

Where are housing associations on the path to net zero?

A survey of housing associations in England

10 December 2020

Summary

Housing associations have a critical role to play in delivering the government's ambition for net zero carbon emissions, and responding to the climate crisis. But where are housing associations on the path to net zero? We recently surveyed our housing association members, and results showed that:

- **Housing associations are at the beginning of the journey to net zero.** Around 1 in 10 (8%) survey respondents have a plan to ensure that homes are carbon neutral by 2050. Two thirds (66%) have started to plan.
- **Social housing already outperforms other tenures** in terms of energy efficiency, and this looks set to continue. Around one third (30%) of survey respondents already have a plan to bring their homes to at least Energy Performance Certificate (EPC) Band C by 2030. Half (49%) have started to plan and expect to bring their homes to at least EPC Band C by 2030.
- **Housing associations are committed to making homes greener and warmer for residents.** Survey respondents cite the need to tackle climate change (69%), tackle fuel poverty (69%), improve resident satisfaction, health and wellbeing (51%) and cut fuel bills for residents (49%) as key drivers for retrofitting their homes.
- **Housing associations face significant challenges in retrofitting homes.** Survey respondents report that the lack of finance (74%), policy uncertainty (56%), concerns around technology (47%), conflicting organisational priorities (40%) and the lack of capacity and capability in supply chains (34%) as the major barriers to retrofitting at scale and pace.
- **Despite these challenges, the sector has started to retrofit.** Three quarters (74%) of survey respondents expect to retrofit homes in 2020-21. A similar proportion (73%) expect to retrofit homes in 2021-22.

Introduction

This year's [Spending Review](#), and accompanying [National Infrastructure Strategy](#), puts tackling climate change at the heart of the UK's economic recovery and sets out the government's plans to cut carbon emissions to net zero by 2050. The need to make social housing more energy efficient, and decarbonise how we power and heat our homes, forms a core part of these plans.

Currently, housing contributes around a fifth of all greenhouse gas emissions, largely from the oil and gas used for heating and hot water¹, and around 10% of these emissions come from the social housing sector².

Building new homes to higher environmental standards is obviously part of the solution, but 80% of the homes we will live in in 2050 have already been built³. This means that decarbonising existing homes will be critical if the sector is to cut its carbon footprint and the UK is to achieve its net zero goal.

The National Housing Federation (NHF) is the voice of housing associations. We have almost 800 housing association members, providing homes for around six million people. To understand where our members are on the journey to net zero, we conducted this survey on decarbonisation. We asked them about their plans to make homes carbon neutral, about the scale of retrofit activity taking place, about the challenges faced and about motivations for investing in energy efficiency work.

In total, 79 housing associations responded. Respondents came from all regions of England, and there was a good spread of responses from different sized organisations. Collectively, respondents account for around 40% of all homes owned by NHF members. More information on research methodology and on respondent characteristics is provided in [the annex at the end of this report](#).

Results are presented under the following headings:

- Planning for net zero.
- Drivers and barriers.
- Scale of activity.

¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/863325/2018-final-emissions-statistics-summary.pdf

²www.sustainableenergyassociation.com/resources/social-housing-leading-the-way-to-net-zero/

³www.ntu.ac.uk/about-us/news/news-articles/2020/07/dramatic-change-needed-for-uk-homes-to-meet-climate-targets,-study-shows

Planning for net zero

Net zero by 2050

The government has legislated for the UK to become net zero in terms of greenhouse gas emissions by 2050⁴. As [the Committee on Climate Change](#) have noted, the UK will not meet this target without near complete decarbonisation of homes.

Despite the lack of a national strategy, we know from our work with the sector that many individual housing associations are starting to put plans in place, setting out how they intend to decarbonise and become net zero by 2050 (or earlier in some cases). This was clear in our survey results, outlined in the table below.

Our survey shows that most respondents have started to plan for 2050. Around three quarters (74%) reported that they either had a plan in place to ensure that their homes were net zero by 2050, or that they had started to develop a plan. Some respondents gave further detail about the development of their plans showing that preparations were at a range of stages: one association's plans were ready to go to the board for approval, another was at a much earlier stage where scenarios and approaches were still being modelled.

Only 13% of respondents said that they had not started to plan.

Response	Do you have a plan to ensure your homes are carbon neutral by 2050?	% total responses (n=79)
Yes	6	8
No, but we have started to plan	52	66
No, and we've not started to plan	10	13
Other	10	13
Don't know	1	1
Total	79	100

⁴www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law

EPC Band C by 2030

The sector already outperforms other tenures in terms of energy efficiency, as measured by Energy Performance Certificates (EPC). The English Housing Survey 2018/19 found that dwellings in the social rented sector were the most energy efficient of all tenures, with 56% rated in EPC Bands A–C, compared to 33% in the private rented sector and 29% of owner occupied dwellings⁵.

The government has said that it wants to consult on how social landlords can upgrade all homes to EPC Band C by 2030 where practical, cost-effective and affordable⁶. This may be part of the review of the Decent Homes Standard announced in the recent Social Housing White Paper⁷. Our survey, however, suggests that housing associations are already working towards this milestone and may continue to outperform other tenures in terms of energy efficiency (see table below).

Around a third (30%) of respondents to our survey told us that they already have a plan in place to bring their homes to at least EPC Band C by 2030. Around half (49%) said that they had started to plan and expect to upgrade their homes to at least EPC Band C by 2030. Only 8% of respondents had not started to plan.

Response	Do you have a plan to bring your homes to at least EPC Band C by 2030?	% total responses (n=79)
Yes	24	30
No, but we've started to plan/expect to bring all homes to at least EPC Band C by 2030	39	49
No, and we've not started to plan	6	8
Our homes already meet this standard	1	1
Other	8	10
Don't know	1	1
Total	79	100

⁵ [English Housing Survey, Energy Report 2018/19](#)

⁶ [Clean Growth Strategy](#)

⁷ [Social Housing White Paper](#)

Drivers and barriers

Drivers

Despite significant barriers housing associations are determined and committed to making their homes greener, cleaner and warmer for their residents and communities.

Housing associations are driven by a social purpose. Everything they do, from delivering and managing homes to providing services for residents, is for the benefit of their communities and this social purpose comes through strongly when examining the drivers for decarbonisation.

As outlined in the table below, survey respondents cite the need to tackle climate change (69%), tackle fuel poverty (69%), improve resident satisfaction, health and wellbeing (51%) and cut fuel bills (49%) for residents as major factors influencing their work on energy efficiency and decarbonisation. Collectively, this shows that the sector's social purpose is driving how housing associations approach their work on retrofitting.

There are, of course, other drivers. The impact of government policy and of government targets are also a major driver, with over two thirds of respondents (67%) saying that this was driving retrofitting work within their organisations. The response of senior executives and boards also appears important. A commitment at board level was identified by 60% of respondents as a key driver, and a commitment at senior executive level was identified by 43% of respondents as a key driver.

What the key drivers for retrofitting your homes?	Count of responses ⁸	% total responses (n=72)
The need to tackle climate change	50	69
To tackle fuel poverty	50	69
Government policy/government targets	48	67
A commitment at board level	43	60
To improve resident satisfaction, health and wellbeing	37	51

⁸ Respondents could select up to five, so total will not equal number of respondents who answered this question.

To cut fuel bills for residents	35	49
A commitment at senior executive level	31	43
To maintain asset value/stock condition	20	28
The availability of finance	17	24
To increase asset value/stock condition	7	10
Resident demand	3	4
Other	2	3

Barriers

Despite the ambition from housing associations to play their part in responding to the climate crisis, we know there are significant challenges to overcome if housing associations are to decarbonise homes and retrofit at scale and pace.

Our survey results, outlined in the table below, show that the key barrier is cost. The overwhelming majority of respondents – nearly three in every four who responded to our survey (74%) – told us that concerns around funding were a key barrier to retrofitting at scale and pace. We know that the cost of retrofitting homes is significant and there is growing consensus that we need a long-term sustainable funding solution.

Recent government initiatives – such as the Green Homes Grants scheme and the Social Housing Decarbonisation Fund demonstrator – are certainly welcome, as is the announcement in the recent Spending Review for additional funding to support social housing retrofit in 2021-22. It will be important, however, that housing associations are able to bid for funding directly (and not only as part of a local authority-led bid) if they are to maximise the potential of these funds. The timescales for submitting bids and delivering work also need to be realistic if housing associations are to plan, procure and carry out retrofit work efficiently and effectively.

Survey respondents also cite concerns about government policy as a major barrier. Over half (56%) of our members who responded to the survey said that unclear government policy made it difficult to plan effectively or with any degree of confidence. The NHF has called for a comprehensive roadmap for the sector, mapping out the journey to 2050. As we set out in our recent response⁹ to the BEIS Select Committee inquiry into decarbonising heat in homes, this needs to provide long-term clarity and certainty on policy, regulation, reporting and funding regimes.

⁹ [NHF response to Select Committee inquiry into decarbonising heat in homes](#)

We hope the government's forthcoming Heat and Buildings Strategy will provide this clarity.

Other major challenges highlighted by housing associations who responded to our survey include concerns around unproven technology or approaches (47%), the need to deal with other organisational priorities (40%) such as supporting residents through the coronavirus crisis or safety remediation work, and skills shortages and supply chain concerns (34%).

What are the principal obstacles to retrofitting?	Count of responses ¹⁰	% total responses (n=73)
A lack of finance	54	74
A lack of policy certainty and direction	41	56
Concerns about unproven technology or approaches	34	47
There are other organisational priorities	29	40
A lack of capacity and capability in supply chains	25	34
A lack of technical knowledge in the business	23	32
A lack of a retrofit strategy or plan	16	22
Unproven business case	15	21
Resident resistance	10	14
Planning issues	9	12
Difficulties in procurement	7	10
A lack of support from the board	0	0
Other	12	16

¹⁰ Respondents could select up to five, so total will not equal number of respondents who answered this question

Scale of activity taking place

Housing associations currently own and manage around 2.7 million homes across England¹¹. Assuming that 80% of these will still be in existence in 2050, housing associations will need to retrofit around 2.1 million homes over the next 30 years to become carbon neutral.

The scale of this challenge is immense and, as highlighted in this report, significant barriers exist which currently limit the ability of housing associations to retrofit at scale and pace. We know from our direct engagement with housing associations that some retrofit work is taking place across the country to improve the energy efficiency of homes, particularly those with low EPC ratings and homes occupied by fuel poor households. Many whole-house retrofit projects and other pilots are also underway to help individual housing associations learn and plan for the future.

But the sector is still at the beginning of the journey to net zero. This can be seen in the scale of retrofitting taking place, outlined in the table below, which shows that:

- Most respondents to our survey are planning some retrofit work. Three quarters (74%) of survey respondents expect to retrofit homes in 2020-21. A similar proportion (73%) expect to retrofit homes in 2021-22.
- For 2020-21, around a third (32%) of respondents to our survey said they were planning to retrofit up to 50 homes. Around 1 in 10 (12%) told us that they were planning to retrofit between 51 and 100, and the same proportion (12%) between 101 and 250.
- For 2021-22, around a quarter (26%) of respondents said that they were planning to retrofit up to 50 homes, 15% between 51 and 100 homes and 11% between 101 and 250 homes.
- In both 2020-21 and 2021-22, around 1 in 10 respondents (10% and 9% respectively) were planning to retrofit over 500 homes.

¹¹ Statistical Data Return, 2018/19

How many homes do you expect to retrofit? ¹²	In 2020/21 - % respondents (n=74)	In 2021/22 - % respondents (n=73)
Between 1–50	32	26
Between 51–100	12	15
Between 101–250	12	11
Between 251–500	8	12
Between 501–1,000	3	5
Over 1,000	7	4
None	15	2
Don't know	8	18
Other	3	7
Total	100	100

Conclusion

With 30 years to meet the government’s target of cutting carbon emissions to net zero, housing associations are at the beginning of a long journey.

The results from this survey makes it clear that there are a number of significant challenges to overcome – but housing associations are putting plans in place and are committed to tackling climate change, and making homes greener and warmer for residents.

The need for sustainable funding and policy clarity are the most significant challenges, but we are now seeing the government coming forward with new investment and more detail around their net zero plans. This is welcome and needs to continue.

The sector itself is also coming together to work through the challenges it faces and to develop its own solutions. But the sector cannot do this alone. To achieve net zero ambitions we need to work in partnership – not just with central government, but also with local partners, residents, investors, lenders and suppliers. If we get this right, then housing associations have the willingness and ambition to lead a national retrofit revolution.

¹² Retrofit was defined in the survey as to ‘upgrade primarily to improve the home’s energy efficiency and reduce carbon emissions’

Annex A: Research methodology and respondent characteristics

Approach

In total we received 79 valid responses to the survey. Not all respondents answered every question, so where statistics are reported we signify the sample size with “n” (e.g. “n = 50”). Because the sample size is different for each question, we recommend recipients do not work backwards and do their own calculations from this paper. If you have questions regarding the data please contact the NHF research team on researchteam@housing.org.uk.

Results are reported as they were received (i.e. not weighted or adjusted). This means these results cover only the housing associations who responded to the survey and are not national figures for all housing associations. Where duplicates were received from organisations, these results were checked with respondents and, if no response was received, the first complete response was taken.

Respondent characteristics

Respondents came from all regions in England, with housing associations whose headquarters are in London accounting for 19% of responses. North East housing associations were best represented, with over a third of all NHF members in the North East responding.

Region	Total	% total responses by region (n=79)	% total membership by region (n=615)
East Midlands	6	8	19
East of England	5	6	10
London	15	19	8
North East	6	8	35
North West	13	16	18
South East	12	15	12
South West	7	9	11
West Midlands	8	10	15
Yorkshire and Humber	7	9	18
Total	79	100	13

There was a good spread across different size organisation, with just over half of all responses (54%) coming from organisations who own fewer than 10,000 homes. The larger an organisation, the more likely they were to respond, with almost half of housing associations who own more than 10,000 homes responding.

In total, survey respondents account for 41% of stock owned by members of the NHF.

Region and size	Total	% responses by size band (n=79)	% total membership by size band (n=615)
<1k	16	20	4
1,000–2,499	4	5	8
2,500–4,999	7	9	18
5,000–9,999	16	20	33
10,000–19,999	18	23	51
20,000–49,999	14	18	45
>50,000	4	5	50
Total	79	100	13