energy saving trust

Green Home Finance Accelerator - Discovery Phase Evidence Report: Retrofit Proposition Toolkit

Contents

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1. Executive Summary

1.1 Introduction, aims and objectives

Total project cost: £210,371.13

Department for Energy Security and Net Zero contribution: £150,888.73

Our aim was to test a service to provide **Journeys to Green Finance**. This would overcome barriers for homeowners (particularly private landlords) in terms of access to finance for retrofit; knowledge about measures, costs and benefits; access to quality installers; confidence in delivery; and securing consents for works to proceed.

For landlords, the Journeys service would unlock financing offers with project-specific advice, help with finding installers, guaranteed quality installations, and a home logbook with records of the improvements. For lenders, the Journeys service would allow easy testing and development of different green finance offers for the private rented sector (PRS) retrofit market by offering a flexible framework of advice, quality assurance, verification and data handling components that could be deployed to support a wide range of lending offers.

We envisaged that this would be delivered by developing and integrating services provided by three leading organisations in the low carbon homes space: Energy Saving Trust (with its unique reach, profile, and energy advice services); TrustMark (as the government-endorsed provider of registered installers and retrofit process management services); and Residential Logbook Association (which brings together the seven UK logbook providers.)

The discovery phase successfully covered partnership building and scoping, and programme design to enable a pilot to proceed. We worked with finance provider(s) to:

- create customer and risk profiles and to understand their requirements for energy efficiency and low carbon heating lending
- carry out market research, testing and segmentation to assess the viability of Journeys with landlords (including understanding their decision-making processes around green finance and to inform the branding of the offer)
- research verification approaches with TrustMark registered assessors and installers

Using the outcomes of these elements, we reworked our proposition to create a detailed plan for the IT infrastructure required as a minimum viable product to enable pilot testing and to create a view of the commercial potential beyond demonstration phase. We are now clear that our primary customers are lenders, and our unique selling point is providing flexible components to meet their green finance product needs. However, in considering the default content and presentation of components of our service, we have shifted from a focus principally on private landlords to a focus on the wider mortgaged (owner occupier and private rented) market. We have also adjusted the presentation of the planned service to particularly emphasise its highly flexible and modular nature for lenders. We are now calling the planned service, **Retrofit Proposition Toolkit (RPT)** - see Appendix A for our proposition overview.

1.2 Key barriers and/or challenges

We faced some initial challenges in recruiting financial services partners due to the perceived burdens of delivering within a government grant funding arrangement. However, we were able to recruit one building society to support our consortium during the discovery phase, who worked closely with us during 4 in-person and online workshops to co-design the proposition. We were also able to access their resources to support our research with landlords and mortgage brokers.

During the research phase there was a change in the UK Government's stance on Minimum Energy Efficiency Standards (MEES) in PRS which reduced the anticipated need to make changes to properties to achieve an improved energy performance certificate (EPC) rating. This enabled us to widen the scope of our proposition to support both owner occupiers and landlords in the PRS via relationships we expect to build with Banks and Building Societies to commercialise our service proposition as the RPT.

With our PRS focus during the discovery phase, our qualitative research with consumers focused on landlords. While many of our learnings will also be relevant to owner occupiers, we added further insight on the owner-occupied sector through literature review, particularly quantitative data, and drew on Energy Saving Trust's deep internal knowledge on this sector.

1.3 Key findings from research and other activities

The findings of our research affirmed the direction and design of our proposition, though we have adjusted our presentation of the proposition and our views of final target customers.

In our service design work, we strengthened the proposition as a toolkit of pre-integrated components that can enable innovative green lending. We created a plan for how digital systems from our three consortium partners can be integrated and used flexibly by lenders. Our research and co-creation activities with lenders identified some uncertainty around the current green finance market, due to high interest rates and policy uncertainty. We have identified a commercial delivery model (based on pay-per use APIs) that will reduce barriers to entry for lenders with lower cost and risk e.g., through unlimited testing of our core toolkit components, with no charge until these are commercially deployed.

A key strength of the consortium of Energy Saving Trust, TrustMark and Residential Logbook Association (RLBA), is we each have existing relationships covering lenders, property industry, national and local governments, installers and assessors and more. Via Trustmark we have worked closely with the registered assessor and installer industry, confirming appetite for the proposition, and informing design of the verification components.

The discovery phase has allowed us to combine resources of knowledge, industry experience, technology and verification to work together on green financing, which is a significant step in the market.

Our consumer research with landlords provided rich insight into the retrofit market in the PRS sector. We identified that key barriers for landlords undertaking retrofit projects were lack of knowledge on the starting point, costs, and practicality, which the proposition was broadly seen to help overcome through tailored online and in-home assessment components. The advice and support components of the project were strongly welcomed by landlords. Similarly, the property logbook was seen by lenders as a valuable potential offer and engagement opportunity.

Landlords were found to be highly responsive to regulation and would not tend to undertake retrofit projects proactively. The government's move away from a planned mandatory EPC C standard therefore removes a significant driver for action, though we have identified a smaller ongoing retrofit PRS market. We anticipate a significant owner occupier energy efficiency retrofit market for our proposition and a rapidly growing market linked to heat pump adoption.

Our approach to verification rests strongly on the TrustMark framework of registered installers and assessors, providing guarantees for work and a register of measures installed in the TrustMark Data Warehouse. The information in the Data Warehouse will be made available to final customers through the logbook. We reviewed this proposition with all the stakeholder groups involved and found that it would be attractive to lenders.

1.4 Key process learnings

A challenge identified with 'discovery projects' is that you need to start with a tight enough hypothesis about the proposition to take into 'discovery', but with enough space for it to evolve.

For our project we were able to support the evolution of our core proposition in two directions based on research insights. Firstly, the research we did with financial services organisations flagged early on that we needed to be flexible about the proposition. The lenders wanted more

options about how to use the proposition, and hence we moved to a concept of a ‘toolkit’ of pre-configured components. Secondly, it was clear that the lenders wanted a broader target market to be considered, not just the PRS sector that our original proposition had targeted.

Were we to do another ‘discovery’ process, we would likely be less prescriptive about our original product and market hypothesis and would test multiple options in research from the outset.

1.5 Reflections on key outcomes achieved

The RPT will be made available to financial services providers (banks, building societies) and (in partnership with lenders) to retrofit service providers (e.g., local advice agencies) which allows it to address the needs of a wider audience including landlords and owner occupiers.

We have built our relationship with Coventry Building Society, and recruited a bank, to support our submission for the pilot phase by allowing us to pilot our proposition with their customers.

We refined our approach with banks and building societies so they can use an integrated proposition approach, either using all component parts of the proposition or specific individual components (e.g., advice and assurance, or verification and logbooks.)

The data sharing approach to support the proposition was also refined with standardised definitions ascribed to the data sharing packages.

The RPT is a service offer that has been designed to allow any bank or building society the flexibility to integrate it directly into their customer journeys to support their green finance products. The component parts can be used to:

- deliver advice to customers on home improvements for energy efficiency and decarbonisation.
- provide customers assurance that the work has been completed to quality standards and that they are supported by installation guarantees.
- provide banks and building societies verification and assurance that their lending is being used to decarbonise/ improve energy efficiency to minimise the potential for greenwashing.
- provide banks and building societies data on the progress they are making on decarbonising their lending and asset portfolio.
- provide landlords and owner occupiers the ability to save data on the improvements they have made and to share that via logbooks with banks and building societies for use in the mortgage underwriting process.

The Retrofit Proposition Toolkit enables ready delivery of a wide range of green finance products, enabling lenders to fulfil their Financial Conduct Authority (FCA) regulated consumer duty and the successful delivery, at scale, of the outcomes expected from green finance products.

2. Product introduction

See Appendix A for our proposition overview.

2.1 Overview

The Retrofit Proposition Toolkit (RPT) is a pre-configured digital toolkit which enables financial services companies to create an end-to-end retrofit proposition. We tested this in the discovery phase for use with the Private Rental Sector (PRS) market**,** but it is intended for roll-out across the whole privately owned market.

The RPT contains pre-configured and pre-integrated data and service components that a finance company can link to their risk assessment systems to create an end-to-end retrofit proposition. These components cover every aspect of a retrofit project, from first assessment, through project management, to the ultimate storage of a project records in a Data Warehouse and homeowner's digital logbook. Built by industry leading players in the provision of digital retrofit services, the RPT toolkit contains pre-configured modules covering retrofit assessment, planning, certification, and data storage.

Incorporating some, or all, the components in the toolkit into their online services enables financial services companies to offer their homeowner clients first class retrofit education, advice, planning and project management. The advice modules cover all aspects of a retrofit project including insulation, low carbon heating and renewables.

Financial services companies have the option to take separate elements from the toolkit to build into their own retrofit propositions or they can work with the consortium to build new online retrofit propositions that feature all the component tools.

2.2 Overcoming consumer barriers

For retrofit to successfully roll-out across the whole of the UK's built housing stock, homeowners are going to need advice and support from the key players who support the process of home ownership. Banks and building societies are the primary organisations that homeowners build relationships with through the life of a property and are, therefore, on the front line for providing advice and support.

The RPT has been designed to support banks, building societies and brokers looking to lead in the provision of financial support to the residential market. The RPT dramatically simplifies the challenge of building complex eco-focused services for end users.

3. General scoping research and other activities

3.1 Initial research and methodology

We conducted user research to explore barriers to landlords' undertaking retrofit works to their properties, whether there would be demand from landlords for a green finance tool, whether our proposed proposition would help overcome the barriers identified, and whether assessors and installers would accept green finance funded work. For the finance sector, we researched mortgage brokers and undertook co-creation work with lenders.

Methodology

We conducted qualitative research with landlords, assessors, installers, and mortgage brokers, as well as reviewed existing evidence on landlords' attitudes and experiences to home renovations.

The qualitative research consisted of:

- 4x focus groups with landlords, covering a range of portfolio size (from 1 property to 10+ properties) and property type (including blocks of flats).
- 20x in-depth interviews with assessors and installers.
- 1x focus group with mortgage brokers.

In addition, we spoke with one property management company and used existing knowledge and research on issues specifically around issues in blocks of flats.

With finance providers our main approach was co-creation with Coventry Building Society who partnered with us to support the project. We staged 4 co-creation workshops with our consortium team and our building society partner, and one meeting also involving the Building Societies Association. We then staged 1-1 meetings with 4 banks and building societies.

Findings overview

The research undertaken has informed the design of the product by validating the demand for elements of the toolkit; in particular, having the information in one place, using a property logbook, and having access to TrustMark registered installers.

The research also showed that assessors and installers would accept green finance work, therefore validating its market feasibility. Discussions with landlords allowed us to identify that they were likely to use a mix of funding approaches (savings, cash flow from rental income and additional borrowing) to make improvements. Additional borrowing was found to be lower on a list of preferences because of the current higher interest rates and the "affordability" criteria that are required by banks/building societies to meet the requirements of the Prudential Regulatory Authority (PRA) and Financial Conduct Authority (FCA).

Work with lenders identified that they were currently cautious in their development plans due to the market (interest rates) and some uncertainty over the policy environment. This supported our approach (strongly welcomed by lenders) of creating a highly flexible service that removed risks and barriers to entry for green finance propositions. It also opened up the opportunity for us to consider the ability to use a wider range of financial products (savings/cashflow) during the pilot phase.

3.2 Existing market solutions

In terms of competition, there is currently no competitive offer that could deliver the outcomes proposed by our project to the financial services community. The only routes for financial services organisations to create propositions that would compete with the RPT would be for them to build the complete proposition from scratch, or to contact with individual suppliers of elements that compete with our toolkit of components. The strength of the approach that we are proposing is that all the components in the RPT will have been pre-configured to work together and will have been tested in prior installations.

3.3 Customer research findings

Our consumer research focused on the private rented sector, though many of the learnings are also relevant to the wider private homeowner market. Landlords did not report strong motivation to retrofit their homes to improve energy efficiency; and many stated that they would only do so when regulation forced their hand. The other main trigger point for making home upgrades was when requested by tenants. Unsurprisingly, landlords prefer to take action in void periods and providing a rapid, ready-to-go solution from advice through to installation and financing is therefore helpful.

Landlords generally reported the need for a strong driver to undertake measures – the split incentive between landlord and tenant came across in that energy savings were not a strong motivation for landlords. There was no discussion of the potential for higher sale values as a result of energy efficiency investment. Landlords were more interested in and ready to consider insulation or existing heating system upgrade measures, there was less interest in heat pumps and solar panels.

Our research indicated landlords with small and medium portfolios primarily viewed rented homes as an investment, while larger landlords identified a regular income as their key motivation to becoming a landlord. This may suggest different messages for the two groups – larger landlords being more persuaded by messages around the reduction in void rates by providing a warm home with lower bills, while smaller landlords may be more persuaded by the potential of increased value to the property for their retirement or passing on to their children.

Due to current high interest rates, adopting financing for retrofit was not initially viewed enthusiastically. Negative perceptions of proposed regulation also clouded initial views on adopting finance. However, when prompted, some landlords stated they would prefer to finance retrofits through savings and rental income, while others stated they would need finance to do so. It is likely that if regulation were to come into force, landlords would require finance for more expensive retrofits. Larger landlords are more likely to consider financing than small/medium portfolio landlords. Landlords with smaller portfolios were more likely to state that they would exit the market if costs of retrofit were too high.

The main barriers to retrofitting, aside from personal motivation, were the cost of improvements, lack of knowledge, and access to suppliers and contractors. Low-interest lending was seen as the most attractive financial incentive (outside of government grants and fiscal incentives); with the potential for interest-rates to be tied to the amount of work done (i.e., if making more improvements, or achieving a higher (energy performance certificate) EPC, the customer gets a more beneficial interest rate).

Advice and support were highly valued, with the proposition of an online toolkit and tailored property advice being welcomed by landlords. They felt that EPC certificates were sometimes generic, and would welcome more tailored advice, which we proposed to offer through the proposition. There is also the potential for the advice offered to demonstrate the wider benefits of retrofitting properties, increasing landlords' motivation beyond regulatory requirements.

Some landlords also welcomed the idea of having a list of TrustMark registered installers to choose from, reporting that they had previously had bad experiences with underqualified installers. Landlords – particularly large landlords – often have builders they work with regularly, so a 'find an installer' feature may be most valuable in the owner occupier market. The assessors and installers also welcomed this element of the proposition, believing it would ensure quality, build capability in the industry, and stimulate the market.

3.4 Size and scope of the market

In addition to the qualitative research with landlords, we undertook a literature review of quantitative data primarily from the English Housing Survey (EHS) data on the whole stock and additional PRS-focused surveys. To assist in planning our pilot, where we will also focus on the owner occupier sector, we also researched quantitative data on the owner occupier sector and found that many of the findings of our qualitative PRS-focused research are also relevant for owner occupiers.

Landlord sector

Through analysis of national data from the EHS, we identified that there are 2.4m 'below EPC C' PRS homes. 65% of landlords have some mortgage lending on their portfolio, so a reasonable assumption may be that around half of PRS homes are mortgaged.

In terms of product offer for the PRS our consumer data affirmed both the need and the opportunity to help landlords with access to tailored advice, installers, verification and logbooks. Nearly half of PRS homes are flats and our research affirmed that advice on overcoming barriers around consents, legal issues, and stakeholder engagement in this area would be helpful.

We noted that even without a MEES (Minimum Energy Efficiency Standard) regulation of EPC C there will be a smaller, ongoing market for retrofit in the PRS. The EHS (latest, 2021/22 data)[1] shows that there are 27% fewer 'below C' homes in the sector than ten years ago and this points to an ongoing level of retrofit, even when there are few policy drivers. The Decent Homes Standard (planned for mandatory introduction in the sector) may be an additional regulatory driver affecting around a quarter of rented homes.

For the moment we therefore have included PRS landlords alongside owner occupiers as a target group for our offer (working with lenders) in pilot/commercial roll out stage. We, and lenders, anticipate a future reaffirmation of the EPC C target (whether promoted by regulation or incentives) in the sector and our proposition is ready to play a key role in green financing that can help deliver this.

Owner occupier sector

Much of the insight we gathered in discovery phase from the landlords (particularly from smaller portfolio landlords) will also be true of owner occupiers. Through extensive wider research on household energy efficiency, we identified that the need for advice and guidance – particularly tailored advice ("what can I do in my home?", "how do I find a trustworthy installer in my area?") was also true for owner occupiers. Current financial barriers – particularly in terms of high interest rates – will be common across the rented and owner-occupied sectors. There will be a much stronger driver in terms of reducing energy bills (no split incentive problem) in the owner

[1] https://www.gov.uk/government/statistics/english-housing-survey-2021-to-2022-energy/english-housing-survey-2021-to-2022-energy#energy-efficiency-profile

occupier sector and more enthusiasm for non-financial benefits of energy and low carbon technologies, such as comfort, environment, and being an early adopter.

We looked in detail at the EHS quantitative data[2] for the potential of green lending for energy efficiency in the owner occupier sector to support our planning for the pilot phase. Based on the EHS we estimate there were 3,769,000 below C mortgaged owner occupier homes in 2021 (and which could therefore benefit from significant energy efficiency retrofit). 43% of these households in 2019/20 were in a group where green finance may be attractive (where they were neither too rich to need lending, nor financially stretched). There is a strong potential for heat pump lending with the 2035 gas boiler phase-out date and the government's 600k annual heat pump sales by 2028 target, which will be initially among private homeowners in the owner-occupier sector, as EHS tells us landlords are slower to adopt renewables technology. There is a potential large market for future unsecured green lending for the 10.5m non-mortgaged private homes. This opportunity can be unlocked by supportive regulatory/legislative change. Examples include reforming the sections 56 and 75 of the Consumer Credit Act so lending becomes more available for changes to properties that include complicated installations of products; or a regulatory push to change gas boilers to air source heat pumps when gas boilers come to their natural end of life; or linking future property transactions where purchasers will be required to improve EPC ratings within a set period.

3.5 Cost of living and price cap barriers

In our qualitative research, we found that the proposed tightened EPC C target was viewed negatively by landlords, who felt it was an additional squeeze during a time of interest rate rises and cost of living crisis. Landlords with smaller portfolios, especially those who became landlords in a more unplanned way (e.g., when moving in with a partner) as opposed to those who saw it as their main business, felt that exiting the market would be easier and more cost-effective than making expensive upgrades.

The mortgage brokers echoed this and stated that they were not currently seeing many new buy-to-let clients as many have already exited the market due to cost rises; and were concerned that legislation might lead to more landlords leaving the market.

The need for energy efficiency was noted (by the assessors and installers) in that tenants were experiencing high energy bills and that upgrading properties would lead to more comfortable living conditions for tenants, improvements to their health, and ultimately alleviate the burden on the National Health Service. However, the split incentive problem[3] in rental sector energy efficiency came up in our qualitative focus groups with landlords not identifying energy saving as a driver for retrofit.

3.6 Barriers to research, development and product design

Our discovery phase occurred in a period of uncertainty around the energy efficiency landscape for both homeowners (landlords) and lenders. However, one of our proposition's key strengths is its highly flexible nature, providing a cost competitive and a low lender-resource requirement approach that lenders can incorporate in their customer journeys, and is a low-risk delivery model for lenders seeking to provide or explore green financing offers. We will provide a suite of

[2] https://www.gov.uk/government/statistics/english-housing-survey-2021-to-2022-headline-report/english-housing-survey-2021-to-2022-headline-report

[3] The split incentive is often – perhaps over-simply - characterised as the fact that landlords pay for energy efficiency while tenants benefit. The problem is better explained as a poor reflection of energy efficiency in market rental prices due to lack of information for landlords and tenants, and a UK rental market where, for many reasons, full free market choice is constrained.

pre-integrated services covering advice/verification/logbooks. In our commercial/ service design work in the discovery phase we have worked up a pay-per-use commercial model, whereby lender customers will pay for each data flow through our systems' APIs (application programming interfaces). Critically, this will allow for free "sandboxing[4]" of the core RPT components by lenders – allowing them to explore integration and innovation with our systems at no cost, until they are ready to put the components into commercial use.

Costs of energy and retrofit measures have risen significantly in recent years. For landlords and lenders, in terms of changing price of energy and capital return on investment, at the centre of our proposition is the Energy Saving Trust Home Energy Check tool with regularly updated energy prices and retrofit measures costs. This allows up-to-date, tailored return on investment (ROI) calculations, as described in Section 3.7 below.

3.7 Future price fluctuations

The Home Energy Check allows homeowners to assess the costs and savings of different home energy upgrades taking account of the specifics of their home, current energy prices and measures costs. Energy Saving Trust has a dedicated team working on keeping this information up to date.

Energy tariffs are relatively easy to keep track of and update in the Home Energy Check. But, even for Energy Saving Trust's long-established, specialist team, tracking the market price of retrofit measures in a fast-moving, highly fragmented market is much more difficult. In our discovery phase service design, we have identified a potential innovation in this area. The TrustMark Data Warehouse will store the final cost of installed measures as part of the verification component of our planned RPT process. This data can be aggregated and anonymised, and used to provide a unique, rich, regularly updated new source of data on measures costs, that can then flow back into the Home Energy Check cost information. We will scope in detail and work out the commercials of this added value service as part of detailed commercial planning in pilot phase.

3.8 Expanding the customer group – Discovery Phase

The RPT can work for the whole retrofit green financing market. We are initially focusing on supporting additional mortgage lending, which is where lenders told us they currently see offers being maintained/put in place, and so we are targeting current mortgage customers. However, as new types of lending product emerge, perhaps in response to additional government incentives or regulations, we anticipate the Toolkit supporting a much wider range of offers.

In terms of final customers, we focused on the private rented sector (Buy-To-Let mortgage customers) in our discovery phase. Both lenders and landlords told us the potential MEES EPC C standard was a strong driver for action. However, with the uncertainty over this through most of the discovery phase, and then clear move away from this policy in the final week of the discovery phase, the feedback from lenders was to explore a more widely focused proposition in pilot phase.

We will therefore be building our pilot phase components with three final customer groups in mind (though this will be principally steered by the needs of our pilot phase lender customer partners):

[4] A sandbox is a testing environment that keeps changes and experimentation separate from the production or live environment.

- owner-occupier existing mortgage customers for renovation action
- owner-occupier existing mortgage customers for heat pump adoption (noting the enhanced, attractive £7.5k Boiler Upgrade Scheme grant that is now available, and the reaffirmed 2035 gas boiler phase out for most homes)
- private rented sector landlords for renovation action (a smaller group than would have been present if the MEES C plan had been maintained, but still present in the market).

In terms of wider clients for the proposition, we have also identified and worked up customer profiles for partnership clients. These are businesses active in the retrofit market who wish to establish strong green financing offers. In particular, we identified the growing number of local/regional retrofit agencies and larger installer businesses as potential customers in this category. Through the pilot phase and building from Energy Saving Trust and TrustMark's strong existing relationships with these sectors, we will work with lenders to co-create commercial propositions targeting these market sectors.

3.9 Expanding the customer group – beyond the Discovery Phase

The initial target market considered for the proposition was lenders who had private rental sector clients, as there were unique challenges facing the PRS with little specialised support available. However, all the lenders that we have worked with have highlighted that the toolkit works equally well in the owner-occupier market as well (and some landlords themselves stated they might use the toolkit for their personal homes). The conclusion we came to at the end of the discovery phase is that the highly flexible nature of our proposition is precisely designed to support a wide range of offers in the market, for different customer groups and lending propositions.

4. Relationship and partnership building

4.1 Discovery Phase partnerships

The combined institutional knowledge of energy efficiency and low carbon products is a key advantage that our consortium of Energy Saving Trust, TrustMark and RLBA has, along with the experience in the home improvements and property sectors. Each organisation has a myriad of existing relationships covering governments, lenders, property industry, regional authorities, installers and assessors etc. The enhanced knowledge base from combining the resources and relationships of these organisations to work together on green financing is therefore a significant step in the market.

Energy Saving Trust is an independent organisation working to address the climate emergency. A respected and trusted voice on energy efficiency and clean energy solutions, Energy Saving Trust continues to work towards a smart, decarbonised, decentralised energy system. Energy Saving Trust empowers millions of householders every year to make better energy choices; delivers transformative energy programmes working with governments, and supports businesses with energy efficiency strategies, research, assurance and communications, enabling them to play their part in building a sustainable future.

TrustMark is the only UK Government-Endorsed Quality Scheme for home improvements carried out in and around the home. TrustMark is the custodian of the PAS 2035 process and provides assurance oversight for Government funded retrofit projects. TrustMark maintains a register of tradespeople and businesses that are qualified to deliver retrofit and low carbon installations and oversees the quality of their delivery within the context of the PAS 2035 and Licence Plus regimes. TrustMark also maintains a Data Warehouse that captures data on energy efficiency and low carbon installations within Government funded schemes. This Data Warehouse and associated data lakes[5] will be available to financial services and other industry participants to support green finance initiatives.

The Residential Logbook Association (RLBA) is the Department for Levelling Up, Housing and Communities (DLUHC)-supported trade association and self-regulatory body for companies providing digital logbooks for the residential property market. RLBA members are providers of logbook systems and services and work closely with all organisations in the residential property market who require access to validated property data. Logbooks will help both owners and occupiers take control of their home's digital life and will enable homeowners to participate in the multiple digital revolutions impacting residential property. Clearly retrofit is one of those digital revolutions. The toolkit elements that pertain to logbooks that were created as part of the RPT, (e.g., downloadable data from the EST tool, downloadable data from Trustmark, project reports that can be uploaded to lenders) will be usable by all members of the RLBA.

Additionally, we have had participation from Repowering London who contributed to the refinement of the proposition and assisted in building relationships with the blocks of flats sector.

All three partners were already providing stand-alone solutions in the finance sector, so have strong existing relations. We have then in the discovery phase discussed the combined proposition with lenders. We had the support of Coventry Building Society for the discovery phase, who will continue to support the consortium during the pilot phase, along with a bank. During the discovery phase, we have specifically engaged four additional building societies and

[5] A data lake is a centralised repository designed to store, process, and secure large amounts of structured, semi structured, and unstructured data.

the Building Societies Association. We expect to continue the engagement and potentially include them during the commercial phase of the pilot.

4.2 Partner expertise

Each consortium partner (Energy Saving Trust, TrustMark and RLBA) has tested and refined the service component they will contribute to the overall proposition.

Energy Saving Trust expertise will be utilised in terms of customer education, advice on retrofit options and retrofit plans for landlords and homeowners. Additional support would be available to banks and building societies to prioritise the roll out of their retrofit plans across chosen customer segments.

TrustMark will provide access to in-home assessors and installers, quality assurance and verification, as well as ensuring energy efficiency and low carbon measures would be captured in the Data Warehouse.

RLBA is responsible for logbooks that link to multiple data sources to enable the landlords, homeowners and financial institutions have a single version of the truth on information relevant to individual properties.

We worked with Coventry Building Society and Building Societies Association who helped frame the research questions we tested with landlords and mortgage brokers. Coventry Building Society also provided insights on financial product design based on their own research on customer take-up of their green lending products and mortgage pricing constraints. The feedback helped refine our approach and proposition design.

Research with landlords' bodies, retrofit installers, technology led start-up businesses in the retrofit space, and retrofit software design companies helped us focus on the design of the RPT.

4.3 Knowledge sharing

We have managed knowledge sharing between partner organisations via an overarching project management structure, including weekly meetings and deep dive workshops on specific topics. Additionally, the partners have access to a shared knowledge base relating to the discovery phase of this project.

4.4 Challenges and barriers

- The project did not encounter any specific challenges or barriers other than those widely recognised in the industry: lack of customer understanding of what retrofit means. A joint industry and government backed awareness campaign could help improve the situation.
- While there are incentives for single measures, e.g., heat pumps, there are no incentives for landlords or homeowners to review the fabric of the house and create/deliver a whole-house retrofit in stages or in full.
- No regulatory imperative (or 'softer' policy alternative – such as a widely publicised ambition for all homes to get to EPC C) for landlords and homeowners to make home improvements that lower carbon footprint. Market forces are not adequate to drive customer behaviour at scale. This creates the situation that banks and building societies are not incentivised to develop products to support the transition, as these products could be viewed internally as margin reducing.
- Changing government policy positions in relation to the path to Net Zero.
- A mixed picture regarding tax incentives. Lower rates of VAT were not recognized/known about by landlords we spoke to, and this was often highlighted as a need to drive the market. For landlords, the treatment of repairs vs improvements in tax terms was an issue.

- There are trust issues with EPCs and confusion/ disagreement over how EPC assessments consider low carbon measures, which could be addressed by DLUHC. And to support the skills availability in the low carbon/energy efficiency the Department of Education could play a more proactive role. For the transition to net zero to work efficiently, the Department for Energy Security and Net Zero, HM Treasury, Department of Education and DLUHC would benefit from aligning objectives.
- In the context of unsecured lending, feedback received during discussions with Financial Services companies suggests that the requirements of Section 75 of the Consumer Credit Act[6], are a barrier to more financing for home improvements being made available via this route. Section 75 creates the potential for claims by customers against lenders, if the performance of an installed product (e.g., for energy efficiency or low carbon) does not meet customer expectations of performance. As a result, many high street lenders are cautious and, to minimise Claims Risk, are not currently playing an active role in this market.

4.5 Knowledge gaps

A key area we will need to explore during the pilot stage of the project will be the mortgage distribution and broker market dynamics. We know that a significant proportion of new mortgage lending and the re-mortgage market is influenced by mortgage brokers. Through our research and during the project we have established that mortgage brokers can play a key influencing role in customer choice and the banks' ability to engage owner occupiers and PRS landlords in matters relating to energy efficiency, low carbon and retrofit. We will bring in customer engagement expertise via our links with the Green Finance Institute and the mortgage industry to help refine the proposition during the pilot phase.

An additional expertise gap we expect to fill during the pilot phase of the project is the integration requirements with bank systems. During the discovery phase we identified that multiple banks and building societies use variants of a mortgage loan origination platform from a single technology provider. We will look to bring in expertise to explore integration opportunities with this technology platform and other similar platforms in the market.

[6] https://www.which.co.uk/consumer-rights/regulation/section-75-of-the-consumer-credit-act-aZCUb9i8Kwfa

5. Finance product research

5.1 Design and development activities

During the research, we discussed potential finance options as part of formal qualitative research with assessors, installers, landlords and mortgage brokers. With landlords and brokers, we demonstrated a green homes finance proposition to get more detailed feedback on the product, which has been considered in further development of the product.

We staged 4 proposition co-creation workshops involving our consortium team, and our partner building society. One of these meetings also involved the Building Societies Association. We met with 4 additional banks/ building societies, and the Green Finance Institute.

We produced customer scenarios around typical retrofit measures, linked to outcomes customers sought – e.g., warmer homes, lower energy costs, lower carbon usage – to identify different lending opportunities (additional mortgage borrowing, unsecured lending, incentives linked to borrowing for green improvements) to inform our co-creation work with the building society, and our service design.

5.2 Lessons learnt

Landlords' views on financing

In terms of financing for green home retrofits, most landlords (as well as other groups we researched) mentioned that government grants and VAT discounts would be the best incentive. In terms of private finance, unsurprisingly, landlords favoured very generous finance options, including lower interest rates on their whole mortgage (not just the green element). Within the remit of the lending product, green mortgages with zero or very low interest rates were viewed positively; with variations suggested including variable rates based on EPC rating or amount of work being done (i.e., lower interest rates the more a customer raises their EPC by).

Mortgage brokers' views

Mortgage brokers highlighted that current stress-test levels would need to be reviewed for green finance packages, and that this may be easier for building societies than banks due to the different ways in which they are regulated – therefore consideration would be needed as to how to "level the playing field".

We explored with mortgage brokers the potential for a panel of lenders offering green finance, who they could refer customers to who wanted a mortgage of this type. Mortgage brokers found this interesting but noted that there would need to be a sufficiently large panel of lenders. We also explored a tool to allow them to consider different green mortgage offers, but there the view was that this would be secondary to any existing tools that they use.

Lenders' views

There was some uncertainty from lenders about the evolution of the green retrofit lending market, noting both the market – current interest rates – and given policy developments (not just in relation to the Prime Minister's announcement on MEES, but also lack of official response to the 2020 consultation on Improving Home Energy Performance through Lenders). However, they recognise the long-term policy direction, and have the wider driver of reducing their carbon exposure across their operations. Interest rates appear to have peaked.

The indication we have taken from lenders is that they therefore wish to maintain and cautiously develop green finance propositions, particularly in the relatively established area of additional mortgage lending, even though there might be constraints on the attractiveness of this in the short term.

In light of this mixed picture, in terms of product development the plan with the RPT is therefore to:

- Provide a highly flexible tool that can be used by lenders to support proposition development as required, removes the need for investment in costly infrastructure, is paid for on a pay-for-use basis and allows testing/sandboxing of core components. We envisage an initial focus on iterations of the service that will support the already established market of green additional lending on mortgages.
- Investigate through pilot phase how a wide range of related propositions can be developed. These could be led by lenders, by the consortium (Energy Saving Trust/ TrustMark/ RLBA) or by the consortium and a lender working in partnership with third party retrofit-service provider companies. For example, we have scoped development of a proposition based around presenting a panel of green lending opportunities promoted via mortgage brokers (which would be co-ordinated/led by our consortium), linked to the wider advice, verification components we are developing. This could be provided on a dedicated green lending site hosted by the consortium.
- Monitor changes (particularly in the policy and regulatory environment) that will open new opportunities, such as around unsecured lending.

5.3 Alternative finance options

Offset mortgages (whereby customers would get favourable interest rates on their savings if used to pay for green upgrades) were discussed with mortgage brokers, however this was not deemed to be practical as they noted that their clients would not tend to have large amounts in savings for long enough to benefit from additional interest rates.

Unsecured finance was looked at more favourably by some landlords due to the short-term nature and ease of acquiring finance, as opposed to the longer-term process of a mortgage. Green unsecured lending would also open up a very sizeable market of non-mortgaged homes (approx. 10m in the UK) that could benefit from the financing offer. However, we were advised in stakeholder discussions with the Green Finance Institute, and with lenders, that currently Section 75 of the Consumer Credit Act, which allows unsecured lending customers to raise a claim against a bank or lender for a breach of contract or misrepresentation by the supplier of goods or services, were seen as a barrier to green finance in this area. This is an area of focus for the finance sector and Green Finance Institute. We will work with the finance providers during the pilot to assess how the Trustmark assurance programme could mitigate Section 75 risks and make unsecured lending more attractive for green products. The highly flexible nature of the RPT will be readily usable by lenders providing green unsecured leading, as and when this market opens up.

5.4 Additional market research findings

Adopting additional financing was not initially viewed positively by landlords, who felt that they were already “squeezed” by interest rates and the cost of living. Many stated they would prefer to finance green retrofit through their own savings and rental income. Many also stated that they would raise their tenants’ rents to fund the retrofit, which is a risk to tenants who are also struggling with the cost-of-living crisis and energy bill rises.

However, when discussed further, landlords were more open to the idea of finance if they “had” to upgrade their properties; and the trigger point would likely be if the installation were to cost more than they could finance through their personal savings.

We also discussed the idea of cashback with landlords (as an incentive for green financing) and this was not viewed very favourably, as the amount typically offered is not sufficiently high

enough to be worth going through the process for, and longer-term incentives were viewed more favourably.

5.5 FCA Regulatory Sandbox

The project did not participate in the FCA regulatory Sandbox or other FCA supported development support services.

5.6 Regulatory considerations

The key regulatory concerns we needed to address within our proposition development related to data / information sharing and, during implementation of home improvements, alignment with relevant building regulations and Public Available Specification (PAS) for energy efficiency improvements in homes.

We did not identify any financial advice or financial product related Financial Conduct Authority (FCA) specific concerns given the nature of the proposition design which delivers advice on potential home improvements to improve energy efficiency and assistance in implementing, verifying and capturing data on the potential improvements. We don't expect to be creating specific financial products as part of the RPT. However, during the pilot phase we may need to consider registration with the FCA as an Appointed Representative or Introducer in the event the RPT offers financing options directly to the consumer. We will need to consider registration requirements in the context of the commercial relationships with the banks and building societies using the RPT.

6. Advice/information research

6.1 Approach to retrofit advice

In our research, landlords (particularly smaller landlords) reported that knowledge and information was a barrier to action. Some landlords also reported that they wouldn't know where to begin to find information, although some stated they would review their EPC certificate, and others would go on GOV.UK as their first port of call.

Many landlords exhibited a lack of knowledge in some areas relating to green technology (particularly heat pumps) and stated that they did not always trust the advice given to them by contractors who were trying to sell them a product. Assessors and installers reported that their clients often lack knowledge about green technology too. As such, there is a clear need for advice and information to address common misconceptions about green technology, and that this needs to come from a trusted, independent source who is not selling a product.

In terms of more detailed information, landlords expressed a strong desire for information that was tailored to their property, which was more specific and bespoke than that offered by their EPC. However, respondents noted that they would not be willing to enter vast amounts of data about the property and landlords would expect that the information would be sourced from existing data sources where possible. While these stated needs will not be fully reconcilable during service delivery, the RPT will help streamline the data entry process for users by pre-populating their assessment with data from the TrustMark Data Warehouse, digital logbook or property database managed by Energy Saving Trust.

Online advice

Advice will be delivered through RPT components provided by the Energy Saving Trust, building on the long-established Home Energy Check tool, and supplementing this with additional content, design, and presentation relevant to the target market of the green lending offer concerned. Our view is that these components will be used by lenders on their own site as part of the green lending proposition ('white labelled') but clearly flagged as 'Powered by Energy Saving Trust' to leverage Energy Saving Trust's reputation for trustworthy, impartial energy advice.

The advice would lead directly to online options for in-home assessment (see below) and to find an installer (powered by TrustMark).

A specific option that we assessed in the research was for a dedicated green lending site, focused on landlords, providing advice, access to assessors and installers and referring into/from a suite of banks' green lending offers. A PRS-specific education tool powered by Energy Saving Trust was viewed positively by all audiences, who felt it provided a good "starting point". Landlords felt it would be useful to have all the information in one place, and brokers felt they would happily support their client to use the tool. For credibility, landlords felt that the tool would be best hosted on an independent website (such as Energy Saving Trust), ideally with government affiliation, and signposted by lenders. This approach of a dedicated site to showcase the tool is something we will continue to explore in pilot phase.

Regarding the online tool, landlords highlighted key considerations regarding how much input from the user would be required to make it attractive (i.e., as little as possible while still getting an accurate result).

In home assessment

A toolkit component we will offer will provide access to a more detailed in-home assessment. This would be powered by TrustMark and delivered by TrustMark registered PAS2035 assessors. The in-home assessment was viewed positively, provided the assessment was more

thorough than a standard EPC survey (though landlords were keen that it should also provide an official EPC rating). However, landlords demonstrated low willingness to pay for this service, and those who did state they would be willing to pay, suggested the cost should be around the £50 mark. Nonetheless, this remains an important element of our toolkit that lenders could adopt – particularly if lenders were willing to subsidise some of the cost of the assessment as part of an incentive package around green lending.

Particularly in the context of a possible mandatory EPC C standard, landlords were keen to feel confident that measures financed and installed had taken the property to the required minimum standard. In service design discussions we did not see how guarantees could be issued around this, but a final, post-works EPC assessment could be offered by lenders, via our Toolkit, as an additional in-home assessment.

6.2 Rationale for approach

In selecting this approach, we considered the balance between online and in-home advice and assessments, and the link to the regulated EPC assessments. Our toolkit-based approach can support these elements being deployed in different ways for different green finance propositions.

In terms of the core online advice we will provide, we are building on the Energy Saving Trust Home Energy Check (HEC) tool, which is already a proven, successful advice tool sold to banks and building societies, so we did not consider using other online solutions. The RPT will enhance the accuracy of the current HEC tool by pre-populating the online advice assessment with installation records lodged in the TrustMark Data Warehouse (where it exists). It will also prompt users to create a digital logbook at the end of the journey and facilitate the transfer of their property data and improvement plan directly to the logbook for future reference and planning.

6.3 Digital logbooks

Logbooks are a new concept on the market, so awareness of them was low. However, our research showed that increased internet literacy and increased use of apps and online services to manage our homes and properties has created a market concept where they are more understood.

Users in our research made clear that managing their properties in this emerging digital age was becoming more complex, with more online data being created and more services requiring online input of data and documents. The residential logbook was demonstrated to research participants, who overwhelmingly thought it was a useful tool (provided it did not add too much additional bureaucracy and was user-friendly). This has informed the design of the product, by focusing us towards the automatic exchange of data and documents between elements of the toolkit and between different providers in the consortium.

Our aim with the toolkit is that, at the end of retrofit work, a property owner is left with a complete digital record of the advice they were given, the works done, certification and documentation with as little inputting or uploading as possible on their part.

6.4 Integration with finance product

Advice and information provision is an important prerequisite to customers seeking finance as they will need to know what retrofits are required, and ballpark costs, before they make their final decision on how to fund them. Lack of knowledge, and incorrect beliefs (e.g., on heat pumps) need addressing by independent, trusted information for landlords to be persuaded to take the required action, and other information and messaging (e.g., on the wider benefits, or benefits to the landlord themself of home retrofits) may need to be integrated to maximise landlords' motivation to undertake renovations.

Landlords in the focus groups highlighted that a positive customer journey would be key to using the product, that it should be user-friendly, and that communication between the different parties involved (installers, lenders etc.) would need to be seamless. Based on the feedback received we will need to incorporate access to financial products and relevant advice, if appropriate, as part of a seamless customer journey. Because the RPT is primarily being developed a pre-integrated advice, verification and digital logbook journey that can be used by lenders, we expect to link to the lender's financial product and advice journey which will deliver customers / landlords options for financial products.

6.5 Existing advice services

Very few landlords mentioned the GOV.UK energy advice tool when asked about where they would go for information when looking at upgrading their properties. Although landlords did state that they would likely go to GOV.UK to see what advice was available. Landlords thought the tool should be government affiliated, they felt that hosting the tool on an independent and trusted website (such as Energy Saving Trust) would increase confidence in the accuracy of the information given. As Energy Saving Trust already has a bespoke advice tool, it was not deemed necessary to build a bespoke tool or signpost to other existing tools.

7. Verification methodology research

7.1 Approach to verification and quality assurance

Our service comprises advice, installation, and data integration components and each will have distinct verification approaches to ensure quality outcomes. Our verification approach will cover fabric improvements and low-carbon heating systems and will include:

1. Installer competence verification using TrustMark verified installers with valid certifications whose competence is assessed by TrustMark surveyors and certification bodies.
2. Users will be able to access installers with PAS 2030/2035 certification or those who are registered via the TrustMark's Licence Plus scheme. The latter is a market innovation to help more tradespeople enter the retrofit market and will be supervised under a quality scheme so:
    a. lenders can mitigate their underwriting risks.
    b. lenders can fulfil their customer duty obligations.
    c. customers are assured that if installations do not meet standards, TrustMark will enforce rectification.
    d. risk of greenwashing[7] is minimised.
3. All installations via RPT will be captured in TrustMark's Data Warehouse, which is the national database for retrofit improvements, via the lodgement process and be subject to quality audits, and EPC ratings will be verified. This data will be shared via integration packages with funders to continually improve the education, advice, and installation components.

Our verification will build on the best practice in quality assurance delivery developed by TrustMark as part of the delivery of the government funded schemes it oversees (e.g., Energy Company Obligation (ECO) scheme funded retrofit, Home Upgrade Grants, Social Housing Decarbonisation Fund (SHDF) projects).

7.2 Rationale for approach

Through the proposal, landlords will have access to TrustMark registered installers. Assessors and installers view this requirement positively, noting that it will guarantee quality work and deter unscrupulous contractors from taking advantage. It might also encourage upskilling in the industry. Mortgage brokers also noted that this would provide assurance to the lender that the money was being used for good quality upgrades. Landlords' views were somewhat mixed, as awareness of TrustMark was low. Whilst landlords with less experience of home renovations welcomed the idea of having a list of verified installers, more experienced landlords preferred to use contractors they had previously had personal good experiences with.

We did not consider any other approaches to verification. We recognise that there is demand from market participants, who want to use heat sensor and smart meter data as part of a verification process. We also recognise that some funders (government and lenders) seek this data to assess progress towards better energy efficiency. This data can also be captured during the TrustMark verification process.

However, we have concerns about the use of heat sensor and smart meter data within a verification process which we will consider (and potentially address) during the pilot. Our primary concern is that heat sensor and smart meter data are influenced by customer behaviour and

[7] Greenwashing is when an organisation conveys a false or misleading impression that it's aims and policies are environmentally friendly.

must be used with care in the context of retrofit outcomes. Verification should focus on quality of installation and to ensure the fabric of the house is not negatively impacted. Also, we know that lenders / banks are measured on improved EPC ratings (which are a blunt tool) and use it as an input for any green securitisation transactions. EPCs record the measures installed and improvement in Reduced Data Standard Assessment Procedure (RdSAP) scores. They do not record heating usage stats.

In summary, heat sensor and smart meter data are useful inputs but do not directly impact EPC rating of a retrofitted property.

The advantage our consortium has is the involvement of TrustMark which provides quality assurance and verification support to UK Government funded projects. During the pilot we will investigate the potential to widen the assurance and verification methodology to allow more of the 2.2m tradespeople / installers who work in the construction industry to support landlords and homeowners in the transition to using lower amounts of carbon.

The TrustMark quality assurance and verification approach covers installation of low carbon measures (including those installed under the Microgeneration Certification Scheme), insulation measures and extensive list of other measures:

Insulation

- Loft insulation
- Flat roof insulation
- Roof room insulation
- Cavity wall insulation
- Party wall insulation
- Solid wall insulation
- Floor insulation (suspended floor)
- Floor insulation (Solid Ground floor)
- Hot water cylinder insulation
- Draught proofing
- Double glazed windows
- Glazing replacement
- Secondary glazing
- Insulated doors

Heating and Lights

- Low energy lights
- Cylinder thermostat
- Heating controls for wet central heating system
- Heating controls for warm air system
- Upgrade boiler, same fuel
- Condensing oil boiler
- Change heating to condensing gas condensing boiler (no fuel switch)
- Change heating to condensing gas
- New or replacement storage heaters
- Air source heat pump
- Solar water heating

Sustainable Energy

- Photovoltaics (Solar Panels)

7.3 Supporting evidence for design choices

One of the main barriers, cited by landlords in the research, to making improvements to their properties was being able to source qualified tradespeople and installers. Previous negative experiences, lack of trust in contractors and concern around contractors causing damage to their properties were seen as a key issue to overcome. TrustMark can provide this assurance through access to registered tradespeople that are qualified, deliver to a high quality and are able to closely support landlords and homeowners through the retrofit journey.

Our research also demonstrated that banks and building societies are looking for quality assurance in installations that allows them to promote, and support retrofit while minimising their own lending and reputational risk.

7.4 Integration with consumer journey

Our research looked at the current barriers to retrofit and talked participants through the proposed customer journey. As described in section 3.1 the main barriers to retrofitting, aside from personal motivation, were the cost of improvements, lack of knowledge, and access to suppliers and contractors. When discussing the proposition, the majority of landlords appreciated the idea of having all the information in one place. The idea of having a trusted source of advice helps to mitigate the barriers of not knowing where to go for advice and a lack of trust in advice provided by suppliers. As mentioned in section 7.3, access to trusted installers is key to landlords being confident in taking appropriate action that will be implemented to a good quality. The research therefore confirmed that homeowners and landlords welcomed a service that included verified quality advice, tradespeople/installers, and installations, along with financial guarantees, which they would be able to access via their Logbooks and the TrustMark Data Warehouse. Our approach of incorporating the TrustMark's desktop and onsite verification audits of deep retrofit and individual measures ensure good outcomes for customers.

For bank and building societies using the RPT with their clients, the verification audits, including the capture of information of the installation measures on the TrustMark Data Warehouse, help mitigate the risk of greenwashing, inform underwriting decisions, and mitigate impact on reputational risk.

By designing the toolkit such that it auto-uploads data and documentation into a property owner's own digital logbook at the end of the process, we have ensured that digital records and work verification are accurate and not reliant on a property owner managing their own records.

A final element of the research outputs was that the property owners were keen that the property logbooks were configured such that the verifications and certifications were captured and presented in the logbooks in a manner which could support future activity, like buying and selling. The logbooks represent a depository of all relevant information on a property and can support the conveyancing process during buying and selling.

7.5 Risk mitigation

We believe the risk of fraud/mischief by customers/lenders/installers can be minimised using a rigorous audit regime that includes desktop and onsite audits. We will use the quality audit approach that TrustMark uses to provide assurance on Government funded retrofit activity and adapt it to support the requirements of the financial services partners who use the Retrofit Proposition Toolkit.

8. Marketing related research

8.1 Findings

We did not specifically look at consumer marketing preferences. Our target customers / clients are banks and lenders who are likely to white label the service. We expect that the banks will hold and confirm the relevant marketing preferences.

The RPT solution is proposed to be marketed via business-to-business relationships with lenders. We will work with lenders to identify the marketing permissions the lenders have from their customers, and work with the lenders to jointly develop the most appropriate approach to engage their customers, while keeping in view characteristics such as customer demographics and vulnerability status.

9. Future plans for green home finance

9.1 Lessons learnt

A key learning for all the consortium members during the discovery phase was on the power of standardising and sharing retrofit data. Creating standardised toolkit elements that could travel between the players will allow the creation of a shared 'truth' about a property or a retrofit product. This could have a huge impact on the way that retrofit is approached in the UK and consortium members have already reached out to engage with teams from the home buying and selling industry, where there are opportunities to standardise and share datasets across disciplines. We are also conscious that data records that are created to capture retrofit work done on properties will ultimately need to be made available to the conveyancing industry when those properties come to market (whether during or after retrofit work). As a result of this insight, consortium members have begun to discuss the conveyancing industry's requirements for retrofit data sharing, including data schemas, metadata formats to establish provenance of property information, permitted uses of the data, etc. For instance, we have looked at how retrofit data will be added to the 'Upfront Information' data pack being developed by the Law Society to help speed up the house sales process.

9.2 Applying lessons learnt to our service

The learnings from the project have given us rich insight into the PRS and retrofit. While we now anticipate the initial end-customer focus of our proposition is on a wider group of customers, the information we have gathered is ready for development into extensive range of Buy to Let (BTL) propositions. We anticipate this will become relevant as and when new policy approaches are developed for energy efficiency in the PRS. This assumption is shared with lenders, based on our own discussions with them, and supported in press reports[8].

9.3 Key challenges for future development

Key challenges for the future development of the green finance proposition are:

- Uncertainty over the policy landscape for home energy efficiency/decarbonisation. This includes a clear long-term trajectory to EPC C or equivalent energy efficiency standard for homes (in line with the Clean Growth Strategy). It also includes the fulfilment of government plans and support to drive the heat pump market towards the 2028 600,000 sales per year target and 2035 phase out date for new gas boiler installs in the majority of homes.
- Property market conditions, especially ongoing high interest rates making taking on additional borrowing unattractive/unaffordable.
- Regulatory and other developments for lenders' businesses. Wide uptake of the proposition will rely on tackling industry level barriers, such as the consumer rights issues (Section 75 of the Consumer Credit Act[9]) around unsecured lending.

[8] Green Mortgages Still on Offer, Despite Axed Targets, D. Byers, The Times 7/20/23
[9] Consumer Credit Act 1974 (legislation.gov.uk)

10. Appendix A – Proposition Overview

energy saving trust

Green Home Finance Accelerator

Proposition Overview

TRUSTMARK Government Endorsed Quality

RLBA Residential Logbook Association

‘Retrofit Proposition Toolkit’

A pre-configured digital toolkit which enables financial services companies to create an **end-to-end proposition** for effective home retrofit financing.

‘Retrofit Proposition Toolkit’

What	Why	Who
The Retrofit Proposition Toolkit (RPT) contains structured, pre-configured data, service and verification components that a finance company can link to their existing propositions. Incorporating some or all of the components in the toolkit into their online services enables financial services companies to offer their home owner clients first class retrofit advice, planning, project management and quality assurance.	The RPT has been designed to support Banks, Building Societies and Brokers looking to lead in the provision of green financial services. The RPT dramatically simplifies the challenge of building complex eco-focussed services for Financial Services companies, with minimal integration requirements	Built by Energy Saving Trust, TrustMark and Residential Log Book Association who are leading players in the provision of digital retrofit services. The RPT contains modules covering retrofit advice, assessment, planning, certification and data storage.

‘Retrofit Proposition Toolkit’

Discovery Phase

The project partners have researched and mapped landlord, installer, broker and lender journeys through the retrofit financing and installation process.

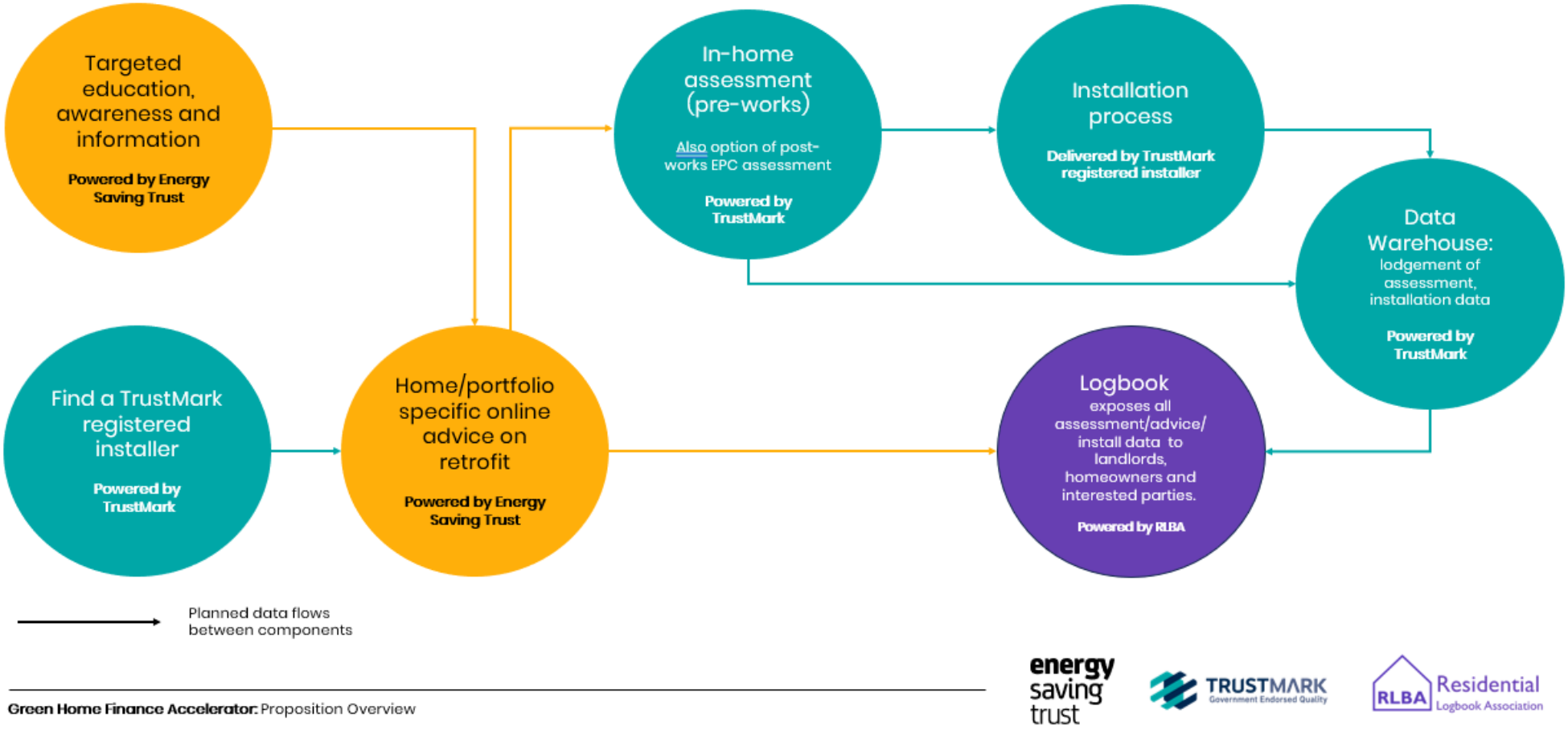
We have designed and tested a modular approach to building retrofit propositions, supported by financial service companies, and created a toolkit of components and services, data schemas and APIs.

Pilot Stage

TrustMark, Energy Saving Trust and RLBA will implement the first working version of the RPT.

We are looking to include a wider range of financial services partners to pilot the RPT, to create national coverage and address multiple segments in the market.

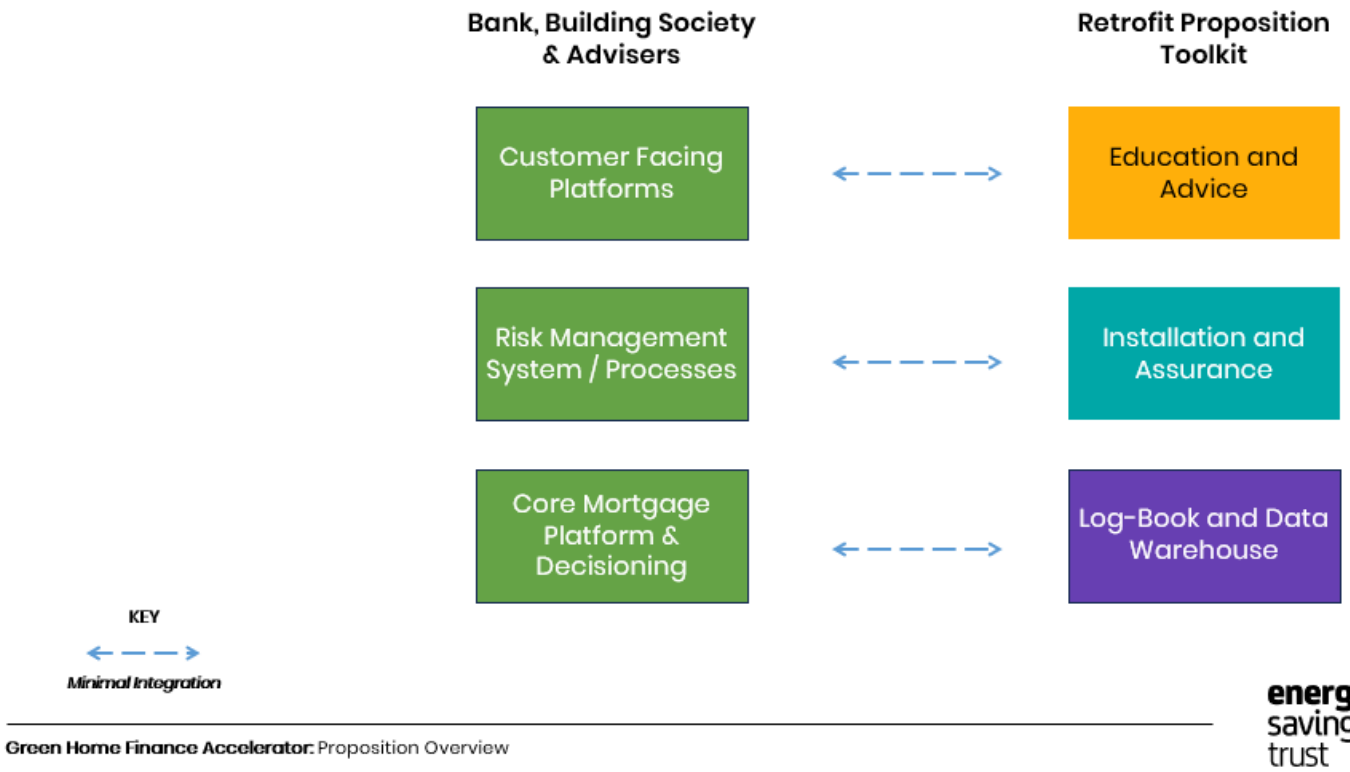
Components of the Retrofit Proposition Toolkit



Green Home Finance Accelerator: Proposition Overview

Enabling innovation by finance providers

Our innovation is the pre-integration of these different, best-in class, retrofit advice and support components, making them available for flexible adoption by financial services providers to use



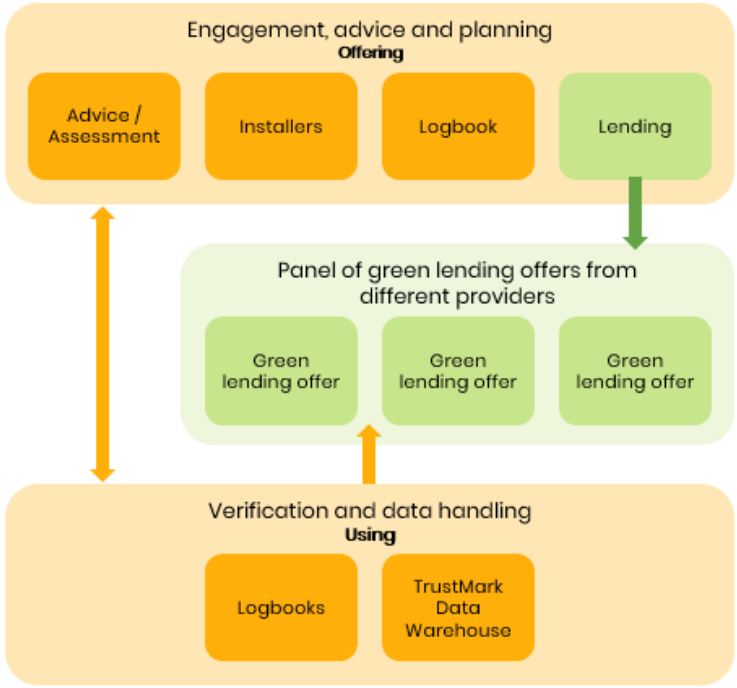
Benefits of the Retrofit Proposition Toolkit

For the finance provider		For the customer
Removes hassle of providing landlord advice and info in this fast moving area	Awareness/advice of retrofit measures	Accurate, up-to-date home specific information about measures, regulations, requirements.
Ensures measures deliver planned results (especially EPC improvement)	Planning and assessing of measures	Tailored advice specific to their property, including portfolio functionality.
Removes risk by ensuring clients are using registered installers with guarantees.	Quality assurance of measures	Qualified installers, guarantees of works.
Ensuring green financing is spent for allocated purpose.	Verification of installed measures	Confirmation measures have been appropriately installed & commissioned. Reduced hassle & bureaucracy around green financing.
Logbooks are an attractive customer offer. Ensures data is readily available.	Record-keeping via logbooks	A useful tool to access all relevant information post-works, alongside wider information about the property.

Possible delivery models for Retrofit Proposition Toolkit

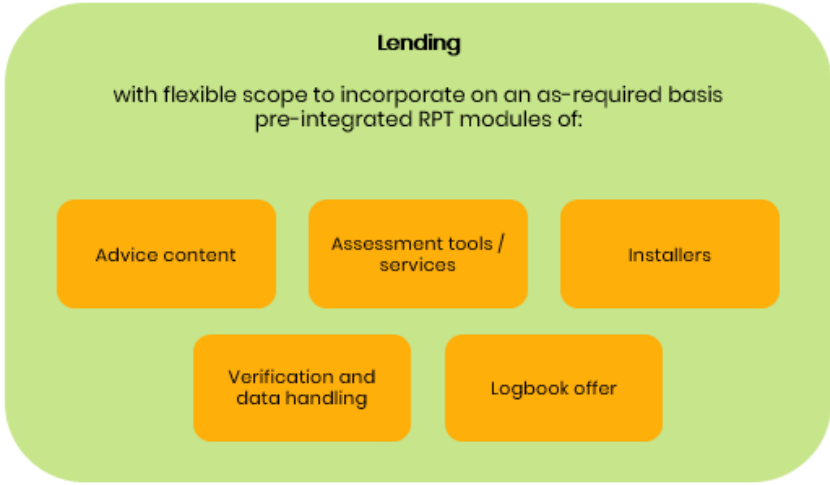
1. A new PRS retrofit platform

- **New Energy Saving Trust / TrustMark / RLBA platform for Retrofit**
- **Can also be delivered in partnership with local/regional authorities**



2. Finance-provider led

Finance provider's own retrofit product, advice or service



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Thank You

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