

## CIH response to ESNZ Select Committee on heating our homes

The Chartered Institute of Housing is the UK professional body for people who work and have an interest in housing. The Select Committee's inquiry on this topic is timely and we welcome the opportunity to contribute. We have addressed the questions where we feel able to give an informed view, and would welcome the opportunity to expand on these points if called to give oral evidence.

In preparing this response we have consulted with CIH members working in this area, as well as with wider stakeholders.

### What policy changes are needed to deliver energy efficient homes across the UK?

1.1. In the near-term, the following changes would support delivery:

1.1.1. Working with installers, energy companies, housing providers, and wider stakeholders to quickly remove barriers to current delivery (see Q2 below) is critical. We would welcome urgent government consultation on how to accomplish this.

1.1.2. The removal of VAT from the renovation and refurbishment of residential buildings. VAT is currently zero-rated on several energy efficiency materials, but not on wider refurbishment. Removing VAT from this would help in social housing, where energy efficiency upgrades are often undertaken through wider planned asset management programmes.

1.1.3. Extending the delivery timeframe for government skills programmes, such as the Home Decarbonisation Skills Training competition. While the establishment of this competition has been hugely welcome, CIH members have noted that the Phase 2 deadline of 31 March 2024 is unrealistic for the completion of sufficient training to meet specific technology standards, especially PAS2035.

1.1.4. Reforming the planning system. Specifically:

1.1.4.1. Reforming the National Planning Policy Framework (NPPF). At present, planning rules can hold back improving the energy efficiency of homes in conservation areas and listed buildings, which [often have poorer energy efficiency](#). Government's proposed Paragraph 161 of the updated NPPF will make it simpler to install energy efficiency measures and low-carbon technologies, but [there are ambiguities](#) in the heritage versus harm formula. These ambiguities [should be clarified](#) to give greater weight to the urgency of reducing carbon emissions from domestic homes.

1.1.4.2. Empowering local authorities to work more flexibly with housing providers on planning. One CIH member at a housing association noted that obtaining presumption of planning permission accelerated their retrofit delivery in one council area, but that complex planning application processes in an adjacent council area was hampering delivery. While blanket presumption would not be appropriate, government needs to work with both local authorities and housing associations to streamline planning processes on energy efficiency.

1.2. In the longer-term, the following changes would support delivery:

1.2.1. Setting clear, evidence-based statutory targets to give households and landlords certainty on the actions they must take to improve the energy efficiency of their existing homes. Targets are however currently unclear. In the private-rented sector, a government

consultation in 2020, which proposed updating current minimum energy efficiency standards, has not yet been responded to, and government has given signals that these standards may be delayed in recent weeks. No targets exist for the owner-occupied sector. In the social rented sector, no statutory targets are currently in place, and CIH members have strongly emphasised that a complete absence of clarity over possible compliance dates, proposed exemptions, and long-term government funding is leading to the deferment of the planning and delivery of energy efficiency programmes.

1.2.2. Developing a longer-term, cross-tenure retrofit programme to improve the energy efficiency of existing homes, underpinned by a long-term strategy. Current retrofit programmes have not had the required ambition, funding, design, or longevity to significantly improve the energy efficiency of homes. As recommended by the [Independent Review of Net Zero](#), a new programme should include consolidating different funding pots, reducing competitive bidding processes, and giving longer lead-in times where bidding remains. In consultation with stakeholders, government should urgently begin planning the design of this programme now.

1.2.3. Mandating the highest energy efficiency standards in new homes, which must include due consideration of how people will use new heating and ventilation technologies:

1.2.3.1. Although the energy efficiency of new homes is improving, in the last ten years [over 100,000 homes have been built](#) that are EPC Band D or below, and will require retrofitting under current EPC measurement. To ensure all new homes are built to the highest energy efficiency standards, the Future Homes Standard (FHS) must be finalised and legislated for in 2024 to give developers certainty as to the changes they will have to make from 2025 onwards. CIH members noted [a minimum of SAP86](#) should be required in new homes, with adequate carbon offsetting.

1.2.3.2. In addition, evidence from [recent FHS trials](#) undertaken by housing association Midland Heart shows that more needs to be done to assist people in understanding heat pumps, controls, ventilation and building performance. This evidence also shows that explicit strategies are required to support people with understanding and properly using low-carbon heating and ventilation if the theoretical levels of energy performance anticipated by the FHS (and by wider retrofit work) are to be achieved.

1.2.4. Lastly, the current model of funding provision, through phases with specified cost assumptions, is problematic in the context of unpredictable inflation (see Q2 below). In this context, government action to stabilise prices of insulation materials and low-carbon heating might be beneficial as part of a wider long-term retrofit programme. This could drive down costs, spur innovation, and crucially provide housing providers and consumers with more certainty over the costs they must pay for measures. The government has historically taken such action to support low-carbon electricity, such as through the Contracts for Difference (CfD) scheme.

### **What are the key factors contributing to the under-delivery of the UK's government-backed retrofit schemes?**

2.1. While each government-backed retrofit scheme faces unique challenges, there are common factors contributing to scheme under-delivery. These are:

2.1.1. The true cost of undertaking works is significantly underestimated in scheme costing assumptions. To take (external) solid wall insulation (EWI) as an example, the GB Insulation Scheme [assumes](#) a fixed cost of £5,000 per installation. Feedback from CIH members, as well as [wider analysis](#), indicates that the true total cost of installation (including ancillary and enabling works) is much higher, with members evidencing true costs of between £20,000 and £55,000. Although this is a longstanding issue, it has partly been driven by inflation, and [government data](#) shows that the price index for insulating materials increased from 152.3 in April 2022 to 198.7 in April 2023 – an increase of 30 per cent. CIH members have also experienced cost increases across several key trades, such as plastering.

2.1.2. Relatedly, CIH members have reported they have experienced challenges supporting residents through energy efficiency works. Residents require tailored support and handholding at multiple points of the installation process to ensure that it adapts to their needs, and results in a warmer home. There is [evidence](#) from recent energy efficiency scheme evaluations that when this support cannot be resourced, schemes are less likely to be impactful for residents. However, although there is [considerable good practice](#) in the sector, the cost of delivering this support is substantial, and if it is not adequately resourced, it can lead to resident withdrawal from schemes. Government schemes must provide sufficient funding to enable this advice and support to be consistently delivered, something that is not currently the case.

2.1.3. The timing and ‘stop start’ nature of schemes is leading to uncertainty for scheme delivery partners and the supply chain, which is causing delays and hampering the necessary upskilling of installers (see 2.1.6. below). Feedback from CIH members indicates that current timings do not allow scheme delivery partners the requisite time to address any contingencies/challenges that arise throughout delivery, and they do not contribute to long-term planned asset improvement programmes undertaken by social landlords. Conversely, [evidence](#) from recent energy efficiency programme evaluations shows that longer-term funding (e.g. 3+ years) enables improved contractor security, better retention of staff, and a more consistent building and scaling of capacity to deliver.

2.1.4. Scheme complexity/bureaucracy and frequent changes in criteria is absorbing delivery partner time and resources, negatively affecting capacity to deliver. Feedback from CIH members on the SHDF has noted complex application and reporting requirements, which are a particular issue for smaller delivery partners with less resources. Similarly, evidence from a recent energy efficiency [evaluation](#) described ECO3 as often “*taking up a disproportionate amount of resources for what was often a limited contribution to overall [project] funding*”, and some CIH members have experienced variation in how energy companies are interpreting new ECO4 rules. Some members also noted that there needs to be a clearer articulation of what funding is definitively available from each scheme (i.e £5,000 towards EWI) to show what can be achieved when modelling costs.

2.1.5. The balance of prioritising the least efficient homes and the practicalities of meeting minimum scheme requirements is increasingly difficult for scheme delivery partners to strike. Scheme delivery partners have reported challenges with finding properties that meet minimum scheme requirements and stipulated efficiency improvements ([especially in ECO4](#)). CIH members have also noted that in social housing, with a smaller proportion of E-G properties than other tenures, restrictions on funding for D rated homes is problematic, complicating their improvement to EPC A/B/C. In this context, some members suggested that

the whole-house approach is not always suitable, and scheme flexibility to allow more incremental/single-measure improvements could enable accelerated delivery.

2.1.6. The availability of suitable contractors and skills shortages in the installation sector. Feedback from CIH members has noted that this is linked to the short-term nature of current schemes; small delivery windows offer limited opportunities to build skills locally, and procuring for longer than the delivery window to build the skills of local installers is a significant risk for scheme delivery partners. This makes procurement and mobilisation challenging.

### **Which standards and assessment frameworks are needed to deliver a reliable, skilled workforce capable of transitioning UK homes to modern heating solutions?**

3.1. Feedback from CIH members working on heat networks has suggested CIBSE CP1 training and the Heat Network Technical Assurance Scheme (HNTAS) will be essential for delivering the number of new engineers and operatives required to design, build, manage and maintain heat networks.

3.2. CIH members also noted that the PAS2035 framework should continue to be a requirement for public funded retrofit work.

### **How might the Government support innovation in delivering local solutions?**

4.1. Forthcoming [UK Investment Zones](#) offer opportunities for research and innovation on decarbonising homes that are tailored to the specificities of local areas.

4.2. City deals, town funds, and broader devolution policies have potential for supporting innovation in local areas. For example, the [Swansea Bay City Deal's Homes as Power Stations](#) project is pioneering the zero-carbon retrofit of local homes, with the aim of developing a model for financing zero-carbon self-powered homes that can be adapted for regional and national use.

4.3. [Examples show](#) that collaborations between academic institutions and housing providers have significant potential for driving local innovation, and could be promoted by government (e.g. through [Knowledge Transfer Partnerships](#)).

### **How will the public be able to afford the switch to decarbonised heating?**

5.1. The switch to decarbonised heating will not be affordable for the public without significant public and private investment. Most significantly:

5.1.1. Increased central government funding for energy efficiency and decarbonisation is necessary if the transition is to be affordable for the public, especially for social housing and lower-income homes. [In 2022 the Committee on Climate Change estimated](#) that an investment of about £250 billion will be needed to fully decarbonise homes by 2050, but in their 2023 progress report they [emphasised](#) that funding for fuel poor homes and social housing “*has been insufficient for some years.*” For example, [analysis](#) for the council housing sector puts the cost of decarbonising 1.5 million existing homes at almost £1 billion per year over a 30-year period, a considerable challenge on resources given that councils’ annual capital housing investment averages £5-6 billion per year in total. These cost requirements cannot simply be met through private investment or capital spending from households.

5.1.2. Social housing providers require stable finances to invest in decarbonising their homes. This is currently challenging for many providers given the multiple financial pressures facing the sector. There is [growing evidence](#) that providers are focusing their inward spend on

matters deemed more urgent than decarbonisation, such as building safety remediation. [Evidence](#) from the LUHC inquiry into the finances of the sector also suggests that regulator viability assessments are increasingly key to the investment decisions of private finance. Certainty on government funding streams for decarbonisation and rent policy/setting will be vital to the sectors ability to commit sufficient funds and attract sufficient investment to decarbonise.

5.1.3. Owner-occupiers and private landlords pose a significant challenge, with a mixture of green mortgage/lending products (e.g. building on the government's [Green Finance Strategy](#) and the [Green Home Finance Principles](#), which one third of the UK mortgage market has already committed to align with), [tax incentives](#), and grant funding (e.g. through schemes like the Boiler Upgrade Grant) likely to be necessary to drive improvements.

5.1.4. There is an opportunity for public finance institutions to invest in the decarbonisation of heating. An expansion of the remit of the UK Infrastructure Bank and the British Business Bank to support the retrofit of decarbonised heating systems would be welcome.

5.2. One of the most significant barriers to the affordability of decarbonised heating is running costs. As of 2021, [around 179,000 homes](#) in England had a heat pump, and the introduction of the Future Homes Standard is likely to see heat pumps become the primary heating technology in new homes. Although the energy crisis has led to the running costs of heat pumps achieving [broad parity](#) with gas central heating systems, [recent research](#) has found that the cost of electricity renders heat pumps difficult to afford, especially for people in fuel poverty and in social housing. Heat network customers have also faced increases in energy bills of [up to 700%](#) during the energy crisis.

5.3. For the switch to decarbonised heating to be affordable, action must be taken to reduce the energy demand of existing homes through insulation and 'fabric first' approaches to retrofit. Action must also be taken to improve the affordability of electricity and heat networks. For electricity, this includes:

5.3.1. An acceleration of government's work on the Review of Electricity Market Arrangements.

5.3.2. A fair and equitable rebalancing of gas and electricity levies.

5.3.3. The introduction of a social tariff, which would make electric heating more affordable for lower-income households.

For heat networks, this includes:

5.3.4. Expanding the Heat Network Efficiency Scheme (HNES). CIH members working with heat networks have noted they are on average 40% efficient, but can be as low as 7%. Improving the efficiency of existing heat networks is therefore critical for affordability.

5.3.5. The development of a Heat Network Guarantee (HNG) guaranteeing minimum standards of affordability, as well as service reliability and powers of recourse.

## **Do the current EPC frameworks help consumers make informed decisions on transition?**

6.1. While EPC reform is necessary, and although EPCs are useful for understanding and measuring aggregate progress towards government energy efficiency targets, consumers are not the only group that use them to appraise options for improving the energy efficiency of homes. Social landlords

have used current EPC and SAP methodologies to guide their energy efficiency and planned retrofit works.

6.2. Some CIH members we consulted with noted that PAS2035 retrofit assessments are more useful than EPCs, as they identify relevant issues with homes that are outside the remit of an EPC. However, they are expensive to undertake, and there is some evidence that EPCs are increasingly being valued by lenders, which disincentivises more complex (and potentially accurate) forms of assessment.

6.3. Ultimately, consumers and landlords require clarity and certainty on the future direction of EPC reform. Any EPC reform must involve proactive consultation with the social housing sector, and include consideration of how to make any new assessment processes more streamlined and affordable.

### **What is the role of different levels of government in developing, funding and implementing schemes?**

7.1. CIH members noted that the principle of ‘subsidiarity’, whereby nothing should be done by a larger and more complex organisation which can be done as well by a smaller and simpler organisation, is a useful prism through which the roles of different levels of government should be understood.

7.2. Accordingly, the primary role of central government should be coordinating stakeholders, especially local authorities, housing associations, and the installer sector, to design a long-term energy efficiency strategy and programme.

7.3. Local authorities and housing associations should continue to be the main recipients of central government funding for decarbonisation and energy efficiency, primarily because:

7.3.1. They have the pre-existing governance structures, accountability mechanisms, and regulatory oversight to coordinate, administer, and implement schemes, including if they subcontract project management to third parties.

7.3.2. They are best placed to know the stock condition and energy (in)efficiency of homes within their remit. This includes social homes they might own and manage, and, in the case of local authorities, the broad condition of all homes within their boundaries.

7.3.3. They are best placed to know their residents and communities, and how to deliver energy efficiency and decarbonisation programmes in a way that meets local needs.

7.3.4. They are well-placed to access match/gap funding, work with local partners to deliver programmes with added value, and coordinate relevant internal services (e.g. adult social care) that can be essential to successful delivery in some circumstances.

7.4. Central government can benefit by acknowledging the uniqueness of each community and the organisations that work with them to deliver energy efficiency schemes more holistically. As noted above, the decentralisation of energy efficiency funding and policy has potential for supporting innovation in scheme delivery. In addition to city deals and town funds, proposed devolution deals for [GMCA](#) and [WMCA](#) already include consideration of local energy planning, as well as local powers on energy efficiency standards, retrofit, and innovative funding models.

**Contact:** Matthew Scott, policy and practice officer – [matthew.scott@cih.org](mailto:matthew.scott@cih.org)

August 2023