months they had lived there. However, some other households were still in doubt and reported that they were turning up the thermostat to an extremely high temperature to put their heat pumps into overdrive to initiate the space heating."

This research also found that despite being provided with information about MVHR systems, some occupants opened windows despite the presence of an MVHR system, and a lack of understanding among some occupants about how their MVHR systems worked created some challenges with the internal flows required for the systems to work optimally. The researchers concluded that "*residents need help understanding their new homes and must take responsibility for adapting their behaviours to achieve the greater efficiencies that the Future Homes Standard should unlock*".

Lastly, with regards to solar PV, technical evaluation and research undertaken by National Energy Action in Barnsley and Wakefield has shown the benefits of occupants being provided with accessible advice and information about their use and operation. This research emphasised the need for accessible advice and information about the smart export guarantee and how to synchronise electricity use with periods of high PV generation (e.g. during especially sunny days). Notably, in Barnsley occupants were provided with advice and support from Age UK Barnsley, who conducted home visits to explain the solar PV system, its linked smartphone app, and discussed the best times to use appliances. This kind of approach, whereby a trusted intermediary from a charity or housing provider provides tailored, personalised support to a household regarding how to use and operate technologies fitted inside their home, has also been found to have positive impacts in evaluations of heat pump retrofit projects in fuel poor households.

The implications of these findings are twofold. Firstly, they show that providing advice and information through the kinds of written documentation listed in Section 10 of Approved Document L, Volume 1: Dwellings is not sufficient to *ensure* that all occupants can use, operate, and maintain heat pumps, solar PV, MVHR, and other technologies

appropriately. Some occupants will require more tailored support, and if they do not receive it, they will be less likely to use their heat pumps and low-carbon technologies in the optimal way, potentially leading to higher running costs. Secondly, the findings show that these challenges may be exacerbated for occupants with specific communication needs and requirements. We are not aware of any evidence on how developers are adhering to the requirement in Section 10 of Approved Document L, Volume 1: Dwellings that all information is provided to the occupant 'in an accessible format'. An accessible format could be interpreted in different ways, and different accessibility requirements (e.g. visual impairments, the need for materials to be provided in a language other than English) may lead to divergent approaches.

We therefore think that while the operating and maintenance information set out in Section 10 is appropriate on its own terms, and while we do not object to affixing information on the heat pump unit or hot water storage vessel, these actions are not sufficient in all circumstances for meeting their stated objectives of ensuring that heat pumps (and other technologies) are operated and maintained appropriately.

We would therefore like to see specific research commissioned to understand how best to support people to use their heat pumps and low-carbon technologies effectively when they move into a new home. This should inform the development of non-statutory guidance and good practice examples for how operating and maintenance instructions can be provided *on request* to occupants in a tailored, personalised, and accessible way. This could include:

- Guidance on producing the information required in accessible formats, including for people with specific communication needs (e.g. visual impairments) or who require information in a language other than English.
- Good practice examples of how developers, heating installers, housing providers, and charities can work together to provide tailored advice and information to occupants about heat pumps and associated low-carbon technologies in new homes. There is considerable good practice in the social housing sector already, such as examples of tenant liaison officers (TLOs) attending the home when an occupant moves in, and at appropriate intervals afterwards (e.g. before winter) to explain how heat pumps and other low-carbon technologies should be used.

Question 25. Should we set whole-building standards for dwellings created through a material change of use?

Yes, we welcome and strongly support the proposal to extend whole-building standards to dwellings created through a material change of use.

A recent assessment states that there have been 220,060 homes created through material change of use since 2015/16. As the consultation document identifies, homes created through material change of use can have significantly higher energy bills and higher carbon emissions than equivalent new-build flats. This can leave their occupants at an increased risk of fuel poverty and make it more difficult for them to attain adequate levels of thermal comfort. In 2020, government commissioned research found that change of use homes created through permitted development are a particular issue, noting that "*permitted development conversions do seem to create worse quality residential environments than planning permission conversions in relation to a number of factors widely linked to the health, wellbeing and quality of life of future occupiers*." Raising the quality of homes created through material change of use is therefore critical across a range of areas related to housing, including health, fuel poverty, carbon emissions reduction, and quality of life.

As described in detail in our response to Question 82 below, the lack of whole-dwelling energy efficiency standards in material change of use homes creates unnecessary overheating risks. But there is also evidence that a lack of standards exacerbates issues with fuel poverty and excess cold in material change of use homes. Government commissioned research from 2020 found that over half of all valid EPC ratings for change of use homes in their study were EPC Band D or worse, placing their occupants at risk of fuel poverty. The Town and Country Planning Association (TCPA) have also noted evidence that excess cold and excess heat are common issues in homes created through material change of use, and an academic review has found evidence that change of use homes can suffer with poor energy performance, with single aspect homes facing north especially difficult to keep warm in winter.

There are also specific examples that demonstrate these issues. One academic study looks at the conversion of New Horizons Court in Brentford, the previous headquarters of Sky TV. This study noted that most of the flats created through conversion were single aspect, facing north, with minimum access to daylight and poor ventilation. EPC data extracted from Open Data Communities shows the energy efficiency of these homes.[1] Of 272 EPC certificates still valid from when the dwellings were created, 229 (84 per cent) are

[1] EPC data extracted from Open Data Communities on 16 February 2024 and analysed by CIH.

EPC Band D or worse, with 159 dwellings EPC Band D, 69 dwellings EPC Band E, and 1 dwelling EPC Band F. Only 43 are EPC Band C or above (16 per cent). The data shows that on conversion, these dwellings were equipped with electric heating and hot water systems classified as 'very poor' by the EPC. These dwellings will be very difficult to keep warm in cold weather, and the data shows that improving their SAP rating through retrofit would be very difficult. Most occupants of these dwellings are therefore at risk of fuel poverty, based on the government's definition.

This evidence shows the need for the mandating of improved energy efficiency standards in homes created through material change of use. We think the evidence is sufficient to support the setting of whole-building standards for dwellings created through a material change of use. Beyond this, there would be a contradiction if higher standards were uplifted for purpose-built homes and not material change of use homes. We acknowledge that doing so will come at an additional cost for developers and may place the viability of some schemes at risk. However, this must be addressed through the creation of a longer-term plan for housing that adequately funds new homes for social rent, and not through the continued use of lower standards that often create homes which are a risk to their occupiers' health and wellbeing (see our response to Question 36 below).

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?

If this refers to paragraph 11.5. in Approved Document L, Volume 1: Dwellings, yes, we agree.

We also support the extension of these standards to houses of multiple occupation.

Question 27. Should different categories of MCU buildings be subject to different requirements?

We agree that the height of the building should be considered when specifying the heating and hot water system for dwellings created through material change of use, as per Table 7.1. of the consultation document.

Apart from this, we do not agree that other categories of MCU buildings should be created. Having lower requirements for some types of MCU dwellings might create a perverse incentive for more of these categories to be developed, leading to larger quantities of poor quality and energy inefficient homes being created.

Question 28. Which factors should be taken into account when defining building categories? (check all those that apply)

Height of the building, i.e., low versus mid- to high-rise buildings.

Question 29. Do you agree with the illustrative energy efficiency requirements and proposed notional building specifications for MCU buildings?

We cannot offer an informed view on the specific energy efficiency requirements and proposed notional building specifications for MCU dwellings set out in the consultation document.

However, while we acknowledge that a different standard to the main Future Homes Standard is likely required given the difficulties of improving the original fabric of material change of use dwellings, we are concerned by the smaller energy cost savings quoted in the consultation document. The illustrative low-rise notional specification is estimated to save occupiers £200-£230 per year, and the illustrative high-rise notional specification is estimated to save occupiers £380-£510. These running cost savings will be quickly eliminated in some households, for example if an occupant has a health-related need for additional warmth or cooling, and who therefore needs to spend an above average amount to obtain the energy they need to maintain good health and wellbeing. To ensure that the standard set for material change of use homes leads to affordable running costs for occupants and minimises the risk of fuel poverty, we would therefore encourage DLUHC to consider any proposals from other organisations that might lead to greater running cost savings in material change of use homes (e.g. those that involve battery storage).

Question 32. Under what circumstances should building control bodies be allowed to relax an MCU standard?

Question 33. Do you have views on how we can ensure any relaxation is applied appropriately and consistently?

Question 34. Should a limiting standard be retained for MCU dwellings?

Question 35. If a limiting standard is retained, what should the limiting standard safeguard against?

Generally, we do not support the relaxation of material change of use standards. However, we acknowledge the possibility of scenarios where meeting the proposed notional building specifications may be difficult for practical reasons, especially in relation to the installation of solar PV. One CIH member at a housing association, who we consulted with to inform our response to this consultation, noted that many of their material change of use conversions are churches, which might reasonably be considered

unsuitable or unviable for the installation of rooftop solar PV covering 40 per cent of the ground floor area.

We think any relaxation must therefore be subject to two key tests:

- Risk of non-decency. Any relaxation should meet a test of decency, whereby the home to be created is considered unlikely to develop any potential Health and Housing Safety Rating System (HHSRS) hazards. If a relaxation of a material change of use standard would lead to the home potentially being non-decent (e.g. if a relaxation of ventilation or airtightness standards was deemed to be a potential structural damp and mould risk), it should not be permitted.
- Risk of fuel poverty. Any relaxation should not lead to modelled running costs that would place a future occupant at risk of fuel poverty.

In such situations, we can see the case for this being backstopped by the retention of limiting standards, as per Question 34. Any relaxation should be at the discretion of the relevant local authority, and evidence should be provided by the developer that any dispensation will pass the two key tests. If this is adopted in the government's decision, local authorities must be resourced properly to be able to fulfil this duty.

Question 36. Do you wish to provide any evidence on the impacts of these proposals including on viability?

Yes. There is an acute need for more affordable housing, and the chronic undersupply of genuinely affordable, settled housing is a key driver of homelessness, with more and more people living in temporary accommodation for extended periods of time. We acknowledge that the introduction of a whole-building standard for homes created through material change may have an impact on supply and viability.

However, we do not think that this is a sufficient justification for accepting lower standards that may place the health and wellbeing of their occupants at risk. The priority is to deliver homes that are fit for purpose, and meet the health and wellbeing needs of existing and future occupants. As we have set out in detail elsewhere in this response, in other consultation responses, and in our recently published housing strategy, homes created through material change of use and/or permitted development are frequently poor quality, and place their occupants at risk of excess cold and excess heat hazards. CIH believes that the answer to this quandary is for greater investment in genuinely affordable housing and the provision of higher grant levels to deliver adequate numbers of new homes. We need more homes, but successfully tackling our housing crisis is not only about numbers; it is also about delivering the right homes in the right places as part of communities in which residents want to live and can afford.

As we have set out in our response to Question 8, government must ensure, as part of a broader long-term plan for housing, that adequate funding is provided to support the delivery of more decent, safe, accessible, and affordable homes for social rent. Homes created through material change of use processes can play a role in delivering these homes at scale and speed, but only if these homes meet basic requirements, including a good standard of energy efficiency. In other words, the solution to any viability issue is not to allow a relaxation of standards, but to increase investment in affordable housing.

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?

Yes, we agree.

Question 39. Do you agree that homes that have undergone an MCU should be airtightness tested?

Yes, we agree.

Question 40. Do you think that we should introduce voluntary post occupancy performance testing for new homes?

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.

It is difficult to provide a firm view on these questions without further detail. CIH members we have consulted with have had mixed views on the potential value and utility of post-occupancy testing and a Future Homes Standard brand. Some of our members have also commented that careful monitoring during construction and/or post-construction testing would be preferable to post-occupancy testing.

As a result, we support the intention to set out further details on this in 2024, and we would welcome the opportunity to respond to a consultation on these details later in the year.

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?

We agree this information will be useful to include. We would also like to see appropriate information about warranties, guarantees, and servicing requirements of heat pumps and any other low-carbon technologies included in the Home User Guide.

Our points in response to Questions 15 and 16 on accessibility and the provision of personalised, tailored advice and support also apply here.

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.

Yes. We agree that the provision of guides in a digital format would be worthwhile. CIH members working in social housing, and with whom we have consulted with to support our response to this consultation, have noted that they are already providing digital information to tenants when they move into a home for the first time. In addition, considerable good practice exists in the sector around the use of smartphone apps to integrate information on the use and operation of heat pumps and solar PV. For example, one evaluation of a solar PV project in social housing found that an Alpha ESS app was used extensively by some occupants to monitor the PV, their electricity use, and a connected battery system, with some also using it to help them use appliances when they were more likely to be powered for free. Mandating the provision of digital guidance and exploring how to standardise this good practice across the new build market would be welcome.

Our points in response to Questions 15 and 16 on accessibility and the provision of personalised, tailored advice and support also apply here.

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?

Yes. While we cannot give an informed view as to whether there are issues with compliance (Question 51), the evidence detailed in our responses to Questions 15 and 16 show the importance of ensuring adherence to Regulations 39, 40, 40A and 40B of the Building Regulations. If there are valid concerns about compliance, we agree that local authorities should have a role in ensuring these regulations have been complied with before issuing a completion certificate. If it is not, the specified technologies and systems are less likely to be used optimally by occupants, which may unnecessarily increase running costs and energy demand in their homes.

If this is adopted in the government's decision, local authorities must be resourced properly to be able to fulfil this duty.

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?

Yes, we agree.

We would welcome clarification and further guidance/information on how these proposals will align with the Department for Energy Security and Net Zero (DESNZ) and Ofgem's respective work on heat network zoning and consumer protection.

Question 57. What are your views on how to ensure low-carbon heat is used in practice?

In its 6th Carbon Budget report, the Climate Change Committee's Balanced Pathway sees the conversion of all heat networks supplied by legacy Combined Heat and Power (CHP) schemes to low-carbon heat by 2040. The Green Heat Network Fund and Heat Network Efficiency Scheme have been important enablers of these conversions to date. In its Powering Up Britain report, the government pledged to maintain these schemes until 2028. It is essential that these programmes are continued to support legacy networks, especially those owned and/or operated by social housing providers, to decarbonise.

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?

Yes, we agree.

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?

Yes, we agree.

We agree with the reasoning set out by The MCS Foundation in their response to the consultation.

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?

Generally, we do not support the relaxation of the standards. However, we agree that there may be a very limited set of circumstances in which it could be warranted to relax standards for practical reasons. Any relaxation should be subject to the same two tests noted in our response to Questions 32-35.

Local authorities and the Building Safety Regulator must also be resourced properly to be able to fulfil this duty.

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?

We agree that requiring local authorities to submit their decisions and reasoning would be a useful way of examining how any dispensations are being dealt with. However, local authorities must be resourced appropriately to do this.

Question 64. Are there any additional safeguards you think should be put in place to ensure consistent and proportionate use of this power?

An element of prescription and guidance will be necessary to prevent these powers being used in circumstances that are unwarranted. We would also support the establishment of independent audits or reviews of decision making to ensure that relaxations are only allowed in genuinely exceptional circumstances. If these safeguards and guidance are not in place, there is a risk that exceptional circumstances could be exploited.

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?

Yes, we agree. Although we are not responding to it, CIH members we have consulted with have generally been positive about the proposals in the government's Home Energy Model consultation.

CIH members have however raised several wider points for clarification. These included:

- How and when RdSAP 10 will be implemented, and how any proposed changes to approved calculation methodologies in the future will be applied to existing homes.
- How any changes to approved calculation methodologies, including the Home Energy Model, will affect fuel poverty policy, especially funding and targets.

- How it will be ensured that energy use over the year is measured and/or modelled over 30 minute increments.
- How the use of 30 minute increments will affect the run time of models.
- How the housing sector, especially the social housing sector, will be supported to understand the forthcoming changes to approved calculation methodologies. Simplified guidance and explanatory memoranda would be very helpful in supporting the sector's awareness of the changes.

We would welcome guidance and explanatory memoranda on all of these points in due course.

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.

We prefer Option 2.

We continue to support the government's timeline of laying regulations in 2024, followed by implementation of the new standards in 2025.

However, while we acknowledge that a longer transitional period will delay the full implementation of the Future Homes Standard, CIH members we have consulted with, especially those working at housing associations and local authorities, have highlighted that a longer transitional period will be important for ensuring they are ready to comply with the regulations. Members have told us that 18 months is too short a timeframe to adjust internal business plans and policies to meet the Future Homes Standard, and that a longer transitional period will enable design assessments and development pipelines to be fully compliant. Members also noted that in situations where detailed planning permission has already been obtained, there would be a considerable cost to redesigning homes to a new standard, especially if they would then require resubmission to planning. Put differently, the potential unintended consequences relayed to use by our members are similar to those articulated by the Future Homes Hub in their Ready for Zero report.

CIH members have also told us that whatever the chosen transitional period, the timely publication of the finalised Approved Documents, as well as the provision of wider forms of guidance, advice, and support by DLUHC will be vital for ensuring they can comply with the regulations. This must include clarity and guidance on how the regulations will affect standards for future homes and buildings that have been (or may be) adopted as local plan policy requirements. We encourage DLUHC to work with the housing sector, including the social housing sector, to understand the support and guidance that is required to meet new regulations and to ensure that this is provided. This will be crucial to

ensuring the transitional arrangements to not inadvertently lead to negative impacts on supply.

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

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.

Yes, it should apply.

As described above in our response to Question 25, homes created through material change of use can have a range of issues with poor quality and energy efficiency. Evidence is clear that these issues extend to overheating risk, and we therefore strongly support the extension of Part O to material change of use homes.

Overheating is a growing issue in England in all homes, not just homes created through material change of use processes. The 2020-2021 English Housing Survey, which included subjective indicators on overheating, found that 1.9 million (8 per cent) of households reported that at least one part of their home got uncomfortably hot. Academic research into the unusually hot summer of 2018 also found that 4.6million English bedrooms (19 per cent of all homes) and 3.6 million (15 per cent of all homes) overheated. The authors of this study emphasised that their findings could be interpreted as "*a glimpse of the likely prevalence of overheating in the national stock during a summer typical of the 2050's.*" More recently, the Town and Country Planning Association (TCPA) have emphasised that half of the UK's housing stock fails the CIBSE TM59 bedroom overheating criterion, with poor insulation and limited ventilation leading to widespread summer overheating.

The impacts of overheating are noted in the Housing Health and Safety Rating System (HHSRS) (England) Regulations 2005, which defines excess heat as a Category 1 hazard involving "*exposure to high temperatures*", including from high indoor temperatures. The HHSRS guidance notes that excess heat leads to an increased risk of thermal stress, strokes, cardiovascular trauma, and (in temperatures exceeding 25°C) mortality, especially for older people. The latest available analysis by the Office for National Statistics (ONS) shows that during the five heat periods between June and August 2022, 56,303 deaths occurred in England and Wales and were registered by 7 September, 3,271 deaths (6.2 per cent) above the five-year average. This also has wider economic and social impacts; excess heat is estimated to cost the NHS £419,195 per annum and caused the loss of 6 million potential labour hours in 2021, costing an estimated £94 million.

Evidence strongly suggests that these wider issues are experienced particularly acutely by people living in homes created through material change of use, especially through permitted development. For example, research published by University College London in May 2023 on the health and wellbeing of homes created through permitted development in London highlighted several issues related to overheating. In their main survey, only 67 per cent of respondents were able to keep comfortably cool during hot summer weather. Interviewees reported flats overheating in summer to the extent that they could not work, and the research summarised that "*overheating issues [are] apparently fairly widespread in [Permitted Development] housing*." Other research supports this view. In February 2024, research published by the Town and Country Planning Association (TCPA) found that thermal comfort in homes created through material change of use is not adequately addressed through current planning policy and regulations, with the non-application of Approved Document O a key reason. An academic review also found evidence that single aspect homes or flats, which are frequently created through material change of use, also have a higher risk of overheating.

We acknowledge that extending Part O to all material change of use homes may affect the viability of some developments. However, the evidence is increasingly clear that overheating is a considerable hazard, and any homes that do not take sufficient steps to mitigate overheating will pose a risk to the wellbeing of their residents. We therefore do not think there should be any exceptions to the application of Part O to material change of use homes; it should at minimum apply to all types of conversion classified as residential development in Regulation 5 of the Building Regulations 2010.

Question 84. Can you provide evidence on how the addition of extensions or conservatories to domestic buildings can impact overheating risk on an existing building?

Yes. There is some evidence from academic research that the addition of extensions or conservatories to domestic buildings can increase overheating risk. One academic study noted that extensions, conservatories, new window systems, and other adaptations can reduce the prospects for adequate ventilation and therefore increase the risk of summertime overheating. A second study concurs, noting that in two examples analysed, a conservatory and/or extension were barriers to adequately ventilating adjacent spaces. These studies support findings made in the 2020-2021 English Housing Survey, which collected data on self-reported overheating in England. It found that those with a conservatory (17 per cent) were more likely to report overheating than those without (7 per cent), and that those with a loft conversion (16 per cent) were more likely to report overheating than those without (7 per cent).

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?

Yes. CIH has been collaborating with academics at the UK Collaborative Centre for Housing Evidence (CaCHE) on a small review of current policy and practice surrounding overheating risk. This project included a review of government commissioned research and existing academic and grey literatures, as well as a workshop with stakeholders from across housing and academia. At the time of writing this research is being finalised ahead of publication, but has one relevant finding here. The research has found that *Appendix C: Areas with a high risk of its buildings overheating*, does not adequately consider buildings that are not located within London or Central Manchester.

Evidence gathered and summarised by the London Climate Resilience Review has shown that the prevalence and risk of overheating is more significant in London than in other English regions. This is supported by some academic research, which found that in the unusually hot summer of 2018, the prevalence of overheating in living rooms and bedrooms was higher in London than elsewhere. However, as unusually hot summers become more regular and average temperatures rise countrywide, there is a need to consider how overheating risk will rise in other cities and urban areas. The Royal Meteorological Society has noted that while cities the size of London experience the Urban Heat Island (UHI) effects in the order of 10°C, other UK cities can experience the UHI effect in the order of 8°C. There is also now a growing amount of academic research examining UHI effects in other UK cities. One study found that heat island intensity in Leeds reached 5.9°C in 2013, while studies examining the 2003 heatwave in the West Midlands (especially the large city of Birmingham) found that the UHI effect contributed around half of the total heat-related mortality in the region during this time, with temperature differentials of up to 7°C.

This evidence suggests that guidance focusing only on London and Central Manchester will increasingly become inadequate as temperatures rise and the UHI is experienced more acutely in more UK cities. We do not have a firm view on the exact amendment that could be made to Approved Document O to address this, but possible solutions are:

- Expanding the list of postcodes in Appendix C to cover more cities and urban areas that are at risk, or will be at greater risk in the future, of overheating.
- Replacing the postcode-based approach in Appendix C with one based on DEFRA's Rural Urban Classification, which classifies densely urbanised areas as 'major conurbations'.

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?

Yes. We would like to make two further comments about Approved Document O.

Firstly, CIH members with experience of using Approved Document O have noted that they do not have sufficient experience of using it in practice to provide evidence on it at this point. Approved Document O was published in December 2021, and CIH members working in housing supply and development have noted that two years is an insufficient timeframe for them to have a good understanding of any practical strengths or weaknesses of the statutory guidance. Partly, this is because many homes that began construction after this date are not yet finished, and real-world evidence on whether the guidance is helping to mitigate overheating risk in practice is therefore not yet available.

This feedback suggests that a further call for evidence on Approved Document O at a later date would be very welcome, as it would allow our members more time to understand how the statutory guidance is working in practice and make any suggestions for how it can be improved.

Secondly, our research with the UK Collaborative Centre for Housing Evidence (CaCHE) has suggested there is a need to consider occupant vulnerability within overheating policy for new homes. We acknowledge that Approved Documents are typically not the place for guidance about occupant vulnerabilities, but the evidence is clear that occupant vulnerabilities increase the risk of harm from overheating. Overheating risk is folded into existing societal inequalities, with evidence that it can be more prevalent in social housing and for low-income and older households. Households with mobility issues (e.g. musculoskeletal conditions) are potentially less likely to be able to use mitigation strategies like opening or closing windows and curtains to ventilate or shade their homes, and low-income households are also less likely to be able to afford the required electricity to operate mechanical ventilation or fans. Research by the Resolution Foundation has also found that young children are particularly at risk of overheating, and that this is especially important because "*young children (particularly babies) can find it hard to keep cool, or risk health difficulties from poor sleep if bedrooms are too warm*."

We believe there should be a review of how existing government policy on mitigating overheating in new homes (e.g. Approved Document O) addresses the heightened risks of harm excess heat poses to vulnerable groups. Ideally, this should take place as part of the wider development of a government-wide strategy and policy for overheating, one that includes new homes and existing homes, and links in with related policy areas across government (e.g. fuel poverty, health).

Question 94. 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.

Our points on accessibility in response to Questions 15 and 16 have particular relevance for older people and people with long-term illnesses and disabilities, who may be more likely to require advice and support in tailored formats.

Our points on occupant vulnerability in response to Question 93 have particular relevance for babies, young children, and older people, as well as people with long-term illnesses and disabilities. It also has relevance for pregnancy and maternity. Although evidence on the links between excess heat and pregnancy in the UK is still emerging, one notable systematic review of global research, published in the British Medical Journal (BMJ), found some associations between higher temperatures and reduced birth weight, pre-term births, and stillbirths. As ambient temperatures rise, this makes it particularly crucial to implement measures to lessen overheating risk in new homes.

Finally, to ensure that our future homes are accessible to all, especially older people and people with long-term illnesses and/or disabilities, we would encourage DLUHC to move forward with parallel work to mandate Part M 4(2) of the Building Regulations as the minimum standard in all new homes.

Question 95. Please provide any feedback you have on the impact assessments.

Please see our response to Question 8.

About CIH

The Chartered Institute of Housing is the professional body for people who work or have an interest in housing. Our goal is simple – to provide housing professionals and their organisations with the advice, support, and knowledge they need. CIH is a registered charity and not-for-profit organisation. This means that the money we make is put back into the organisation and funds the activities we carry out to support the housing sector. We have a diverse membership of people who work in both the public and private sectors, in 20 countries on five continents across the world.

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