Social Housing Decarbonisation Study

Views from Social Housing Providers

BEIS Research Paper Number 2021/056
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Glossary

**Arm’s Length Management Organisation (ALMO).** These are organisations that manage social housing on behalf of a Local Authority without ownership.

**Decent Homes Standard (DHS).** A technical standard for public housing within the UK to promote measurable improvements to social housing.

**Energy Efficiency Certificate (EPC).** These are required in the UK when residential or commercial buildings are constructed or put up for sale or rent, to provide the prospective owner or tenant with information on the energy performance of the building and recommendations for improvement. EPCs use an A-G rating scale based on the modelled energy bill costs of running the building. They are valid for 10 years.

**Energy performance improvement.** Throughout this report the broad umbrella term of ‘energy performance’ is used. This is to cover findings relating to retrofitting, decarbonisation and improving energy efficiency.

**Fuel Poverty.** Whether tenants are in fuel poverty is determined by the energy efficiency of their home, their income and their fuel costs. The Government’s recently updated measure, Low Income Low Energy Efficiency (LILEE), defines a household as fuel poor if their home has an energy efficiency rating below band C and, once required fuel costs are accounted for, it has residual income below the poverty line.¹

**Grade listing.** Buildings listed on the National Heritage List for England are considered to be of national importance and therefore protected. The changes which can be made to listed buildings are limited. The vast majority of listed buildings are Grade II which are not subject to such stringent controls as Grade I, but owners need to apply to their Local Authority for Listed Building Consent for many types of work.

**Housing Association (HA).** Not-for-profit organisations that own, let, and manage social and affordable housing.

**Local Authority (LA).** Local government bodies (or ‘councils’) which provide social housing as part of their housing responsibilities.

**Mixed Tenure development.** Mixed tenure housing is where residents live within a residential development under different tenure options. For example, where within a block of flats or within a street some homes are privately owned by residents, whilst others are rented from a social housing provider. Homes may be owned via shared ownership schemes, Right to Buy schemes, outright and so on.

**Provider Type.** There are two types of Social Housing providers referenced in detail throughout this report: Housing Associations and Local Authorities. The research included one ALMO so is not representative of their views.

**Provider Size.** Social Housing providers are grouped by the number of homes they own according to their responses given in the report survey. Throughout this report the three size

¹ Sustainable warmth: protecting vulnerable households in England (accessible web version) - GOV.UK (www.gov.uk)
bands described are: Small (<1,000 homes), Medium (1,000 - 10,000 homes) and Large (10,000+ homes).

**Regulator for Social Housing (RSH).** The Regulator of Social Housing regulates registered providers of social housing to promote a viable, efficient and well-governed social housing sector able to deliver homes that meet a range of needs.

**Standard Assessment Procedure (SAP) rating.** The SAP methodology models the energy costs, energy usage and carbon emissions of homes to provide an overall rating. It uses a set of calculations, assumptions and data and considers factors such as the fabric of the building; insulation measures; lighting; efficiency and control of the heating system; ventilation; and renewable technologies.

**Social Housing Decarbonisation Fund (SHDF).** A Government fund that encourages social housing providers to accelerate their decarbonisation plans and upgrade social housing stock currently below EPC rating C up to that standard.

**Social Housing Decarbonisation Fund Demonstrator (SHDF Demonstrator).** A £50 million programme announced in July 2020 which supports social landlords to demonstrate innovative approaches to retrofitting social housing at scale. It is an initial investment to learn lessons and catalyse innovation in retrofitting for the Social Housing Decarbonisation Fund.

**Social Housing.** Accommodation provided by registered housing providers for people typically on lower incomes or with particular housing needs.

**Social Housing provider.** Social housing providers, typically Housing Associations or Local Authorities which provide social homes to those who need them.

**Technical Assistance Facility (TAF).** As part of the SHDF, BEIS are looking to develop a technical assistance facility to support social landlords in accessing funding and developing energy performance improvement plans.
Executive Summary

Introduction

The current Government’s 2019 manifesto committed £3.8bn to a Social Housing Decarbonisation Fund (SHDF) over a 10-year period\(^2\), which will provide funding to encourage and enable social housing providers to accelerate their decarbonisation plans. Social housing providers have responsibility for 4.0 million households, just under one-fifth (17%) of all households in England and equating to approximately 9.3 million people.\(^3\) The fund aims to upgrade a significant amount of the social housing stock currently below EPC rating C up to that standard, delivering warmer and more energy-efficient homes, reducing carbon emissions and bills, and tackling fuel poverty as well as supporting green jobs. The Department for Business, Energy and Industrial Strategy (BEIS) will deliver the fund and also create a technical assistance facility (TAF) to support social landlords in accessing funding and developing energy performance improvement plans.

To support the launch of the SHDF, BEIS commissioned IFF Research to explore providers’ attitudes to improved energy performance, barriers to implementing new measures, and views on the new fund. This research also sought to contribute to the wider evidence base on the decarbonisation of housing.

Methodology

The study comprised two strands:

- 39 depth interviews with social housing providers held between 21st December 2020 and 29th January 2021.
- An online and computer assisted telephone interviewing (CATI) multi-mode survey sent to all social housing providers (N=1,517) with contact details in the population file. 449 responses were achieved between 5th February and 1st March 2021.

Knowledge of stock

Nine in ten providers were familiar with the age and condition (both 91%) of a ‘very high\(^4\)’ proportion of their stock, although knowledge of building grade listing was lower (65%).\(^5\) One of the objectives of the SHDF is to increase the proportion of stock that is at least EPC C.\(^6\) However, only half (47%) of providers were familiar with the EPC rating of a very high stock.

\(^2\) https://assets-global.website-files.com/5da42e2cae7ebd3f8bde353c/5ddaa257967a3b50273283c4 Conservative%202019%20Costings.pdf.

\(^3\) English Housing Survey 2019 to 2020: headline report - GOV.UK (www.gov.uk). This reflects households not housing stock.

\(^4\) This equates to knowledge of 91-100% of a provider’s stock.

\(^5\) Condition and grade listing were not explicitly defined within the survey. Condition was expected to reflect general condition of stock.

\(^6\) EPC is a rating of energy efficiency where A is the most efficient and G the least efficient.
proportion of stock. Meanwhile just 26% were aware of their SAP rating for a very high proportion of stock.\(^7\)

Small providers (those with fewer than 1,000 homes) in particular, were less likely to be familiar with the energy performance of their stock. As EPC ratings are essential in setting out energy performance improvement plans there was evidence that different sized providers may need more support to acquire this information in the first instance.

### Current maintenance and energy performance improvement plans

This research identified that the energy performance of providers’ housing stock is typically a secondary consideration in planned maintenance works. Existing components at end of life are replaced with higher performing substitutes, but there is little evidence that providers were working towards longer-term energy performance ambitions. Respondents highlighted that the main barriers experienced in incorporating broader energy performance objectives into maintenance plans were related to a lack of long-term external funding and attempting to keep resident disruption to a minimum.

When asked what energy performance measures they had installed since 2010, providers reported having installed six different types of measures on average (e.g. double glazing, external wall insulation or smart meters). New energy efficient boilers were the most common measure (85% of providers who had installed any measure), followed by double glazing (72%) and loft insulation (69%).

### Energy performance improvement ambitions

Over two-thirds of providers (68%) were looking to improve the energy performance of at least some of their homes over the next 10 years, rising to 82% of medium and 91% of large providers. Such ambitions did not necessarily translate to actionable plans however: only a quarter (25%) of providers actually had targets for their homes to reach a particular energy rating by a specific date (e.g. a minimum EPC rating C by 2030), although medium (72%) and large (85%) providers had more concrete plans than small providers (10%).

Most commonly, providers reported that they were motivated to make energy performance improvements due to a general move towards improving sustainability of their stock (61% cited this), although only five per cent specifically stated they were aiming to become carbon neutral.

As with current plans, financial barriers were commonly regarded as the principal barrier in meeting energy performance targets in future: 42% of all providers identified a lack of budget (this was a particular concern for small providers), while 36% identified a lack of internal skills or experience for applying for funding.

\(^7\) This is used to assess and compare the energy and environmental performance of dwellings.
Social Housing Decarbonisation Study: Views from Social Housing Providers

Experience of tenant response to energy performance improvements

Providers were asked how (perceived) tenant attitudes affected their energy performance improvement plans. Overall, providers did not have a strong grasp on their tenants’ attitudes towards energy performance. Providers themselves were frequently concerned whether any changes might lead to increased energy bills for tenants, based on their understanding of the importance of costs for tenants.

Just under half of providers (46%) reported that tenants had refused (general) improvement or maintenance work in their homes, although for around a third (32%) this had only happened ‘rarely’. One in eight (12%) providers noted that tenants had specifically resisted activities that were part of the provider’s energy performance improvement plan.

Asked for their view as to why tenants refused improvements, those who had experienced customer refusals cited three leading barriers: the risk of Covid-19 due to workers operating in homes (64% of providers perceived this to be a reason for refusal); disliking change (62%); and noise disruption (60%).

Providers had typically looked to overcome tenant refusal through: targeted communications containing case studies of previous work; minimising disruption by integrating one-off activities with their continuous maintenance programme, undertaking external work first to ensure buy-in; and educating tenants on the benefits of energy performance improvements.

Mixed tenure considerations

Government and stakeholders were concerned that leasehold properties within mixed tenure blocks (see Glossary for definition) may not be included by providers in their energy performance improvement works, or, that the involvement of leaseholders may lead to issues with activities designed to improve energy performance.

Since 2010, two-fifths (40%) of providers with mixed tenure blocks had carried out energy performance work on their stock, and of these only 49% had done so on their mixed tenure properties. Just over one in ten providers (11%) with mixed tenure stock reported that the nature of this mixed stock had a high or fairly high impact on the amount of work they did to improve energy performance. This included work being cancelled, altered or delayed. A slightly higher proportion (20%) believed that mixed tenure blocks will have a high or fairly high impact on their future plans for energy performance activities.

It was quite common for providers to avoid addressing the complexity of adapting mixed tenure stock altogether, and instead focus on or at least prioritise upgrades to stock that was not mixed tenure. Some providers reported general frustration with a minority of absent private landlords who may be unwilling to contribute to costs and felt that these landlords did not have a sufficient incentive to engage. Indeed, just over half (53%) of providers with properties within mixed tenure developments thought that recouping costs from leaseholds and shared owners would be a barrier to carrying out energy performance works.
Social Housing Decarbonisation Study: Views from Social Housing Providers

Social Housing Decarbonisation Fund (SHDF)

Around three in ten (29%) providers considered that government policy regarding energy performance initiatives were clear, however close to half (48%) felt policy was generally unclear. Small providers in particular found it difficult to engage with policy and felt that communications were not sufficiently targeted at them.

One-third (34%) of providers had heard about the SHDF, although there were considerable differences across providers. By stock size only 19% of small providers had heard of the SHDF, compared with 81% of medium and 97% of large providers. By provider type, 30% of Housing Associations and 85% of Local Authorities had heard of the SHDF.

While awareness was relatively low, providers demonstrated a strong appetite to utilise the funding: once informed about the fund, over three-quarters (78%) of all providers said they were likely to apply for financial support from the SHDF.

The qualitative interviews revealed that providers perceived financial support as a key mechanism to enable them to achieve and expand on their energy performance plans, and this underpinned their enthusiasm towards the SHDF. There were three broad factors that might impact likelihood to apply: the complexity and timescales of the application process, the eligibility criteria of the fund, and the amount of available funding.

Nine in ten (90%) of providers likely to apply to the SHDF stated they would seek support from a BEIS technical assistance facility (TAF), with the potential complexity of the application process identified as a key reason for this. Providers envisaged the TAF would help address a lack of technical knowledge and skills when applying for this kind of funding, as well as ensure a transparency and clarity to the application process (for example providing templates for applications), that would be particularly beneficial to small providers.
Social Housing Decarbonisation Study: Views from Social Housing Providers

Introduction

Background

There are approximately 4.0 million social homes in England, which account for 17% of all homes. These are managed by over 1,600 social housing landlords. While social housing has the most energy efficient stock of all tenure types, with 61% of homes rated EPC Band A-C in comparison to 38% in the private rental sector and 36% in owner occupied, it still constitutes around 23% of fuel poor households in England.

Almost a fifth (18%) of households in the social housing sector are fuel poor according to the Low-Income Low Energy Efficiency (LILEE) metric introduced in 2019, but of those in social housing below EPC band C 54% of households are fuel poor. This is significantly higher than both the owner occupied and private rented sectors, where 13% and 44% of below C properties are fuel poor, respectively.

Social housing providers undertake measures to improve the energy performance of homes, including installing insulation, double glazing and central heating as part of their cycle of home maintenance. However, with competing budgetary constraints, there is limited funding for the social housing sector to proactively go further than this in retrofitting their homes.

In response to these issues and catalysed by the government’s recent commitment to transition to Net Zero Carbon emissions by 2050, the 2019 manifesto committed £3.8 billion of funding to the Social Housing Decarbonisation Fund (SHDF) over the next ten years, to the end of financial year 2029/30. £62 million has already been awarded as part of the SHDF Demonstrator; with around £160m committed for the first wave of the SHDF in the financial year 2021/22.

The fund aims to be available to all social housing landlords in England. The aim of the SHDF is to provide funding to encourage and enable social housing providers to conduct retrofitting work and help them achieve their decarbonisation ambitions. Specifically, it seeks to ensure that a significant amount of the social housing stock that is currently below EPC C is brought up to that standard. This will result in warmer and more energy-efficient homes, reducing carbon emissions and bills, and tackling fuel poverty as well as supporting green jobs.

The Department for Business, Energy and Industrial Strategy (BEIS) will deliver the fund and also create a technical assistance facility (TAF) to support social landlords in accessing funding and developing energy performance improvement plans. Full evaluations of the Demonstrator, and of the Main Fund will be undertaken at a later date.

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11 UK sets new climate target ahead of UN Summit (Gov.uk, 2020)
12 Social Housing Decarbonisation Fund Demonstrator – successful bids (Gov.uk, 2021)
Research Aims

BEIS commissioned IFF Research to conduct a piece of research which aimed to:

- Understand and explore social housing providers’ current ambitions and attitudes around decarbonisation and how this ties into their regular maintenance schedules.
- Understand how decisions on retrofit projects are made within Local Authorities and Housing Associations.
- Understand how ambitions vary across different providers e.g. by size or region.
- Help inform the design and implementation of the SHDF, including the design of a technical assistance facility (TAF). In particular, understanding what support different groups will require e.g. what are the needs of providers based on size, region, levels of ambition for energy performance improvement measures?
- Understand the key barriers and drivers of providers to help bring the social housing stock that is below EPC C up to that standard. Again, this links to which support would be more of a priority for BEIS to provide in relation to the fund.
- Bridge evidence gaps within the sector to help inform both the SHDF as well as wider policy.

Report Structure

This report is focussed primarily around five key research themes as well as the SHDF. Within these key research themes BEIS posed 12 core research questions which can be found in Appendix A.

The themes are as follows:

1. Knowledge of stock
2. Current retrofitting, decarbonisation and energy performance improvements
3. Retrofitting, decarbonisation and energy performance ambitions
4. Providers’ perceptions and experience of tenants’ attitudes towards decarbonisation
5. Mixed tenure considerations13
6. Social Housing Decarbonisation Fund (SHDF)

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13 See Glossary for definition.
Methodology

This chapter outlines the methods used to collect and analyse relevant data. A mixed methods approach comprised of 39 qualitative interviews with providers and a 15-minute survey with 449 providers.

Population file

The Regulator for Social Housing (RSH) provided a population file of social housing providers. This file contained details for 1,517 providers and was used for both stages of the primary research (recruitment for the qualitative interviews and invitations to the survey). It included a contact name and accompanying contact details (1,457 had telephone numbers), and two variables to categorise the housing providers:

- **Provider type.** Providers were either listed as a Housing Association or Local Authority. Housing Associations are not-for-profit organisations whose core function is to own, let, and manage social and affordable housing, whereas Local Authorities are public administration organisations whom within their housing responsibilities, provision social housing. It was hypothesised that different provider types may have different ambitions and experiences of energy performance improvement work on their stock due to the differences in organisation structures, strategic priorities, condition of stock and access to funding. It was therefore important to ensure both provider types were included in the research. Only one arm’s length management association (ALMO) participated in the research, so when social housing providers are referenced in the report it should be considered as largely exclusive of this group.

- **Provider Size.** The banded number of homes each provider had was listed within the population file. These were further grouped into three bands to organise providers by size throughout the research: Small (<1,000 homes), Medium (1,000 – 10,000 homes) and Large (10,000+ homes). Providers with different volumes of homes were hypothesised to have different ambitions and experiences of energy performance improvement work and it was therefore important to ensure different sized providers were included in the research.

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14 Providers were given 10 days to opt-out of the file before it was shared with IFF Research. It therefore did not contain all registered providers.
15 The seven providers who had taken part in the SHDF Demonstrator Pilot were removed from the population file ahead of recruitment.
16 The population file contained details of CEOs (or their Executive Assistants), who may have had overall knowledge of structure and priorities but generally interviewers were referred to others within the organisation who were better placed to respond to the research.
17 There were only seven ALMOs in the population file as ALMOs are not required to be registered with RSH. IFF Research had originally intended to include ALMOs in the research to explore how management on behalf of the local authority without ownership might affect applying for or actioning funding. However, due to the very small number of contacts, only one ALMO was included in the qualitative interviews, and none were subsequently invited to take part in the survey.
Social Housing Decarbonisation Study: Views from Social Housing Providers

Qualitative Interviews

Approach

Semi-structured qualitative interviews were conducted with 39 providers from a range of provider types and across multiple positions including Climate Change Manager, Asset Manager, Director of Housing, Chairman, Director of Development and Growth, Director – Sustainability and Climate Change, and Head of Repairs and Maintenance. These interviews were used to gain in-depth insights into how providers plan and implement improvements to their properties as well as covering topics such as ambitions around energy performance improvements, experience with tenants relating to retrofitting, and reaction to the SHDF. The full topic guide is included at Appendix B. Qualitative interviews were conducted between 21st December 2020 and 29th January 2021 and were conducted as video or telephone interviews, lasting an average of 45 minutes.

Interviewees

As shown in Table 1, IFF Research planned to speak to 40 providers of ranging size. Whilst large providers made up eight per cent of all providers within the population file, they made up a larger proportion of the overall providers interviewed (25%). This was because these providers represent a large proportion of social housing stock (65% of total social homes) and are therefore more likely to be most impacted by the SHDF.

The proportion of Housing Associations and Local Authorities interviewed reflected the breakdown in the population file. Only one ALMO was included in the interviews due to the low number contained within the population file.

Table 1. Breakdown of providers interviewed by stock size and type

<table>
<thead>
<tr>
<th>Provider type</th>
<th>Target no. of Interviews(^\text{18})</th>
<th>No. of Interviews</th>
<th>% of total Interviews</th>
<th>% of RSH pop. file</th>
<th>% of total social housing homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider type: Housing Associations</td>
<td>30</td>
<td>34</td>
<td>87%</td>
<td>88%</td>
<td>60%(^\text{19})</td>
</tr>
<tr>
<td>Provider type: Local Authorities</td>
<td>5</td>
<td>4</td>
<td>10%</td>
<td>12%</td>
<td>40%</td>
</tr>
<tr>
<td>Provider type: ALMO</td>
<td>5</td>
<td>1</td>
<td>3%</td>
<td>0.5%</td>
<td>-</td>
</tr>
</tbody>
</table>

\(^{18}\) Prior to receiving RSH sample  
\(^{19}\) English Housing Survey Headline Report (2019-20) (MHCLG, 2020)
Social Housing Decarbonisation Study: Views from Social Housing Providers

<table>
<thead>
<tr>
<th>Provider size:</th>
<th>Count</th>
<th>Providers</th>
<th>Percentage</th>
<th>Total</th>
<th>Percentage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small (&lt;1,000 homes)</td>
<td>20</td>
<td>16</td>
<td>41%</td>
<td>74%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Medium (1,000 – 10,000 homes)</td>
<td>10</td>
<td>11</td>
<td>28%</td>
<td>18%</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Large (10,000+ homes)</td>
<td>10</td>
<td>12</td>
<td>31%</td>
<td>8%</td>
<td>65%</td>
<td></td>
</tr>
<tr>
<td>All providers</td>
<td>40</td>
<td>39</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Source: SHDF survey response rates. Provider type and size are given as per the population file. Please note percentages don’t add up to 100% due to rounding.

Analysis

The qualitative interviews were written up using an analysis framework (in Excel) which grouped information into major themes and questions. Key quotations from interviewees were highlighted and have been used throughout this report. Shortly after all interviews had taken place, the research team conducted an analysis session to reflect on what had been found. For each question, subgroup differences (in particular provider size and type) were explored and are illustrated in this report.

Limitations

Qualitative research is subjective by nature. The findings presented here are not necessarily representative of the wider provider population but provide in-depth insight into the views of those interviewed.
Quantitative Survey

Survey design

A small cognitive testing exercise was undertaken which utilised IFF Research contacts in the sector, as well as some of those who had already taken part in the qualitative interviews. In total, four cognitive interviews were conducted with Housing Associations the week before fieldwork began. The interviews showed that there were no major concerns with the survey but did provide a handful of suggestions to help improve question clarity. A copy of the final survey is included in Appendix C.

Approach

In order to maximise representativeness a mixed method approach was used, with the survey available to be completed both online and by telephone (CATI). Initially a link to the online survey was sent to all providers in the population file provided by the RSH. This was complemented by additional CATI follow ups to increase the chances of reaching providers, particularly when many were working from home owing to Covid-19 restrictions.

Fieldwork ran from 5th February to 1st March 2021. Telephone follow ups began a couple of days after email invitations were sent to providers. These calls had two purposes: to make providers aware they had been sent a survey invitation as well as offer them the opportunity to complete over the phone if they preferred. Providers who wanted to complete over the phone could either opt to do so at that point or request an appointment for an interviewer to call them at a more convenient time.

As the population file contained contact details of CEOs or Executive Assistants, recipients were asked to forward the email to colleagues if they were better placed to complete the survey. During fieldwork, and to help maximise response rates, desk research was conducted to try and find alternative contact details for providers where it proved difficult to reach an appropriate individual through the telephone number in the population file.

Response rates

A handful of awareness raising activities were conducted during the quantitative stage of the project to help maximise response rates as much as possible. These included IFF Research issuing a press release a couple of days before survey fieldwork began and a thought piece being shared within the Housing Quality Network communication channels.

In total, 449 providers out of a possible 1,517 providers contained within the population file took part in the survey, a response rate of 30%. A breakdown of response rates by provider type and size are shown in Table 2.

Six in ten providers took part in the survey via telephone (61%) and the rest took part online (39%).
Table 2. Survey response rates

<table>
<thead>
<tr>
<th>Provider</th>
<th>No. of survey completes</th>
<th>Response rate</th>
<th>% of survey completes</th>
<th>% of RSH population file</th>
<th>% of social housing homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider type: Housing Associations</td>
<td>416</td>
<td>31%</td>
<td>93%</td>
<td>88%</td>
<td>60%&lt;sup&gt;20&lt;/sup&gt;</td>
</tr>
<tr>
<td>Provider type: Local Authorities</td>
<td>33</td>
<td>18%</td>
<td>7%</td>
<td>12%</td>
<td>40%</td>
</tr>
<tr>
<td>Provider size: Small (&lt;1,000 homes)</td>
<td>348</td>
<td>31%</td>
<td>78%</td>
<td>74%</td>
<td>5%</td>
</tr>
<tr>
<td>Provider size: Medium (1,000 – 10,000 homes)</td>
<td>67</td>
<td>25%</td>
<td>15%</td>
<td>18%</td>
<td>31%</td>
</tr>
<tr>
<td>Provider size: Large (10,000+ homes)</td>
<td>34</td>
<td>28%</td>
<td>8%</td>
<td>8%</td>
<td>65%</td>
</tr>
<tr>
<td>All providers</td>
<td>449</td>
<td>30%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: SHDF survey response rates. Provider type is given as per the population file, whereas provider size and region are given as according to responses in the survey. Please note percentages don’t add up to 100% due to rounding.

Repeated telephone follow ups focused on ensuring large providers were represented, given that they are responsible for the majority of social housing stock.

Regional representativeness was based on ‘majority region’ (the region in which providers reported they had 50% or more of their housing stock located). Based on this, half (51%) of the providers who took part in the survey had a majority of their stock in London and the South, whilst a further 26% had a majority of stock in the North and 21% in the Midlands and East. Only 2% of providers did not have 50% or more of their housing stock in one region.

Analysis

Descriptive statistics from the survey data were presented in excel tables, which showed responses for each question at a total level as well as broken down by key sub-groups, including:

- Provider type

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<sup>20</sup> English Housing Survey Headline Report (2019-20) (MHCLG, 2020)
Social Housing Decarbonisation Study: Views from Social Housing Providers

- Provider size
- Majority region
- Whether or not providers had conducted energy performance improvement work on any of their homes in the past 10 years
- Whether or not providers plan to conduct energy performance improvement work on any of their homes in the next 10 years

Limitations

While every effort has been taken to ensure that the findings presented in this report are as accurate and reliable as possible, it is important to note some limitations of the research, mostly related to the breadth of response.

As previously mentioned, the contact details provided by RSH were not necessarily the direct details for the relevant individual within the organisation (they were typically CEOs and Executive Assistants). This had two effects. Firstly, the research was reliant on them forwarding the survey invite to a relevant individual within their organisation. They were under no obligation to do so, so it is likely that a number of invites were not forwarded, causing lower online response rates. Secondly, it increased the risk that an individual who was less suited to respond to the survey participated in the research, which could cause issues with the quality of the data. Analysis of survey responses however indicates this effect was minimal, with low levels of uncertainty and few missed questions.

The research was conducted over a short timeframe (less than four months) which impacted on elements such as recruitment as well as reducing the amount of time to engage more widely with the sector and raise awareness of the research. This impacted response rates in the survey. Furthermore, recruitment for the qualitative interviews was conducted in the weeks either side of Christmas 2020 which impacted providers’ availability and willingness to engage.

The UK entered further restrictions as a result of Covid-19 on January 4th 2021, which may have also impacted the response rates of the survey. IFF Research recruiters found it harder than usual to contact relevant stakeholders (particularly in large housing providers) as the majority of telephone numbers in the RSH population file were for offices or switchboards at a time when respondents were working from home.

For the survey a lower response rate increases the risk of a returned data file that is not representative of the provided population. As shown in Table 2, however, the profile of providers completing the survey was relatively consistent with the provider population profile. Whilst the size of the population who responded is relatively robust, with a 30% response rate achieved, the survey might suffer from non-response bias, where providers who chose not to participate in the study were systematically different to those who did. Readers should take care to consider why some providers chose not to participate in the survey. For example, they might rarely engage in government initiatives, which means – had they responded to the survey – key measures such as likelihood to apply to the SHDF could be affected. Furthermore it should be noted that Local Authorities (33) and large providers (34) have particularly small base sizes. These groups have still been included in the report (although flagged as small), but findings should be interpreted with caution.

As the survey was conducted as a census and there was no clear non-response bias in terms of provider type or size, no weighting was applied to the data.
Knowledge of stock

This chapter explores providers’ level of knowledge of their social housing stock, and in particular whether they knew the age, condition, grade and energy performance (EPC and SAP ratings) for their homes. This information, or lack of, is likely to impact the energy performance improvement plans providers have, their ability to apply for the SHDF and whether support is needed to help providers obtain this information.

Throughout this report the umbrella term ‘energy performance’ is used to refer to retrofitting, decarbonisation and improving energy efficiency.

Knowledge of stock age, condition and grade listing

Providers were asked approximately for what proportion of their homes they knew the age, condition, grade, and energy performance. Proportion bands were offered as percentages and for ease of reporting these have subsequently been relabelled into a commensurate scale None (0%); Very low (1-25%); Low (26-50%) Reasonable (51-75%); High (76-90%); Very high (91-100%).

As shown in Figure 1, providers were more likely to know the age and condition of a very high proportion of their stock than to know information such as EPC rating. Nine-in-ten providers (91%) knew the age of a very high proportion of their stock, and a further 91% knew the condition of a very high proportion of their stock, for example whether it met the Decent Homes standard.

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21 Condition and grade listing were not explicitly defined within the survey. Condition was expected to reflect general condition of stock.
High levels of knowledge about stock age and condition were consistent across provider types and sizes.

Almost all (97%) of providers with mainly rural stock knew the age of a very high proportion of their stock compared to 89% of those with mainly urban stock. Providers with stock mainly in London were more likely to not know the age of any stock (4% compared to either 0% or 1% in all other regions) or to be unsure what proportion they knew the age of (5% compared to 2% overall) – though these are still small minorities. Those with stock mainly in the South outside of London were particularly likely to have had high knowledge levels: 95% knew the age of a very high proportion of their stock compared to 84% of providers in London.

Providers with stock in one region were more likely to have knowledge of a higher proportion for their stock relative to those with stock across multiple regions: 92% of providers with stock in one region knew the age of a very high proportion of their stock compared to 79% of those with stock in multiple regions.

There seemed to be evidence of association between knowledge of stock and propensity to make energy performance improvements: virtually all who had undertaken improvements (98%) knew the age of a very high proportion of their stock (compared to 83% of those who had not undertaken any such improvements). Again, knowledge of stock condition did not vary to this extent.

Knowledge of building grade listing is not as common, though two-thirds of providers (65%) knew the grade for a very high proportion of their stock, as shown in Figure 2. Just over a fifth (22%) were unsure how many they knew the grade for and nine per cent did not know the grade of any stock.
Knowledge of building grade listings was lower amongst small providers, 11% did not know the grade listing for any of their stock and a further 25% were unsure how many properties they knew the grade listing for. This may indicate that – for many – none of their buildings are listed, so they have not had to consider this factor.

There was little variation in knowledge of grade listing status by provider type, housing type, region, location type or whether the provider had undertaken retrofit work.

Knowledge of EPC and SAP ratings

An EPC gives a property an energy efficiency rating from A (most efficient) to G (least efficient) and is valid for 10 years. Knowledge of their housing stock’s EPC ratings helps providers inform their energy performance improvement plans but also impacts their ability to apply to the SHDF. The SHDF will upgrade a significant amount of the social housing stock currently below EPC C up to that standard and therefore it was important to know how many providers already held this information. In addition, the survey captured provider knowledge of the SAP ratings for their stock. A SAP rating reflects a properties’ energy costs associated with space heating, water heating, ventilation and lighting minus the cost savings from energy generation technologies.

Compared to age and condition, knowledge of EPC and SAP ratings were much lower, and more variable. Just under half of providers (47%) knew the EPC rating for a very high proportion of their stock. Twenty two percent were unsure what proportion they knew it for and a further nine per cent did not know it for any stock, as shown in Figure 3.
Knowledge of SAP rating was considerably lower, only a quarter (26%) were sure of the SAP rating for a very high proportion of their stock. Almost half (47%) of all providers were unsure and a further 13% were aware of the SAP rating for none of their stock. This suggests that providers were less likely to hold information about their stock which requires a more formalised assessment. The variation in knowledge of EPC and SAP ratings is important considering the significance of these ratings to informing energy improvement performance plans.

**Figure 3. Proportion of stock for which providers know the EPC and SAP rating**

![Proportion of homes](image)

Source: SHDF Study – Survey. A8: “For approximately what proportion of your homes do you know the following information? Please consider what your organisation holds information on even if you personally do not know this information.” All providers (N=449)

There was notable variation in knowledge of EPC and SAP ratings between Housing Associations and Local Authorities, as shown in Figure 4 and Figure 5. Nine per cent of Housing Associations did not know the EPC rating for any of their stock and 14% did not know the SAP rating, compared to three per cent of Local Authorities respectively. Around half (55%) of Local Authorities knew the SAP rating for a high or very high proportion of their stock, compared to 27% of Housing Associations.
Figure 4. Proportion of stock for which providers know the EPC rating, by provider type

Source: SHDF Study – Survey. A8: “For approximately what proportion of your homes do you know the following information? Please consider what your organisation holds information on even if you personally do not know this information.” Housing Associations (N=416), Local Authorities (N=33) *Low base size, findings should be treated as indicative only. Please note percentages don’t add up to 100% due to rounding.

Just under half (47%) of small providers knew the EPC rating for a very high proportion of their stock, compared to 54% of medium and 29% of large providers.

Twenty eight percent of small providers were unsure for what proportion of stock the EPC was known. A similar pattern was seen for SAP rating, as shown in Figure 7. This is important because having information about EPC ratings is essential to the development of energy
performance improvement plans and suggests different sized providers may need more support to acquire this information in the first instance.

Figure 6. Proportion of stock for which providers know the EPC rating, by provider size

![Figure 6](image_url)

Source: SHDF Study – Survey. A8: “For approximately what proportion of your homes do you know the following information? Please consider what your organisation holds information on even if you personally do not know this information.” Small (N=348), Medium (N=67), Large (N=34). *Low base size, findings should be treated as indicative only. Please note percentages don’t add up to 100% due to rounding.

Figure 7. Proportion of stock for which providers know the SAP rating, by provider size

![Figure 7](image_url)

Source: SHDF Study – Survey. A8: “For approximately what proportion of your homes do you know the following information? Please consider what your organisation holds information on even if you personally do not know this information.” Small (N=348), Medium (N=67), Large (N=34). *Low base size, findings should be treated as indicative only. Please note percentages don’t add up to 100% due to rounding.

There was little variation in knowledge of stock EPC ratings by region, although those with stock mainly in London (15%) were unlikely to know the SAP for a very high proportion of their stock compared to all providers (26%). Providers with stock in multiple regions were more
likely to know the EPC and the SAP for a very high proportion of their stock, than those in a single region (67% vs. 44% EPC and 50% vs. 23% SAP).

Providers who had previously undertaken retrofit work to improve energy performance were slightly more likely to be familiar with the EPC and SAP ratings of their stock than those who had not, as were those planning to conduct energy performance improvements.

The qualitative interviews also reflected that providers largely have good general knowledge of their housing stock in terms of age and condition. However, it is important to note that those who do hold more information about their stock might not necessarily have more confidence or knowledge regarding what energy performance improvement measures to plan for:

“I think there’s a lot of work that still needs doing, and understanding that data and understanding what you actually need to bid for to make sure that you’re bidding for the right measures per property.” (Housing Association, Medium)

In the qualitative interviews large and medium providers frequently referenced programmes they had put in place in reaction to both raising of government standards and general greater awareness of their environmental impacts.

Whilst small providers may not have conducted recent professional surveys, the qualitative interviews showed they often had greater first-hand knowledge of the stock. They had more informal awareness of the condition or listed status of their stock, however, as many small providers maintained their stock only reactively, they had not been through an assessment process which would be needed to set up an on-going improvement or maintenance programme. Small providers who were unsure about their stock EPC rating sometimes reported the costs of professional surveying prohibitive.

Demolition plans

The survey asked providers how many homes they had planned to demolish in the next ten years. The percentage of stock planned for demolition has been calculated based on this number divided by the total number of homes their organisation has. As shown in Figure 8, the majority of providers (88%) had no plans to demolish any of their homes in the next ten years. However, this did vary across provider type and size. It is important to note that whilst 1-5% is a relatively small percentage, for medium and large providers especially, this may actually represent a considerable number of homes.
Social Housing Decarbonisation Study: Views from Social Housing Providers

Figure 8. Percentage of homes due for demolition in next 10 years (banded)

Source: SHDF Study – Survey. A9: “In the next 10 years, how many homes, if any, are planned for demolition?”
All providers (N=449), Housing Associations (N=416), Local Authorities (N=33), Small (N=348), Medium (N=67), Large (N=34). **Low base size, findings should be treated as indicative only. Please note percentages don’t add up to 100% due to rounding.

Summary

Compared to age and condition, knowledge of EPC and SAP ratings were much lower and more variable. Just under half of providers (47%) knew the EPC rating for a very high proportion of their stock. There was some differentiation in EPC knowledge within provider sizebands, however findings were not clear cut. Medium sized providers were more likely to have known the EPC for a very high proportion of stock (54% compared to 47% of small and 29% of large). Small providers (28%) were far more likely than medium (1%) or large (0%) providers to not know the EPC rating of their stock. This is important because having information about EPC ratings is essential to informing energy performance improvement plans, and suggests different sized providers may need more support to acquire this information in the first instance.
Current maintenance and energy performance improvement plans

This chapter reports the existing maintenance plans providers had at the time of research, alongside their energy performance activity and budgets since 2010, including the range of specific measures installed, e.g. new boilers, double glazing, loft insulation etc.

Planned maintenance

The qualitative interviews demonstrated that energy efficiency components were typically incorporated into providers' planned work cycles, albeit to varying degrees.

However, energy performance was typically only a secondary consideration within maintenance plans. Maintenance plans across providers were typically determined and scheduled by a matrix of factors and stock surveys weighted to determine overall stock condition and associated cost of improvements. In particular such plans seek to meet the requirements of the 'Decent Homes Standard' e.g. kitchens, bathrooms, boilers, windows etc. are reviewed and replaced on a set cycle (every 20 to 30 years or when they fail). Energy performance improvement therefore was primarily incorporated through the replacement of components (e.g. boilers) at end of life with new and higher performing substitutes. This consequential improvement on energy performance was, for many, a by-product of the Decent Homes Standard rather than a dedicated aim or in response to broader trends towards 'net zero' ambitions.

Providers were generally open to implementing and conducting new energy performance works into their planned maintenance schedules. Providers were less worried about the installation process once they had clarity on the best approach:

“You find the order of need, work out how many you've got and do as many as you can.” (Housing Association, Large)

Principle barriers to incorporating energy performance objectives into maintenance plans were related to two areas:

- Short-term external funding which did not allow providers sufficient time to factor these grants into their planned maintenance. This was largely referenced as a generic barrier for government schemes however a smaller number of providers spontaneously mentioned the Green Home Grant as an example of one which had allowed insufficient time.

- Keeping resident disruption to a minimum, providers preferred to undertake as much work as feasible within a single visit to a particular home.

For small and medium providers in particular, maintenance plans were perceived predominantly as an opportunity to react to issues within the existing stock, or to regulatory

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22 A Decent Home: Definition and guidance for implementation: June 2006 – Update (Department for Communities and Local Government, 2006)
requirements. It was rare that maintenance plans incorporated broader ambitions relating to implementing more energy performance improvement measures for example.

### Energy performance activity since 2010

Energy performance improvement plans primarily consisted of multiple, small-scale component replacements. Survey respondents were presented with a list of energy performance measures (as seen in Table 3) that they might have installed in customers’ homes since 2010. On average, providers had installed six different types of measures in this period, although just over a quarter (28%) had not installed any measures. There was considerable variation by provider stock size, as shown in Figure 9.

In addition:

- Local Authorities (9%) were less likely than Housing Associations (30%) to have installed zero measures, coinciding with Local Authorities (79%) being more likely than Housing Associations (53%) to install three or more measures.

- By region, providers with the majority of their stock in London (38%) were more likely to have installed zero measures compared to 28% of all providers.

In the qualitative interviews, providers also reported a range of similar measures they had carried out including: ‘water meters’, ‘double glazing’, ‘internal wall insulation’, ‘boilers upgraded’ and ‘installing solar panels’.

#### Figure 9. Number of energy performance measures installed since 2010

<table>
<thead>
<tr>
<th>Mean Score</th>
<th>6</th>
<th>5</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>4+ measures</td>
<td>55%</td>
<td>46%</td>
<td>79%</td>
<td>94%</td>
</tr>
<tr>
<td>Zero</td>
<td>28%</td>
<td>33%</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>1 - 3</td>
<td>17%</td>
<td>20%</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>4-5</td>
<td>18%</td>
<td>18%</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td>6+</td>
<td>38%</td>
<td>29%</td>
<td>65%</td>
<td>82%</td>
</tr>
</tbody>
</table>

All Providers | Small (< 1,000) | Medium (1,000-10,000) | Large (10,000)*

Source: SHDF Study – Survey. B2_Count: “Since 2010, which of the following measures have you installed in customers’ homes?” All providers (N=442) Small providers (N=342), Medium (N=66) and Large providers (N=34).
Table 3 shows the types of measures providers have installed since 2010, and how prevalence varied between different providers.

Double glazing (72%), Draught proofing (58%) and Tank & pipe insulation (47%) were amongst some of the most frequently installed measures since 2010. These measures were typically most cost effective and involved shorter periods of disruption to tenants.

More efficient boilers / condensing boilers (85%), loft insulation (69%), improved or 'smart' heating controls (46%), and cavity wall insulation (42%) were also amongst the top measures with previous government funding schemes having covered some or all of the cost of these.

It is important to note that these figures relate to whether a provider installed each measure for any of their stock; it does not provide volumetric information in terms of the number or proportion of homes they installed these measures in.

Table 3. Breakdown of measures installed since 2010, by provider stock size

<table>
<thead>
<tr>
<th>Measures installed since 2010</th>
<th>All Providers</th>
<th>Small (&lt; 1000)</th>
<th>Medium (1000-10,000)</th>
<th>Large (&gt; 10,000)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>More energy efficient / condensing boilers</td>
<td>85%</td>
<td>83%</td>
<td>86%</td>
<td>100%</td>
</tr>
<tr>
<td>Double glazing</td>
<td>72%</td>
<td>64%</td>
<td>91%</td>
<td>94%</td>
</tr>
<tr>
<td>Loft insulation</td>
<td>69%</td>
<td>62%</td>
<td>86%</td>
<td>94%</td>
</tr>
<tr>
<td>Draught proofing</td>
<td>58%</td>
<td>56%</td>
<td>66%</td>
<td>59%</td>
</tr>
<tr>
<td>Tank &amp; pipe insulation</td>
<td>47%</td>
<td>42%</td>
<td>64%</td>
<td>53%</td>
</tr>
<tr>
<td>Improved or 'smart' heating controls</td>
<td>46%</td>
<td>45%</td>
<td>48%</td>
<td>47%</td>
</tr>
<tr>
<td>Cavity wall insulation</td>
<td>42%</td>
<td>29%</td>
<td>71%</td>
<td>91%</td>
</tr>
<tr>
<td>Smart meters for heating / hot water</td>
<td>39%</td>
<td>40%</td>
<td>40%</td>
<td>28%</td>
</tr>
<tr>
<td>External wall insulation</td>
<td>36%</td>
<td>22%</td>
<td>67%</td>
<td>84%</td>
</tr>
<tr>
<td>Internal solid wall insulation</td>
<td>23%</td>
<td>19%</td>
<td>36%</td>
<td>28%</td>
</tr>
<tr>
<td>Air / ground source heat pumps</td>
<td>22%</td>
<td>7%</td>
<td>57%</td>
<td>72%</td>
</tr>
<tr>
<td>Floor insulation</td>
<td>18%</td>
<td>14%</td>
<td>34%</td>
<td>25%</td>
</tr>
<tr>
<td>Solar Panels</td>
<td>10%</td>
<td>6%</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>Heat networks</td>
<td>10%</td>
<td>8%</td>
<td>10%</td>
<td>28%</td>
</tr>
</tbody>
</table>
Energy performance budgets

The survey also captured total planned/expected maintenance budgets among providers over the next 10 years and whether energy performance improvements were incorporated into these.

Planned maintenance budgets naturally increased the larger the provider size, as shown in Figure 10, although it is notable that small providers were much less certain of their planned maintenance budgets (35% were unsure). In terms of mean averages, small providers' anticipated budget was £1.6m, medium providers was £50.4m and large providers was £233.2m. There were no notable differences by provider type.

**Figure 10. Total planned/expected maintenance budget over next 10 years**

![Bar chart showing budget distribution by provider size](chart.png)

Source: SHDF Study – Survey. A10_Banded: “Over the next 10 years, what is your total planned or expected maintenance budget?” Small providers (N=331), Medium (N=57) and Large providers (N=26). *Low base size, findings should be treated as indicative only. Please note percentages don’t add up to 100% due to rounding.

Around two-fifths (42%) of providers who knew their planned budgets for the next 10 years reported that this included budget specifically for energy performance improvements (there was little variation by key subgroups including provider stock size or type). Only a small proportion of providers had a bespoke, separate budget for energy performance improvements, accounting for approximately eight per cent of all providers. Bespoke budgets varied, but on average they accounted for 28% of these providers' total planned budget for the next 10 years (this figure should be treated with caution due to the low base).
Summary

Energy efficiency improvements were often a secondary impact of existing replacement cycles for components such as boilers and glazing. On average, providers installed six different types of energy performance measures in the past decade, although just over a quarter (28%) had not installed any measures in this timeframe. New energy efficient boilers were the most common measure installed (85% of providers who had installed any measure), followed by double glazing (72%) and loft insulation (69%).

Budgets are typically not specifically allocated to energy efficiency. A small minority, just eight per cent of all providers, recorded having a separate and bespoke budget solely for energy performance. Planned maintenance budgets by provider varied largely and naturally saw an increase by provider size, with 35% of small providers being unsure what their planned maintenance budgets were.
Energy performance improvement ambitions

In order to inform the design of the SHDF and understand the potential interest from providers, BEIS wish to understand the level of energy performance improvement ambition amongst providers.

This chapter sets out the extent to which providers have planned energy performance improvement work, and what these plans entail, including whether or not they have specific targets and/or desired outcomes. The research looked at the barriers to energy performance improvement that providers face, and these are discussed in the second half of the chapter. This section includes issues dealt with (at least to some extent) by those who have undertaken energy performance improvements as well as the problems anticipated by those who have not yet begun improvements.

Plans to improve energy performance

Proportion of stock planning to improve energy performance

Over two-thirds of providers in the survey (68%) were looking to improve the energy performance of some of their homes in the next ten years. This rises to 82% of medium providers and 91% of large providers, compared to 63% of small providers (as shown in Figure 11). This reflected the findings in the qualitative interviews that ambition levels were high across all types of providers, but these aspirations did not always lead to concrete plans:

"[We’re] in the process of putting the tools in place to develop a better process for decarbonisation." (Housing Association, Medium)

"We’re right in the middle of writing our climate strategy actions". (Housing Association, Medium)

Almost a third of providers (31%) hoped to improve the energy performance of a very high proportion of their stock. A fifth of providers (20%) did not know how many properties they might be looking to improve, while 12% had plans for none of their stock.

23 Throughout this chapter ‘a very high proportion’ refers to 76-100% of providers’ homes
Social Housing Decarbonisation Study: Views from Social Housing Providers

Figure 11. Proportion of homes the provider is looking to improve energy performance of in next ten years

Source: SHDF Study – Survey. E1: “What percentage of your homes are you looking to improve the decarbonisation and energy performance of in the next 10 years?”. All providers (N=449), Small (N=348), Medium (N=67), Large (N=34). *Low base size, findings should be treated as indicative only. Please note percentages don’t add up to 100% due to rounding.

Although small providers were less likely to be planning energy improvements for their stock, those that did have plans were more likely (34% of those with plans) to be looking at improving a higher proportion compared to large providers. Large and medium providers would evidently be dealing with higher volumes and were commonly planning to improve a fairly low proportion of their stock within the next ten years (53% of large providers and 33% of medium providers). Large providers were also more likely to have already undertaken such work on some of their stock.

There was a key distinction between providers with a history of undertaking energy performance improvement work and those who had not. Over three-quarters (77%) of those who had already undertaken such work had plans for further energy performance improvements by 2031 compared to 46% of those who had not started. This may have been for a number of reasons including, greater experience of improvement measures, the stock condition of these properties or it being more cost-effective to improve multiple properties at the same point in time/ in quick succession.

Energy improvement targets

It was important to determine whether energy performance ambitions led to specific energy performance improvement targets.

Only a quarter (25%) of providers actually had targets for their homes to reach a particular energy rating by a specific date (e.g. a minimum EPC rating C by 2030), as shown in
Figure 12. This rises to 34% amongst those who reported that they had plans for energy performance improvement works in some of their stock by 2031. To a large degree this was driven by the lack of targets among small providers, only 10% of whom had targets compared with 72% of medium and 85% of large providers. This may reflect the findings in the Knowledge of stock chapter which showed that small providers were less likely to know the EPC rating of their homes. Below is an example of the targets held by a large provider:

“We have a programme of properties that we will be investigating and building into that programme so by 2030 as a minimum we are at the C level, but by then we’re also hoping we’ll have got to the point where we’re taking properties beyond a C as we retrofit them.” (Housing Association, Large)

Just over one tenth of both Housing Associations (11%) and Local Authorities (12%) were unsure if their organisation has targets for improving energy performance. This may be a reflection of who in each organisation completed the survey as those leading on this area would have been expected to know if targets exist or not. It might indicate that energy performance targets need to be more widely and consistently publicised throughout an organisation to demonstrate a clear drive to improve.

Figure 12. Whether providers had energy performance improvement decarbonisation targets (stock to reach particular energy ratings by particular date)

<table>
<thead>
<tr>
<th></th>
<th>Don’t know</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>All providers</td>
<td>11%</td>
<td>25%</td>
<td>64%</td>
</tr>
<tr>
<td>Housing Associations</td>
<td>11%</td>
<td>22%</td>
<td>67%</td>
</tr>
<tr>
<td>Local Authorities*</td>
<td>12%</td>
<td>27%</td>
<td>61%</td>
</tr>
<tr>
<td>Small (&lt;1,000)</td>
<td>11%</td>
<td>10%</td>
<td>78%</td>
</tr>
<tr>
<td>Medium (1,000 - 10,000)</td>
<td>9%</td>
<td>19%</td>
<td>72%</td>
</tr>
<tr>
<td>Large (10,000+)*</td>
<td>6%</td>
<td>9%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Source: SHDF Study – Survey. E6: “Do you have targets for your homes to reach a certain energy rating by a certain date? E.g., Minimum EPC rating C by 2030”. All providers (N=449), Housing Associations (N=416), Local Authorities (N=33), Small (N=348), Medium (N=67), Large (N=34). *Low base size, findings should be treated as indicative only. Please note percentages don’t add up to 100% due to rounding.

Other providers more likely to have specific energy performance improvement targets were:

- Providers with a broadly even mix of house types (57%) compared to those with mainly flats, maisonettes or apartments (14%) and those mainly with houses or bungalows (30%).

- Providers with stock mainly in the North (31%), compared to those in London (12%), for example. This is interesting given providers in London had higher levels of ambition.
Social Housing Decarbonisation Study: Views from Social Housing Providers

Amongst those that did have explicit energy performance improvement targets, the most common (for 54%) is for their homes to reach a minimum of EPC C / SAP 69-72 by 2030. A small proportion (13% of those with a set target) aimed to reach this by 2025, whilst some (16%) are only planning to reach this by 2050.

Desired outcomes from energy performance improvement

When providers who were planning to improve the energy performance of their stock were asked to describe their motivations for doing so they most commonly said it was to improve their environmental sustainability in general (61%), as shown in Figure 13. More specifically, a small proportion mentioned aiming to meet the EPC C / SAP 69-72 rating (7%) and / or be carbon neutral or net zero (5%).

Around a quarter (24%) of providers with energy performance improvement plans said this was in order to improve tenant satisfaction, and around a fifth (18%) aimed to reduce fuel poverty or fuel bills for their tenants.

Figure 13. Aims of energy performance improvement work planned in next ten years (multiple responses allowed)

<table>
<thead>
<tr>
<th>Aim</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve general environmental sustainability</td>
<td>61%</td>
</tr>
<tr>
<td>Tenant satisfaction</td>
<td>24%</td>
</tr>
<tr>
<td>Reduce tenant fuel poverty / bills</td>
<td>18%</td>
</tr>
<tr>
<td>Financial savings for providers and / or tenants</td>
<td>11%</td>
</tr>
<tr>
<td>To meet minimum EPC C / Sap 69-72 Rating Standard</td>
<td>7%</td>
</tr>
<tr>
<td>Be carbon neutral / net zero</td>
<td>5%</td>
</tr>
<tr>
<td>To meet other requirements around health and safety</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
<tr>
<td>No specific aims yet</td>
<td>3%</td>
</tr>
<tr>
<td>Don't know</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: SHDF Study – Survey. E4: “What are you aiming to achieve with these improvements?” (multiple responses allowed). Providers planning to improve energy performance of homes in next ten years (N=397).

A quarter (26%) of Housing Associations aimed to improve customer satisfaction through energy performance improvements compared to only six per cent of Local Authorities. Small providers were also more likely to have reported aiming to improve customer satisfaction, 28% compared to 15% of medium and 12% of large providers.

Local Authorities (16%) were more likely to have aimed to meet the specific EPC C / SAP 69-72 rating standard, than Housing Associations (6%), and / or to become carbon neutral or net zero (19% of Local Authorities compared to 4% of Housing Associations).

The qualitative interviews found that the biggest driver for providers was a duty to provide the highest quality of housing and comfort to their tenants as possible.
“Our role is to provide quality homes to people in housing need. The vast majority are on low incomes so if you’re putting them in a home that costs a fortune to heat that’s going to have a big impact on them... Morally it’s the right thing to do to try and make our properties as good as they can be and affordable for the tenants”. (Housing Association, Medium)

However, climate change had increasingly become a driver. The need to pre-empt and meet government minimum standards was referenced. Fuel poverty was also mentioned but often this was in terms of prevention (i.e. providers were not seeking to reduce bills further, but certainly aimed to avoid any work that might increase them at all).

“No doubt we’ll be asked to have one before long, in which case we’ll comply with the regulations. There are a few people living in the coop who are that way inclined - they’re very conscious of the need to save energy and go carbon zero, it’s just that we haven't all got together and made it policy.” (Housing Association, Small)

“The reduction in our carbon footprint are happy extras for us, but that’s how we justify it. We want to be playing our part but for us it's about tenancy sustainment and making sure our homes are affordable for our residents.” (Housing Association, Medium)

**Energy performance improvement funding**

It was also important to understand how providers intended to fund their planned energy performance improvements.

Providers planning energy performance improvement work were most likely to have planned to use a mix of funding streams, with 49% planning a mix of internal and external funding, as shown in Figure 14. Around a quarter (26%) were basing their plans on internal funding only whilst 13% planned to rely solely on external funding. A notable 12% were unsure how their plans will be funded.

Sixty two percent of providers with plans for energy performance improvement intended to access external grants or funding.
Figure 14. Funding plan for energy performance improvement works

Amongst all providers, internal funding was most likely to be part of a wider asset management budget (for 58% of those that plan to improve energy performance in the next ten years), but a third (33%) of those with plans had a dedicated energy performance budget. Small proportions of those with plans to improve energy performance will fund it through internal reserves (7%) or internal income (7%).

Barriers to energy performance improvement plans

Providers had encountered a range of barriers to implementing their energy performance improvement plans over the last ten years. The survey revealed that financial considerations were the principal barrier: 42% identified a lack of budget to see through their plans, while 36% identified a lack of skills or experience internally within their organisation to apply for funding, as shown in Figure 15.

Being unclear about government policy, or the actual content of the policy was a barrier for a third (34%). This is discussed in more detail later in this report.

Covid-19 has also been a barrier to a third (34%) of providers, although clearly only since March 2020. This may have been as a result of the disruption caused internally, challenges and delays hiring contractors or with the supply chain generally, as well as tenants having been less likely to want people working on their buildings during this time – especially for internal works.
Other issues included identifying (28%) and procuring time (16%) from suitable contractors, a lack of stock knowledge (12%), and / or a lack of board support or interest in energy performance improvement (8%). Concerns about a lack of stock knowledge were more prevalent amongst those who knew the EPC and / or SAP rating for over three quarters of their stock (15% and 17% respectively compared to 9% and 10% of those who knew the ratings for a smaller proportion of stock). This seems counter-intuitive but may largely reflect that those with better knowledge of ratings were large organisations with thousands of homes so respondents may have had less first-hand knowledge.

Almost a quarter (23%) of providers had not experienced any barrier to their decarbonisation plans.

**Figure 15. Barriers to energy performance improvement plans experienced by providers (multiple responses allowed)**

<table>
<thead>
<tr>
<th>Barriers to Energy Performance Improvement Plans</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget / finance</td>
<td>42%</td>
</tr>
<tr>
<td>Internal skills / experience to apply for funding</td>
<td>36%</td>
</tr>
<tr>
<td>Clarity / content of government policy</td>
<td>34%</td>
</tr>
<tr>
<td>Covid-19</td>
<td>34%</td>
</tr>
<tr>
<td>Identifying suitable contractors</td>
<td>28%</td>
</tr>
<tr>
<td>Procuring time from suitable contractors</td>
<td>16%</td>
</tr>
<tr>
<td>Resistance from tenants</td>
<td>13%</td>
</tr>
<tr>
<td>Stock knowledge</td>
<td>12%</td>
</tr>
<tr>
<td>Supply chain issues</td>
<td>10%</td>
</tr>
<tr>
<td>Board support / interest</td>
<td>8%</td>
</tr>
<tr>
<td>Private owners in mixed tenure blocks</td>
<td>7%</td>
</tr>
<tr>
<td>Building grade / age</td>
<td>3%</td>
</tr>
<tr>
<td>Experience / knowledge of new measures / guidelines</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
<tr>
<td>Not sure</td>
<td>4%</td>
</tr>
<tr>
<td>Not faced any barriers</td>
<td>23%</td>
</tr>
</tbody>
</table>

Source: SHDF Study – Survey. E8: “Since 2010, have you experienced any of the following barriers to your decarbonisation plans?” (multiple responses allowed). All providers (N=449).

Providers who had carried out energy performance improvement work on a minority of their stock were significantly more likely to have reported experiencing most of these barriers than those who had retrofitted a majority (over 50%) of their stock. This could reflect that experience helped overcome most issues, that those who had dealt with a majority of stock tended to be small (86% vs. 58% of those who had carried out energy performance improvements on a minority of stock) and / or that these barriers prevented expansion of their energy performance improvement work to more properties.

Providers who had undertaken energy performance improvement work were no more likely than those who had not, to have reported a lack of internal skills to access funding or indeed a lack of board support.
Local Authorities were more likely than Housing Associations to have experienced a number of barriers, most notably; a lack of budget or finance (67% vs. 40% of Housing Associations) and / or supply chain issues (24% vs. 9%). They were also more likely to have faced tenant resistance and / or mixed tenure issues, as reported in detail in Refusal of access for maintenance or improvements and Impact of mixed tenure blocks sections. These differences largely reflect that Local Authorities were more likely to have plans for and / or have carried out energy performance improvement work. Housing Associations were more likely to not have experienced any barriers (24% respectively compared to only 9% of Local Authorities).

Similarly, medium and large providers were more likely to have faced most of the listed barriers than small providers. For example, 82% of large and 70% of medium providers identified a lack of budget and finance compared to only 33% of small providers. Large (65%) and medium (52%) providers were also more likely to have reported a lack of internal skills and have more experience of applying for funding compared to small providers (30%) – this again probably reflected that they are more likely to have actually considered making or made previous applications. Small providers were more likely to not have experienced any barriers (28% compared to only 9% of medium and 0% of large providers), probably because they were less likely to have undertaken works.

The qualitative interviews revealed a greater level of detail that underpinned some of these core barriers. Providers cited a lack of funding for energy performance improvement internally (i.e. within their capital budgets), as well as feeling that external grants were insufficient. Available grants were considered to be too short term, with unrealistic timeframes for internal sign off and completion of works. A handful of providers spontaneously mentioned the Green Homes Grant as an example of grants with too short a timeframe.

A couple of large providers reflected that it may be too expensive to carry out energy performance improvement work for their very worst energy performing stock and therefore selling their stock would be more cost effective. It was clear that providers would prefer not to do this and felt guilty for highlighting it but felt without external funding (or greater amounts) to cover non-standard, older or very inefficient properties they would have no choice.

“Some homes may never get to carbon neutral in a cost-effective way. This may result in the disposal of stock.” (Housing Association, Large)

Smaller providers often felt their ambitions could only be developed into plans with access to external funding.

Lack of expertise around which might be the most cost effective and appropriate measures was particularly common amongst smaller providers.

“There is an overwhelming feeling that we can do more, [it’s] become such a big topic ... we would be interested to know more about what actions we can take.” (Housing Association, Small)

Issues raised less frequently in the qualitative research, but still representing substantial barriers to some providers included:

- **Building restrictions** were raised as a barrier by some providers who had properties which were grade listed or in a conservation area. This may also reflect a lack of expertise amongst some who had perhaps not investigated the possibilities within their planning parameters and used this as an ‘excuse’ to take no action.
“It’s very hard to think what retrofitting we could be doing [to our listed building stock].” (Housing Association, Small)

- Uncertainty around the impact work might have on tenant fuel bills, and that it may lead to increases, as reported in the Types of technology providers find more appealing amongst tenants section.

- Supply chain limitations, for example competition for limited supply of air source heat pumps across Europe with anticipation that UK demand will increase substantially.

- Workforce limitations, a couple of providers flagged a need to re-train their gas-fitters or that the installation workforce who were skilled in these technologies may be impacted by the UK’s exit of the EU.

Summary

Over two-thirds of providers (68%) were looking to improve the energy performance of at least some of their stock by 2031. Large and medium providers were more likely to have such plans than small providers (91% and 82% compared to 63%).

A quarter (25%) of providers had specific energy performance improvement targets for their stock; this is much more likely amongst large and medium providers (85% and 72% compared to 10% of small) and Local Authorities (61% compared to 22% of Housing Associations).

A lack of budget or finance was the most common barrier to improving energy performance (42%) and three-in-five providers who had plans to improve their energy performance hoped to fund this through external grants or funding. However, a lack of skills or experience within organisations to apply for funding was also a barrier for over a third (36%).
Experience of tenant response to energy performance improvements

BEIS were keen to understand what role, if any, providers thought tenants’ attitudes would play in shaping their current and future energy performance improvement plans. This chapter reviews providers’ experiences with tenants during past maintenance or improvement works as well as any energy improvement work. It looks at how some providers have encouraged acceptance of works.

As only providers participated in this research it does not necessarily reflect tenants’ own views or experiences, only the provider perspective. It presents the extent to which tenant-related concerns amongst providers impact their energy performance improvements plans.

Provider experience of tenant attitudes

Provider experience of tenant interest in energy performance improvements

In the qualitative interviews, providers had difficulty reporting how interested their tenants might be in energy performance generally, or in energy performance improvements to their home. The qualitative research found that very little consultation specific to energy performance improvement work had been conducted to date. Most providers assumed that the majority of their tenants would have no real interest in improving energy performance as it had not been raised proactively. However, a few providers had carried out their own research amongst tenants and a similar small number had monitored behavioural change following retrofitting.

Some providers felt tenant interest was likely to be in-line with that of the general population (i.e. it would vary). Those who did not have energy performance improvement plans emphasised that energy performance simply did not manifest as a general concern for tenants.

“They don’t care if it may be energy efficient or it might decarbonise our footprint …they are just happy to sit in their favourite chair and not have a draft.” (Housing Association, Small)

A couple of providers reported that previous work (e.g. replacement of heating systems or insulation installation) had not resulted in behavioural change. Whilst the home may have seen improvement in energy performance, some providers felt tenants were not interested in using the system to reduce their energy use.

“We haven’t seen significant amounts of behaviour change … People’s default is to switch off the cost, which is the heating”. (Housing Association, medium)

Lack of behavioural change may not necessarily indicate a lack of interest in energy performance improvements. Previous studies have found a number of factors at play beyond
interest, that affect behavioural change, such as lack of knowledge and the quality of technology installed.  

Elderly and vulnerable tenants were more likely to be thought uninterested in energy performance improvements. Indeed, many providers who specialise in housing for these types of tenants had avoided retrofit work due to concerns that their tenants would not want disruption or new systems which they may struggle to operate.

‘Some people are passionate about climate change and decarbonisation and up for new things, and other people aren’t. There is probably an age factor there as well’. (Housing Association, Large)

There was some variance in insight into tenant views by provider size:

- **Smaller providers** in general were less likely to know their tenants’ views, but perhaps more likely to assume they would constitute a notable barrier to works. They were also less likely to have recent energy performance improvement work or other works experience to base their assumptions on. Some smaller providers, possibly those where fuel poverty is less of a primary concern for tenants, reported limited growth in interest amongst tenants.

- **Large and medium providers** were more likely to have experience of energy performance improvements, and all had more recent experience of tenant reaction to improvement or maintenance programmes.

Types of technology providers find more appealing amongst tenants

The qualitative interviews also investigated what types of technology providers thought their tenants would find more appealing. Whilst questions were perhaps framed to elicit responses around specific tools or changes, providers tended to focus on the anticipated outcomes of change.

There was general consensus that any tenant interest in energy performance improvements was almost entirely driven by their desire to reduce fuel poverty, and not by environmental concerns. This meant lower cost heating systems, improved insulation or replacement glazing could be of interest, depending upon the material impact for the tenant.

“A benefit to their pocket rather than a contribution towards a reduction in greenhouse gases ... it’s about the pound in your pocket.” (Housing Association, large)

Providers had mixed views on whether energy performance improvement measures would reduce fuel poverty, some reported cases where this had not been the result of energy performance improvement work. Where improvements were not anticipated to reduce fuel poverty for tenants they were often rejected by providers who assumed impact on fuel bills will over-ride all other issues.

“At the moment electricity costs four times what gas costs. If I implement a strategy of decarbonisation heat sources into my homes, it will put my customers in even greater fuel poverty.” (Housing Association, Medium)

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“If we move to electric heating within homes from natural gas, and if hydrogen isn’t a viable option for us, we need to ensure that the decarbonisation activity doesn’t increase the incidence of fuel poverty and make the problem worse because electric heating can be more expensive.” (Local Authority, Large)

External works, such as insulation installed externally or setting up new heating systems which do not require changes inside the home were also highlighted as more appealing due to the minimal disruption to tenants. This is reflected in the low installation rate for internal wall insulation (not installed in around 40% of Housing Association stock).  

Providers felt that tenants did not welcome complex control systems offering personalised settings, they pointed out that if tenants needed to reduce their fuel bills they would often completely turn off their heating to ensure their costs were absolutely minimised.

“The simplest solutions, the ones that require the least input from them are the ones that are more popular’ (Housing Association, Large)

Providers perceived that tenants were interested in thermo-comfort and being able to keep warm. Some providers reported tenants were interested in new heating systems that would address damp and mould.

Refusal of access for maintenance or improvements

The quantitative findings enable us to see the extent to which providers have faced tenant refusal for works in the past. This provides some insight into the level of refusals providers may face when offering works to improve energy performance in future.

Providers’ experience of tenant reactions to work being carried out in their home was mixed. Just under half of providers (46%) reported that tenants had refused improvement or maintenance work in their homes, although for around a third (32%) this had only happened ‘rarely’.

Just over half (52%) of providers reported they never experience refusals from tenants, as shown Figure 16. There was considerable variation by stock size and type of provider. Local Authorities and large and medium providers were more likely to have reported their tenants sometimes or often refused works. Around two in five Local Authorities (39%), medium providers (40%) and large providers (38%) had tenants often or sometimes refuse works compared to 12% of Housing Associations and seven per cent of small providers. This may largely reflect their likelihood to have undertaken maintenance and improvement work.

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25 2013/14 English Housing Survey as reported in ‘Decarbonisation of Social Housing: Literature Review’ (BEIS, 2020)
Figure 16. How often tenants refuse planned maintenance or improvement work

Source: SHDF Study – Survey. C1: “Generally speaking, how often do your customers who are offered planned maintenance and improvement work in their homes, refuse to have this completed?”. All providers (n=449), Housing Associations (N=416), Local Authorities (N=33), Small (N=348), Medium (N=67), Large (N=34). *Low base size, findings should be treated as indicative only.

Reasons for tenant refusal

The quantitative survey followed up providers reports of tenant refusal by asking those who had experienced refusals what the main drivers of tenants refusing works were. This covered refusals for general maintenance work as well as for energy performance improvement work amongst those who had carried it out.

Covid-19

When interviewed in early 2021 (during a UK lockdown period) Covid-19 was the most common reason why providers thought tenants had refused work (given by 64% of those who had had tenant refusals). This may flag that reported refusal rates were higher at the time of research than they would have been pre, or will be post, pandemic.
Figure 17. Main perceived drivers of tenant refusal of improvements (multiple responses allowed)

Change and disruption

Almost as frequent was providers feeling that tenants had refused work because they disliked change (62%) and / or the noise disruption of works (60%), as shown in Figure 17. Over a third of providers who had had tenant refusals considered this to be based on the time work would take (45%), rooms being unusable during the works (43%), uncertainty about how new measures would work (37%), and / or impact or risk of damage to property or furnishings (34%).

Fear of disruption was also discussed as a major barrier during the qualitative research. Providers were concerned that in cases where homes needed several measures worked on at once tenants would be unhappy once they realised the extent of disruption. Some providers could not envisage how they might go about managing the logistics of carrying out the work needed, with wall insulation installation taking up to a week and floor insulation installation not feasible whilst the home was occupied. Some providers reported they would have to wait until the properties were vacant, most commonly this was amongst providers with elderly or vulnerable tenants.

The usability of new systems was also a concern for some providers who were worried some of their tenants would not be able to operate them correctly. These providers reported their tenants were ‘resistant to change’, for example the lower but more consistent heat given by heat pumps was thought to make them less ‘usable’ as they did not react instantly to a change of setting as a gas boiler might. Some providers reported they had had to reduce the controls accessible to tenants as some tenants had struggled to adapt. Not being able to understand new systems was perceived to be a real concern for elderly and vulnerable tenants especially.
“Some of them beg for that simplicity [of a thermostat]” (Housing Association, Small)

Concern about costs for tenants
The qualitative interviews showed that concerns around potential increases to fuel bills were thought to be a major reason for refusal of works amongst tenants. This was also a concern commonly raised in other qualitative research amongst social housing tenants. Some providers reported that changing from natural gas to electricity or installing air source heat pumps had increased fuel bills for tenants. Those who had not undertaken any energy performance improvements, however, generally assumed improved performance would lead to lower bills; if this is not the outcome, they may have been far less positive about anticipated tenant reactions.

Variation of provider views by experience
Providers who had actually carried out energy performance improvements were more likely to consider many of the listed issues in Figure 17 as drivers of tenant refusal, than those who had not done so. For example, they were significantly more likely to report tenants disliking change (67% compared to 49% of those who had not carried out retrofit), and/or resistance to new technologies (37% compared to 16% of those who had not carried out energy performance improvements).

However, the qualitative interviews indicated providers who had not carried out energy performance improvements were more concerned about tenant refusals being a major problem in the future, to the extent that it was a factor in some being deterred from starting energy performance improvements. This variance perhaps reflects that the survey question focussed on which issues ‘are significant drivers’ whilst the qualitative work was also able to explore which were anticipated drivers. The survey also only asked whether the issues have been significant for the tenant (not the provider), whilst the qualitative work was able to explore the extent to which these concerns had impacted both.

There were no significant differences in reasons providers gave for tenant refusal by provider type, while – as one might expect – a greater number of barriers were cited among large providers compared to small providers, presumably due to the number of tenants they are responsible for.

Approaches to reduce tenant refusal
The qualitative study looked at how providers who have tackled tenant resistance to energy performance improvements (or to other work such as building safety) had done so.

Providers approaches to overcoming tenant resistance typically focussed on three main areas.

- **Communication / promotion of the work.** Some providers had run large-scale tenant consultations or had set up forums, learning from their approach to building safety changes. Some had created case studies or examples of how changes might affect

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tenant bills. Digital message boards in communal areas, roadshows, leaflets, videos and demonstrations have also been used.

- **Minimising disruption.** Providers had taken approaches such as scheduling heating works in the summer, integrating with their continuous maintenance programme, and undertaking external work first to build buy-in. Practical help (e.g. packing boxes) had been offered by some. Ensuring work was high quality was also flagged by some, to increase chances of tenant satisfaction. Providers flagged that standard supplier literature promoting aspects such as timed programmes to set heating upon a return from holiday might not be relevant to their lower income tenants.

- **Tenant education to drive behavioural change.** Some providers had built tenant education (e.g. how to operate new technology or components to maximise efficiency) into the installer’s contract, others had provided their own detailed guidance. Some had specialist support staff to assist older or more vulnerable tenants. Some providers had monitored progress towards behavioural change goals. Providers highlighted the desirability of engaging installers (or training their in-house staff) to educate tenants (e.g. how to minimise fuel bills without turning off heating completely) alongside energy performance improvements. However, even large and medium providers reported they had insufficient technical staff to provide the guidance residents need to benefit from changes and reduce energy use.

Some providers reported limited tenant engagement despite their efforts, highlighting the need to make clear that energy performance improvements are a pressing requirement given government targets, and the direct positive impact these changes could have on tenants’ homes. Ensuring the work leads to behavioural change (e.g. effective use of new controls, maintaining a steady rather than fluctuating temperature), may also be key, as this is perhaps more likely to lead to fuel bill reduction as it should reduce fuel consumption.

Providers reported the primary ‘selling point’ is a potential reduction in fuel bills (though as noted above, some providers report this is not always the result). Where providers were certain it would reduce costs they felt there was scope to strengthen the link between energy performance improvements and lower costs in tenants’ minds.

“I don’t think tenants have made the connection between retrofitting and putting money back in their pockets”. *(Housing Association, Medium)*

This reflects findings of a 2013 study which concluded public awareness of the benefits of retrofit cannot be assumed.27

Improving comfort was also thought to be a pull factor for many tenants by providers. A few providers thought that common tenant concerns with mould or damp could be addressed through new heating systems (though there was also concern that better insulation might reduce ventilation and worsen problems). One small study amongst tenants found that thermo-comfort was more important to tenants than reduced bills, but whilst providers in this research

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Some providers felt their tenants welcomed any work if it was presented as investment in their property.

**Extent to which tenants are perceived to be a barrier to energy performance improvement plans**

Whilst this chapter has explored whether tenants cause, or are likely to cause, any difficulties in undertaking energy performance improvement works it is key to place this in the context of whether these would be a ‘showstopper’. The extent of the impact of perceived tenants’ views was explored in both the qualitative and quantitative parts of the study. It was found that the anticipated reactions of tenants were generally not a deciding factor in whether providers improve energy performance (or whether they might apply for the SHDF).

Overall, 13% of providers reported that resistance from tenants had been a barrier to their energy performance improvement plans since 2010. This reflects the views of all providers about the impact on potential plans, not only the experience of those who have experience of energy performance improvement works. As reported in the Reasons for tenant refusal section, issues with tenants were less likely to have been a barrier than a number of other issues including a lack of budget, a lack of skills or experience, government policy and Covid-19.

Resistance from tenants was more likely to have been a barrier to energy performance improvement plans for medium (33%) and large providers (38%) compared to small providers (7%). Local Authorities were also more likely to report resistance from tenants (27% compared to 12% of Housing Associations). This largely reflects that large and medium organisations and Local Authorities listed more barriers, whilst smaller organisations and Housing Associations were more likely to report that they had not faced any issues (often as they had not undertaken any such work and were less likely to have plans to). There was no marked difference in perceived tenant resistance by region.

The qualitative interviews similarly found that tenant views were not pivotal:

- The majority of providers who were improving energy performance, or in the process of planning to, did not flag tenant concerns as an area in which they need additional support.

- For those who did not have energy performance improvement plans concerns around costs and internal resources outweigh those regarding tenants.

- Some Local Authorities did not see that the tenants’ views would be a significant barrier and did not anticipate consultation before introducing energy performance improvements.

For the few providers who did raise tenant views as a barrier to SHDF application (or energy performance improvements more widely) this was specifically based on how they thought

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tenants would react to disruption, worries that tenants would not see a benefit or see the work as unnecessary and/or that tenants may not want to lose control over their utility set up.

“We can’t force this work in the same way as we can if there’s a faulty gas boiler.”  
(Housing Association, Large)

A few providers conversely thought tenant views would be a driver toward SHDF take up; that if the work was being part-funded from elsewhere they would more readily accept changes they may not consider essential. One example was the ability funding might give providers to ‘front-load’ work and so futureproof homes from further disruption (whereas if providers were reliant on their own funding the work would have to be staged over a longer timeframe).

“If there was money available to do this work we would drum up a lot of support from our tenants.” (Housing Association, Large)

Small providers were more likely to consider that tenants’ views might be a barrier, though they were also less likely to be aware of what these views might be. For example, tenants of a small co-operative had voted to reject installation of smart meters and so the provider assumed other changes which may improve energy performance would also be rejected by tenants, though these had not been discussed.

The qualitative interviews also showed there was some differentiation in provider views based on whether they had experience with energy performance improvements.

- **Providers who had energy performance improvement experience** (who also tended to be the large and medium providers) generally anticipated some ‘resistance’ from tenants, but that it would not be a major issue.

- **Those who were planning to start energy performance improvements** frequently assumed tenants would be ‘grateful’ for the work and present little difficulty.

- **Providers who had not conducted energy performance improvements nor have any plans to (which tended to be the small providers)** more often cited tenants as a perceived potential major barrier.

- Whilst it did not commonly drive decision-making, tenants’ anticipated reactions were taken into account by many providers. Some providers did raise the need for support with how to design programmes of work to minimise disruption, and how best to communicate with tenants.

**Summary**

Most providers assumed that the majority of their tenants would have no real interest in energy performance improvements for their home. There was a general consensus amongst providers that any tenant interest in energy performance improvements was almost entirely driven by their desire to reduce fuel poverty, and not by environmental concerns. Providers themselves were frequently concerned whether any changes might lead to increased energy bills for tenants.

In terms of tenants actually having refused maintenance on their homes, providers’ experience was mixed. Almost half (46%) reported that tenants had refused improvement or maintenance work in their homes, although 32% reported this happened only on rare occasions. Covid-19
was the most common reason providers thought tenants would refuse work (by 64% of those who had tenant refusals), indicating these reported refusal rates may have been higher at the time of research than they will be post pandemic.

The anticipated reactions of tenants were generally not a deciding factor in whether providers carry out energy performance improvements (or whether they might apply for the SHDF), although the qualitative interviews showed there was some differentiation in provider views based on whether they had experience with retrofitting. Providers who had experience of energy improvement works generally anticipated some ‘resistance’ from tenants but felt it would not be a major issue.
Mixed tenure considerations

Within this research mixed tenure was defined as follows:

Mixed tenure housing is where residents within a residential development are living there under different tenure options. For example, where within a block of flats or within a street, some homes are privately owned by residents, whilst others are rented from a social housing provider. Homes may be owned via shared ownership schemes, Right to Buy schemes, outright and so on.

There is a concern that leasehold properties within mixed tenure development may not be included by providers in their energy performance improvement works, and that this may affect the overall improvement plans and resulting efficiencies; or, that the issues faced by leaseholders may impact on social housing providers’ retrofit activities.

This chapter sets out the extent to which developments being mixed tenure was a consideration for providers when conducting or planning energy performance improvement work. It also explains how providers plan to address any issues.

Prevalence of mixed tenure blocks

Initially this section sets out the proportion of units owned by providers which are in mixed tenure blocks to establish how widespread mixed tenure blocks are amongst the research participants. It then looks in more detail at the make-up of these mixed blocks, reporting the proportion of homes owned by others (leasehold or shared ownership) within any mixed tenure blocks the provider has, to establish the relative volume of those owned and not owned by providers.

Proportion of all provider’s stock in mixed tenure blocks

Firstly, the quantitative study sought to establish how widespread mixed tenure blocks were amongst providers participating in the study. This does not provide a definitive measure of how many providers in England overall have mixed tenure blocks, only amongst research participants.

Around three-in-ten providers (29%) who participated in the quantitative survey had homes which were in mixed tenure blocks. As shown in Figure 18, 14% of providers had a very low proportion of their stock in mixed tenure blocks, only 4% had a fairly low or fairly high proportion of stock in mixed tenure blocks.
Local Authorities (79%) and large (91%) and medium (69%) providers were more likely to have mixed tenure blocks. They were also more likely to have higher proportions of homes in mixed blocks - for 30% of Local Authorities, 22% of medium and 24% of large providers, a high proportion of homes were in mixed tenure blocks (compared to 10% of Housing Associations and 8% of small providers homes).

Providers with stock in multiple regions were twice as likely to have homes in mixed tenure blocks as those with stock only in one region (50% compared to 26%).

**Leasehold or shared ownership homes within the provider's mixed tenure blocks**

Amongst the minority of providers who had mixed tenure blocks it was most common for leasehold or shared ownership properties to make up a very low proportion properties in the mixed block (36% of those with mixed tenure). A shown in Figure 19, a further fifth (21%) had a
fairly low proportion of homes in their mixed blocks owned by others, and only a small proportion (6%) had a fairly or very high of properties in their shared blocks owned by others.

A notable minority of providers with mixed tenure blocks were unsure what proportion of homes within their mixed blocks were owned by others – this may partly have been as it varies too much between blocks but could also indicate that some providers have not yet considered the extent of the issue.

Figure 19. Typical proportion of leasehold or shared ownership homes within mixed tenure blocks (amongst those with mixed tenure)

Source: SHDF Study – Survey. A6: “Within these mixed tenure blocks, approximately what percentage of homes are leasehold or shared ownership?” Providers with homes in mixed tenure blocks (N=128). Please note percentages don’t add up to 100% due to rounding.

Providers with stock mainly in London were less likely to have had mixed tenure blocks, but those that do have such blocks reported a high proportion of leasehold or shared ownership properties in these mixed blocks. So, whilst they are less widespread in London, those that do have mixed tenure may face a trickier resident base.

Impact of mixed tenure blocks

Energy performance improvement work carried out on mixed tenure blocks

Amongst providers with homes in mixed tenure blocks the study sought to establish the impact mixed ownership had on work carried out so far. This section therefore reflects actual experience, although the impact may have been to not undertake work as not all providers have undertaken energy performance improvement work on mixed tenure blocks.

Since 2010, two-fifths (40%) of providers with mixed tenure blocks have carried out energy performance improvement work on these blocks. This is lower than the 65% of providers who had carried out such work on their stock in general.

Amongst those providers who had carried out energy performance improvement work on some stock, only half (49%) had done so on their mixed tenure properties. A further eight per cent were unsure if this energy performance improvement work had been carried out on their mixed tenure blocks.

29 Base is 16 so these findings should be treated with caution, as indicative only.
Providers were asked whether their having mixed tenure blocks as part of their stock impacted the amount of energy performance improvement work they have carried out since 2010, for example resulting in cancellations, alterations or delays. While three-in-five (61%) reported it had a (fairly) low impact, there was a small proportion (11%) citing a (fairly) high impact, as shown in Figure 20. This rises to 19% of Local Authorities and 16% of large providers, who were more likely to have undertaken such work.  

**Figure 20. Extent to which having mixed tenure blocks has impacted amount of energy performance improvement work carried out**

Providers with lower proportions of homes in mixed blocks (74%), and those with lower proportions of leasehold or shared ownership properties within those blocks (71%) were more likely to say the impact of these blocks on their energy performance improvement work was low, compared to 61% overall (perhaps indicating focus on their other properties).

Mixed tenure blocks are likely to affect future energy performance improvement plans more than they have impacted previous works. One-in-five (20%) providers with mixed tenure blocks reported it would have a high or fairly high impact. It was still more common though for providers to think the mixed tenure element would have a low impact.

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30 Base is 26 for Local Authorities and 31 for large providers so these findings should be treated with caution, as indicative only.
Figure 21. Extent to which having mixed tenure blocks impacts future energy performance improvement plans or ambitions

<table>
<thead>
<tr>
<th>Tenure Block Size</th>
<th>Not Sure</th>
<th>High Impact</th>
<th>Fairly High</th>
<th>Neither High nor Low</th>
<th>Fairly Low</th>
<th>Low Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those with homes in mixed tenure blocks</td>
<td>8%</td>
<td>7%</td>
<td>13%</td>
<td>25%</td>
<td>38%</td>
<td>LOW: 48%</td>
</tr>
<tr>
<td>Small (&lt;1,000)</td>
<td>4%</td>
<td>2%</td>
<td>8%</td>
<td>27%</td>
<td>51%</td>
<td>LOW: 59%</td>
</tr>
<tr>
<td>Medium (1,000 - 10,000)</td>
<td>7%</td>
<td>11%</td>
<td>11%</td>
<td>24%</td>
<td>28%</td>
<td>LOW: 39%</td>
</tr>
<tr>
<td>Large (10,000+)</td>
<td>3%</td>
<td>13%</td>
<td>19%</td>
<td>23%</td>
<td>29%</td>
<td>LOW: 42%</td>
</tr>
</tbody>
</table>

Source: SHDF Study – Survey. D3: “To what extent does having mixed tenure blocks impact your future plans and ambitions for decarbonisation and energy performance work?” Providers with homes in mixed tenure blocks (N=128), Small (N=51), Medium (N=46), Large (N=31). *Low base size, findings should be treated as indicative only. Please note percentages don’t add up to 100% due to rounding.

Similarly, providers with mixed tenure blocks were more likely to report tenant resistance as a barrier to their energy performance improvement plans (27% versus 7% of those without mixed tenure). It may be that these providers are considering leaseholders or shared ownership properties here rather than their own tenants.

Issues with energy performance improvement work on mixed tenure blocks

Providers with mixed tenure blocks were also asked more explicitly about whether they had faced specific issues such as delays. This reflected experiences of works in general, not specifically issues experienced during energy improvement works, but is indicative of the scale of issues providers may face for these type of programmes.

Reflecting the relatively low impact of mixed tenure blocks providers reported on energy performance improvement work undertaken so far, three-in-five (59%) providers with mixed tenure blocks had not previously experienced any issues with works on these blocks, as shown in Figure 22. This included any type of work such as general maintenance or improvements but would also include energy performance improvement work for some. Where providers had experienced a problem, it was most commonly a delayed start to the works (23% of those with mixed blocks), followed by delays during the works (14%) and / or having had to alter plans or specifications (13%).
Flagging more fundamental challenges (possibly related to recouping costs or access refusal) 13% of providers with mixed tenure blocks had de-prioritised works on mixed blocks and 5% had cancelled them.

**Figure 22. Issues with works as result of mixed tenure blocks (multiple responses allowed)**

- **Delayed start**: 23%
- **Delay during**: 14%
- **Altered plan / specification**: 13%
- **De-prioritised mixed-tenure**: 13%
- **Cancelled**: 5%
- **Other**: 4%
- **Not sure**: 4%
- **None of the above**: 59%

Source: SHDF Study – Survey. D4: “In the past 10 years, have you done any of the following as a result of issues with mixed tenure blocks?” (multiple responses allowed). Providers with homes in mixed tenure blocks (N=128).

- Small providers with mixed blocks were more likely to report having experienced none of these issues (76% none, compared to 42% of large providers and 52% of medium providers). This may reflect the smaller scale of works likely to have been attempted.
- Providers who had specifically undertaken energy performance improvement work on their mixed tenure blocks were more likely to have experienced delays to the start of works (37%) and / or alterations (25%) and were less likely to report no issues (41%) than providers with mixed tenure who have not undertaken any energy performance improvements as yet (though they may have undertaken other types of work).

Providers with mixed tenure blocks were asked how likely the recouperation of costs from leaseholders and shared owners would be a barrier to carrying out energy performance improvement works. Just over half (53%) reported that this would likely be a barrier (26% stated it would be ‘very’ likely).

As Figure 23, shows, a notable proportion (12%) were unsure if this might be an issue, indicating a lack of experience / exploratory investigation.
Figure 23. Likelihood cost recuperation from leaseholders and shared owners will be a barrier to carrying out energy performance improvement works on mixed tenure blocks

As Figure 23 shows, large providers were more likely to think cost recuperation would be a barrier, 71% compared to 33% of small providers. This may reflect that they were more likely to have undertaken works on these blocks previously, or to have started an energy performance improvement programme, as well as their likelihood to have higher proportions of leaseholders or shared owners within their mixed blocks.

During the qualitative interviews providers often described it as ‘too complicated’ to consider decarbonisation work in mixed tenure blocks; it was identified as a ‘thorny issue’.

‘It [dealing with private leaseholders and passing on costs] is something we tread very carefully on. It is something I have had people express concerns about in the past and be unhappy about.’ (Housing Association, Large)

A few providers reported their general ‘frustration’ with some absent private landlords who are at times unwilling to contribute to costs and that this might ultimately result in extra costs being passed on to the provider’s tenants (who are often on lower incomes) rather than being covered by the leaseholders or shared owners. They were concerned that such landlords had no incentive to improve energy performance and would refuse requests for financial contribution.

‘Absent landlords . . . don’t want to pay £10,000 so someone else can save money on their electric bill.’ (Housing Association, Medium)
Other providers felt leaseholders would be positive about the work, but their response would purely be based on whether they felt the cost reasonable and affordable and / or whether they themselves had access to Green Finance.

As for many providers the proportion of properties that were mixed tenure is relatively small, their impact on energy performance improvement works was not seen as a major concern sector-wide. Many providers with mixed tenure blocks do not appear to have fully considered how they will deal with the situation and so viewed it as a minor planning point. However, for those that do have a higher proportion of such properties there were few positive strategies in place.

Potential ways to address issues with energy performance improvement work on mixed tenure blocks

The qualitative interviews explored how those providers who had tackled energy performance improvements (or in some cases other types of works) in mixed tenure blocks had done so.

Typically, providers did not have clear strategies for addressing these issues. Commonly their attention would be directed to non-mixed stock first, mixed tenure blocks were treated as a lower priority due to their perceived complexity. Some were also ignorant to the potential challenges these situations might raise, especially providers with less experience.

Most providers interviewed ultimately felt leaseholders would have to pay for any energy performance improvement work deemed essential. Several reported they would simply pass costs on to leaseholders, but most raised some concerns about how this would work in practice, aware that it might be difficult for leaseholders to meet their demands.

Providers with less experience of carrying out work and organising payment in mixed tenure blocks were more likely to assume recouping payment would be straightforward. Providers who did have experience dealing with similar situations previously, were generally less optimistic about recouping costs.31 These had used two main approaches:

- Covered the costs for all homes in the block, including those they do not own. This approach had precedents, for example when funding cladding or other external works, where providers felt 'leaving out' some properties would negatively affect the overall aesthetic. However, a couple of providers had omitted homes they did not own from such work.

- When they had implemented building safety measures some providers had set up payment plans, for example requiring payment from leaseholders only when properties were sold.

However, flagging that some providers assumed recouping costs would be very difficult, some were considering consolidating blocks by buying-back or selling off properties. For example, one medium sized Housing Association had undertaken work to establish the EPC rating of their stock and the measures needed to bring their homes up to a minimum of C or be carbon neutral by 2050. It was then considering buy-backs as the volume and scale of work required meant it would be make more financial sense to redevelop entire blocks. Another large Housing Association was considering avoiding making changes to mixed tenure blocks and so

was deciding whether to buy other residents out, subsidise works or sell mixed blocks off entirely.

Green finance for leaseholders was rarely raised spontaneously by providers, though a couple either suggested that offering it as part of a package would enable leaseholder participation or that they had received an enquiry about it from a leaseholder.

Summary

Around three-in-ten providers in the survey (29%) had homes in mixed tenure blocks. Amongst this minority it was most common for leasehold or shared ownership properties to make up a very low proportion of the block.

Amongst those providers who had carried out energy performance improvement work on some stock, only half (49%) had included their mixed tenure properties. Providers often described it as ‘too complicated’ to consider energy performance improvement work in mixed tenure blocks.

Although three in five (59%) providers with mixed tenure blocks had not experienced issues with works on these blocks, 13% of providers with mixed tenure blocks had de-prioritised works on mixed blocks and five per cent had cancelled them, possibly flagging that issues faced by leaseholders meeting their requirements led to challenges related to recouping costs or refusal of access.

Just over half (53%) of providers with mixed tenure blocks said that it was likely that recuperation of costs from leaseholders and shared owners would be a barrier to carrying out energy performance works on these blocks.

The scale of work to be undertaken on non-mixed stock was generally consuming all attention, it left little scope for mixed-tenure considerations for the many providers who were only at early stages in the energy performance improvement planning process.
Social Housing Decarbonisation Fund (SHDF)

BEIS were keen to understand how social landlords are likely to react to the SHDF. This chapter therefore looks at the likelihood of providers applying for the funding and factors impacting this. BEIS are developing a technical assistance facility (TAF), as part of the fund design, to support social landlords in accessing funding and developing energy performance improvement plans. This chapter reports what support offered by the TAF would be most beneficial to different types and sizes of provider. The chapter begins by reporting how clear providers thought central government policy regarding retrofitting is.

Government retrofitting policy

In November 2020, just prior to this research being conducted, the Government published the Social Housing White Paper where they have committed to review the Decent Homes Standard to consider how it can better support the decarbonisation and energy efficiency of social homes.32 The Government will consider the ambition set in the Clean Growth Strategy that all homes should meet Energy Performance Band C by 2035, where practical, cost effective and affordable.

Providers were asked if central government policy is clear on retrofitting to improve decarbonisation and energy performance. As shown in Figure 24, three-in-ten providers thought it was ‘very’ or ‘fairly’ clear (29%) whilst almost half said it was ‘not very clear’ or ‘not clear at all’ (48%). Around a quarter (23%) were unsure. This is especially significant given that 34% of providers reported clarity / content of government policy as being a barrier (the third most frequent) they had experienced in their decarbonisation planning (see section Barriers to energy performance improvement plans).

Differences in both knowledge of policy and views on policy clarity by provider size from the qualitative interviews and the survey indicate that large providers were more likely to know what the policy is but less likely to find it clear. Four-in-five large providers (82%) thought policy was unclear compared to 43% of small providers and 58% of medium providers. Small providers were notably more likely to be ‘not sure’ how clear policy is (29% compared to only 4% of medium and 0% of large providers), although those that were able to rate its clarity were less negative than large providers.

32 The charter for social housing residents: social housing white paper - GOV.UK (www.gov.uk)
Figure 24. How clear do providers think central government retrofitting policy is?

Source: SHDF Study – Survey. E9: “How clear, if at all, do you think central government policy is on retrofitting to improve decarbonisation and energy performance?” All providers (N=449), Small (N=348), Medium (N=67), Large (N=34), *Low base size, findings should be treated as indicative only. Please note percentages don’t add up to 100% due to rounding

Small providers, who felt less aware of what government policy is (according to the qualitative interviews), sometimes felt that this was because they were missed out when it came to the dissemination of information from government, or that no help was given to allow them to engage more with policy.

“I think the smaller cooperatives like ourselves, we are taken out of the loop and they focus on councils and larger housing associations” (Housing Association, Small)

“It's something we should have been informed about rather than having to search for the latest policies.” (Housing Association, Small)

Higher levels of clarity were also seen among:

- Providers who had carried out retrofitting work to improve the energy performance of their homes in last 10 years (32% vs 21% of to those who had not). It may be that these providers were aware of Government policy and so carried out the work, or vice versa, that they became aware of policy whilst conducting the work.

- Providers who were aware of the SHDF (35%) compared to those who were not aware of it (25%).

There were few differences reported between Local Authorities and Housing Associations.

The qualitative interviews provided more detail on what expectations providers had with regards to the clarity of the government’s retrofitting policy. In particular, a few felt that whilst broader policy aims and targets might be clear, understanding how the social housing sector could achieve these aims and targets is not.
“It is becoming more and more understandable. But I don’t think it is quite there yet…They have made it… very clear that in terms of private landlords, there is an expectation on the minimum energy performance standards. I don’t think that’s necessarily been fully understood as to what that should be for social housing.” (Housing Association, Large)

“It’s emerging, direction of travel is clear, but the standards aren’t clear if it is private housing or social housing.” (Housing Association, Medium)

‘Not really [clear], not in terms of the retrofitting agenda. It’s certainly clear on its commitment by 2050 to get to net zero, which is really helpful…But not what measures, and certainly [the policy is unclear] where those measures would be deemed excessive or too difficult to apply.’ (Housing Association, Large)

Some providers may also need more guidance to address their reluctance to conduct energy improvement measures that may result in greater energy bills / higher incidences of fuel poverty amongst their tenants e.g. the replacement of gas boilers with electric.

**Awareness of the fund**

Once a brief outline of the scheme was given, a third (34%) of all providers confirmed they had heard about the SHDF prior to taking part in the research\(^\text{33}\), as shown in Figure 25.

Levels of awareness varied considerably across providers. For example, small providers were much less likely to have heard of the fund (19%) compared to medium (81%) and large (97%) providers. Eighty-five percent of Local Authorities had an awareness of the fund compared to 30% of Housing Associations. It is important to remember that only 34 large providers and 33 Local Authorities took part in the survey and so results should be interpreted with caution.

\(^{33}\text{When introducing the research, the study was pitched as focussing on “the views of social landlords about retrofitting their housing stock to improve energy performance”, as opposed to a focus on the SHDF itself.}\)
There were no differences in awareness amongst providers based on region, although those who had homes in more than two regions were more likely to have heard of the fund (possibly linked to their size).

Providers who were more likely to have heard of the fund included:

- Providers who had carried out work to improve the energy performance of their homes in the past 10 years compared to those who had not carried out any such work (40% vs 23%).
- Providers who had a dedicated energy performance improvement budget compared to those who do not (57% vs 41%).
- Providers who had plans to improve the energy performance of any of their homes (in the next 10 years) compared to those who do not (41% vs 15%).

There was not a great deal of clarity from providers who had heard of the fund about where they had heard of, or who from. Some mentioned hearing about it through colleagues and emails (without specifics), whilst others mentioned sector press/association communications e.g. Inside Housing and the National Housing Federation. A handful mentioned hearing about it through the 2019 manifesto, where SHDF was first introduced. Only one provider mentioned the Social Housing White Paper (launched in November 2020), despite this making reference to the SHDF and being a prominent paper in the housing sector.

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34 SHDF will run from financial year 2021/22 to the end of financial year 2029/30.
Likelihood to apply to the fund

While awareness was relatively low, the majority (78%) of providers said they were fairly (48%) or very (29%) likely to apply to the SHDF (based on their prior knowledge or the brief outline given in the survey). Only 15% said that they would be unlikely to apply, with seven per cent not sure, as shown Figure 26. Eighty-one percent of providers who had conducted some retrofitting work to improve energy performance in last 10 years said they were likely to apply to the fund. Reasons impacting likelihood to apply are detailed later in this chapter.

Figure 26. How likely are providers to apply for the SHDF?

Source: SHDF Study – Survey. E12: “How likely, if at all, do you think your organisation would be to apply for the Social Housing Decarbonisation Fund?” All providers (N=449). Please note percentages don’t add up to 100% due to rounding.

Reflecting awareness of the fund by provider size, medium and large providers were more likely to report they would apply to the fund than small providers. Almost all medium (99%) and large (97%) providers said they were likely to apply compared to 72% of small providers, as shown in Figure 27. Almost all Local Authorities said they were likely to apply (94%) compared to 76% of Housing Associations.
Seven-in-ten providers (68%) in rural areas reported that they would likely apply to the SHDF, whereas 80% of those in urban areas reported this.

Providers who had been aware of the SHDF before taking part in the research were more likely to apply than those who had not heard of the SHDF (86% vs 74%). This indicates that the likelihood of applying might increase over time as more providers become aware and familiar with the fund, although there may be other factors that will impact likelihood to apply (as discussed in more detail below). The findings suggest that those who were aware and knew something about the fund have a positive view of it. The fact that three-quarters of providers, who hadn’t heard of the fund prior to their participation in the research, are likely to apply based on the brief outline provided indicates a positive reaction to the fund in principle.

The qualitative interviews revealed that the draw of financial support to support decarbonisation efforts was a game-changer:

“If the money is available and we could improve the buildings…. Nothing (would stop us).” (Housing Association, Small)

This was reflected in the survey when providers were asked whether they had experienced any barriers to their decarbonisation plans since 2010. As discussed in the Barriers to energy performance improvement plans section, the most common barrier selected was a lack of budget/finance (42%).

In the qualitative interviews, providers were asked about what factors may impact their likelihood of applying to the fund. Providers identified a number of factors which, amongst those likely to apply to the SHDF, broadly fell into the following three categories:
1. **The application process itself.** Many providers mentioned that the application process itself would impact the ability of their organisation to apply, as opposed to impacting their interest in applying. Factors included how much time providers would have to write and submit their applications, how much internal resource they had available to pull together a viable bid, as well as how clear the overall process was.

2. **The eligibility criteria of the fund.** Some providers were unsure what the criteria of the fund would be and therefore whether they would be eligible to apply. For example, one provider thought they would not be able to apply because all of their homes already have an EPC rating of C or higher.

3. **The amount of money that would be made available.** Providers either spoke about the amount of money that would be made available in overall terms, or how much match-funding they might need to provide themselves.

Providers will ultimately decide whether the time, effort and resource required to apply for the SHDF would be worthwhile based on the amount of money made available and the plans they would therefore be able to realise (a cost-benefit consideration):

"It will come down to the level of resource required to access the funding in relation to the benefit that it gives back" (Housing Association, Large)

Amongst those providers interviewed who said they were less likely to apply, some additional factors were mentioned:

- They did not have retrofit plans finalised to an extent that would warrant applying for external funding of this kind at this stage:
  
  "We are not in a position to apply for it now. We don’t have a clear enough picture of what we need to do in what order, to what properties, to make beneficial use of it." (Housing Association, Medium)

- A lack of confidence in the sector to deliver the quality of the work yet or general concerns regarding the supply chain.
  
  "Is there enough capacity in the market for everyone like us to go out and achieve that?" (Housing Association, Large)

Ways in which the design of the fund, its application process and TAF could help address some of the factors raised by providers are discussed in more detail in the next section.

Those taking part in qualitative interviews were asked a handful of questions regarding the process of submitting an application e.g. “Who would ultimately decide whether or not your organisation would apply?” and “Who would make the application?”. Overall, the envisaged process amongst the Housing Associations interviewed was fairly standardised.**35** Staff whose roles included retrofitting or decarbonisation work would put together a recommendation to apply for the organisation’s board or executive team to then review. A handful of providers mentioned that their board or executive teams would likely approve the desire to apply as it fits with their current strategy and priorities. The majority of providers would try and write the application bid internally, although some mentioned procuring external support (e.g."

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**35** Only three Local Authorities were asked these questions limiting what conclusions can be made.
consultants) to help with this. The work itself would be carried out by external suppliers and contractors for most although some had internal teams.

Support needed by providers

As mentioned at the start of this chapter, to help deliver the fund BEIS will create a technical assistance facility (TAF) to support social landlords in accessing funding and developing energy performance improvement plans. Providers were asked questions in both strands of the research to ascertain uptake of the TAF and what support different providers might require.

Of providers who said they were likely to apply to the SHDF, 90% said that they would be likely to seek support from a TAF, as shown in Figure 28.

**Figure 28. How likely are providers to seek support from a TAF?**

Source: SHDF Study – Survey. E14: “BEIS also intends to set up a TAF to provide technical support to those applying to the fund. How likely would you be to seek support from this to apply for the fund?” All providers who said they were likely to apply for SHDF (N=349)

High proportions of providers reported they were likely to seek support from the TAF, regardless of whether or not they had already carried out retrofitting work on their homes to improve energy performance. Ninety-two percent of those who had carried out such work and 83% of providers who had not indicated they would be likely to seek support.

Overall, based on both strands of the research it is clear that providers welcomed the inclusion of a TAF in regards to the SHDF:

“I am really heartened to hear about the TAF… I would welcome any engagement we could have with them.” (Housing Association, Large)

When providers were asked in the qualitative interviews what type of support would be beneficial to applying to the fund, answers broadly fitted into two categories which are
discussed in more detail below: support to address a lack of technical knowledge and skills, and support with the application process itself. On the whole, large and medium providers were more concerned about the application process and wanting to know how to submit a good application which was likely to succeed, whereas smaller organisations seemed to want and need more wholesale support and advice.

Support to address a lack of technical knowledge and skills

Providers suggested a range of ways support could be provided to support technical knowledge and skills. Some solutions were for BEIS to provide examples of suitable retrofit schemes. For instance, providing case studies of what schemes would make more sense for different housing types as well as which housing types would be more or less financially viable to retrofit.

“There’s only going to be a limited number of archetypes. And it’s only going to be a limited number of technologies we’re looking at. So really, they [BEIS] could probably standardise a suite of specifications which would probably support a number of us.” (Housing Association, Medium)

Smaller providers in particular would welcome the opportunity to speak to someone on a regular basis about their retrofit plans and their bid. This ranged from simply having an email contact of someone who could answer questions, to having a dedicated consultant (either from BEIS or paid for by BEIS) to discuss ideas, advise on bid content and review applications.

“It’d be good to have like a case consultant that you could speak to and say… “This is what we’re thinking of doing”…a human being that I can speak to, if I run into difficulties to say what should I do here…” (Housing Association, Small)

“None of us are experts. Some of us think we are. We’re just ordinary people and usually these things are highly technical and difficult to get your head around, so right from the beginning it would be great to have somebody guiding us through. Preferably the same person.” (Housing Association, Small)

“I would benefit hugely from getting somebody to come in and tell us what we could do, because I, you know, I know nothing…It would be support, not just on the energy side of things because we are, you know, 400 year old listed buildings… We’re a board of lay people, we don’t have expertise on either the energy side or the planning side. So we would welcome as much support as we could get. And the more support we got, the more likely it would be that we would be able to develop and do something good.” (Housing Association, Small)

Some providers also mentioned having funding available to hire external experts who could advise and provide technical knowledge.

Support with the application process itself

Providers also highlighted that the application process needed to be as clear and transparent as possible. This was felt to be something that would make them more likely to apply, but also lead to a more positive overall experience when engaging with the process. Information that providers mentioned as helpful to know upfront included the terms and conditions of spending as well as knowing what BEIS are expecting providers to achieve with the funding and in what timescales.
Providers wanted to have **transparency regarding how bids would be assessed**. This was felt to be important for two reasons: ensuring that providers knew what information was needed, but also to establish whether or not they had a genuine chance of securing funding. Particularly amongst smaller providers, many wanted to see ‘what good looks like’. This was felt essential to providers being able to submit a viable bid as well as knowing how competitive the process would be. Providers mentioned having **examples of what good bids would include** and what a successful bids would look like.

“We don’t know what successful bids have been in the past.” (Housing Association, Small)

"If you’re asking us to compete with big landlords then that’s difficult for us to do". (Housing Association, Small)

Building on this desire to have examples of high-quality bids, a handful of providers suggested having **someone review their bid** before submission.

Finally, a common theme which impacted how providers would view the application process, related to **timescales**. As mentioned in the above, unrealistic timescales would impact some providers’ likelihood to apply for funding.

“The biggest issue is with timescales in terms of responses required from us” (Local Authority, Large)

"A lot of these funds are announced, and you’ve got 4 weeks to pull something together which is impossible unless you’ve got something ready" (Local Authority, Medium)

Linked to timescales, a couple of providers mentioned that having multiple submission windows would be advantageous. This was felt beneficial for two reasons: to ensure providers only applied when they were ready and to prevent all providers needing to hire contractors to carry out the work during the same period of time.

**Summary**

Three-in-ten providers thought that central government policy regarding energy performance retrofitting was ‘very’ or ‘fairly’ clear (29%) whilst almost half said it was ‘not very clear’ or ‘not clear at all’ (48%). Around a quarter (23%) were unsure. Small providers were less likely than large providers to know what government policy on retrofitting was, and – as found in the qualitative interviews – some felt that this was because they were missed out from government communications, or that they receive little support to engage more on policy issues.

Around a third (34%) had heard of the SHDF, but levels of awareness varied considerably across providers. While awareness was relatively low, the majority (78%) of providers were quite likely to apply (48% ‘very likely’ and a further 29% ‘fairly likely’).

A number of factors were felt to impact providers likelihood to apply to the fund. These broadly fell into three categories: the application process itself e.g. how long they had to apply, whether they would meet the eligibility criteria of the fund and the amount of money that will be made available i.e. how much match-funding they might need to provide themselves. It is therefore crucial that this information is provided upfront in a clear and detailed manner.
It is clear that providers welcomed the inclusion of a TAF in regards to the SHDF, with 90% of those surveyed reporting that they would likely seek support from this facility. When providers were asked what type of support would be beneficial to applying to the fund, answers broadly fit into two categories: support to address a lack of technical knowledge and skills, and support with the application process itself. On the whole, large and medium providers were more concerned about the application process and wanting to know how to submit a good application likely to succeed, whereas smaller organisations seemed to want and need more wholesale support and advice.
Appendix A – Research Questions

This report seeks to answer 12 core research questions as posed by BEIS:

- What is the current state of knowledge of stock amongst social housing providers?
- What is the decision-making process on property maintenance and improvement amongst social housing providers?
- How do social housing providers plan and implement improvements to their properties?
- What level of retrofit are social housing providers likely to use the fund for (i.e. smaller measures or Whole House Retrofit)?
- In which circumstances do tenants refuse maintenance/how often does this happen? How do social housing providers go about getting agreement for works from tenants?
- How do social housing providers plan to encourage tenants to accept maintenance?
- Are there particular technologies/types of maintenance that are more appealing to tenants?
- How do social housing providers order events or maintenance to ensure tenant agreement?
- How many social housing blocks are mixed tenure (also containing leasehold properties)?
- If leasehold properties were not able to be included in the energy performance improvement works, how would that affect social housing providers improvement plans? (including which measures)
- What would increase the likelihood of leasehold properties in mixed tenure blocks participating in renovations? Would green finance help with these issues?
- How are social housing providers likely to react to the scheme?
Appendix B – In-depth Interview Topic Guide

Background & ambitions around retrofitting energy efficiency improvements

1. We’d like to understand how advanced your decarbonisation planning is. Does your organisation have any plans to decarbonise, and/or improve the energy efficiency of your current housing stock in the next 5 to 10 years?
   • IF HAVE PLANS:
     • What are they?
     • Do you have any set targets/timescales?
     • Are there any potential barriers to these plans? (e.g. has internal or external funding been identified and agreed/do they involve other investors or partnerships?)
     • Do you plan to have a decarbonisation or energy efficiency budget separate from your regular maintenance budget? (IF NOT: Which budget would any spending on these areas come from?)

IF HAVE PLANS:

2. What are the key drivers and desired outcomes of your current decarbonisation plans?
   • PROMPT IF NO MENTION: Pre-empting new government or regulatory/legal minimum standards/targets, climate change, fuel poverty

IF NO PLANS:

3. Why do you think that is? What might make your organisation more likely to consider energy efficiency improvements over the next 5-10 years?
   • PROMPT IF NO MENTION: New government or regulatory/legal minimum standards/targets, climate change, fuel poverty
Experiences of retrofitting (10 mins)

Thank you. I’d like to move on to talk about your experience of retrofitting

4. Which household components do you currently include in your planned works cycles? E.g. Kitchens, bathrooms, double glazing. PROBE FOR ANY AIMED AT IMPROVING ENERGY EFFICIENCY
   • How often do you do planned work or improvements to your existing stock?
   • And how do you prioritise which homes and components are delivered first?

I’d now like to focus specifically on retrofitting to improve energy efficiency.

5. Do you think central government policy is clear on retrofitting to improve energy efficiency?
   • PROMPTS: What could be clearer? Is there anything missing from the policy portfolio?

6. In the last 5 years, have you carried out any retrofitting specifically aimed at improving energy efficiency?
   • What energy efficiency retrofitting have you already completed?
   • What was the scale of this work? What proportion of your stock did this work apply to? Number of homes completed? EPC ratings achieved?

7. Have you experienced any challenges to retrofitting?
   • IF NOT MENTIONED SPONTANEOUSLY, PROBE FOR:
     • Supply chains (where specifically?), funding streams, tenant cooperation, private owners in mixed tenure blocks

8. In your experience how interested are tenants in retrofitting to improve energy efficiency?
   • Why is this? What drives interest/ lack of interest? (PROBE FOR: experiencing fuel poverty, climate change awareness)
   • Are there energy improvements they are more/less interested in?
   • What kind of concerns do tenants have? How do you overcome these?

9. Have you had any success in changing tenants' behaviour, or engaging them with using new technology around energy efficiency?
10. Have you used any innovative techniques or technologies when retrofitting?

- IF YES: Can you tell me briefly about these? PROBE: Why did you decide to use them? How did you use them? Did they reduce costs?

11. Do you have any mixed tenure blocks in your stock?

- NOTE TO INTERVIEWER: Mixed tenure blocks are flats, terraces, blocks of maisonettes where some of the homes are owned and rented out by the landlord and some are privately owned or leased
- IF NO MIXED TENURE: Skip to section C
- IF YES: Approximately what proportion of your stock is mixed tenure blocks?

12. Does your approach to retrofitting change at all for mixed-tenure blocks that include private leaseholders?

- IF YES: What is different about these cases?

13. And in your experience, how have leaseholders in mixed tenure blocks reacted to retrofitting to improve energy efficiency?

- FOR leaseholders WHO ARE AGAINST RETROFITTING:
- What do you think would encourage leaseholders to cooperate? PROBE FOR: Green finance?
- What is the impact of leaving some homes untreated where leaseholders refused to cooperate? Do leaseholders who refuse to participate ever derail entire retrofit projects? PROBE FOR DIFFERENT TYPES OF TREATMENTS: wall / floor insulation, low carbon heating solutions
14. Do you have any experience of using government funding schemes to make energy efficiency improvements in the social housing sector?

- IF YES: How beneficial was using the scheme for your organisation? What, if any, challenges did you have? What additional support could have helped?
- IF NO: Why do you think this isn’t something you’ve done before?

15. The Government’s Social Housing Decarbonisation Fund is expected to be made available to social landlords from 2022 to 2030. One of its key aims is to bring existing homes with an EPC rating of below C up to that standard, although the exact design of the fund is still being considered. BEIS also intends to set up a Technical Assistance Facility to provide technical support to fund recipients.

- Prior to this interview, had you heard of the fund at all?
- IF YES: What had you heard about the fund? How did you hear about it?

- IF NO MENTION AT C2:
- C2A. Have you heard of the Social Housing Decarbonisation Demonstrator Fund at all?
- IF YES: Did you apply? Why / why not?

16. Can you talk me through the decision-making process for applying for funding such as the Social Housing Decarbonisation Fund:

- Who would ultimately decide whether or not your organisation would apply? Who would make the application? Who would be responsible for carrying out the retrofit work?
  INTERVIEWER TO CLARIFY JOB ROLE/ROLES INVOLVED
- IF NOT MENTIONED: Would your board play a role in the decision? IF YES: What do you anticipate their attitude to retrofit work would be?

17. How likely do you think your organisation would be to apply for the Social Housing Decarbonisation Fund?

- What considerations would make you more or less likely to apply for funding?

---

36 SHDF will run from financial year 2021/22 to the end of financial year 2029/30.
Support needs (10 mins)

BEIS are developing a technical assistance facility to support social landlords in accessing the Social Housing Decarbonisation Fund and developing energy performance improvement plans.

18. What kinds of guidance or support would your organisation benefit from if you decided to apply?

- PROBE FOR: at what stage would you need support: developing plans to support the application, completing the application, identifying suppliers, delivering the improvements? What skills gaps do you feel you have in your organisation which would make applying more difficult?
- How could the technical assistance facility help?

19. Are there any additional barriers you feel your organisation would face if you applied for the fund? What are these?

- FOR EACH BARRIER RAISED: What assistance would help you to overcome these?
- PROBE: What could BEIS or the technical assistance facility do to overcome these barriers? Stock assessments? Supply chain?
Appendix C – Quantitative Survey

Housing stock

To begin, we would like to understand more about your current social housing stock.

ASK ALL

A1. How many homes do you have in total?

If you do not know the exact number, please enter your best estimate.

ADD IF NECESSARY: By homes we mean individual dwellings

WRITE IN (NUMERIC, MAX VALUE 500,000)

<table>
<thead>
<tr>
<th>[WRITE IN] NUMBER</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t know</td>
<td>2</td>
</tr>
</tbody>
</table>
ASK ALL

The next few questions will ask about percentages, please note that these don’t need to be exact; estimates are fine.

**A2. Roughly what percentage of your housing stock are in each of these regions?**

ADD IF NECESSARY: If you are unsure, please use your best estimate.

**WRITE IN PERCENTAGE TOTALLING 100%**

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>North East</td>
<td>1</td>
</tr>
<tr>
<td>North West</td>
<td>2</td>
</tr>
<tr>
<td>Yorkshire and the Humber</td>
<td>3</td>
</tr>
<tr>
<td>East Midlands</td>
<td>4</td>
</tr>
<tr>
<td>West Midlands</td>
<td>5</td>
</tr>
<tr>
<td>East of England</td>
<td>6</td>
</tr>
<tr>
<td>London</td>
<td>7</td>
</tr>
<tr>
<td>South East</td>
<td>8</td>
</tr>
<tr>
<td>South West</td>
<td>9</td>
</tr>
<tr>
<td>Don’t know</td>
<td>10</td>
</tr>
</tbody>
</table>

ASK ALL

**A3. And roughly what percentage of your housing stock are in rural and urban locations?**

ADD IF NECESSARY: If you are unsure, please use your best estimate.

ADD IF NECESSARY: By rural we mean locations where there are roughly less than than 10,000 people in the population.

ADD IF NECESSARY: By urban we mean locations where there are roughly more than 30,000 people in the population.

ADD IF NECESSARY: By suburban we mean locations where there are roughly between 10,000 and 30,000 people in the population.

**WRITE IN PERCENTAGE TOTALLING 100%**

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural areas</td>
<td>1</td>
</tr>
<tr>
<td>Urban areas</td>
<td>2</td>
</tr>
</tbody>
</table>
A4. Roughly what percentage of your homes are the following?
ADD IF NECESSARY: If you are unsure, please use your best estimate.
WRITE IN PERCENTAGE TOTALLING 100%

<table>
<thead>
<tr>
<th>Type of Housing</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detached or semi-detached houses or bungalows</td>
<td>1</td>
</tr>
<tr>
<td>Terrace housing of three or more homes</td>
<td>2</td>
</tr>
<tr>
<td>Low rise flats, maisonettes, or apartments</td>
<td>3</td>
</tr>
<tr>
<td>High rise flats, maisonettes or apartments</td>
<td>4</td>
</tr>
<tr>
<td>Other (including sheltered schemes)</td>
<td>5</td>
</tr>
<tr>
<td>Don’t know</td>
<td>6</td>
</tr>
</tbody>
</table>

A5. Approximately what percentage of your homes are within mixed tenure blocks?
Mixed tenure blocks are flats, terraces, blocks of maisonettes where some of the homes are owned and rented out by the landlord and some are privately owned or leased.
ADD IF NECESSARY: If you are unsure, please use your best estimate.
WRITE IN (% NUMERIC, MAX VALUE=100)

<table>
<thead>
<tr>
<th>[WRITE IN] NUMBER</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>2</td>
</tr>
<tr>
<td>Don’t know</td>
<td>3</td>
</tr>
</tbody>
</table>

A6. Within these mixed tenure blocks, approximately what percentage of homes are leasehold or shared ownership?
ADD IF NECESSARY: If you are unsure, please use your best estimate.
WRITE IN (% NUMERIC, MAX VALUE=100)

<table>
<thead>
<tr>
<th>[WRITE IN] NUMBER</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t know</td>
<td>2</td>
</tr>
</tbody>
</table>

ASK ALL

A8. For approximately what proportion of your homes do you know the following information? Please consider what your organisation holds information on even if you personally do not know this information.

SINGLE CODE PER ROW

<table>
<thead>
<tr>
<th></th>
<th>0%</th>
<th>1-25%</th>
<th>26-50%</th>
<th>51-75%</th>
<th>76–90%</th>
<th>More than 90%</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>The age of the building</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Condition of the home i.e. compliance with decent homes standard</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>EPC rating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>SAP rating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Grade listing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

ASK ALL

A9. In the next 10 years, how many homes, if any, are planned for demolition?

ADD IF NECESSARY: If you are only aware of plans over a shorter time frame, please enter this information.

ADD IF NECESSARY: If you are unsure, please use your best estimate.

WRITE IN (NUMERIC, MAX VALUE=100,000)

<table>
<thead>
<tr>
<th>[WRITE IN] NUMBER</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Don’t know</td>
<td>2</td>
</tr>
</tbody>
</table>
ASK ALL

A10. Over the next 10 years, what is your total planned or expected maintenance budget?

ADD IF NECESSARY: If you are only aware of plans over a shorter time frame, please enter this information.

WRITE IN (£ NUMERIC)

<table>
<thead>
<tr>
<th>[WRITE IN] NUMBER</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t know</td>
<td>2</td>
</tr>
</tbody>
</table>

ASK IF A10=1

A11. And does this include your budget for decarbonisation and energy performance improvements?

SINGLE CODE

<table>
<thead>
<tr>
<th>Yes</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>Not sure</td>
<td>3</td>
</tr>
</tbody>
</table>

IF DOESN'T INCLUDE RETROFIT BUDGET (A11=2)

A12. Over the next 10 years, what is your total planned retrofit budget?

ADD IF NECESSARY: If you are only aware of plans over a shorter time frame, please enter this information.

WRITE IN (£ NUMERIC)

<table>
<thead>
<tr>
<th>[WRITE IN] NUMBER</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t know</td>
<td>2</td>
</tr>
</tbody>
</table>
Retrofitting, decarbonisation and energy performance improvements

ASK ALL

B1. Since 2010, what percentage of your homes have undergone any retrofitting work to improve decarbonisation and energy performance?

ADD IF NECESSARY: We are specifically asking in terms of improvement works that have been conducted with the intention to improve energy efficiency rather than replacing existing features.

SINGLE CODE

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1</td>
</tr>
<tr>
<td>&lt;5%</td>
<td>2</td>
</tr>
<tr>
<td>6-10%</td>
<td>3</td>
</tr>
<tr>
<td>11-20%</td>
<td>4</td>
</tr>
<tr>
<td>21-30%</td>
<td>5</td>
</tr>
<tr>
<td>41-50%</td>
<td>6</td>
</tr>
<tr>
<td>50%+</td>
<td>7</td>
</tr>
<tr>
<td>Don't know</td>
<td>8</td>
</tr>
</tbody>
</table>

ASK IF UNDERTAKEN ANY RETROFITTING TO IMPROVE ENERGY PERFORMANCE OR DON'T KNOW (B1= 2 to 8)

B2. Since 2010, which of the following measures have you installed in customers’ homes?

MULTICODE

<table>
<thead>
<tr>
<th>Measure</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart meters for heating / hot water</td>
<td>1</td>
</tr>
<tr>
<td>Improved or 'smart' heating controls</td>
<td>3</td>
</tr>
<tr>
<td>Double glazing</td>
<td>4</td>
</tr>
<tr>
<td>External wall insulation /</td>
<td>5</td>
</tr>
<tr>
<td>Internal solid wall insulation</td>
<td>6</td>
</tr>
<tr>
<td>Cavity wall insulation</td>
<td>7</td>
</tr>
<tr>
<td>Loft insulation</td>
<td>8</td>
</tr>
<tr>
<td>Measures</td>
<td>Percentage</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Floor insulation</td>
<td>9</td>
</tr>
<tr>
<td>Tank &amp; pipe insulation</td>
<td>10</td>
</tr>
<tr>
<td>More energy efficient boilers / condensing</td>
<td>12</td>
</tr>
<tr>
<td>boilers</td>
<td></td>
</tr>
<tr>
<td>Air / ground source heat pumps</td>
<td>13</td>
</tr>
<tr>
<td>Heat networks</td>
<td>14</td>
</tr>
<tr>
<td>Draught proofing</td>
<td>15</td>
</tr>
<tr>
<td>Biomass boilers</td>
<td>17</td>
</tr>
<tr>
<td>Other measures to improve decarbonisation</td>
<td>18</td>
</tr>
<tr>
<td>and energy performance (please specify)</td>
<td></td>
</tr>
</tbody>
</table>
Tenants engagement in retrofitting

ASK ALL

C1. Generally speaking, how often do your customers who are offered planned maintenance and improvement work in their homes, refuse to have this completed?

ADD IF NECESSARY: If you are unsure, please use your best estimate.

WRITE IN (% NUMERIC, MAX VALUE=100)

<table>
<thead>
<tr>
<th>Often</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sometimes</td>
<td>2</td>
</tr>
<tr>
<td>Rarely</td>
<td>3</td>
</tr>
<tr>
<td>Never</td>
<td>4</td>
</tr>
<tr>
<td>Don’t know</td>
<td>5</td>
</tr>
</tbody>
</table>

ASK ALL APART FROM C1=4 (NEVER)

C2. In your experience, which of the following issues, if any, do you feel are significant drivers of tenants refusing planned maintenance or decarbonisation and energy performance improvements specifically?

MULTICODE

RANDOMISE ORDER

<table>
<thead>
<tr>
<th>Concerns about being responsible for maintenance of the improvements</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise disruption of work</td>
<td>2</td>
</tr>
<tr>
<td>The length of time the work will take</td>
<td>3</td>
</tr>
<tr>
<td>Impacting look and feel of property / area e.g. scaffolding being needed, increased traffic</td>
<td>4</td>
</tr>
<tr>
<td>Having certain rooms within their property unusable for a period of time</td>
<td>5</td>
</tr>
<tr>
<td>Impact and risk of damage to their property, furniture, decoration etc…</td>
<td>6</td>
</tr>
<tr>
<td>Uncertainty of how new measures will work e.g. smart meters</td>
<td>7</td>
</tr>
<tr>
<td>Resistance to new technologies</td>
<td>8</td>
</tr>
<tr>
<td>Concern</td>
<td>Count</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Fear of increased rent or bills</td>
<td>9</td>
</tr>
<tr>
<td>Disliking change</td>
<td>10</td>
</tr>
<tr>
<td>Fear of reduced thermo-comfort</td>
<td>11</td>
</tr>
<tr>
<td>Risks relating to Covid-19 of workers entering the home</td>
<td>12</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>13</td>
</tr>
</tbody>
</table>
| Don’t know                                                             | 14    | EXCLUSIVE
### Mixed tenure blocks

ASK THOSE WITH MIXED TENURE (A5 = 1)

**D1.** Thinking about your sites which are mixed tenure, have you carried out any decarbonisation or energy performance work on mixed tenure blocks since 2010?

**SINGLE CODE**

<table>
<thead>
<tr>
<th>Yes</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>Not sure</td>
<td>3</td>
</tr>
</tbody>
</table>

ASK THOSE WITH MIXED TENURE (A5 = 1)

**D2.** To what extent has having mixed-tenure blocks impacted the amount of decarbonisation and energy performance work you have carried out on your homes since 2010? Impact may have included decarbonisation and energy performance work being cancelled, altered or delayed.

**SINGLE CODE**

<table>
<thead>
<tr>
<th>High impact</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairly high impact</td>
<td>2</td>
</tr>
<tr>
<td>Neither high nor low impact</td>
<td>3</td>
</tr>
<tr>
<td>Fairly low impact</td>
<td>4</td>
</tr>
<tr>
<td>Low impact</td>
<td>5</td>
</tr>
<tr>
<td>Not sure</td>
<td>6</td>
</tr>
</tbody>
</table>
ASK THOSE WITH MIXED TENURE (A5 = 1)

D3. To what extent does having mixed-tenure blocks impact your future plans and ambitions for decarbonisation and energy performance work?

SINGLE CODE

<table>
<thead>
<tr>
<th>Impact Level</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>High impact</td>
<td>1</td>
</tr>
<tr>
<td>Fairly high impact</td>
<td>2</td>
</tr>
<tr>
<td>Neither high nor low impact</td>
<td>3</td>
</tr>
<tr>
<td>Fairly low impact</td>
<td>4</td>
</tr>
<tr>
<td>Low impact</td>
<td>5</td>
</tr>
<tr>
<td>Not sure</td>
<td>6</td>
</tr>
</tbody>
</table>

ASK THOSE WITH MIXED TENURE (A5 = 1)

D4. In the past 10 years, have you done any of the following as a result of issues with mixed-tenure blocks?

Please select all that apply.

MULTICODE

<table>
<thead>
<tr>
<th>Action</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancelled decarbonisation and energy performance work</td>
<td>1</td>
</tr>
<tr>
<td>Altered the plan/specification for the works</td>
<td>2</td>
</tr>
<tr>
<td>Delayed the start of works</td>
<td>3</td>
</tr>
<tr>
<td>Experienced a delay during the works</td>
<td>4</td>
</tr>
<tr>
<td>De-prioritised work on mixed-tenure compared to other types of stock</td>
<td>5</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>6</td>
</tr>
<tr>
<td>None of the above</td>
<td>7 EXCLUSIVE</td>
</tr>
<tr>
<td>Not sure</td>
<td>8</td>
</tr>
</tbody>
</table>


ASK THOSE WITH MIXED TENURE (A5 = 1)

D6. How likely do you feel that recouping costs from leaseholds and shared owners will be a barrier to carrying out energy efficiency works on mixed tenure blocks?

SINGLE CODE

<table>
<thead>
<tr>
<th>Response</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very likely</td>
<td>1</td>
</tr>
<tr>
<td>Fairly likely</td>
<td>2</td>
</tr>
<tr>
<td>Not very likely</td>
<td>3</td>
</tr>
<tr>
<td>Not likely at all</td>
<td>4</td>
</tr>
<tr>
<td>Not sure</td>
<td>5</td>
</tr>
</tbody>
</table>
Energy performance and decarbonisation plans

ASK ALL

E1. What percentage of your homes are you looking to improve the decarbonisation and energy performance of in the next 10 years?

ADD IF NECESSARY: If you are unsure, please use your best estimate.

WRITE IN (% NUMERIC, MAX VALUE=100)

<table>
<thead>
<tr>
<th>[WRITE IN]</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>2</td>
</tr>
<tr>
<td>Don’t know</td>
<td>3</td>
</tr>
</tbody>
</table>

ASK ALL EXCLUDING E1 = 2

E2. Do you have projected costs for this work over the next ten years?

SINGLE CODE

<table>
<thead>
<tr>
<th>Yes (please specify)</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>Not sure</td>
<td>3</td>
</tr>
</tbody>
</table>

ASK ALL EXCLUDING E1 = 2

E3. How do you currently plan to fund these works?

ADD IF NECESSARY: If you are unsure, please use your best estimates.

WRITE IN PERCENTAGE TOTALLING 100%

<table>
<thead>
<tr>
<th>External grants or funding</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal dedicated decarbonisation and energy performance budget</td>
<td>2</td>
</tr>
<tr>
<td>Internal wider asset management budget</td>
<td>3</td>
</tr>
</tbody>
</table>
Other (Please specify) | 4
---|---
Don’t know | 5

**ASK ALL EXCLUDING E1 = 2**

**E4. What are you aiming to achieve with these improvements?**

OPEN

| [WRITE IN] | 1 |
| Don’t know | 2 |

**ASK ALL**

**E6. Do you have targets for your homes to reach a certain energy rating by a certain date? E.g. Minimum EPC rating C by 2030**

If yes, please provide details of the rating, and the target date

| Yes (please specify) | 1 |
| No | 2 |
| Not sure | 3 |

**ASK ALL**

**E8. Since 2010, have you experienced any of the following barriers to your decarbonisation plans?**

MULTICODE

| Lack of budget / finance | 1 |
| Lack of skills and experience internally within the organisation to apply for funding | 2 |
| Identifying suitable contractors to carry out the work | 3 |
| Procuring time from suitable contractors | 4 |
Supply chain issues | 5 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Resistance from tenants</td>
<td>6</td>
</tr>
<tr>
<td>Private owners in mixed tenure blocks</td>
<td>7</td>
</tr>
<tr>
<td>Lack of knowledge of stock</td>
<td>8</td>
</tr>
<tr>
<td>Lack of board support/interest</td>
<td>9</td>
</tr>
<tr>
<td>COVID-19</td>
<td>10</td>
</tr>
<tr>
<td>Clarity or content of government policy</td>
<td>11</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>12</td>
</tr>
<tr>
<td>Not sure</td>
<td>13</td>
</tr>
<tr>
<td>Not applicable – we have not faced any barriers</td>
<td>14</td>
</tr>
</tbody>
</table>

ASK ALL

E9. How clear, if at all, do you think central government policy is on retrofitting to improve decarbonisation and energy performance?

SINGLE CODE

<table>
<thead>
<tr>
<th>Very clear</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
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<td>4</td>
</tr>
<tr>
<td>Not sure</td>
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</tr>
</tbody>
</table>

ASK ALL

E11. The Government’s Social Housing Decarbonisation Fund is expected to be made available to social landlords from 2022 to 2030.\textsuperscript{37} One of its key aims is to bring existing homes with an EPC rating of below C up to that standard, although the exact design of the fund is still being considered. Prior to taking this survey and hearing about this research, had you heard of the fund at all?

\textsuperscript{37} SHDF will run from financial year 2021/22 to the end of financial year 2029/30.
### E12. How likely, if at all, do you think your organisation would be to apply for the Social Housing Decarbonisation Fund?

**SINGLE CODE**

<table>
<thead>
<tr>
<th>Choice</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

### E14. BEIS also intends to set up a Technical Assistance Facility to provide technical support to those applying to the fund. How likely would you be to seek support from this to apply for the fund?

**SINGLE CODE**

<table>
<thead>
<tr>
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<th>Code</th>
</tr>
</thead>
<tbody>
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