



RETROFIT
ACADEMY CIC



local energy
north west hub

CONTRACTING FOR PAS 2035 COMPLIANT RETROFIT

PHASE TWO – A LIVE TEST AT ST HELENS CEMENT CITY
BRIEFING 1: PRE-PROGRAMME ACTIVITIES



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1. Introduction

This is Briefing 1 of a series of five that captures lessons learnt from a live test of Publicly Available Specification 2035 (PAS 2035) compliant assessment (and coordination) undertaken by The Retrofit Academy CIC on behalf of the Local Energy North West Hub (LENW Hub).

This piece of work follows on from Phase 1, which consisted of a desktop study entitled; “Contracting for PAS 2035 Compliant Retrofit – A Guide for Local Authorities” [Retrofit Academy]. The Hub wanted to consider factors relevant to procurement and the contracting of Retrofit Assessors (RA/RAs) and Retrofit Coordinators (RC/RCs). Within Phase 1, four delivery models were described in response to discussions around PAS 2035 delivery for local authority led retrofit programmes.

There will be five key areas covered that describe learnings from the live test, which investigate PAS 2035 compliant retrofit from inception up to the lodgement of the Medium Term Improvement Plan (MTIP) as outlined below;

- 1. Pre-programme Activities**
2. Retrofit Assessment
3. Medium Term Improvement Plans and Retrofit Coordinator Tasks
4. The Customer Interface – Assessment and Coordination (Up to Design)
5. How to Ensure an Effective Handover

2. Background

The LENW Hub has commissioned The Retrofit Academy CIC to conduct a live test for compliant retrofit in accordance with PAS 2035 and on engaging the services of RCs and RAs. PAS 2035 is a new, comprehensive domestic retrofit standard developed following the Each Home Counts Review.

The LENW Hub is funded by the Department of Business Energy and Industrial Strategy (BEIS) to support public sector organisations to develop energy projects in collaboration with businesses and communities and respond to the energy agenda. The LENW Hub is an intermediary for funding Local Authority Delivery (LAD) Scheme Phase 2 funding, a £300 million programme for energy retrofit for low income households. This report was funded by the Government as part of the Local Authority Delivery Scheme.

LAD Phase 2 was launched as an economic stimulus during the Covid-19 pandemic. Substantial funding was to be delivered in the year 2021/2022. In 2021, a transition occurred from PAS 2030 (2017) to PAS 2030 (2019) to making PAS 2035 mandatory for future government programmes. The Phase 2 scheme was designed and launched prior to the wide-scale adoption of PAS 2035 by the retrofit sector but recognising that it was coming into force. All retrofit work funded via the LAD Phase 2 scheme is required to comply with PAS 2035.

The LAD Phase 2 programme was designed around national eligibility criteria. This included an average cost cap of £10k per property for measures that could improve a dwelling’s Standard Assessment Procedure (SAP) rating. In accepting the funding, energy hubs profiled an expected range of measures that would be installed as part of the programme. In the North West, the energy hub allocated funding to each LEP area, including the Liverpool City Region (LCR). The Liverpool City Region Combined Authority (LCR CA) is managing a circa £10m retrofit programme for local authorities, including St Helens Borough Council. The energy hub programme is also administered by the LCR CA.

3. St Helens Cement City – Live Test Site

The energy hub worked with the LCR CA to identify a set of properties that could be brought forward for retrofit assessment in advance of the main retrofit programme.

It was agreed that retrofit assessment and coordination processes were to be undertaken on up to 40 properties in the 'Cement City' area of St Helens – carrying this name due to the hundreds of no-fines build types on the estate. It was envisaged that a live test at this location would enable a range of lessons to be learnt from a relatively complex housing estate that nevertheless had some commonality between property types.

The tenure of these properties is owner-occupied, which tests the engagement aspects of retrofit assessment. Around 40% of the estate has been targeted by previous energy efficiency funding streams such as the Community Energy Saving Programme (CESP) and the Energy Company Obligation (ECO), and there is evidence of poorly detailed external wall insulation (EWI) across the estate. The general state of repair of the properties is that the main structure is in good order, but there are clear signs of ageing to the render/dash, and careful attention was to be paid to the internal and external condition of the properties and any resulting challenges.

4. Live Test Methodology

The LENW Hub engaged with The Retrofit Academy because it wanted to understand best practice in respect of the delivery of PAS 2035 compliant retrofit. Scoping of the LAD Phase 2 programme had highlighted that there were decisions to be made about the structure of contracts for programmes. A single delivery partner which could undertake all retrofit engagement, assessment and installation activity was one option for local authorities. Alternatively, these activities could be separated from each other so that organisations with particular specialisms could deliver.

This pilot was originally intended to test the effectiveness of one of the models presented in the initial Phase 1 report: The Local Assessment Coordination and Evaluation (LACE) model where assessment, coordination and evaluation are done by a multi-disciplinary team independent from the installer.

However, there was a need to procure the programme and start quickly to gain information to feed into the wider LAD Phase 2 programme. This meant disengaging the retrofit assessment stage of the PAS 2035 process from delivery and splitting the RC role into two parts. The LCR CA went to market to procure a main delivery partner for the installation of retrofit, with retrofit coordination and assessment as part of the contract. This means that the live test would progress up to the completion of the MTIPs and these would then be made available to the delivery partner.

This has the implication that the RC role is split across two contracts with the local authority. The Retrofit Academy recommended as part of the LACE model that the RC is independent of the Retrofit Designer (RD/RDs) and Retrofit Installer (RI/RIs); this project provides a hybrid of independent assessment followed by delivery by a main contractor and, therefore, provides the opportunity to understand many parts of the PAS 2035 process in detail, including whether the handover of MTIPs and gaining agreement from a contractor side RC can be achieved effectively.

If it can be demonstrated that pre-programme retrofit assessment can be separated from the delivery of measures, this would have advantages in terms of enabling a local authority to build a pipeline of homes ready for retrofit and such homes would be already compliant with the PAS 2035 assessment process and would enable local authorities to submit more robust funding bids and or go out for procurement based on data from MTIPs.

However, there is a risk inherent in splitting the RC role between contracts, if the second RC has any issues with the work/evidence from the first RC, this will add cost and time to contract delivery. Furthermore, Sections 6.1.1 and 6.1.3. of PAS 2035 state, inter alia, that: “The RC shall be responsible for overseeing the project from inception to completion”. The live test at St Helens Cement City investigated the complexity added to projects by the separation of duties, allowing conclusions to be drawn about best practice approaches.

Briefing 1: Pre-programme Activities

A commission was agreed between the LENW Hub and The Retrofit Academy to undertake the Assessment and Coordination of the properties in the live test area. The Retrofit Academy subcontracted this work to a specialist company which offers advice, assessment, coordination and evaluation of PAS 2035 services. Osmosis ACD appointed a Project Manager.

A kick-off meeting was held between the Project Manager, St Helens Borough Council and the LCR CA. Weekly updates were provided by the Project Manager to St Helens Borough Council and LCR CA. [There was also a live daily tracker available for review by all parties.](#)

Fortnightly reviews took place between the Project Manager at Osmosis ACD and The Retrofit Academy. Assessment appointments were arranged by Osmosis ACD. The appointment of the RC was done by Osmosis ACD. A team of two assessors were on-site to perform the assessments. Video footage was taken with the permission of the LENW Hub to enhance the reporting potential.

This first briefing in the series covers pre-programme activities. These are the activities that should occur prior to any customer contact or assessments being undertaken. There are five sub sections to this briefing.

- A. Generic challenges: funding, PAS 2035 transition**
- B. Understanding the delivery of the contract services**
- C. General Data Protection Regulation (GDPR)**
- D. Appointment of the RC and setting outcomes**
- E. Access protocols**

A GENERIC CHALLENGES: FUNDING, PAS 2035 TRANSITION

Before diving into the detail and lessons from this pilot, this section explores some of the more generic issues that set the context for the delivery of this work and other funded projects.

1. Funding timescales

Many funding programmes have a short overall delivery timetable.

Tight delivery windows (and delivery habits) 'drive' many authorities towards using a turnkey solution provider which incorporates the RC and Retrofit Evaluator (RE/REs) roles.

The Retrofit Academy recommends keeping the RC and RE roles independent from the RI.

If the local authority funds the RC, they are not taking on key delivery responsibility. Design liability still sits with the designer (RD), and installation compliance is with the RI. The RC does not 'sign off' or 'approve' these elements. The RC collects and collates these things from the responsible role. In effect, the RC checks work has been done, rather than 'approving' the actual content of the work. An independent RC should, however, provide an additional informed checking process alongside this collating role.

Currently, many authorities are contracting the RC role within the main contractor. This creates a potential for a conflict of interest (recognised in PAS 2035). PAS 2035 does allow this arrangement. With this structure, there is probably a greater need for a contracting authority to be more deeply involved in contract management, especially around checking PAS 2035 detail and compliance.

2. Work required pre-bid?

Recent government-funded retrofit programmes (such as LAD) have been designed as bidding competitions into which local authorities must submit anticipated profiles of the measures to be delivered, in advance of an evaluation of the stock that will be retrofitted. The spirit of PAS 2035 would assume the prioritisation and selection of measures after a full (i.e. PAS 2035 compliant) Assessment has been completed. Also, after subsequent consultation with the Resident Client and the Funding Client. There is, therefore, a potential disconnect between existing funding regimes and PAS 2035. This disconnect is being discussed with BEIS.

This disconnect creates the potential pitfall of creating a scheme at bid stage that cannot then be delivered as anticipated. Bids for successful projects will require enough PAS 2035 compliance input to ensure that schemes are developed along robust, compliant lines. Alternatively, funders may need to reshape programmes to allow more upfront work to be supported within programmes so that deeper work is less 'at risk' for authorities and RPs.



Key Lesson – Developing Funding Bids: Funding bids for retrofit programmes should be based on a good understanding of the condition of stock where measures will be implemented and the implications of PAS 2035 upon compliant measure packages. This could include retrofit assessments. RCs and/or RDs could be involved in the process of understanding stock condition and making recommendations for potential measures on a typology basis – with due consideration of potential PAS 2035 requirements.



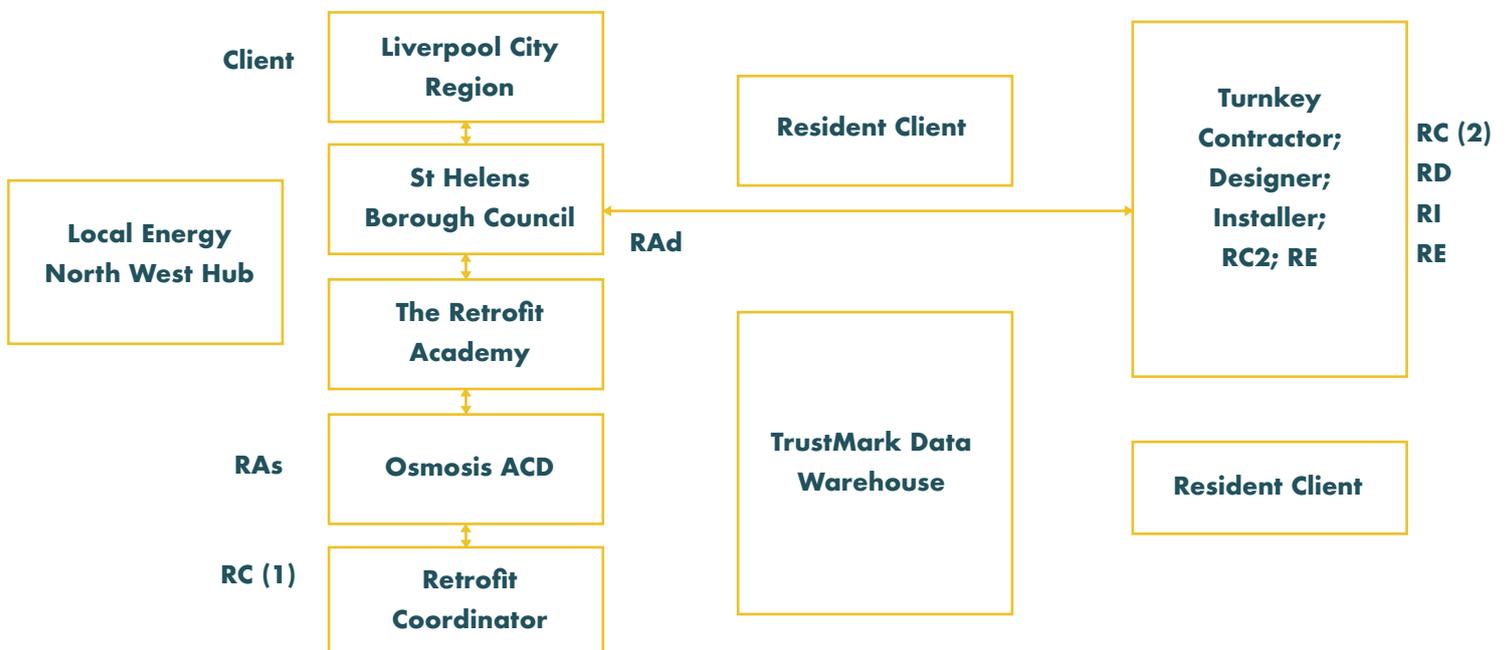
Key Lesson – Measures: In order for many of the current LAD projects to be PAS 2035 compliant, the ‘measures profile’ must be regarded as an initial illustration only. The final decision on the measures for any given property can only be made after a PAS 2035 compliant assessment, and in line with the wider requirements of the standard. For many projects, PAS 2035 will significantly change the required work at large numbers of properties. This will probably relate more to associated works than changing the measure (e.g. below damp proof course, eaves details, etc).

3. Timing for appointing PAS 2035 roles

Trying to get assessments done early, either for bidding or at the start of delivery, also creates challenges. Ideally, the RC, the RA and the RD would all be in place before assessments start. This is partly because the RC would coordinate with the RD to establish the scope of the assessments and their suitability to meet the needs of the Designer.

4. Splitting delivery into stages

In order to undertake assessments early, a contracting authority can either contract the PAS 2035 roles for the duration of the project from the outset, or they must recognise the challenges of splitting the work into separate stages. If the RC role is split – as in this project – this does create some challenges.



KEY		
Contract: 	RAs: Retrofit Assessors RC: Retrofit Coordinator RD: Retrofit Designer	RI: Retrofit Installer RE: Retrofit Evaluator RAd: Retrofit Advisor

The Retrofit Academy believes that the approach of splitting the RC role into two parts may risk not being PAS 2035 compliant. This is because of sections 6.1.1 and 6.1.3 of the Standard. These say, inter alia, that: “The RC shall be responsible for overseeing the project from inception to completion”. Though a different interpretation of these sections could be possible, The Retrofit Academy would not recommend splitting the RC role at this time.

The potential for, and implications of, separating the RC role are being considered by The Retrofit Academy and raised with stakeholders. This fits with considerations around the idea of assessment being undertaken ahead of bid submissions as a new typical approach for grant funding.

During the course of this work, The Retrofit Academy has engaged with stakeholders around issues raised from the pilot. This has produced some key considerations and approaches:

- The current plan is a further development of the TrustMark Data Warehouse. This is likely to improve access to stored data over a longer period. Hence current approaches and limitations should change in future.
- At this time, lodged information cannot be easily retrieved by an RC other than the initial RC who uploads the information. This means that the pragmatic approach to early assessments is that they are not initially lodged, but they are retained so that they can be passed on to the RC when the project starts. RAs should be aware of what is required anyway, but if necessary, they can seek guidance from a RC who may not be the ‘Project RC’ once the project technically commences. This will ensure that assessments will be ready for the ‘Project RC’ with content and formats that are likely to be suitable.

If an authority does split the RC role, this requires some additional considerations:

- Scope of each role: Detailed definition of exactly what is and is not included in the work.
- Mitigating impacts: Some elements of the process do not easily fit into this arrangement. This will require some proactive decision making by the client and first RC. For example, trying to ensure that assessments will be suitable for the Designer, before the Designer is in place.



Key Lesson – Handover between RCs: If the design of a programme results in a split in the RC role, then the detail, process and methodology for handover needs to be in place.

B UNDERSTANDING THE DELIVERY OF THE CONTRACT SERVICES

Once the Assessment and Coordination Pt1 contractor had been appointed, the first stage of the project was a meeting between the client (St Helens Borough Council) and contractor (Osmosis ACD) to understand and agree what PAS 2035 services were to be offered. The discussion that took place highlighted a series of considerations that can form part of a checklist to be used by local authorities and their contractors. This checklist will be made available to local authorities as an output from ongoing work with the Midlands Energy Hub on Guidance for Local Authorities on PAS 2035. In this phase, there were several lessons learnt:

1. What services were to be provided and to whom

On this project, there were several parties who formed the client team due to the grant funding programme associated with delivery of this retrofit scheme (LAD Phase 2). St Helens Borough Council was part of the wider LCR Local Enterprise Partnership (LEP) area bid for funding led by LCR CA and are working collaboratively to deliver retrofit projects to the six local areas that make up the LCR. LCR is part of the North West regional allocation of funding, administered by the LENW Hub. The Retrofit Academy performed a research function for the project, also funded by the LENW Hub. This was a somewhat unique contracting situation and it led to some additional challenges.

For the Project Manager, this is a complex reporting structure and has proved time consuming when needing to agree key points. Although the day-to-day operational lead was established and worked very effectively, the overarching connection with LCR CA was not established or their role not communicated early enough.

Some RC accreditation schemes may insist that the RC uses retrofit assessments that are also lodged through their scheme or produced using their software system. This can create a problem if the RAs are appointed before the identity of the project RC is known. However, that is not the case with all the schemes. Therefore, it would be recommended that a requirement is included in the contract that any RC employed by the contractor should be accredited with a scheme that does allow them to use a retrofit assessment that is produced using any compliant methodology.



Key Lesson – Roles: Where there are multiple parties in government-funded and let contracts it is important to establish early on:

- who is the lead for the project,
- who is responsible for directing the contractor,
- how communication will function between the parties.

Key Lesson – Decision Making: To prevent delays in project mobilisation, all projects should proceed from a shared contact list for all stakeholders involved in decision making with all stakeholders briefed on their role in the project. This is particularly true where multiple organisations are participating in delivery.

Key Lesson – Accreditation Body: consider including in the contract that any RC employed by the contractor should be accredited with a scheme that does allow them to use a retrofit assessment that is produced using any compliant methodology.

2. Setting outcomes (and measures)

Outcomes

The client is responsible for setting out the outcomes they wish to see from the works and discussing/agreeing them with the RC.

Measures

The PAS 2035 process does not determine specific measures, only that the measures must achieve the requirements of the standard.

In this project, the measures profile in the bid was rationally derived but set out before PAS 2035 assessments were conducted. These measures will, therefore, need to be reviewed in light of the PAS 2035 delivery process.



Key Lesson – Scope of Programme: A briefing document should be provided to the RC at the outset of the project. This should detail relevant programme eligibility criteria and funding constraints. It could also include the wider context of any local authority policy or targets. This context can inform the recommendations provided in a medium term plan, which can set the measures to be funded in the short term in the proper context of the most suitable measures for a particular property.

Key Note – Review Outcomes (and Measures): Initial outcomes and measures should be reviewed post assessment and through design and consultation, to ensure that the initial thinking fits with the reality of the actual homes.

3. Scope

Assessment & RCpt1

On this project, clarification of the scope of objectives was provided at a programme level and, in theory, in the LAD Phase 2 funding application which had stated a preference for EWI that goes against the PAS 2035 guidance.

Agreement of outcomes with the residents can prove time consuming and challenging with pre-set measures and multiple governance parties. This will be considered further in later briefing notes.



Key Lesson – Defining scope: Use The Retrofit Academy “PAS 2035 Compliance Process Map” to itemize exactly which retrofit coordination activities will sit in each part of the split. Some elements may be required twice as the second RC is likely to need to review some of the existing elements. There are also elements of the Assessor role in relation to advice that need to be included in this process.

4. Delivery structure

Separating the RC role does introduce the potential for duplication of effort (with RCpt2's need to review/confirm elements from RCpt1).

In this pilot the RA and RC were appointed 'to design stage' only. This was done to facilitate St Helen's working to complete a fast-track number of assessments as part of the wider LCR retrofit programme. This allowed the pilot to be started earlier (ahead of the appointment of a main contractor [RI]). It also allowed the testing of the Assessment & Coordination, with these roles being independent of the RI.

This approach was beneficial for the overall programme in terms of speeding up the first part of delivery. However this approach means splitting the RC role into 2 parts (up to the Medium Term Improvement Plan and post-MTIP).



Key Lesson – Split RC Role:

- Specific scope must be defined
- Pro-active decision making to reduce risks from 'missing' inputs (e.g. anticipating likely RD requirements)
- Handover needs to be set out

5. Lead-in Times

Lead-in times for providing the assessments and appointing the RC raised the issue of multiple clients and General Data Protection Regulation (GDPR) protocols not being in place. This is commented upon further below.



Key Lesson – Assessment Timescales: Local authority led retrofit programmes must be designed to ensure that there is sufficient time for the assessment phase of the programme. Whilst a programme might aspire to deliver a range of measures within a funding cap, delivery must ensure that the homeowner is in full agreement on the measure[s] for their property supported by recommendations from the RC.

6. Resident engagement

It is important to agree early who will bridge the link from the last advice given to residents and introduce a new organisation. In this project, it was agreed that Osmosis ACD would write to residents with St Helens Borough Council approving the content.

7. Information that would be shared between the client and the contractor

On this project, it was agreed that the information relating to assessments progress would be held on a spreadsheet and shared with St Helens Borough Council and LCR CA weekly. Some of the meetings were virtual and the exchange of information was always through a secure channel, but the offer of site visits was made and the schedule of when assessors would be on-site was shared. It was also established what would be shared.

8. Invoicing

Payment terms and invoicing schedule to be agreed.

C APPOINTMENT OF THE RC AND SETTING OUTCOMES

In this project the appointment of the RC was the responsibility of the appointed service provider – Osmosis ACD. The introduction to the client was delayed because of the confusion over the client lead as well as the need to make progress after the delay with GDPR protocols. On this project:

1. The outcomes were assumed to be energy efficiency and warmer homes as there was a suggestion that EWI was a preferred measure as outlined in the project brief.
2. Although there is not a requirement for the RC to visit all assessed homes, a RC who is geographically close to the site is an advantage.
3. It is the RC's responsibility to consider the programme outcomes, determine the pathway and advise the assessors on the depth of assessment, involvement of specialists and the number of airtightness tests. To make a start and make up time due to early project delays, all assessments were done to Path C to ensure the highest quantity and quality of data.



Key Lesson – Setting Outcomes: Programme outcomes need to be agreed at the start of the process. Measures should not be determined before the assessments have taken place. Outcomes should be both discussed and recorded by the RC and the Lead Client for their own records. This is particularly important on a project where there is a second stage RC. The outcomes should be owned by the client.

D GENERAL DATA PROTECTION REGULATION (GDPR)

At the kick-off meeting, it became apparent that the GDPR agreement was not in place and so this delayed the start of the process for 5 – 6 weeks. Although the residents had signed to agree the sharing of their data, the two government bodies, i.e. the local authority and the Combined Authority, had not agreed their shared protocol. The things that are key regarding the GDPR in this phase are listed below.

1. Have your GDPR in place before letting the contract.
2. At the kick-off meeting, share the protocol with the contractor and all client representatives to ensure that all parties know what their responsibilities are. On this project, the protocol document was never shared with the contractor although through discussion the project manager ascertained his responsibilities.
3. This project used an encrypted and secure data sharing system which worked for everyone.
4. All parties need to agree what information is needed by the contractor. In this case, it was determined that the following was the minimum needed: names, addresses, telephone numbers, last

contact and about what, any previous feedback from resident and appetite for retrofit, vulnerabilities that may affect ability to engage and red flags that may impact safety of contractors.

5. It was also decided that there would be a need to share more addresses than the contract allowed for to accommodate dropouts and unsuitable homes.



Key Lesson - Data Management: A data sharing agreement should be in place at the outset of a project so that information can pass between the client, the assessor and any third parties who need to be involved, such as lead generators and specialist surveyors.

Key Lesson – Initial Contact: Local authorities may be in contact with households in advance of RAs being appointed. They should retain information about households' reasons for contacting the council and ensure that any advice on potential appropriate measures does not risk conflict with the PAS 2035 process.

E ACCESS PROTOCOLS

St Helens Borough Council confirmed that they would provide addresses from campaigns previously run. It is key to determine who contacts the resident throughout the process, particularly when the advice and assessment stages are disengaged. Residents need to understand the assessment, install and evaluation process, including when they can expect activities and decisions that affect them and their home. On this project:

1. It was agreed that the assessment team would contact the residents and make appointments directly. All content was approved by St Helens Borough Council.
2. Clarity on the customer journey is important for householders and delivery partners alike. This is important from initial marketing and customer acquisition right through to post-works evaluation.
3. A freephone number and out of office hours appointments were made available.
4. Safeguarding red flags were made known to the contractor but not always with enough time.
5. Where the LA contracts out services or does not have the capacity to respond to customer queries, an event or call script may be helpful to maintain the Trusted Partner role that the LA usually has.



Key Lesson – Referral and Attrition: Reassuring the household that their retrofit is being undertaken as a coherent process requires that all parties understand their roles and responsibilities. A straightforward description of the customer journey should be supplied to the resident explaining who will visit their home and why. This will reduce attrition in the programme. In this pilot, 39 surveys were completed from 51 potential participants.

Further information

The next briefing in the series is 'Retrofit Assessment', which covers:

- Off-site assessment preparation
- Customer engagement
- Key elements of a compliant assessment
- Software and lodgement

Subsequent briefings cover: Medium Term Improvement Plans and Retrofit Coordinator Tasks, Customer Interface and Handover.



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