

Headline Report from:

Retrofit for Residents:

What do residents need to know?

Thursday 8th December 2022 at Trafford Hall, Chester, CH2 4JP

On the 7th- 8th of December 2022, the Energy Plus Academy organised a knowledge exchange Think Tank, attended by social housing residents and staff, representatives from the construction industry, green energy suppliers and environmentally focused organisations. The event explored the importance of retrofitting, what residents need to know about the process, and the best ways to engage and work with residents.

1. *Why do we need to retrofit our homes?*

What is retrofitting? Retrofitting refers to works on an existing building to modernise it and to improve its energy efficiency, including thermal performance and reducing reliance on fossil fuels. Retrofitting needs to look at every major part of a home: roofs, walls, windows, doors, floors, and all equipment including heating and lighting. The basic starting point is “fabric first”, which means that insulation is the first priority, making sure that all external elements that let in the cold are as insulated as possible, reducing overall energy demand. In effect, it is the housing equivalent of putting a tea cosy over a teapot to keep the tea warm. To prevent cold air coming in, a building needs to be airtight but the fabric first approach should also ensure a home is well ventilated, in order to prevent condensation and mould growth.

There is an urgent need to retrofit homes. The consequences of climate change are already being felt both in the UK and across the world in the more extreme weather we have been experiencing. Running our housing contributes 18% of the UK’s annual carbon emissions and 80% of existing homes will still be standing in 2050¹. If we include the embodied carbon involved in building new homes, the share of CO2 emissions related to our homes rises very significantly. So, in order to limit climate change, it is vital we retrofit our existing homes to reduce their environmental impact and to reduce the numbers of new buildings needed. We have all the technology and know-how we need to make our homes carbon neutral in the UK, but we need to act quickly.

2. *Why do residents need to be involved in retrofit?*

Resident involvement and buy-in are key to any successful retrofit process. The retrofit process is disruptive and changes how people live in and use their homes, but it can also bring about huge benefits; homes are warmer, have less damp and condensation, and are cheaper to heat. There are also health benefits of living in a retrofitted home. Residents need to understand this in order to be persuaded to allow the works to go ahead and cooperate with the process of retrofitting.

Building trust with residents is crucial. Residents have to agree to the retrofit process, to allow contractors to access their homes to do the necessary works, but they need to trust that the work will benefit them and be done in the right way. Many residents have had bad experiences in the past which may mean they are cautious about having work done to their home. Furthermore, research by the Northern Housing Consortium shows that many people don’t understand what retrofit is, and

¹ <https://kb.goodhomes.org.uk/guidance/climate-emergency-retrofit-guide/>

are very suspicious of such interventions. The time schedule for a project should allow for conversations with residents to build this trust from very early in the planning stages. The plan should also allow for residents to join later on in the process, once they have seen some of the work being carried out successfully on neighbouring homes.

Box 1: What should residents know before retrofit starts?

- Step-by-step what will happen to their home – when, where, what, by who
- The key point of contact
- The level and timescale of any disruption
- What their responsibility is e.g. moving furniture, and how to get support if they are unable to do this personally
- The financial implications once the works are done, or how their home will change during the retrofit, for example having to buy new curtains / blinds to fit retrofitted windows, the cost of relaying decking, refitting aerials
- Decanting and respite offers

3. What are the best ways to engage residents?

Different forms of engagement are required. All residents are different and will need key information presented to them in ways that are accessible to them. Landlords need to understand their residents’ requirements in order to do this successfully. Information should be presented both digitally and in paper form and through meetings and face to face chats. If the project allows, show flats or show houses can be a useful tool for residents to see what will be done. Videos and drawings can be a good alternative if this isn’t possible. Displaying samples of physical materials can also be a useful way of engaging people. It is also important to organise in-person events where residents can come and ask any questions they may have about the work. You can encourage residents to attend these events by linking in other services, for example a chance to report repairs. Face to face contact is often the most effective form of engagement. If people won’t come to events, door knocking can be a useful tool to break down barriers and encourage people to engage.

Before the retrofit process starts, residents need a clear step-by-step guide of what will happen in their home and when. Different residents will want different levels of information and it is important not to overwhelm residents with too much information in one go. Repeat events, visits, and newsletters are useful in this.

Tenant advocates can support retrofit projects. Residents may be more likely to trust other residents than staff or contractors. Bringing residents on board as messengers and using their homes as pilots can be a good way to “sell” the retrofit to other residents who may be more wary of external people. Tenant advocates can also give feedback on whether information is being presented in a clear and understandable format. Tenant advocates are also useful once the work is completed, helping other residents understand how to use the new technology in their homes, and gathering feedback informally to pass on to the landlord or contractors. In one example from the Think Tank, Together Housing trained one of the residents on their over-55s scheme to re-pressurise the new boilers, so he can help any residents having issues to avoid a contractor being called out.

Involvement throughout the process is essential. For a retrofit process to be successful residents must be involved right from the start of the process up until after completion. Residents must begin by understanding the retrofit process, the benefits it brings, and how it will impact them.

Throughout the works, residents must be kept up to date with what is happening and when, and any delays or changes. Once the works are finished residents need to know how to run their homes with the new systems and new energy requirements. They also need the opportunity to report any issues that arise, for example, controlling the thermostat. Landlords and contractors should check in with the retrofit project and residents regularly once the project is completed, in case of any problems arising.

Communicating the benefits of retrofit - saving money vs reducing energy use. Retrofitting is often sold as a way of saving residents money on their bills. However, with the ever-increasing energy prices, people's bills don't always reduce once the work has been completed. However, showing people how much their energy consumption has reduced and therefore how much more their bills would be if they were being charged at current energy prices for higher energy use, can make it easier for people to understand the positive impact of the works.

Box 2: What are the best ways to engage residents?

- We need to understand the reality of peoples' lives and how they use their homes
- Build a rapport by being present and visible in the community
- Respect
- Having a central point of contact
- A detailed pre-start meeting to explain the works, find out any vulnerabilities or challenges for the resident
- Demonstrations such as pilot homes, mock-ups, and other visual demonstrations
- Individual and sustained engagement with hard-to-reach groups
- Tell them the whole truth, be honest and transparent, be quick to share explanations and plans when there is a delay
- Group open days
- Drop ins for residents to ask questions
- Engagement once the retrofit is finished in case of any problems
- Conversations at an early stage to understand people's suitability for retrofit
- Utilise interpreters and translators where necessary, have different methods of communication to ensure engagement is accessible

4. Long term engagement

Engagement around retrofit should not just be linked to a specific planned project. We need to educate everyone about the wider importance of retrofitting and the benefits that it brings. This should include teaching about retrofitting in schools. This wider understanding will help people to be more open when they are approached about having their own home retrofitted. It may also encourage people to put pressure on their own landlord to retrofit homes, as well as offices, community centres and other shared facilities.

5. Educating staff

As well as educating residents about retrofit, it is crucial staff have the right information to be able to communicate with residents and answer any questions. They also must know how to use the new technology in residents' homes. Bolton at Home plan to give all their staff carbon literacy training so everyone, in all parts of the business, understands the importance of saving energy. This training

needs to be kept up to date as new technology comes on to the market. This information needs to be shared in an accessible and usable way, and training sessions need to be simple enough not to be overwhelming.

6. Making the building process work for residents

Understanding who lives in the property and the reality of people's lives is key. To understand how a retrofit process will work in a home, it is crucial to understand the needs of the people living there. For example, if they have specific health requirements, they may need to move out during the works; if they work, they won't be able to have appointments during the day without special arrangements; if they have young children their lives may be disrupted and they may need places to go during the day time while works are happening. Daytime respite options, away from the noise and dust, can be useful for people who would otherwise be at home during the works. Social landlords can use their existing infrastructure and community buildings, or void properties as respite centres.

A dedicated resident liaison officer should be attached to every retrofit project. Residents need to have a clear point of contact throughout the retrofit process. This key liaison officer must have a regular onsite presence and know the residents personally. If the person in charge of this role changes, there should be time allowed for a proper handover period so residents can get to know the new staff member.

Working with contractors should be carefully managed. Contractors need oversight to ensure they are treating residents and their homes with respect. If they are going to be late or not be able to turn up for an appointment, it is important that residents are told. Seemingly small things such as sweeping up at the end of the day and closing gates can make a big difference to a resident's experience. Contractors need to be able to explain to residents what work they are carrying out and answer any questions. Stories of contractors treating residents badly will quickly spread and put other residents off from agreeing to having their home retrofitted.

The quality of work should be checked. Retrofit work should be regularly checked throughout the process to ensure it has been carried out to the highest possible standard and will not have to be re-done. A dedicated clerk of works can help ensure this happens. If retrofitting is not done right the first time, it can create more problems later down the line.

7. Making best use of technology

Technology such as heat pumps and solar panels can help to reduce the carbon emissions of a home. Taking a fabric-first approach and reducing the overall energy demands of a home ensures that the contribution of energy efficient technologies are maximised, and also means that your home needs only smaller and cheaper system. It is important that these systems are well maintained and are performing how they should be. Heat pumps, solar panels, and other technologies should be have regular assessments to check they are functioning at maximum efficiency.

8. Making the most of a retrofitted home

Residents should be instructed on how to make the most of a retrofitted home. It is important that residents know how their newly retrofitted homes works and have a clear point of contact to ask any questions. Retrofitting changes how you heat and ventilate your home, for example, mechanical ventilation systems (MVHR) need to be kept on at all times, and radiators no longer need to reach the high temperatures that a resident may be used to. Residents also need to be careful about

drilling holes into the walls that may impact the insulation and affect the thermal performance of the building. There should be regular checks over the 12 months post completion to check the home is performing as it should be, and residents understand how to run the home.

Maintenance is crucial. Retrofitted homes not only need regular checks to ensure they are performing how they should be, they also need regular maintenance. Technologies such as heat pumps need to be professionally maintained. Staff working on the homes after the retrofit is complete should have a good knowledge of retrofit technologies, and efficient record keeping, so they can ensure this is happening.

9. The cost of retrofit and knowing the stock

Retrofitting is costly, but it can save both the resident and the landlord money, by reducing the need for repairs and cutting energy use, thereby reducing arrears. Retrofitting can be built into planned maintenance works, and it is important that the opportunity to retrofit is taken when other works are taking place.

Landlords sometimes have to make difficult decisions, about whether it is better to retrofit a few homes to a high-level EPC, or more homes to a lower level EPC². Landlords need to have good data about their stock condition and how their buildings are performing in order to make informed decisions about how much they need to do to their buildings. Social landlords can retrofit lots of homes at the same time creating economies of scale and making it a more worthwhile project for contractors.

10. Retrofitting private and owner-occupied housing

We need to share the learning from social housing retrofit projects. While a lot of the conversation around retrofitting is focused on social housing, to tackle climate change we must retrofit all buildings. The lessons from the social housing sector need to be shared with housing professionals more widely. Forums such as the GLAs “Flats Retrofit Support Programme: Core Collaboration and Consultation Group” can be a useful way to do this. The Carbon Co-op specialised in helping owner occupiers to retrofit their homes. They have set up the “Levenshulme Area Based Retrofit Scheme” where they are working with owner occupiers to retrofit homes. Working on the ‘economies of scale’ principle, they are grouping homes together to be retrofitted at the same time, to make the projects appealing to contractors.

If we are going to scale up retrofitting to include more social housing, and to reach private renting and owner-occupied properties, much more funding, upskilling, and training will be required. This will require government involvement and financing.

11. Summary and conclusions

Retrofitting social housing not only brings huge benefits to residents and landlords; it helps ensure the future resilience of our large and “leaky” existing stock. It provides a model for other tenures and types of buildings, and it potentially has a significant impact on overall carbon emissions. It therefore saves money on many fronts simultaneously. The short-term costs are far outweighed by the long-term gains, and residents are the primary beneficiaries.

² EPC- An EPC is a measure of a buildings energy efficiency, rating buildings from A (very efficient) to G (inefficient). Each band will show you how much energy a building will take to run and how much carbon it will emit each year.

Messages to Government and Key Actors

At the end of the Think Tank we asked participants to propose key changes government could make to ensure retrofitting happens across the country and how best to involve residents. The main ideas are below:

- Long-term consistent funding for retrofitting in social housing
- Investment in training and upskilling to deliver retrofit
- More funding to support owner occupiers to retrofit their homes
- A long-term strategy to teach people about retrofitting in schools and colleges
- Incentivising green energy production, and stopping the reliance on fossil fuels