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Retrofit for All Toolkit

How to centre energy-vulnerable clients in the design of energy efficiency schemes

Carbon Co-op

electricity
north west



Carbon Co-op is an energy services and advocacy co-operative that helps people and communities to make the radical reductions in home carbon emissions necessary to avoid runaway climate change.

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Introduction

How do we design energy efficiency schemes, in particular, schemes that work for the residents-clients experiencing energy vulnerability?

It has long been recognised that those experiencing energy vulnerability live in the least efficient homes and that a key part of the solution is improving energy efficiency¹. Numerous government schemes to tackle fuel poverty and climate change have been undertaken over the last decade (CESP (2009 - 2012), CERT (2008 - 2012), ECO (2013 - 2022), Green Deal (2012 - 2015) and the recent Green Homes Grant (2020 - 2022)) yet fuel poverty is still a significant issue for many. In 2009 there were 4 million fuel poor homes², in 2019 government figures estimated there were 3.18 million households in fuel poverty³. With the COVID-19 pandemic setting efforts back it is possible that we will have made limited progress in the 12 years since 2009⁴. Some campaigners would even argue that schemes since 2009 have left us with a loss in public trust, a loss of industry confidence and no clear idea of how effective efforts have been at reducing emissions and improving lives.

Much important work has been done to improve how schemes are delivered, for example through the development of the TrustMark⁵ and retrofit standards PAS2035 and PAS2030:2019. However, without addressing wider systemic factors such as the stop-start nature of government schemes, reductions in public funding and the lack of local authority capacity, issues around procurement and the construction industry, and problematic attitudes towards those in poverty, we may not see the changes needed to build better and end fuel poverty.

In the current context of increased economic hardship, wealth inequality⁶ and government stimulus for a post-COVID-19 green recovery, addressing these issues and finding ways to make schemes more effective is more important than ever.

This project does not address all of the issues raised above. It experiments with changing one aspect of energy efficiency scheme delivery in an attempt to shift culture. We explore what happens if we turn our approach to designing retrofit schemes on its head. Rather than working to the needs and priorities of a funder or existing supply chain, we ask first: what would a successful energy efficiency scheme look like from the point of view of a resident-client experiencing energy vulnerability?

In asking this question we make the assumption that the needs of a resident-client for a warm, healthy home, with affordable energy bills overlap with a scheme manager who is seeking to reduce fuel poverty and carbon emissions. Using a resident-client centered perspective, scheme managers can assess funding sources, procurement approaches and onsite supply chain management and seek to make these work for those experiencing energy vulnerability.

¹ Cutting the cost of keeping warm –a fuel poverty strategy for England, March 2015, DECC, https://www.haringey.gov.uk/sites/haringeygovuk/files/fuel_poverty_strategy_for_england_2015.pdf

² Ibid.

³ Annual Fuel Poverty Statistics in England, 2021 (2019 data) 4 March 2021, BEIS, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/966509/Annual_Fuel_Poverty_Statistics_LILEE_Report_2021_2019_data_.pdf

⁴ Note that the metric for measuring fuel poverty has changed between 2009 and 2021 so it is not possible to be fully accurate in comparing figures over time.

⁵ <https://www.trustmark.org.uk/>

⁶ The Scale of Economic Inequality in the UK, The Equality Trust, <https://www.equalitytrust.org.uk/scale-economic-inequality-uk>

Who is this toolkit for?

This toolkit has been designed for use by scheme managers, whether they work for a Local Authority, a Housing Association, an energy company, a charity or in the co-operative and community sector.

The toolkit and how to use it

This toolkit looks at the project cycle of an energy efficiency scheme before, during and after installation. At each stage it asks the following questions:

- What is important from the resident-client's point of view?
- Why are the factors outlined important in the context of energy vulnerability?
- As a result, what aspects should be considered in the design of the scheme?

The research that informed this work has been gathered through desk-based research and ten interviews undertaken with six local authority workers, two charity workers, one contractor and one journalist during 2019 and 2020. The direct experience of resident-client will feed into future editions of the toolkit. This work is not intended to be static but to be added to and evolve with continuing research. If you would like to contribute to this research please get in touch via info@carbon.coop.

Note on terms

- Resident-client - typically in Local Authority or Housing Association energy efficiency projects, the client is often the organisation commissioning the works. The term 'resident-client' denotes the resident or tenant as the client alongside the commissioning organisation.
- Energy vulnerable - this term is used as opposed to the term fuel poverty in recognition of varied and changing factors that can lead to reduced access to energy services at differing times⁷.

⁷ Understanding Energy Poverty, Vulnerability and Justice, S Bouzarovski (2017) https://link.springer.com/chapter/10.1007/978-3-319-69299-9_2

Stage One

Initial contact and sign up



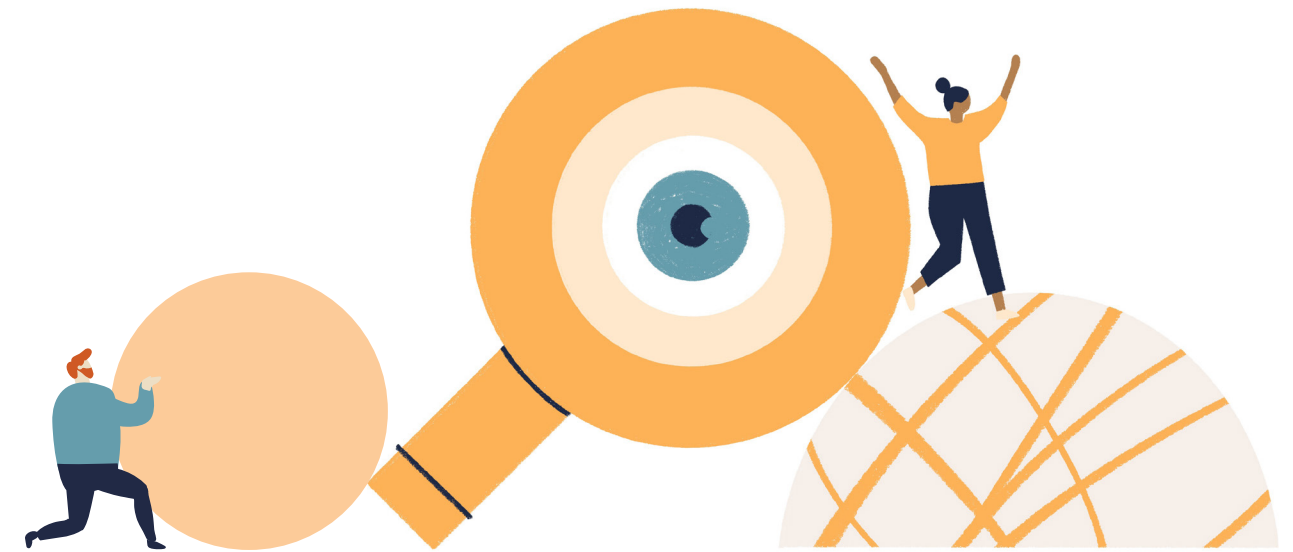
Resident-client experience What is important from the resident-client's point of view?	<ul style="list-style-type: none"> Initial information provided via a credible and trustworthy source. 	<ul style="list-style-type: none"> Resident-client feels the scheme is for them. 	<ul style="list-style-type: none"> A clear understanding of what is on offer and any financial costs (including need to let in builders e.g. losing shift work wages etc), and other implications of involvement (e.g. disruptions to living space). 	<ul style="list-style-type: none"> Easy application process.
Why important? Why are the factors outlined above particularly important when working with people experiencing energy vulnerability?	<ul style="list-style-type: none"> More sign-ups are likely if a trusted source makes initial contact, and is therefore more effective at engaging people experiencing energy vulnerability. 	<ul style="list-style-type: none"> The stigma associated with claiming benefits means that many <i>eligible</i> resident-clients experiencing energy vulnerability self-exclude from schemes that mention benefits in the eligibility criteria. Many experiencing energy vulnerability may not access benefits. 	<ul style="list-style-type: none"> Managing expectations is particularly important in this context as some that have a strong need may 'hear what they want to hear' with consequences down the line. 	<ul style="list-style-type: none"> Some people experiencing vulnerability are less able to engage in complex application processes with paperwork and administration, they may not be able to engage and may drop out if there is no additional support.
Scheme design Taking into account the resident-clients' point of view, what should be considered in the design of the scheme?	<ul style="list-style-type: none"> Community intermediaries or public bodies are preferable as scheme managers/ intermediaries. These organisations should be upfront about their motivations/ interest Use Social Marketing: raise awareness of schemes through friends or neighbours. Contact made by someone who is both personable and skilled at understanding and explaining technology/retrofit measures. 	<ul style="list-style-type: none"> If possible, avoid use of benefits in eligibility criteria. Preferable indicators are: income level and health. If benefits are not a core eligibility requirement, avoid reference in first contact. 	<ul style="list-style-type: none"> Manage expectations to avoid over promising. Communicate offer/scheme in multiple formats i.e. written, verbal, visual etc. Have an awareness of language barriers in areas of multiple ethnicities. Take into account both people who want lots of detailed information and those who will only read the first page of any written communication. Verbal communication via phone calls/ door knocking is more effective than written brochures/information. However accuracy, consistency and a means of recording verbal communication must be ensured to prevent issues down the line. 	<ul style="list-style-type: none"> Simplify the application process. Minimise paperwork and form filling. Minimise proof of eligibility, documentation as much as possible. If the application process is unavoidably lengthy, ensure ample staff time is available to guide applicants through the process, ideally with one trusted point of contact. Length of application process is proportionate to measures on offer i.e. minimal for simple measures like loft top ups.

Stage One

Scheme Manager Checklist

- Eligibility criteria includes income level.
- Eligibility criteria does not include benefits.
If benefits are not a core requirement of the scheme reference is avoided/minimised in first contact.
- Community networks have been assessed and utilised to promote the scheme.
- Social marketing has been utilised to promote the scheme.
- Staff members involved in resident-client contact are both personable and can communicate technical issues in layman's terms.
- All communications clearly manage expectations and do not over promise.
- The offer is communicated in multiple formats; written, verbal, visual etc.
- Information about the scheme is presented at different levels, including both clear and simple key headlines and fine detail.
- Scheme managers have an awareness and means to address language needs in areas of multiple ethnicity.
- The application process is simple.
- Paperwork and form filling has been minimised.
- There is one point of contact for applicants.
- Staff time to guide vulnerable applicants through the process has been resourced.
- Length and complexity of application process is proportionate to measures on offer.

Stage Two Survey



Resident-client experience What is important from the resident-client's point of view?	<ul style="list-style-type: none"> Surveyors are friendly, approachable and personable. Surveyors respect resident-client privacy and are sensitive and respectful of their homes. 	<ul style="list-style-type: none"> The survey and report are conducted in a short timeframe. 	<ul style="list-style-type: none"> The resident-client feels informed about the process and next steps. Appointments are kept and there is good communication around rearrangements. 	<ul style="list-style-type: none"> Survey reports are presented in an understandable format for the resident-client.
Why important? Why are the factors outlined above particularly important when working with people experiencing energy vulnerability?	<ul style="list-style-type: none"> Builds trust and goodwill. 	<ul style="list-style-type: none"> Longer timeframes lead to more drop out impacting negatively on the scheme's ability to support those that are most in need. 	<ul style="list-style-type: none"> Maintains trust and goodwill from the resident-client making the next stage of the process smoother. Additional reassurance may be needed to maintain involvement. Prevents dropouts. 	<ul style="list-style-type: none"> Resident clients have a broad range of communication needs, ranging from those who will only read the front page summary of a report in clear and simple language, to those who will want lots of detail.
Scheme design Taking into account the resident-clients' point of view, what should be considered in the design of the scheme?	<ul style="list-style-type: none"> Consider using independent surveyors to represent resident-client interests, providing them with a service as opposed to purely working to the interests of the installer or scheme designer. Consider communication skills of surveyors in appointing them. Surveyors are briefed on appropriate behaviour when undertaking surveys. 	<ul style="list-style-type: none"> Ideal timeframe: survey visit taking place within two weeks of first contact. Survey results feedback on the same day or within a few days, depending on the complexity of the assessment. 	<ul style="list-style-type: none"> Ensure that very good customer service is built into the scheme, prioritising frequent and clear communication. Ensure resident-clients have a single point of contact. Customer service should be responsive to the resident-clients needs. 	<ul style="list-style-type: none"> Find out how resident-clients prefer to receive information and make a broad range of options available. Relay findings from the assessment verbally as well as in a written format. Communicate key information simply on the first page of the report and go into more detail on the following pages.

Stage Two

Scheme Manager

Checklist

- Resident-clients have a single point of contact.
- The resident-client is kept informed through frequent and clear communication.
- Surveyors hired have good communication skills.
- Surveyors have been briefed on appropriate behaviour when entering homes.
- Survey visit takes place within two weeks of first contact.
- Survey results feedback on the same day or within a few days.
- Resident-clients are asked about their communication preferences.
- Survey results and next steps are communicated verbally as well as in a written format.
- Key information is communicated simply on the first page of the report and with more detail on the following pages.
- The physical and mental health needs of the resident-clients household has been assessed.

Stage Three Design



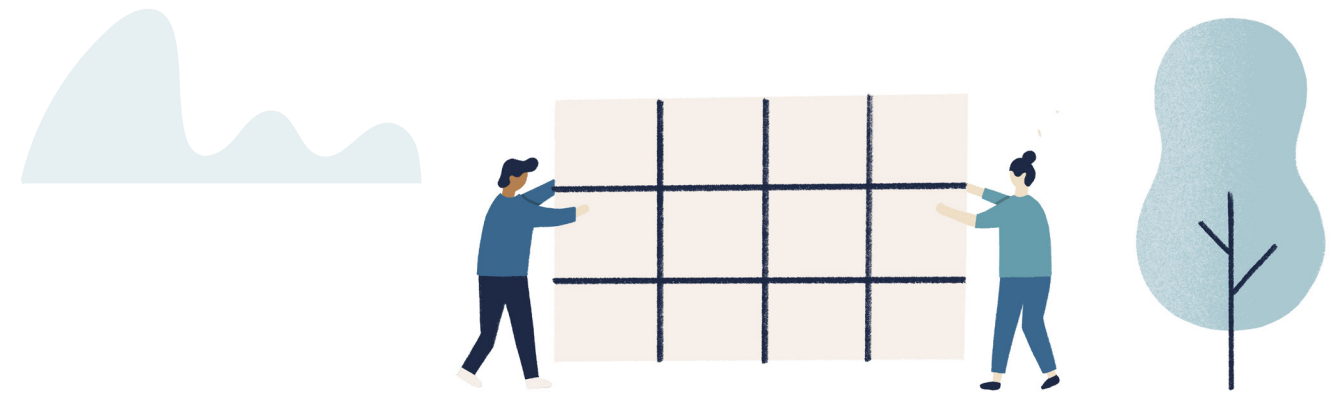
Resident-client experience What is important from the resident-client's point of view?	<ul style="list-style-type: none"> • To understand and trust what is planned. • To have the opportunity to input into the design process. 	<ul style="list-style-type: none"> • To be listened to and have their lived experiences and concerns taken into account. 	<ul style="list-style-type: none"> • To receive communications that are clear and understandable. 	<ul style="list-style-type: none"> • To be able to use and understand heating controls.
Why important? Why are the factors outlined above particularly important when working with people experiencing energy vulnerability?	<ul style="list-style-type: none"> • Some people are less likely to engage with the scheme without access to the design process, others may have lives that are difficult to cope with and will not have capacity to engage in any design process. Both are in need of support and need to be catered for in how the design process is carried out. • If resident-clients understand what measures are being installed and why they will be more likely to use new systems in an appropriate way, thus better meeting scheme goals. 	<ul style="list-style-type: none"> • Meaningfully taking on board resident-clients lived experiences in the design phase leads to goodwill, buy in and trust. • This can lead to resident-clients becoming champions for the project and increased engagement in follow on schemes. • It will also support resident-clients ability to deal with disruption in the installation phase (to an extent). 	<ul style="list-style-type: none"> • Resident-clients have a broad range of communication needs, ranging from those who will only read the front page summary of a report in clear and simple language (if anything), to those who will want lots of detail. 	<ul style="list-style-type: none"> • Confusion and incorrect use of heating controls can have a big impact on the comfort and health of resident-client and the effectiveness of energy efficiency measures. • Given the wide availability of varied heating controls this is an area in which choice could have a significant impact.
Scheme design Taking into account the resident-clients' point of view, what should be considered in the design of the scheme?	<ul style="list-style-type: none"> • Organise events to share plans and gain input, make sure these events are engaging as possible. • Bates et al (2012) and Groves (2019) (renovation of council estate tower blocks) found that public meetings were much less engaging than using open days to look around pilot flats and speak directly with the design team. 	<ul style="list-style-type: none"> • Space should be made to engage with resident-clients early enough that their input can be meaningfully taken into account. 	<ul style="list-style-type: none"> • Use participant co-production to develop communications, i.e. find out what communication style works best, visual, verbal, written. 	<ul style="list-style-type: none"> • If heating systems are being upgraded, or if there is potential to change heating controls, allow staff time for supporting resident-clients to understand and pick the heating controls that will best suit them.

Stage Three

Scheme Manager

Checklist

- Resident-client engagement events/activities are planned at appropriate points of the design process to meaningfully input their preferences.
- Resident-client’s communication preferences have been accounted for in design stage engagement.
- If relevant, resident-clients have been meaningfully engaged in their preferences around heat controls.
- The provision of heating control options has been resourced.



Stage Four

Onsite/Installation

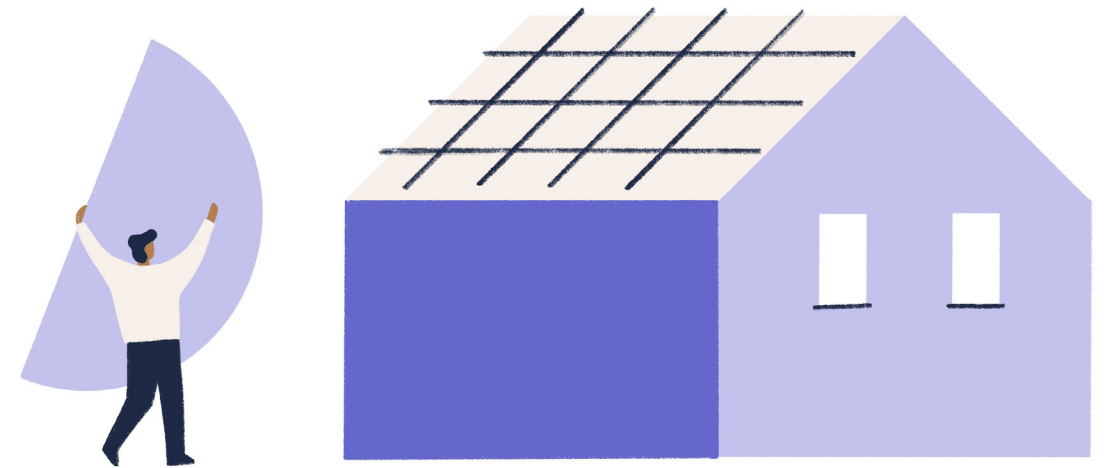
Resident-client experience What is important from the resident-client's point of view?	<ul style="list-style-type: none"> To understand what is going to happen, when it is going to happen and what preparation they need to make. To make rearrangements for access. To know if there are delays. To know who to call if there are issues, and to have that contact able to resolve issues meaningfully. 	<ul style="list-style-type: none"> To be listened to and treated with respect. 	<ul style="list-style-type: none"> To be able to manage any impact the disruption might have on their health (physical and mental). 	<ul style="list-style-type: none"> To be left with a good finish, or to agree to how works will be left. For the work schedule to be as time efficient as possible.
Why important? Why are the factors outlined above particularly important when working with people experiencing energy vulnerability?	<ul style="list-style-type: none"> Good customer service maintains goodwill which in turn supports resident-clients to be willing to cope with disruption and advocate for the scheme post works. There may be less flexibility in resident-clients' working hours. 	<ul style="list-style-type: none"> Being listened to and treated with respect is a basic part of customer relationships important for us all, however research⁸ revealed that resident-client relations are often badly handled in fully funded schemes aimed at people on a low income. Poor customer service can lead to mistrust and potential disputes. 	<ul style="list-style-type: none"> Many people experiencing fuel poverty are more likely to have physical and mental health issues which will likely be negatively impacted by building works. 	<ul style="list-style-type: none"> Financial issues will mean that resident-clients may not be able to afford to finish off (paint/decorate) areas of the home that have been worked on.
Scheme design Taking into account the resident-clients' point of view, what should be considered in the design of the scheme?	<ul style="list-style-type: none"> Ensure there is one point of contact for resident-client liaison through the build process working in the resident-clients interests and working with a contractor representative. This person would preferably be employed by a trusted intermediary. This person should be a good communicator, personable and approachable. The resident-client liaison should have the power to meaningfully deal with concerns in liaison with the contractor representative, and be able to keep in frequent contact with clear communication. Have plans to deal sensitively with mental health issues such as hoarding and establish clearly where responsibility lies in providing access. 	<ul style="list-style-type: none"> Ensure that installers (from site managers to those working onsite) are brought into the broader purpose of the scheme and value resident-client goodwill. Ensure that on site workers have capacity and training to manage good resident-client relations. Include customer service proficiency and track record in the tendering process. Make sure the complaints process is well communicated to the resident-client. Create a process by which any reports of problematic behaviour of either party (resident-client or installer) are investigated and resolved adequately. 	<ul style="list-style-type: none"> Understand household physical and mental health needs at survey stage. Good communication and expectation management around disruption at the pre-installation phase. Good communication during the build phase around access requirements and keeping to appointments (see customer service point to the left). Discuss mitigation strategies with the resident-client. These might include: <ul style="list-style-type: none"> An option to live elsewhere during installation phase Mitigation strategies around disruption to electricity and heating that might impact resident-clients health needs. Timing/scheduling of works Keep up good relations and resident-client goodwill through the build phase. 	<ul style="list-style-type: none"> Plan for dealing with snags and manage expectations with resident-client pre-works. Communicate work schedule and update with reasons for delays clearly. Ensure clarity between the resident-client and the installer on responsibility for non 'build' aspects of the works including clearing spaces pre-works and what constitutes finished works. Appropriate timeframe for finishing works (avoiding artificial deadlines) to ensure installers do not rush works towards a deadline, whilst also managing resident-clients through lengthy timeframes.

⁸ Whilst Portsmouth City Council had a very good approach to resident relations in the upgrade of Wilmcote House, during the installation phase they recognised that communications were poorly handled by the contractor (2019). Interviewee with a contractor working on social housing schemes in Manchester revealed poor attitudes taken toward social housing tenants by the construction firm he worked for. Sherriff and Swan (2016:39) note residents expressing concerns of the attitude of the contractor towards them.

Stage Four Scheme Manager Checklist

- There is a one point of contact for resident-clients throughout the build process.
- The resident-client liaison has the power to meaningfully deal with concerns.
- The resident-client liaison keeps regular contact with resident-clients using clear communication.
- Before works starts there has been good communication and expectation management around disruption.
- Mitigation processes are in place to take account of disruption during works, this has taken into account physical and mental health needs.
- Before works start the plan for dealing with snags has been communicated.
- There are plans to deal sensitively with mental health issues such as hoarding.
- Customer service proficiency and track record is included in the tendering process.
- Site workers have capacity and training to manage good resident-client relations.
- The resident-client is aware of the complaints process.
- Before works start there is clarity between the resident-client and the installer on responsibility for non 'build' aspects of the works including clearing spaces pre-works and what constitutes finished works.
- Good communication during the build phase around access requirements and appointments.
- Any changes to the work schedule are clearly communicated with reasons given for delays.
- Reports of problematic behaviour of either party (resident-client or installer) are investigated and resolved adequately.
- There is an appropriate timeframe for finishing works (avoiding artificial deadlines).

Stage Five Post-works



Resident-client experience What is important from the resident-client's point of view?	<ul style="list-style-type: none"> • Who to call if there are any future issues with the works. • To not be left with issues after work are complete. • To have snags dealt with in a timely manner. 	<ul style="list-style-type: none"> • What to expect in terms of changes to energy bills, how to use heating etc. • How to use any new technology. 	<ul style="list-style-type: none"> • To be asked how they thought it went and be able to voice any concerns.
Why important? Why are the factors outlined above particularly important when working with people experiencing energy vulnerability?	<ul style="list-style-type: none"> • Continuing good customer relations post-works helps with ongoing goodwill and advocacy. • Uncertainty around when and how issues with works will be dealt with impacts the resident-clients goodwill and mental health. 	<ul style="list-style-type: none"> • If there have been changes to the heating system in particular (e.g. first time central heating) the resident-client may not be aware of changes to expect in terms of energy bills and clear communication is needed. • Effective outreach around new ways to interact with homes will help reduce any aspects of the performance gap connected to user behaviour. 	<ul style="list-style-type: none"> • Meaningfully asking resident-clients for their views throughout the project and at the end is appreciated, shows that their opinions and experience is valued. • Leaving on a positive note will help future promotion of similar schemes. • Goodwill will also help if there are any snagging issues that need resolution after sign off. • Resident-client feedback is useful for improving delivery for future schemes.
Scheme design Taking into account the resident-clients' point of view, what should be considered in the design of the scheme?	<ul style="list-style-type: none"> • Make available contact number and name of organisation dealing with post works enquiries. • Identify the level of scheme manager capacity to respond to ongoing queries, concerns about works and communicate this clearly to resident-clients. • Provide clear handover information around warranties, guarantees and responsibility for post works issues. 	<ul style="list-style-type: none"> • Handover materials should take into account resident-client's preferred communication style. • If possible depending on the extent of ongoing relationship between scheme manager and the resident-clients, drip feed information on use of new technology over time (appropriate for social or council tenants). • Environmental monitoring equipment helps scheme managers understand the impact of installed measures and supports them to feedback relevant observations to the resident-clients about their energy usage at home. 	<ul style="list-style-type: none"> • Ensure there is a simple and accessible evaluation process with resident-client and scheme manager. • Revisit resident-client after 6 months to see how things are going and if any issues have cropped up.

Stage Five

Scheme Manager Checklist

- Resident-clients are given a contact number and name of the organisation dealing with post works enquiries.
- Resident-clients are aware of scheme manager capacity to respond to ongoing queries, concerns about works.
- Resident-clients have received clear handover information around warranties, guarantees and responsibility for post works issues.
- Handover materials use a variety of communication styles.
- Where appropriate the resident-clients are drip fed information on use of new technology over time.
- If monitoring equipment has been installed relevant observations have been fed back to the resident-clients about their energy usage and indoor air quality.
- A simple and accessible evaluation process with resident-client and scheme manager has been undertaken.
- The resident-client has received a 6 months check-in to see if any issues have arisen.

Further Reading

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