

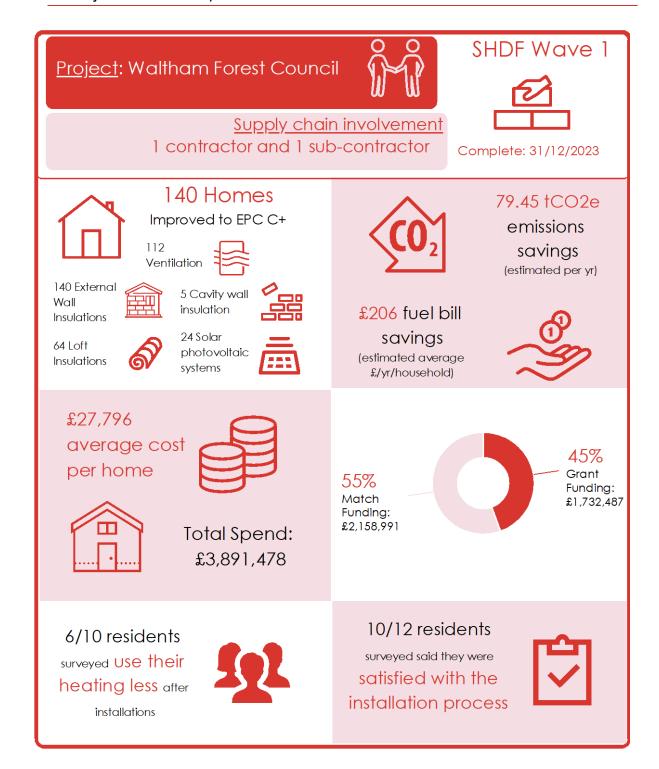


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1 Project Summary



¹ Carbon emission and fuel bill figures are taken from the SHDF Wave 1 change control log and are based on the National Household Model. Figures are accurate as of 30th July 2024.



Rationale for case study selection

The Waltham Forest Council project was selected as a case study for the Wave 1 evaluation because it moved from amber to green RAG rating in Delivery Partner reporting, suggesting that it had successfully overcome project challenges. In July 2022, when this project was rated amber, 39% of all Wave 1 projects had an amber to red rating. The case study covers:

- Resident engagement challenges, in particular in relation to property types, and how these were mitigated.
- Challenges experienced throughout delivery, including securing planning permissions, compliance with PAS 2035 standards, and high costs and material shortages, and how these were managed.

This case study is based on findings from a survey with residents, interviews with the social housing landlord (SHL) project team, supply chain stakeholders, and residents, and analysis of monitoring data and project closure reports.

2 Resident Engagement and Outcomes

2.1 Resident engagement challenges

The project team reported several challenges engaging residents during the retrofitting of properties, including:

- Both the Council and supply chain representatives reported that some residents did not want works to be undertaken because they considered them too disruptive or inconvenient. As reported by the Council, residents often mentioned being on holiday, having hospital treatment, or about to have a baby, and therefore did not want the noise of works. However, this did not apply to all residents. In an interview, a resident said they were happy for all the proposed measures to be installed, and did not expect much disruption.
- Lack of resident understanding about the works proposed and timescales involved. The Council stated that booklets and leaflets were sent out to residents to inform them about the works. However, they suggested that some residents were potentially not looking at these and, therefore, did not understand the timescales of works. In support of this view, the one resident interviewed said they received plenty of information through a letter, but they did not really take this in. However, ten of the twelve surveyed residents said that the time it took for the measures to be installed was in line with their expectations, suggesting they had awareness of the timings of installation.

"But yeah, I think people just weren't reading the letters. They didn't understand timescales. So, they thought two to three weeks was too long. "– Project team interviewee

- Both the Council and supply chain representatives also reported in interviews that some residents raised concerns that the material being used was the same as the Grenfell cladding, although this was not the case.
- Lack of cooperation from some residents. The Council also reported that in some properties residents refused to control their dogs, or keep them in the house, and were getting in the way of installers working on property exteriors. This resulted in tensions between residents and installers.



• **Difficulty communicating with residents.** One supply chain representative stated that some residents reportedly did not answer the phone, or took time to reach, resulting in delays.

"There were a number of residents on the scheme who were just difficult and restrictive in the access they would give." – Project team interviewee

The project team conducted visits to check properties before the works, and assess whether the retrofit measures they had planned to install were appropriate. During these visits, the team had discussions with residents about the plans to gauge whether they would then be supportive or not. Having a large pool of eligible properties made it easier to replace properties where there was resident resistance.

Difficulties in engaging residents were sometimes exacerbated by challenges relating to the nature of the properties being retrofitted. The selection of homes followed a worst-first approach. The majority of properties were Victorian, often terraced and with solid brick walls, as shown in Figure 3. During interviews, supply chain representatives reported challenges with retrofitting these properties, such as:

- Difficulties installing External Wall Insulation (EWI). The Victorian properties often had different designs, and therefore required different design models for external cavity wall measures to be installed. Lots of installers were involved in these works and were outside properties for weeks making noise and creating disruptions for residents. It was also often difficult to gain access to the back of properties to install EWI because residents did not want installers to walk through their houses, as reported by SHLs during interviews.
- The Council reported that having to clear lofts for insulation created additional disruption for residents, particularly where residents used lofts for storage.

Strategies to mitigate these challenges included:

- Paying supply chain contractors to help clear lofts and big furniture. The Council reported that this helped overcome barriers to install loft insulation specifically.
- Working closely with residents and involving the Council to impress upon residents that
 access was needed for the works to continue. Supply chain representatives reported
 constantly reminding residents of the benefits of measures, explaining that disruption for a
 few weeks could give them twenty-five years of a warm home. They said that, if necessary,
 they would rely on the Council's support to encourage residents to grant access.

The project team also reported that **resident engagement sessions run by SHRA** (the Social Housing Retrofit Accelerator, funded by the SHDF) were helpful and provided advice on accessing properties. This included learnings for future retrofit delivery, as shown below:

"So, we've made videos that we plan to use in our next project and show to other tenants. We basically did interviews with residents who were happy and then we're going to now show them to other residents to show them that this is what can happen." – Project team interviewee

2.2 Resident satisfaction with installation

Almost all surveyed residents (10 out of 12) were satisfied with the installation process overall, as shown in Figure 1. Six residents indicated that they were satisfied with the information provided to them at the end of the installation and eight residents were satisfied with the level of disruption caused by works to them and their household. The majority (10) agreed that the way the installation was scheduled was as convenient as it could have been for



them and their household. However, the one resident interviewed reported some dissatisfaction with the installation process, for example having to wait all day for an installer who did not turn up in the end, or installations taking longer than expected. Among surveyed residents, six were satisfied with the information provided after installation, while four were dissatisfied.

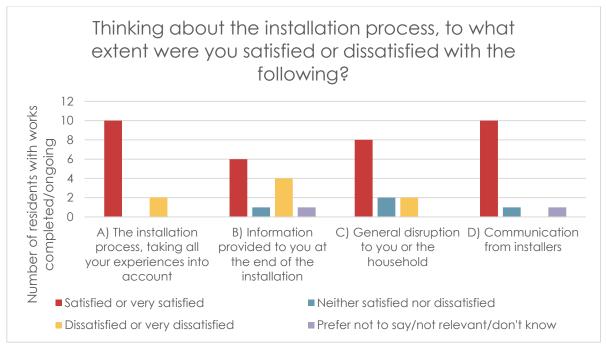


Figure 1: Satisfaction with the installation process amongst surveyed residents who had works completed or ongoing at the time of the survey (base: 12 residents.

Key learnings:

- To encourage resident engagement in future schemes, one supply chain representative suggested to focus more on potential bill savings as a benefit for residents following the installation of measures.
- The creation of video case studies showing interviews with residents who are happy with the measures received could help future residents understand the scope of works and the potential benefits.



2.3 Resident outcomes



8/12 residents now have more pride in their home





7/12 residents reported it is more affordable to maintain a comfortable temperature in their homes

8/12 residents are more likely to consider other energy efficiency measures in the future





6/10 residents now use their mains gas central heating systems less

Those who have not reduced their use of mains gas central heating 8/12 residents reported the attribute this to spending more time work made them feel more in their homes or receipt of other proud of their home financial support for their bills



Percentage of tenants reporting an improvement in:

Rot - 1/1

Damp - 3/4 Draughts - 2/5 Condensation - 5/7

Mould or mildew - 4/6

Figure 2: Evidence on emerging outcomes after the installation of measures reported by surveyed residents (base: 12 residents). Base sizes for individual survey questions vary as not all questions were applicable and therefore asked to all residents.

"Overall, it's been very positive, there isn't anything negative at all that I can think of." – Resident interviewee





Figure 3: Before and after works on a terraced house from Waltham Forest Council.



3 Early Challenges in Project Delivery and Mitigations

Challenges faced by the project team during early stages of delivery included securing planning permissions, compliance with PAS 2035 standards, and material cost increases and shortages.

3.1 Planning permissions

Difficulties with Local Authority Planning Restrictions and working with the Waltham Forest Planning Department resulted in the exclusion of otherwise suitable properties. Supply chain representatives said that some properties were ruled out due to planning issues, even though other properties in the same street had already had the same works undertaken under SHDF. Decisions were made by individual planning officers and were, therefore, difficult to predict. To mitigate planning issues, the project team sought to focus on properties that did not require planning permissions where possible.

"The planning issues were a challenge because it kept ruling out properties that should have been done, so, for example, we've got roads where we should have done six jobs, but two got declined. "- Supply chain interviewee

3.2 The impact of PAS 2035

Both supply chain representatives and the Council noted difficulties around understanding PAS 2035, including meeting the standard in terms of cost, time, and scope of works. One Council representative suggested it would be useful to have more training on PAS 2035. For example, with flats, there was uncertainty about whether looking at a sample of properties in pre-retrofit assessments was sufficient:

"There was some confusion about the extent of what was needed [in terms of PAS2035 requirements], especially when it came to flats in a block [...] It took a while before someone got the answer you need. But for every property seemed excessive and a waste of money to be honest." – Project team interviewee

The Council reported that specific PAS requirements had a major impact on their work, as they increased costs and affected residents. Requirements included:

- Having to eliminate any cold bridging to prevent the formation of condensation or mould.
 For example, installers were expected to remove steps going up to a front door, insulate behind the steps, and reconstruct them. Additionally, there were bridging-related requirements on roof finishes and gable ends. These additional works created disruption for residents.
- Specifications around putting in appropriate mechanical ventilation which created concerns among some residents about using more energy and increasing costs in the long run.



3.3 Material cost increases and shortages

In interviews, representatives from the Council reported that material costs increased due to:

- Cost inflation since the application was submitted. The Council reported needing to approve additional co-funding internally. This process meant that retrofits had to be paused until additional funds were received, and were therefore delayed. Supply chain representatives also reported higher than estimated costs of materials.
- Shortage of materials. Once work had started, the Council mentioned that there were fire safety concerns about the insulation material being used, and wanted to change the polybead product they were using to a mineral product. However, they reported that there was increased demand for this material as other projects also started sourcing this product. This pushed prices up and made it difficult to find available contractors for the installations. There was also a shortage of the mineral product due to post Covid supply issues.

"We allocated average cost per property, but by the time we were awarded the funding and started the work, the costs had increased. So, we then had to get additional funding approved internally, and it took time to go through that process." – Project team interviewee

3.4 Managing costs and delays

The Council invested additional co-funding of over £1 million more than was initially planned into the Wave 1 project and the end date of the project was extended from March 2023 to 31st December 2023. The Council also reported a number of strategies used to manage costs and delays:

Establishing a standardised cost pricing with scaffolders.

"They (the main contractor) established with scaffolders an average price for the scaffolding. They agreed to a package price so that individual variances were evened out, so it made agreeing the pricing and arranging the scaffolding much quicker." – Project team interviewee

- Agreeing a tendered contract with the partner contractor so that most of the works had an
 agreed schedule of rates. This helped reduce costs. For example, with resident liaison costs
 that had been tendered as part of this contract.
- Installing multiple measures simultaneously where appropriate. The Council reported that they used the scaffolding already in place to do internally funded works on solar PV installations (Figure 4) at the same time as other Wave 1 work such as EWI. This allowed them to save time.





Figure 4: Solar PV installation.

Key learnings:

- Supply chain representatives highlighted the importance of having sufficient time available for the initial planning and application stages, to prepare for the project effectively and secure the required approvals. Earlier kick of meetings with DESNZ would be helpful to understand better what is expected of projects.
- The efficiency of works can be increased by maximising the use of scaffolding, for example by installing solar PV when doing other works.

4 Data Sources

Data sources used to produce this case study			
Social housing landlord Interviews	1 interview (Q2 2023) held with 3 Wave 1 representatives from Waltham Forest Council (in a single interview).		
Supply chain stakeholder interviews	 3 interviews (Q3-4, 2023) with: 1 resident liaison lead from a supply chain contractor. 1 strategic communications manager from a building services and facilities management organisation. 1 installation manager from an organisation specialising in retrofit installations. 		
Resident surveys and interviews	2 tranches (1 and 3) of a survey with residents for whom installations had started or who had their works recently completed. 12 respondents from Waltham Forest, Q 2 2023 – Q1 2024. Not all respondents may have answered all questions so some sample sizes may be smaller.		



	 1 in-depth interview with a resident who also took part in the survey and consented to take part in a follow-up interview (Q1 2024).
Final project report	1 final project report delivered by Coventry City Council and Citizen to DESNZ (Q 4, 2023)
Scheme monitoring data	Scheme monitoring data, as reported by the project team and assessed by the Wave 1 Delivery Partner. Includes risk registers developed by both the project and Delivery Partner.



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