

Chartered Institute of Housing response to the Net Zero Review: Call for Evidence

The Chartered Institute of Housing (CIH) welcomes the opportunity to respond to the Net Zero Review call for evidence. It is crucial that we meet our target to achieve net zero by 2050, and a critical part of this will be decarbonising our existing homes and ensuring the new homes we build have a minimal impact on our environment. In our response, we focus primarily on these two points.

We represent housing professionals, therefore our responses refer to the housing sector. We are predominantly answering the questions for businesses, as well as some overarching questions and those for organisations delivering net zero locally.

1. How does net zero enable us to meet our economic growth target of 2.5% a year?

A concerted effort to tackle the energy efficiency of our homes would help to boost growth, reduce energy bills and improve our energy security. Firstly, as set out in greater detail in response to question 17 below, a national programme to improve the energy efficiency of our homes would create thousands of new jobs across the country. [Research by the IPPR](#) shows that a government retrofitting programme could sustain over 400,000 direct jobs and 500,000 indirect jobs by 2030.

Energy efficiency measures reduce spending, both by individual households and by the government, which frees up money to be spent in local communities. The [Energy & Climate Intelligence Unit](#) (ECIU) estimates that households with a heat pump, an electric car and good insulation will save an average of £1,000 a year (based on May's energy prices) compared to those in poor performing homes. With the government subsidising energy prices through to April 2023 for all households, and further support needed after that at least for households on low to middle incomes, measures which reduce the level of energy demand from our homes would now also save the government money directly.

Finally, the broader benefits of improving energy efficiency would bring savings in the wider public system. Improving energy efficiency would mean that fewer

people will live in cold and damp homes, with significant improvements to their livelihoods, health and wellbeing. The [BRE Group](#) estimates that excess cold in homes costs the NHS £857m annually, while Age UK has calculated that cold homes cost the NHS in England [£1.4 billion every year](#) in hospital and primary care due to their impact on older people's health. These costs are then compounded by further economic productivity losses related to long-term care, mental health issues and poorer educational achievement; addressing the hazards presented by excess cold in our homes could result in annual public savings of £15.3bn, according to the BRE Group report.

All of this together would support national economic growth. [Research commissioned by Greenpeace](#) shows that shifting to low-carbon heating and improving the energy efficiency of our homes could increase GDP by between 0.11% and 0.23% by 2025.

2. What challenges and obstacles have you identified to decarbonisation?

See response to questions 9, and 11 below.

3. What opportunities are there for new/amended measures to stimulate or facilitate the transition to net zero in a way that is pro-growth and/or pro-business?

See response to question 14 below.

4. What more could government do to support businesses, consumers and other actors to decarbonise?

See response to question 14 below.

6. How should we balance our priorities to maintaining energy security with our commitments to delivering net zero by 2050?

Improving the energy efficiency of our homes would directly work to improve our energy security. We have some of the leakiest homes in Europe and home heating is the [single biggest use of gas](#) in the UK; each measure implemented to reduce energy loss and improve efficiency will contribute to reducing the overall demand

for gas to heat our homes. This means we would need to use and import less gas. Recent analysis by ECIU finds that if [UK homes were upgraded with insulation and other heating efficiency measures](#), each household would use 20% less gas on average, overall gas demand would fall by 8%, and imports could be reduced by 15%. This would fall even further with the installation of heat pumps in homes where fabric improvements have already been made.

8. What growth benefits/opportunities have you had, or do you envisage having, from the net zero transition?

There are substantial growth benefits and opportunities for housing providers and connected sectors from the decarbonisation of our existing homes. Firstly, a significant number of new jobs have been or will need to be created to enable the sector to retrofit homes at the scale and pace needed to meet the government's target of all social homes being EPC C rated by 2030 and all homes by 2035. The [Retrofit Academy](#) has assessed that the sector needs at least 200,000 retrofitters and aims to train this many by 2030. [Research by the IPPR](#) shows that a government retrofitting programme could sustain over 400,000 direct jobs and 500,000 indirect jobs by 2030.

There is significant opportunity to develop skilled, well-paid retrofitter roles, which would support wider economic growth. These roles can be created within landlords or in the wider supply chain. Social landlords can support the levelling up agenda by building green skills in their local communities and supporting their residents into decent, green jobs. For example, Bolton at Home are [transforming a local retail park](#) into a community focused green technology, business and skills hub which will help train local residents to fill retrofit roles. Additionally, there are opportunities for landlords with successful in-house retrofit teams to develop this into a revenue-making service which completes retrofit projects for other landlords and private homeowners.

The opportunity for new jobs and growth goes beyond retrofitting; a wider industry is developing to support the move towards energy efficient homes. This is particularly evident in the development of new technologies, including smart appliances and monitoring systems to assess the effectiveness of energy efficiency measures. This new technology enables housing providers to make better informed decisions, particularly on the cost-effectiveness of different measures, which then frees up resources to be used elsewhere.

Several housing associations have been able to secure green finance deals, where they secure loan financing on beneficial terms on the basis that they will meet energy efficiency targets. For example, earlier this year Alliance Homes secured a [£75m sustainability-linked loan](#) from Lloyds Bank, which has targets including achieving EPC C ratings across all of their homes by 2028 and building 2,000 new homes over the next 10 years. Lloyds Bank alone helped to support [£2.4bn of sustainability or ESG-linked finance](#) into the social housing sector last year. This type of green financing supports housing associations to both decarbonise their stock and invest in the development of new homes, increasing the provision of affordable housing. There is great potential for innovative financing to support decarbonisation and growth.

9. What barriers do you face in decarbonising your business and its operations?

The cost of retrofitting existing homes is a significant barrier; [latest research by Savills](#) estimates that it will cost up to £330 billion to ensure all homes are EPC-C rated by 2035. Estimates for how much it will cost the social sector to retrofit their homes range from £35 billion up to £104 billion. This cost burden is made particularly acute given the disproportionate impact of inflation; our members have experienced above-inflation rises in construction and repairs work. Prices for heat pumps and other green technologies are also artificially high due to scarcity in some areas.

Additional costs cannot simply be passed on through higher rents, particularly as thousands of households are already struggling to cover their bills with prices continuing to rise. Government proposals to cap social rents are expected to result in a drop in investment in energy efficiency programmes, as social landlords will protect the delivery of core services and building safety works. The various government funding sources (Social Housing Decarbonisation Fund, Home Upgrade Grant, Local Authority Delivery scheme and Energy Company Obligation) are welcome but fall far short of meeting the true cost to the sector.

None of these government funding sources offer the long-term certainty needed to encourage the supply chain to invest in developing the number of skilled retrofitters needed. The lack of skilled, trained staff to complete energy efficiency works and install low-carbon heat sources is the most significant barrier to decarbonising our housing. Social landlords bidding for the Social Housing Decarbonisation Fund have struggled to find the staff required who meet PAS

2035 standards, as the timings for bidding and then delivering projects are not long enough to complete the necessary training.

The lesson from experience over the last few years with programmes such as the Energy Company Obligation (ECO) and the Green Homes Grant is that it is vitally important not only to underpin energy efficiency work with a necessary amount of government funding to release private investment, but also – just as important – with medium-term certainty about government targets, funding commitments and incentives such as training programmes. The renewables and retrofit industry suffered considerably from recent chopping and changing of government programmes. Everyone is aware of the long-term objective of achieving net zero, but if the country is to do so, sustained commitment is required so that the sector can develop and respond to growing consumer demand in ways that deliver truly more efficient and sustainable homes with lower heating costs, whether in the public or private sectors.

11. What challenges has the net zero transition presented to your business?

There have been some challenges in working with residents to get the buy-in needed for energy efficiency measures in their homes, and to build awareness of how to use low-carbon heating sources. Some retrofit measures, particularly cavity wall and under-floor insulation, can be significantly disruptive for residents. Landlords must effectively communicate the benefits of these measures to residents to get their buy-in. This may include opting for less-disruptive measures using new technology. For example, there are systems to install insulation under suspended timber floors [using robots](#) which are significantly less disruptive than traditional methods.

Low-carbon heating sources such as ground and air-source heat pumps operate differently to gas boilers. They maintain a consistent ambient temperature in the home, which means they must be left on all the time and cannot provide a quick boost of heat during a cold snap. Some systems rely on specific levels of ventilation to work and can be undermined by opening windows or leaving them on vent. Residents need to understand how new heating systems work for them to function effectively, presenting a challenge for landlords to communicate this effectively and monitor performance to identify any issues as they emerge.

These challenges can be met through clear, effective communication with residents, before, during and after retrofit and low-carbon heating measures are delivered in their homes. As discussed in the next question, the cost of living crisis has emphasised the potential benefits and savings to many residents.

Another challenge is how to deal with homes that are not financially viable to retrofit. Some homes, typically those which are particularly old and/or poorly designed, would require such extensive interventions to bring them up to EPC C that it is not financially viable for landlords to do so (where they are the owners). Over five million homes are now over a century old. However, this part of the housing stock cannot simply be offloaded onto private owners. This requires government intervention with measures that will enable these homes to be brought up to low-carbon standards effectively or else (in the worst cases) earmarked for demolition and replacement.

12. What impacts have changing consumer choices/demand had on your business?

Many social landlords have seen increased resident interest in energy efficiency measures as the cost of living crisis continues. Residents are asking for measures in their homes to help reduce their heating bills.

For developers including housing associations building homes for private sale or shared ownership, it is important to consider the impact energy efficiency measures can have on demand and property prices. Recent [research by Santander](#) suggests that consumers would be willing to pay 9.4% extra for homes which are already energy efficient.

13. What impacts have decarbonisation/net zero measures had on your business?

The Social Housing Decarbonisation Fund (SHDF) has supported many social landlords to implement decarbonisation measures, despite the challenges discussed elsewhere in our response. Through the demonstrator project and wave 1 of the SHDF, over 22,000 social homes with EPC ratings below C will be upgraded. This has made a huge difference to residents' lives. For example, some homes [upgraded by Clarion](#) with SHDF funding have been improved to EPC band A, improving homes which had previously been damp and very cold during winter. These projects have brought learnings to social landlords which will help

them to deliver their broader retrofit programmes more efficiently and effectively, and can be used to inform wider energy efficiency programmes in privately rented and owner-occupied homes.

14. What more could be done to support your business and/or sector to decarbonise?

The most crucial barrier that needs to be addressed is the lack of staff with the skills and training needed to complete retrofit projects and install low-carbon heating sources. Without this, no amount of money spent on decarbonisation projects will be able to deliver at the scale needed to meet government targets. This would require engagement with education and training providers, to increase the number of places made available for training and apprenticeships but also to ensure that green skills are included in current courses.

Given the current skills gap, timescales for completing current government projects are inadequate. The SHDF requires retrofit installers to meet PAS 2035 standards, but this is hugely challenging; there are not enough trained retrofitters currently, and the timescales between bidding and completion of projects are not long enough for new staff to be trained. The short-term pots of funding do not give contractors the confidence needed to significantly increase their investment in the training of new staff. The timescales additionally do not allow enough contingency for dealing with any issues that arise over the course of a project. We need government funding schemes to allow more realistic time periods for work to be completed.

The proposed [social rent cap](#) risks many housing associations and councils cutting or delaying investment in decarbonisation projects. This may be necessary to protect the delivery of core services and necessary building safety remediation. However, this may actually result in residents having higher outgoings overall; one of our members has calculated that their plans to improve the energy efficiency of their homes would save tenants far more in reduced energy costs than the marginal saving they would make from rents being capped at 5% rather than 7% (the average annual savings of a property moving from EPC D to C is £500, whereas the average saving in rent would be £87 per year in this example). If the government does proceed with a social rent cap, it will save money from the reduced housing benefits bill. These savings should be redistributed back to social landlords, to enable them to continue their decarbonisation plans at pace and help to reduce residents' energy bills during the ongoing cost of living crisis.

At present, the government's requirements for housing decarbonisation are not firm. The government has set targets for decarbonisation but has not set them out in legislation. If the government cannot commit to placing these targets in law, it does not inspire firm commitments from all social housing providers at a time where they must balance numerous competing priorities with limited resources. Clear requirements with stepping stones to set out a realistic path to decarbonisation would be beneficial, as has been provided by the [Scottish government](#).

We are pleased that recent amendments to the Social Housing Regulation Bill would require the Regulator of Social Housing's fundamental objectives to include reference to energy efficiency, give the Regulator powers to set standards relating to energy demand in social homes, and require the Secretary of State to publish a strategy on reducing energy demand for social housing properties. We would support these amendments remaining in the final Act once the Bill completes its progress through parliament. We would also support the introduction of minimum energy efficiency standards, for the social and private rented sectors.

15. Do you foresee a role for your business within an expanded UK supply of heat pumps, energy efficiency, electric vehicles, hydrogen economy or clean power?

The social housing sector is already delivering energy efficiency measures and heat pumps in homes across the country. Many landlords are also taking steps to electrify their fleet of vehicles and/or offering attractive salary sacrifice car schemes for electric and hybrid vehicles.

17. How many green jobs do you estimate will be created in your sector by 2030?

As discussed in previous responses, there is substantial opportunity for new green jobs in the housing sector, roles needed to complete the decarbonisation of our existing homes. [Research by the IPPR](#) shows that a government retrofitting programme could sustain over 400,000 direct jobs and 500,000 indirect jobs by 2030. The [Retrofit Academy](#) alone has a mission to train over 200,000 competent retrofitters by 2030, a substantial ambition as the sector currently only has 2,000.

24. What are the biggest barriers you face in decarbonising / enabling your communities and areas to decarbonise?

See responses to questions 9 and 11 above.

25. What has worked well? Please share examples of any successful place-based net zero projects.

Social landlords across the country have been delivering successful retrofit projects, improving the energy efficiency of their residents' homes and saving them money on their energy bills. Some of this has been achieved with the backing of government schemes; as noted above, through the demonstrator project and wave 1 of the SHDF, over 22,000 social homes with EPC ratings below C will receive energy efficiency upgrades.

There are also successful examples of social landlords delivering new energy-efficient affordable housing schemes. For example, [Midland Heart's Project 80](#) is a new development of 12 affordable homes in Birmingham which meet the Future Homes Standard three years before it is implemented. This means the homes produce 80% fewer carbon emissions than a standard new build. Several different forms of technology have been used to limit carbon emissions in these homes, and each home has sensors and monitors installed to track how much energy is used (with residents' consent). In partnership with Birmingham City University, this data will be analysed to assess the effectiveness of the different technology used. This will inform the development of future homes and be shared to inform the final requirements of the Future Homes Standard. These homes are well-located, spacious and cheap to run, bringing substantial benefits to their residents.

Schemes like Project 80 which monitor and assess performance in homes with energy efficiency measures are particularly beneficial, as the learnings can be used and shared to improve other projects. Another example is the award-winning retrofit project by the [Northern Ireland Housing Executive](#), in which various energy efficiency measures were installed in five terraced houses and monitored for two years. The results of this monitoring are being used to inform the strategy for future schemes on a much larger scale.

26. How does the planning system affect your efforts to decarbonise?

The extent to which planning affects retrofit works varies across different local authority areas. We have heard from members that some planning teams require individual planning permission for external insulation and the installation of air source heat pumps. This often causes delays to projects, with customers becoming disengaged and works sometimes having to be abandoned. In some cases this is because planners are not well-informed about how air-source heat pumps function, for example believing that they will be disruptively loud to run. Planning teams in other areas, however, are more supportive, even requiring higher energy efficiency standards from new developments. It would be beneficial to have rules followed across all local authorities to reduce the burden of applying for planning permission for external wall insulation and air source heat pumps.

The issue is not that planning departments do not support carbon-reducing measures. A survey by the [Royal Town Planning Institute](#) revealed that although 79% of respondents agreed that climate action should be a top priority for planners, only 17% felt their nation's planning system or policy framework was well equipped enough to deal with the current climate crisis. The main issue is the under-resourcing of local planning teams; local authority net expenditure on planning has fallen by 43%, from £844m in 2009/10 to £480m in 2020/21. Having to apply for permission for retrofit measures places unnecessary burdens on over-stretched planning teams and introduces avoidable delays to projects.

27. How can the design of net zero policies, programmes, and funding schemes be improved to make it easier to deliver in your area?

See response to question 14 above.

About CIH

The Chartered Institute of Housing (CIH) is the independent voice for housing and the home of professional standards. 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. Further information is available at: www.cih.org.

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