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Green home finance consumer typologies and barriers

Research findings

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1. Executive Summary

1.1 Research background

Context

The government is exploring a potential new scheme to support homeowners to make home decarbonisation upgrades to their properties (referred in this summary as ‘green home upgrades’) by making green finance products available. The proposed scheme is in its early stages of development. The target population has not yet been determined but is likely to include both owner-occupiers and private landlords in England.

Research objectives

DESNZ commissioned Verian to conduct qualitative research to understand, in greater detail, the views of the eligible population for the proposed green finance scheme. The research will support the government’s understanding of how the scheme can best be designed and marketed to different types of consumers to maximise uptake.

The six main research questions were:

1. What are the different consumer typologies within the UK population (with respect to building decarbonisation)?
2. What are consumers’ attitudes towards taking up green finance for the purpose of installing home decarbonisation measures, and what influences these attitudes?
3. What are consumers’ attitudes towards specific green finance products, which are preferred, and how do preferences vary across groups of consumers?
4. What are the barriers and facilitators to take-up of different green finance products?
5. How can consumers be supported to overcome barriers to green finance take-up (for the purpose of installing home decarbonisation measures)?
6. Who do consumers trust to (i) deliver green finance products; and (ii) deliver advice on green finance products?

Methodology

Research was conducted between November 2024 and February 2025. After a scoping workshop, primary research was conducted in two phases. The first phase comprised 35 qualitative, online in-depth interviews lasting one hour, conducted with a sample of owner-occupiers, landlords and installers of green home upgrades. The second phase of research comprised five online 90-minute focus groups with owner-occupiers and landlords. These focus groups explored responses to more detailed descriptions of four of the potential green finance scheme products, including example repayment terms with scenarios to illustrate how each product could work in practice.

1.2 Findings

What are the different consumer typologies within the UK population (with respect to building decarbonisation)?

During the initial scoping workshop several factors were theorised as potentially influencing attitudes to green home upgrades. These factors were attitudes to the environment, property type and age, household composition, financial circumstances, and current Energy Performance Certificate (EPC) rating. The importance of these factors was then tested through the subsequent phases of the research. All of these factors were important in influencing attitudes to green home upgrades.

Attitudes to debt also varied across the sample. This research highlighted six consumer typologies covering owner-occupiers and landlords. A typology based on attitude to green finance, as opposed to the green home upgrades themselves, was selected as it was more pertinent to the research questions and would be more useful for designing a green finance scheme. Owner-occupiers could be divided into four groups by their relative level of willingness to take on debt to fund green home upgrades, and their relative ability to afford repayments. Landlords could be divided into large and small portfolio typologies.

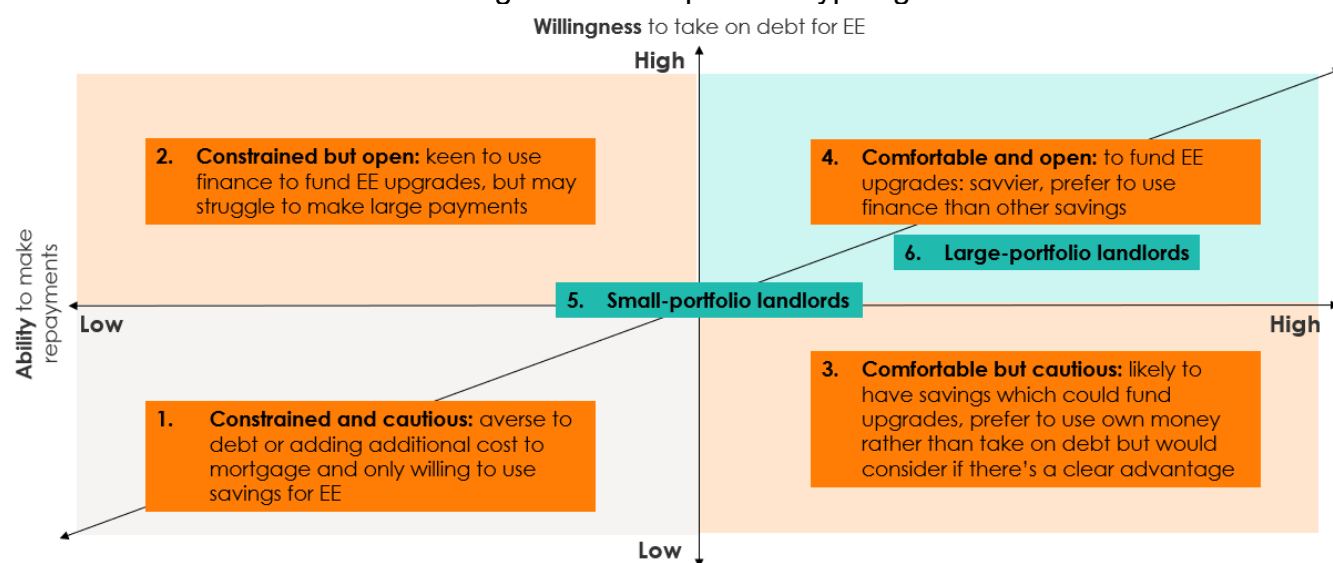


Diagram 1: Consumer Typologies

What are consumers' attitudes towards green finance products, which are preferred, and how do preferences vary across groups of consumers?

Awareness of existing green finance for home upgrades was mixed across the sample. Participants were generally open to a range of options for green finance products when given high-level detail only, but this openness reduced when shown example interest rates and repayment terms. Four options were explored in detail: secured green borrowing via a mortgage, point of sale finance, personal loans, and heat as a service.

Table 1: definitions of four green finance models shown in phase two of the research

Green finance model	Definition
Secured green borrowing	Finance typically offered on top of an existing mortgage, which allows homeowners to borrow additional funds at reduced rates to spend on green home improvements (e.g. insulation, solar panels, a heat pump): all of the additional borrowing must be spent on green home improvements, from any certified installer.
Point of sale finance	Finance offered at the moment of purchase which can be used to fund a green home improvement through delayed payment, it involves retailers or service providers partnering with lenders in a government backed scheme to offer lower interest rates than commercially available.
Personal green loans	Loans issued based on the borrower's credit history and income which can be used to fund energy-efficient appliances, insulation, or renewable energy installations; through a government-backed partnership with lenders they might have lower interest rates than a commercial loan.
Heat as a Service	A model which involves a provider installing a product such as a heat pump and offering maintenance services for a monthly subscription, which can be transferred to a new owner when the property is sold; the provider retains ownership of the technology throughout the length of the subscription contract meaning there are no upfront costs for the homeowner.

Secured green borrowing was consistently preferred as the most appealing option across different groups. This was predominantly due to the lower interest rates available for this option. Furthermore, additional mortgage borrowing to invest in their home felt intuitive to participants and gave them additional confidence, as the lender has vested interest in maintaining the property's value. Other options had less appeal, predominantly due to the higher example interest rates.

What are the barriers and facilitators to take-up of different green finance products?

Participants noted several barriers which could prevent them using this scheme. Some had a strong aversion to any kind of debt they perceived as avoidable, and would much prefer to fund upgrades by other means or simply not undertake them.

Other barriers included:

- Perceived complications that would be created when selling the property, which would put off potential buyers who might be required to take on payments

- Energy savings being insufficient to cover debt repayments
- A lack of trust in installers

Participants were also uncertain about how each finance option would work in practice, but did not consider this to be a barrier as they expected this information to be forthcoming when the scheme design is finalised.

Participants also identified a range of facilitators that would encourage them to use green finance. They consistently expected that a government-backed green home finance scheme would offer significantly more attractive interest rates than equivalent commercial products. With low interest rates available, those with higher ability to make debt repayments anticipated that using the scheme would enable them to fund upgrades with relatively cheap credit so they could allocate the money that would otherwise be spent elsewhere (e.g., in savings or pensions). Groups with lower ability to make debt repayments felt that this scheme could enable them to make upgrades they wouldn't otherwise be able to afford. Landlords were typically more hesitant than owner-occupiers to make green home upgrades, unless required to do so as part of Minimum Energy Efficiency Standards (MEES). This was seen as the main facilitator to uptake of a green finance product.

How can consumers be supported to overcome barriers to green finance uptake (for the purpose of installing home decarbonisation measures)?

Participants felt that the most important support to overcome these barriers would be to offer appealingly low interest rates, as well as flexible repayment terms where possible, so individual consumers could choose terms that best suited their own circumstances. Providing detail and reassurance on the implications and options when selling a property mid-term was also welcomed as a way of overcoming this barrier. When discussing their concerns about trust in installers, participants wanted to understand if the government backing for this scheme would give any additional protection from poor quality installation, and if the government will provide a list of approved suppliers.

Who do consumers trust to (i) deliver green finance products; and (ii) deliver advice on green finance products?

Lenders were perceived as having the primary role in delivery and consumers expected them to be their main point of contact for arranging any green finance product, rather than the government (participants expected the government to take more of a background role). Participants felt that this was an appropriate division of responsibility. However, there was concern about lenders restricting the choice of provider. Participants were keen to have a list of government-approved suppliers, as long as this provided a range of options so users of the scheme would still have choices. Government was also seen as having an important role in publicising the scheme and highlighting benefits, particularly environmental benefits, while lenders were expected to provide more information on specific product details and terms.

2. Introduction

2.1 Project context

The UK has committed to achieving net zero emissions by 2050. In 2022, domestic heating accounted for 13% of the UK's carbon emissions.¹ To achieve net zero emissions, virtually all heat in buildings will need to be decarbonised. Improving the energy performance of buildings, including upgrading the energy efficiency of residential homes, will be a crucial element of this process.² Previous research has indicated that stimulating the market for private green finance may present an opportunity to achieve this goal.³

At the time of research, DESNZ is exploring a new scheme to support homeowners to make upgrades to their properties by making green finance products available. The proposed scheme is in its early stages of development. The target population has not yet been determined but could include owner-occupiers and private landlords in England. The measures in scope – referred to in the following sections of this report as 'green home upgrades' – may include:

- Replacing windows and doors
- Installing secondary glazing
- Using energy efficient lighting
- Insulating lofts or walls
- Adding draught-proofing
- Upgrading heating (such as replacing a gas boiler with a heat pump)
- Generating renewable energy from sources such as wind or solar power

2.2 Research objectives

DESNZ commissioned Verian to conduct qualitative research to understand the views of the eligible population for the proposed green finance scheme in more detail. The main aims of the research were to develop consumer typologies for this scheme, and explore what barriers are faced that inhibit scheme uptake and how consumers can best be encouraged to engage with it. The research will support the government's understanding of how the scheme can best be designed and marketed to different types of consumers to maximise uptake.

¹ DESNZ 2022 UK Greenhouse Gas Emissions, Final Figures: [2022 UK Greenhouse Gas Emissions, Final Figures](#)

² DESNZ Heat and buildings strategy, 2021: <https://www.gov.uk/government/publications/heat-and-buildings-strategy>

³ DESNZ Green Home Finance, Expert Analysis from a Behavioural Perspective: [Green home finance: expert analysis from a behavioural perspective](#)

The research aimed to address the following research questions:

1. What are the different consumer typologies within the UK population (with respect to green finance for building decarbonisation)?
2. What are consumers' attitudes towards taking up green finance for the purpose of installing home decarbonisation measures?
 - a. What influences attitudes towards taking up green finance? For example, social influence, cultural norms.
3. What are consumers' attitudes towards specific green finance product? For example, low-interest loan, salary sacrifice, heat as a service, green savings account, property-linked finance mechanism, one-stop shop.
 - a. Which, if any, of these do they prefer and why?
 - b. How do attitudes vary across different consumer typologies?
4. What are the barriers and facilitators to take-up of different green finance products?
 - a. How do these vary across different consumer typologies?
 - b. How likely are landlords to take-up green finance to comply with strengthened Private Rented Sector Minimum Energy Efficiency Standards?
5. How can consumers be supported to overcome barriers to green finance take-up (for the purpose of installing home decarbonisation measures)? For example, incentives, grants, information, regulation.
 - a. What type(s) of incentives are most likely to help consumers overcome barriers to green finance take-up? How (if at all) does this vary between typologies?
 - b. How would consumers prefer to learn about green finance products?
6. Who do consumers trust to (i) deliver green finance products; and (ii) deliver advice on green finance products? For example, the government, installers, energy companies, financial institutions.
 - a. What role, if any, should lenders play in supporting consumer uptake of green finance?
 - b. What do consumers feel the government's role should be in rolling out green finance products?
 - c. What role, if any, should installers play?

3. Methodology

This section provides an overview summary of the methodology and sample included in this research. Additional detail on methodology, sample, and the analysis approach can be found in Appendix 6.1.

3.1 Methodology summary

Research methodology

Scoping workshop

At the outset of the research, the DESNZ and Verian teams held a scoping workshop to discuss potential characteristics for the consumer typologies and identify topic areas to explore further in the research. During this DESNZ and Verian initially created a longlist of potential characteristics that could inform the typologies and used these to guide the sample for the first phase of primary research. Following this, primary research was conducted in two phases.

Phase 1 primary research: qualitative interviews

The first phase comprised of 35 qualitative online in-depth interviews lasting one hour, conducted with a sample of owner-occupiers, landlords and installers of green home upgrades. Interviews explored participants' attitudes to energy usage and green home upgrades, attitudes towards using finance to make green home upgrades, and responses to high-level summaries of six potential green finance products. These options were: secured green lending, unsecured green lending, a green savings account, heat-as-a-service, property linked finance, and retrofit salary sacrifice. Interim findings from this phase were used to create six consumer typologies (detailed in section).

Development of consumer typologies

Prior to the second phase of research, Verian developed two possible options for consumer typologies through analysis of phase one findings. The first option focused on consumers' attitudes to green home upgrades and the second option focused on consumers' attitudes to green finance. Given the goals of the research and the focus of the scheme being green finance, DESNZ and Verian opted to create four owner-occupier groups based on participants' willingness to use finance products to fund green home upgrades and ability to make repayments.

Two distinct groups of landlords were also identified in the research: those who had larger portfolios, for whom this was their primary source of income, and others who tended to have smaller portfolios and often used this as a supplementary source of income.

These typologies were used to define the sample for the second phase of research: one discrete focus group was conducted for each of the four owner-occupier typologies, alongside one landlord focus group that comprised an even split of both landlord typologies.

Phase 2 primary research: focus groups

The second phase of research comprised of five online 90-minute focus groups with owner-occupiers and landlords. These groups were designed to align with the typologies developed following the phase 1 research. These groups explored responses to more detailed descriptions of four of the potential green finance scheme products, including example terms with scenarios to illustrate how each product would work in practice.

As phase 2 explored green finance products in more detail, DESNZ had to prioritise the options taken forward for testing. The unsecured (Personal green loans and Point of sale finance), secured lending (Secured green borrowing) and Heat as a Service options were chosen for further testing as they were of policy interest to DESNZ.

The in-depth interviews were conducted in November and December 2024, and focus groups in January and February 2025. All fieldwork was moderated by Verian researchers, using discussion guides and materials developed with DESNZ oversight.

Sample and recruitment

In total, 67 participants were involved in the research (35 interview participants and 32 in focus groups). All participants were recruited from Verian recruitment partner Roots Research's online panel. Five installers of energy efficiency products took part in interviews. Installers were employees or directors of companies installing a range of different types of green home upgrades. All reported their roles to be customer-facing at least 60% of the time, and were helping customers make decisions about which measures to install.

45 owner-occupiers (20 in interviews, 25 in focus groups) were recruited. The sample included a mix of locations within the UK, age, financial attitudes, attitudes to climate change, mix of property age, property type, property value, and current EPC rating. All participants were required to be empowered to make decisions, whether solely or jointly, about adapting their properties, including potential green home upgrades.

17 landlords (10 in interviews, 7 in focus groups) were recruited, with the sample covering the same range of characteristics as owner-occupiers above. The landlord sample included a mix of portfolio sizes, split between those with 1-3 and those with 4-7 properties (no landlords with more than 7 properties participated in the research). The sample also included a mix of landlords operating as sole traders and those who had set up limited liability companies (LLCs) to manage their property businesses.

Note on terminology

Where findings are consistent across the three sample groups (installers, owner-occupiers, and landlords), this report refers to 'participants'. Where findings are consistent across owner-

occupiers and landlords but not relevant to installers the report refers to 'homeowners'. The report also notes whenever findings are relevant to one specific sample group.

Where the report quotes participants, it refers to them in the format: Phase of research they participated in, their typology, their age bracket, and their EPC rating. Where landlords are being quoted this is the average EPC rating across their properties. As the phase 2 typologies were developed after phase 1, participants from phase 1 are referred to simply as owner-occupiers, landlords, or installers.

3.2 Considerations for interpreting findings

Readers should be mindful of the following caveats when interpreting the findings of this research.

Firstly, this research was purely qualitative, exploring relevant topics in depth with a small number of participants. Given this, the research should not be interpreted as representing the views of all owner occupiers and landlords, but rather indicative of a range of opinions held by these groups.

Secondly, this research was conducted at the early stages of development of the potential new scheme, before many details of the scheme had been established. As participants themselves noted, the appeal of different green finance products varied significantly according to the precise interest rate available, the terms on offer, and the type and cost of green home upgrade being considered. Participants were able to reflect in depth on hypothetical scenarios, including example interest rates and repayment amounts for some potential products, although in reality responses would be likely to be influenced by many other factors beyond the scope of this research. Research should therefore be interpreted as an indication of the factors which will influence uptake of the scheme.

Thirdly, three of the six green finance products were only explored in the first phase of research in relatively less detail than the second phase, namely the green savings account, property linked finance, and retrofit salary sacrifice. Findings for these products only reflect participants' general responses to an overview description of each, rather than the result of prolonged consideration based on them and the needs of their property.

Any further considerations for interpreting specific findings are highlighted throughout the report where relevant.

4. Findings

4.1 Consumer typologies

This section outlines potential consumer typologies within the UK population with regards to building decarbonisation.

Key findings:

1. Initial scoping work and interim qualitative findings from interviews were used to create a set of six consumer typologies, which were then validated in focus groups.
2. Owner-occupiers can be broadly grouped by their relative level of willingness to take on finance and debt to fund green energy upgrades, and relative ability to make repayments.
3. Landlords can be broadly divided into large portfolio and small portfolio groups.

Creating typologies

This research used an iterative approach to define and explore potential consumer typologies for the green finance scheme. As described in section , DESNZ and Verian initially created a longlist of potential characteristics that could inform the typologies in a scoping workshop, and used these to guide the sample for the first phase of primary research (the in-depth interviews). Analysis of the interview findings suggested two possible ways to create typologies for owner-occupier groups. One option was to use a combination of type of home, life stage and household circumstances to divide owner-occupiers into five broad groups. A second option was to create four owner-occupier groups based on participants' willingness to use finance products to fund green home upgrades and ability to make repayments. DESNZ determined that the latter option was more relevant to take forward.

Two distinct groups of landlords also emerged in the research: those who had larger portfolios and for whom this was their primary income, and those who with smaller portfolios which often supplemented another form of income. There were some key differences between landlords and owner-occupiers, such as differences in motivation (discussed **above**), lack of flexibility around timings of making upgrades, and the broad separation of personal finances from their property portfolio. However, there were enough similarities to include both landlords and owner-occupiers in one set of typologies, outlined **below**. These typologies were used to define the sample for the second phase of research: one discrete focus group was conducted for each of the four owner-occupier typologies, alongside one landlord focus group that comprised an even split of both landlord typologies.

Consumer typology groups

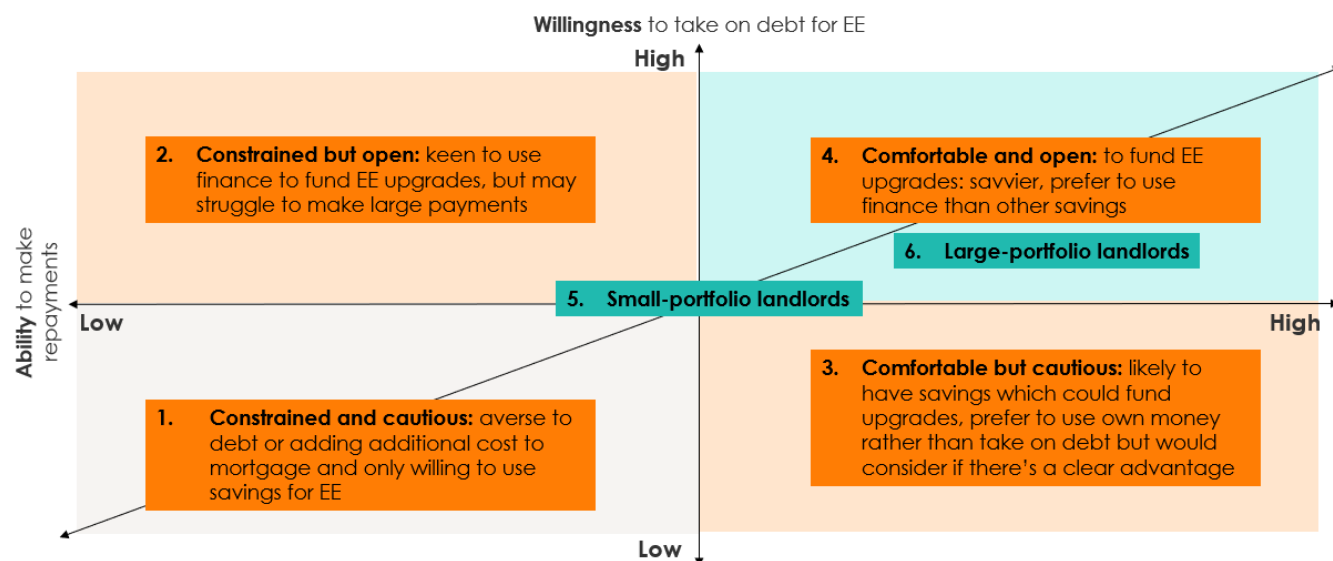


Diagram 1: six consumer typology groups categorised by relative ability to make repayments and relative willingness to take on debt for energy efficiency upgrades

The full sample specification, including recruitment criteria to define typologies, can be found in Appendix 6.2. Broadly, owner-occupier typologies were structured by:

- Attitudinal measures of willingness to take on finance to fund general home improvements.⁴
- Financial circumstances, defined by their self-reported optimism to afford everyday essentials and discretionary purchases over the course of the next year (used as a proxy for participants' ability to make repayments).⁵

⁴Willingness and ability were both determined by potential participant responses to the recruitment screener. Willingness to use finance was determined by potential participants' answers to the question "On a scale of 1-5, with 1 being very uncomfortable and 5 being very comfortable, how do you feel about using finance options such as loans or credit to make improvements to your home?", with those who answered 1-2 being placed in the low willingness groups and those who answered 3-5 being placed in the higher willingness groups.

⁵ Those placed in the low ability to repay groups were those who responded 1-3 to the questions "On a scale of 1-5, with 1 being not at all optimistic and 5 being very optimistic, how optimistic do you feel about your ability to afford to buy everyday essentials over the course of the next year?" and "On a scale of 1-5, with 1 being not at all optimistic and 5 being very optimistic, how optimistic do you feel about your ability to afford luxury purchases over the course of the next year?", with the high ability to repay grouping being those who responded 4 or 5.

Table 2: typologies for owner occupier groups

Attitude to finance	Higher ability to repay	Lower ability to repay
Higher willingness to take on debt	Comfortable and open	Constrained but open
Lower willingness to take on debt	Comfortable but cautious	Constrained and cautious

Landlords were grouped into two relatively simply divided groups based on the number of properties they owned: large-portfolio landlords were defined as those with three or more properties, small portfolio landlords were defined as having one or two only. The latter were more likely to operate as sole traders, although there was some variation within this.

Due to the qualitative nature of this research the sample size was 32, split into 6 typologies. These typologies should therefore not be seen to represent equal sized groupings within the wider population, and instead are purely indicative of a range of sentiments that exist.

Group 1: Owner-occupiers with high willingness to use finance to fund green home upgrades, high ability to make repayments: ‘Comfortable and open’

This group tended to be higher earners, and self-identified as ‘savvy’ with finances. Typically, these owner-occupiers lived in high-value properties and viewed their homes as a significant financial asset (e.g., were more conscious of the property’s value, and saw increasing this as a key motivator in making green home upgrades). They were more comfortable with debt and finance, and typically preferred low or zero-interest finance if this allowed them to keep more of their own money in savings or a pension earning a preferable rate of return. This group’s properties covered a wider range of potential EPCs and household compositions than other groups, and therefore also included a broad range of potential planned green home upgrades, (encompassing every potential upgrade discussed in this research).

“I’ve got a very good pension, I’d much prefer a low-interest loan and put more into the pension rather than paying out of pocket after tax.” (Phase 1 participant, Owner-occupier, 55-64, EPC C)

Group 2: Owner-occupiers with high willingness, low ability to repay: ‘Constrained but open’

Like group 1, this group was not inherently debt averse but preferred to avoid debt if alternatives were available. This group was more financially constrained, due to having relatively low and/or fixed incomes such as pensions or having high day-to-day costs such as mortgages and childcare. Accordingly, young families and retirees were well represented in this group. This group felt under pressure from high energy costs but typically had limited savings to invest in green home upgrades.

Owner-occupiers in this group could generally specify changes they would be keen to make to their home soon, particularly to improve energy efficiency. They preferred to make upgrades sooner rather than saving up to make changes incrementally. Many lived in homes with EPC ratings of D or below, and most commonly referred to loft or cavity wall insulation, upgrading doors and windows, and changing the heat source (particularly if their current boiler was old and will need replacing soon) as the upgrades they would like to make. This group placed a particular emphasis on loans for green home upgrades needing to 'pay for themselves' through savings on bills compared to other groups. This made green finance feel different to, for example, mortgages or car loans, which have no immediate return to consider. Some suggested this would 'justify' taking on additional debt even if they already had other debts.

This group was also particularly interested in finance to cover additional spending (e.g., decoration beyond just 'making good') so that they could make substantial changes to the home all at once and pay this off after the changes had been made.

"I'd prefer one larger loan to do everything we want, get the house how we want it now rather than saving. If it's a low interest rate I won't pay much more, I'm putting money towards it either way, this way I'm just doing it in a nicer house"
(Phase 1, Owner-occupier, 25-34, EPC C)

Group 3: Owner-occupiers with low willingness, high ability to repay: 'Comfortable but cautious'

Owner-occupiers in this group were more cautious about taking on any kind of debt to fund green home upgrades unless terms were very positive (i.e., 0% interest) but would have the ability to afford repayments should they take this on. Some owner-occupiers in this group were satisfied already with their home's energy efficiency, with EPC ratings of C or above, and saw little urgent need to make future upgrades. Some had lived in their current homes for a long time and so had tended to have made any desired home upgrades already. This group also included some homeowners planning to move relatively soon for a range of reasons, so were unwilling to take on debt to fund improvements without reaping the benefits of energy savings in the long term. All emphasised becoming or staying debt-free, including paying off their mortgage as early as possible, as an important personal financial goal.

"I can see the appeal of loans for people without other means... personally I want to be debt free for good next year" (Phase 1, Owner-occupier, 45-54, EPC C)

Group 4: Owner-occupiers with low willingness, low ability to repay: 'Constrained and cautious'

Owner-occupiers in this group were generally the most cautious about any green finance product. They were typically highly debt averse: in some cases, from previous experiences in which debt had caused them a great deal of stress; or in others, where they had outstanding debt and were keen to avoid adding any more to this. In contrast to group 3, this group also had limited flexibility to make repayments even if a green finance offer with particularly appealing terms was made available to them.

Some owner-occupiers in this group raised practical considerations for not being able to improve energy efficiency, for instance those living in leasehold flats in tower blocks who faced practical challenges in making some improvements, even if technically they would have permission to do this. However, generally this group had upgrades they would like to make to reduce bills but could not afford or justify the upfront expense. The potential upgrades raised most often were upgrades to doors and windows, and loft or cavity wall insulation (this group typically saw investing in solar panels or heat pumps as unrealistic given their financial circumstances). They were also less likely than other groups to be planning other renovations, so did not have this trigger point for considering green home upgrades.

"I spend my life never being in debt to anyone... If I haven't got the money, I won't buy it. I will never be in debt. I will never owe anybody anything." (Phase 1, Owner-occupier, 45-54, EPC D)

Group 5: Small portfolio landlords

This group comprised landlords with one or two properties. For many of these landlords, rental properties were not their primary source of income but supplemented a full-time job and/or were seen as an investment for later life. Some of this group described themselves as 'accidental' landlords who had inherited a property or kept a property to rent out when moving in with a partner. Compared with other landlords, this group was more likely to have misconceptions about incoming MEES requirements, such as thinking that the government had (at the time of research) announced an intention to introduce minimum EPC band C requirements for rental properties. Those with properties with EPC ratings of C or higher typically saw no need to make further upgrades.

These landlords were typically operating as sole traders rather than managing their portfolios through LLCs, and to some extent had merged the finances for the rental property with their own personal finances. This meant that potential upgrades might be taken from personal savings, rather than a separate fund ringfenced for the rental property. Some of this group reported having limited profits from rental income to invest in non-essential home upgrades. They were also likely to prioritise keeping long-term tenants in place where there is a positive relationship, and were reluctant to remove tenants to make upgrades. Those with lower EPCs planned to make smaller changes (not requiring tenants to move, such as upgrading windows/doors) but would avoid larger changes (insulation, heat pumps) until they were between tenancies. Ability to invest in green home upgrades also varied by location: outside of London/South East England, some landlords felt that upgrades would be unlikely to add much value to their properties, and would cost much of their expected profit from rental income.

"These [examples] do feel like they've been developed with London property prices in mind, where yes you might invest ten grand in your home but the values can go up that much easily. My rental properties are terraced houses in Wales – investing a few thousand would wipe out any money I'd make this year from rent and that would just be gone, I wouldn't see that back." (Phase two, Small portfolio Landlord, 25-34, EPC D)

Group 6: Large portfolio landlords

This group comprised landlords with three or more properties. Their portfolio was typically the main source of income, with a clear distinction made between personal and rental property finances, and were more likely to have set up LLCs. Due to their larger portfolios, these landlords were more experienced buying and selling properties than any other group and had more tenant turnover than landlords in group 5. This generally made this group more confident in their ability to replace tenants quickly if needed, and to manage any complications selling the property (this was relevant for some green finance products, as detailed in section). This group typically had enough flexibility to have a property vacant for a brief period while making home upgrades, but would still prefer to avoid this if possible, to minimise lost income.

These landlords were typically more open to making green home upgrades to properties than landlords in Group 5. Large portfolio landlords placed more emphasis on easily attracting new tenants or on finding buyers if wanting to sell and highlighted the importance of making a home seem warm and comfortable for viewings. This group had made or planned to make a wide range of green home upgrades, but none had seriously considered solar panels or heat pumps as costs were seen to outweigh any potential returns. Double-glazing and fixing severe draughts were seen as the only 'urgent' upgrades to install when buying a new property before tenants moved in, while other upgrades were seen as more discretionary.

4.2 Context for green home upgrades

This section highlights some of the wider contextual factors that influenced attitudes to green home upgrades and green finance throughout the research.

Key findings:

1. Attitudes to energy usage and energy efficiency varied, but all homeowners were motivated to reduce their home energy usage.
2. The most important motivation for owner-occupiers to reduce usage was to reduce day-to-day energy bills, followed by increasing comfort and reducing environmental impact. These motivations were supported by a range of secondary benefits.
3. Landlords were mostly motivated to improve energy efficiency by Minimum Energy Efficiency Standards, and were not typically responsible for paying energy costs on their rental properties.
4. A wide range of factors influenced views and attitudes to green home upgrades. Most significant were the characteristics of the property, the household's financial circumstances, and plans to move or stay in the property long-term.

Views of energy usage

Owner-occupiers varied in their understanding of energy usage and energy efficiency but consistently mentioned trying to reduce their usage amid concerns about high energy costs. Those who were able to say how much energy they were using often had smart meters, which made tracking usage easier, or had installed various green home upgrades already. Owner-occupiers without smart meters did not generally have a clear grasp on their household energy usage or their energy efficiency. Attitudes to energy usage also varied by household composition: households with children, older people, or people with long-term health conditions felt less able to reduce their heating and, therefore, more exposed to high and rising costs.

"[I am] very conscious of energy usage, obviously energy prices have shot up."
(Phase 1, Owner-occupier, 45-54, EPC B)

Landlords tended to be less aware of energy usage in their properties. For most of the landlord sample, tenants were responsible for paying energy bills (although landlords did note this would be different for many houses in multiple occupation or short-term lets, where a landlord would be responsible for paying energy bills). Landlords were more likely to raise concerns about tenants not using enough energy, i.e., not having heating on enough to prevent damp and mould.

"They might just hardly use the heating and then you get more condensation, more mould and cost you more in the long term." (Phase 2, Small portfolio Landlord, 55-64, Average EPC C)

Motivations for green home upgrades

Participants across the sample reported generally consistent motivations for green home upgrades, whether made in the past or planned for the future. Green home upgrades were often planned as part of larger home improvements or more perennial work required to update a property every few years. Reducing day-to-day energy costs from heating the home was consistently the most important motivation. Making the home more comfortable, i.e., reducing drafts and feeling warmer in cold weather, was also a significant motivator, linked to cost.

"It gets to the point, you're cold, you put the heating on... I feel like I can't really worry [about turning the heating on] with the kids now...they need the heat"
(Phase 1, Owner-occupier, 35-44, EPC D)

Improving the sustainability of the home varied in importance as a motivator but was typically seen by owner-occupiers as a secondary benefit behind cost and comfort. Maintaining or increasing the property value was relevant to some owner-occupiers if they were planning to sell soon, but this was more abstract and less directly motivating for others. Some green home upgrades like upgrading windows and doors were also seen as providing additional benefits by making a home look more attractive, reducing noise pollution, and generally making the property feel less tired or dated.

Landlords' main motivation for improving energy efficiency was generally linked to future-proofing their properties against increasing Minimum Energy Efficiency Standards (MEES). Landlords would often make green home upgrades when they bought a new property but preferred only to replace existing parts of the property after that, due to the difficulty conducting repairs with tenants in-situ.

Variables influencing views of green home upgrades

Views on and plans for making green home upgrades were affected by a wide variety of factors. A key factor was financial circumstances and attitudes, including the level of savings available to make upgrades and/or their relative willingness to take on debt. Property characteristics also influenced views, including the size, age, and current EPC rating of the property. Homeowners with lower EPC ratings, larger homes, and older homes were all more motivated to make green home upgrades, due to higher potential savings on offer, but also in some cases felt that upgrades would be particularly complicated for their own circumstances, for instance older properties might need more complex or novel types of upgrade made which could require prioritisation between upgrades or more extensive financing.

Homeowners' future plans for a property also had a significant impact on attitudes towards home upgrades. Those planning other renovations or upgrades were often keen to include green home upgrades to minimise overall disruption, while those planning to sell and move in the next few years felt the benefit to them would be limited in terms of what they would save on energy bills. Those intending to sell a property in the next few years were mostly interested in the least expensive and most straightforward improvements, while those who were planning to stay in homes for much longer, and/or were planning large scale renovations, were more open to larger or more expensive upgrades.

"If we were staying, we'd definitely be doing things, but because we want to move, we don't see the point in investing lots of money." (Phase 1, Owner-occupier, 25-34, EPC A)

Views and experiences of different upgrades

Owner-occupiers making or planning green home upgrades tended to start with those that were seen as the easiest wins: for those with lower EPC ratings, these comprised of secondary glazing and draught-proofing doors and windows. Some made distinctions between more urgent improvements like draught-proofing, and less urgent improvements like changing to energy efficient lighting – and this urgency was often linked to physical comfort. For landlords, these improvements were seen as cyclical and incorporated into the work done in between tenancies.

Insulation was seen as a key improvement, although one to be made after securing the 'easier wins'. Some homeowners had experience with heat pumps or solar panels, and these were not seen as urgent upgrades: only those who already had high EPCs, or were doing major renovations, had installed these measures. This was reflected in installers' reported experiences of working with these upgrades. Views on these more expensive upgrades were

more mixed, with many having no direct experience of heat pumps and expressing scepticism about them. As well as the home upgrades under consideration for the scheme outlined in section , participants also spontaneously mentioned a range of other upgrades they would consider and would be like to see included. These were external cladding, switching to more efficient radiators, underfloor insulation, and energy-efficient underfloor heating.

“Adding insulation in the loft and the garage is one of the best things we’ve done to this house. Barely need the heating on for an hour in the evenings.” (Phase 2, Comfortable and open, 35-44, EPC B)

Homeowners who had positive views on more expensive green home upgrades (e.g., solar panels and heat pumps) tended to already live in more energy-efficient homes. These tended to be older, more affluent owner-occupiers, and many had older children who had or were about to move out of the property. Those who had positive views on insulation, but not heat pumps, tended to have homes with lower EPC ratings, or had recently improved their EPC through adding insulation.

Some homeowners had looked into green home upgrades but decided against them, for three main reasons. The first was the perceived inappropriateness of their property, for instance solar panels not being relevant due to the orientation of the roof, their house being insufficiently insulated for a heat pump, or being the wrong kind of property for various types of insulation; this tended not to be mentioned for upgrades like secondary glazing or loft insulation. The second was cost; this was a particularly pressing barrier to adoption of solar panels and heat pumps, but tended not to be mentioned for other, less expensive, upgrades. The third reason given was inconvenience: either the application process for funding or finding qualified tradespeople to do the work was thought to be too difficult.

Additionally, some owner-occupiers had a scepticism of government schemes, which they had limited experience of and tended to have not qualified for when they had applied or investigated.

“I feel like there are all these government initiatives, but they’re not real, they don’t exist... there is always some kind of loophole, you earn too much, you don’t earn enough, the companies they list don’t actually do it. I feel like it’s one big scam.” (Phase 1, Owner-occupier, 34-44, EPC D)

4.3 Attitudes to finance and debt

This section discusses participants' general attitudes to finance for making home upgrades, including green home upgrades, to provide context for responses to specific green finance products in later sections.

Key findings:

1. Homeowners were consistently keen to avoid debt if possible, and would prefer to fund green home upgrades through other means such as savings.
2. Financing green home upgrades was seen as different from financing other home upgrades, as there is a direct cost/benefit trade-off to consider.
3. However, those who had previously made green home upgrades were typically very satisfied with the choice, despite not knowing exactly if the resulting savings completely mitigated the cost.
4. Attitudes to finance and debt varied by the type of home upgrade being considered.
5. The sample for this research had relatively limited experience of using green finance in past, so expectations for green finance products were fairly open.

Attitudes to using finance for general home upgrades

Homeowners were divided on their attitudes to finance and debt, with this divergence cutting across a range of other socio-economic factors. These differences were used as the basis for the typologies developed for phase 2 of this research, as detailed in [section .](#)

Generally, homeowners were cautious around debt and financing for home improvements. Homeowners described this caution as both a rational aversion to debt, which could be overcome if it was financially prudent, and a more instinctive or emotional aversion to debt in principle. Some of this caution was attributed to relatively high expected interest rates, making improvements more expensive than if paid for out of savings. This was a particular concern for those considering expensive upgrades and upgrades with uncertain or limited expected energy savings, such as heat pumps. Owner-occupiers who had had negative previous experiences around financial insecurity, or who had paid off all of their debts, including their mortgage, also expressed strong reservations about taking on more debt.

"I have had problems with debt before, and now I'm debt-free, well the phrase free is the right one. I don't want to go back to that if I can possibly avoid it."
(Phase 1, Owner-occupier, 45-54, EPC C)

While homeowners were generally wary of debt, mortgages were seen as an exception to this rule and understood as a 'necessary' form of debt. Homeowners also viewed mortgage lenders in a more positive light than other loan providers, as discussed in more detail in [section .](#)

Owner-occupiers who were more willing to take on debt or take out financing options often felt that they could work out a way to do so that would save them money. They often had experience of using financing options in this way: for example, some had experience of choosing specific energy tariffs to power both their home and charge an electric vehicle in a cost-effective way, or using 0% finance to fund an upgrade, such as new doors or windows, and leaving more money in savings to accrue interest.

Attitudes to using finance for green home upgrades

Financing green home upgrades was seen as different from other home upgrades, as there is a direct cost/benefit trade-off of to consider, with homeowners expressing concern that savings would not cover the outlay required. However, owner-occupiers who had previously made green home upgrades were typically very satisfied with the choice, despite not knowing exactly if the resulting savings completely mitigated the cost. This suggests that potential users of a green finance scheme may overestimate the importance of this cost-benefit calculation and underestimate the additional benefits such as improved comfort, which is a consideration that should be kept in mind when interpreting these findings.

Financing green home upgrades was not spontaneously seen as different from financing other home improvements, with the exception of solar panels and heat pumps. Several homeowners had heard of government schemes, in particular grants, that would help them to fund solar panels and heat pumps, and so already understood they might not need to cover the entire cost themselves. Furthermore, homeowners often did not perceive solar panels as improving the comfort of the home (unlike other upgrades), so these prompted a more purely financial calculation.

While landlords with smaller portfolios tended to express the same views as owner-occupiers, those with larger portfolios and more experience were more open to using financing to fund improvements, expecting to be able to do this through their LLC to minimise their own exposure.

Past experiences of financing green home upgrades

Owner-occupiers making smaller green home upgrades, like installing double-glazing or partially insulating their property, tended to have paid for this out of pocket. Those who had installed heat pumps or solar panels had often paid for this through financing. One owner-occupier had taken out a green mortgage when building their own property, and had seen their mortgage rate decrease as the property became more environmentally friendly. Other participants spontaneously mentioned that they would expect this to be the case for financing green home upgrades.

"At the moment, our mortgage is like a noose around our neck. So anything that lowers that is needed." (Phase 1, Owner-occupier, 55-64, EPC D)

Landlords who had paid for the properties through their savings tended to report paying for upgrades this way too. Those who bought their properties using buy-to-let mortgages were

more likely to have funded large-scale renovations by adding borrowing to their mortgages, they typically conducted such renovations just after buying a property and before starting a tenancy.

4.4 Consistent motivators and barriers for green finance

This section discusses the overarching motivators and barriers which encouraged and discouraged participants from using green finance options, before responses to specific options are discussed in section 4.5.

Key findings:

1. Participants consistently expected low interest rates to be the most important factor in encouraging them to use a government-backed green finance scheme.
2. Some participants also expected using a government-backed scheme would give them additional protections or guarantees, compared to other means to fund upgrades.
3. There were consistent barriers to using a green finance scheme. These were aversion to debt, long repayment periods, complications when selling the property, and insufficient savings on energy bills to justify the cost of repayments.
4. The relative importance of these barriers varied across typology groups.

Consistent motivators across products

Interest rates and savings

Participants saw the most important benefit of a government-backed green finance scheme as reducing the total amount they (or potential customers, for installers) would pay overall for green home upgrades, and potentially allowing them to make upgrades they could not otherwise afford. If the interest rates on offer from the scheme would be low enough, homeowners with relatively high income and/or savings appreciated that the scheme would allow them to take advantage of low-interest loans, and put money they would have spent upfront into savings or pensions with a better rate of return.

Protections and guarantees

Some also expected that a government-backed finance offer could provide greater protection for those using the scheme, for example if installation work carried a government guarantee or if compensation would be available for installation errors.

Consistent barriers across products

Aversion to debt

Participants of all types, but especially the owner-occupier groups with a lower willingness to use financing products, raised concerns about taking on non-essential debt. While not all owner-occupiers were averse to debt, most were cautious. In phase one interviews, options that did not involve incurring debt such as retrofit salary sacrifice and a green savings account proved consistently popular.

"I'm not looking to get into any more debt, I'm not looking to put large portions of my income or savings into this kind of thing." (Phase 1, Owner-occupier, 45-54, EPC B)

Long repayment periods

Repayment periods were another barrier frequently raised by all types of participants, although for different reasons. Homeowners often cited multi-year repayment periods as a reason to be cautious, fearing that personal circumstances might change and make repayments more challenging.

"The 10 year thing puts me off, like others have already said, I won't want to take a loan on unless I absolutely have to anyway." (Phase 2, Comfortable but cautious, 45-54, EPC E)

Owner-occupiers with a greater willingness to take on debt, as well as landlords with larger portfolios, were less concerned by the principle of a long repayment period. They were more concerned about the build-up of interest and linked this to concerns that the debt would keep them tied to a property they might want to sell (more detail on this in the section Error! Reference source not found.). Landlords also did not think that they would be able charge extra rent for the upgrades, and so felt that having an additional extra monthly cost was a barrier.

"I think 10 years is a long time as well because, so, if you need to remortgage any of the properties, who knows what the interest rate will be and how much extra it'll cost." (Phase 2, Large portfolio Landlord, 55-64, Average EPC D)

Complications when selling the property

Anything that might make it harder to sell a home was disliked by homeowners who were considering selling, particularly older owner-occupiers considering downsizing in the next few years and younger families hoping to move to a larger home. This was also true of landlords who were looking to downsize their portfolio or leave the market, or who were keen to keep the option to do so available. Homeowners were consistently nervous about long-term finance options that would transfer to a new owner, fearing this would be off-putting for potential buyers. Relatedly, they felt they would be less keen to purchase a property with some kind of long-term finance attached, feeling that in this case the original homeowner would reap the reward (avoiding upfront cost) and transfer the downside onto the seller. This concern was less

significant for those currently living in what they saw as their ‘forever home’, with no plans to move within ten years.

"I don't like that idea. For someone like me that's selling my property – when you add something like finance to it, it will probably put people off." (Phase 1, Owner-occupier, 35-44, EPC C)

Insufficient savings on energy bills to justify the cost of repayments

While acknowledging that home upgrades would bring benefits such as increasing comfort, reducing emissions, and hopefully improving property values, participants saw reducing energy bills as the primary motivation for making upgrades. Throughout the research there was consistent scepticism about whether some upgrades, particularly solar panels and heat pumps, would reduce bills enough to justify the cost. These concerns were exacerbated when expected savings for a range of green home upgrades were shown in the focus groups. Participants were consistently disappointed that expected savings were significantly lower than most repayments, reducing the appeal of green finance products.

"[It's] just way too expensive, like solar panels, it costs thousands and thousands. And you only get a small percentage of that back." (Phase 2, Large portfolio Landlord, 55-64, Average EPC D)

4.5 Responses to green finance products

This section includes participants' responses to a range of green finance products, including how appeal varied across different groups.

Key findings:

1. All participants were positive about the idea of a government-backed green finance scheme, and assumed that such a scheme would offer considerably better interest rates and terms than commercial finance.
2. There were some consistent barriers across the range of options shown, including aversion to debt, complications when selling a property, and insufficient expected savings on energy bills to justify investments in home upgrades.
3. Of the options shown in detail, secured green borrowing through a mortgage was consistently preferred across groups as the most appealing option.

Overarching views of interest rates

Homeowners consistently raised questions and concerns about interest rates throughout the research. There was a general concern about additional costs given the increase in interest rates in recent years, and additional concern if potential green finance products would include fixed rates leaving participants stuck with higher rates if base rates are cut, or would be

vulnerable to future increases. These were consistent concerns across the range of green finance products shown.

Interest rates were often a deciding factor for homeowners preferring one option over another. All homeowners stated a preference for lower interest rates or options that did not involve incurring debt, and when example rates were provided the option with the lowest rates was generally preferred.

"They're already paying out a lot of money for the cost of it. The interest on top, I think, is just a bit of a killer...without that, probably be a lot more appealing."
(Phase 2, Comfortable but cautious, 45-54, EPC C)

However, this sentiment was not universal. Some participants, in particular owner-occupiers with a low willingness to take on debt, were more averse to using their home as collateral than to interest rates.

"Anything that requires collateral is a no. Having a mortgage is quite enough. I don't want to be saddled in any more debt. Particularly if it's secured, I don't like the risk of attaching collateral." (Phase 1, Owner-occupier, 45-54, EPC B)

Once example rates were provided, homeowners were able to provide clearer answers about what level of interest rate was acceptable. Owner-occupiers spontaneously raised the idea that interest rates for a government-backed scheme should be significantly lower than commercially available, with some expecting that this should be 0% or 1%. Multiple owner-occupiers had previous experience buying new gas boilers with 0% finance provided by their energy supplier, which led them to expect a similar rate here. Landlords generally felt that the Government should offer 0% loans for any landlords needing to make upgrades due to MEES.

"If it was 1% or something, so if not completely killing the Treasury coffers, I don't know. But it has to be a lot lower." (Phase 2, Comfortable but cautious, 45-54, EPC D)

Owner-occupiers generally felt that an interest rate of around 2% could reasonably be considered as 'low', with 3% appearing to be highest rate that would still be considered 'low' by many. All the interest rates shown in the research were lower than what is commercially available, and this was made clear within the sessions. Some examples included illustrative rates of 5% or more, which were strongly rejected across the sample. Homeowners who were more affluent and considered themselves more savvy felt certain that they could secure financing for the desired product at favourable rates without a government scheme. Additionally, some felt interest rates that were perceived to be higher than they could otherwise get were a form of penalisation for engaging in environmentally beneficial behaviours.

"You have to save to make it worthwhile. the interest rate and bonus would have to be hefty to make it worthwhile." (Phase 1, Landlord, 55-64, Average EPC C)

Options discussed in the research

Homeowners participating in the first phase of primary research (online interviews) were shown high-level descriptions of six options for a potential government-backed green finance product. Those participating in the second phase (focus groups divided by consumer typology group) were shown four options in more detail with hypothetical interest rates and repayment terms. The stimulus shown to participants is included in Appendix 6.3.

Table 3: green finance options shown in phase one and phase two of the research

Phase one interviews: high-level summaries only	Phase two focus groups: additional detail, example interest rates and repayments
<ul style="list-style-type: none"> Green Savings Account Retrofit Salary Sacrifice Unsecured Green Lending Secured Green Lending Heat as a Service Property Linked Finance 	<ul style="list-style-type: none"> Secured Green Lending (specifically secured green borrowing via a mortgage) Unsecured Green lending (specifically personal green loans) Point of sale finance Heat as a service

Overall preferences for each group are summarised in the diagram below.

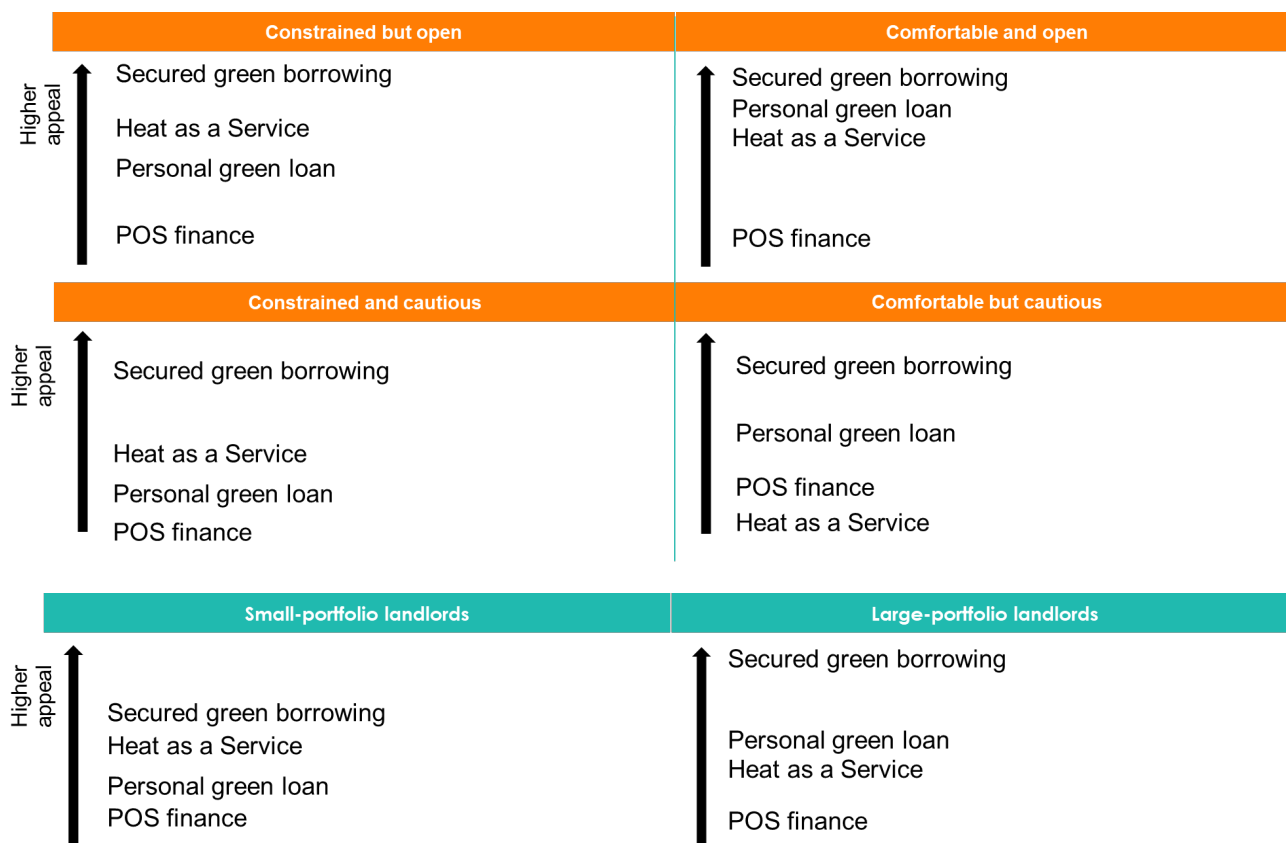


Diagram 2: summary of overall preferences for each typology group.

Secured green borrowing

Definition

Secured green borrowing is typically offered on top of an existing mortgage and allows homeowners to borrow additional funds at reduced rates to spend on green home improvements (e.g. insulation, solar panels, a heat pump). All of the additional borrowing must be spent on green home improvements, from any certified installer.

Overall appeal

Secured green borrowing was presented differently between the two phases. In phase 1, this was presented as one option within a broader category of 'secured green lending', and was often the most popular aspect of the secured green lending option across homeowners. The connection to the mortgage seemed to offset worries about using the home as collateral for some, but not all homeowners.

"It looks quite attractive because this is an investment in the property, so it makes sense to align it with a mortgage" (Phase 1, Owner-occupier, 35-44, EPC B)

In focus groups, secured green borrowing was shown as a standalone option with example rates and terms. **This option emerged as the consistently preferred option across all groups.** Significantly, the example interest rate was lower than any other option, making it considerably more appealing than others. The example shown included a 0% interest rate for five years, which was seen as a major benefit by nearly all homeowners. Homeowners noted that this was significantly lower than the other options shown to them and that it was also lower than what their own mortgage provider would be offering them. Additionally, those who were less able to take on debt saw those initial five years as an opportunity to improve their financial situation without having to worry about accumulating interest. As well as preferential interest rates, homeowners also felt that additional mortgage borrowing is more intuitive as the mortgage is already linked to the property meaning that using the mortgage feels more like an investment in the home, and that mortgage lenders could be considered more trustworthy, having a vested interest in the property maintaining its value.

"In five years' time. All right, if you're not moving home, hopefully you're going to be in a slightly better financial position." (Phase 2, Large portfolio Landlord, 55-64, Average EPC D)

"I would 100% go for one secured against the property, because ultimately this work is being carried out on the property and as xxx said, if I was going to move or change circumstances and then that loan is then associated to me or my partner as a personal debt so if I move property that debt still moves with me." (Phase 2, Large portfolio Landlord, 55-64, Average EPC D)

Questions and potential barriers

In phase 1 interviews, the collateral aspect of secured lending was highlighted in a stimulus shown to participants and this tended to be the focus of most of the reservations expressed.

Homeowners were aware that collateral was a common part of financial products, and were generally accepting of this in the context of a mortgage. However, some felt that the prominent reference to 'secured against the home' came across as threatening, and was inappropriate given the cost of the upgrades being discussed.

"I don't like it at all. I don't like 'if you don't pay us, we're taking your house away', I don't want that hanging over me... I do get it's a loan but the terminology is quite scary." (Phase 1, Owner-occupier, 35-44, EPC D)

"People are going to be reluctant, including myself, to put anything on a property" (Phase 1, Owner-occupier, 55-64, EPC D)

Furthermore, owner-occupiers who owned their homes outright felt that this option would be less relevant to them, and were hesitant to take out a new mortgage having appreciated the freedom of paying one off already. Homeowners also questioned if they would still be able to make early repayments with a green mortgage, hoping to pay off as much of the loan during the introductory 0% interest period as possible. Additionally, some homeowners were curious about how remortgaging would work if using this product: while hopeful this product would not impede them from moving to a new product or a new lender when looking for a new fixed rate deal, some had some concerns they could be tied to one mortgage provider and potentially to that provider's standard variable rate after the initial 0% interest period expires. Finally, some homeowners wanted to know whether this option would require additional guarantees or warranties for work being conducted, with some feeling that mortgage lenders might be more restrictive in the assurances required compared with a personal loan provider.

Overall, these concerns were not seen as insurmountable, but homeowners were keen to have clarity on these questions before seriously considering this product.

Variations by typology group

Responses to this option were most consistent (and more positive) across owner-occupier typologies than other options. All homeowners emphasised the low interest rates as the most appealing element of this idea. The Comfortable and open group placed more emphasis than others on ability to make early repayments. Both groups with lower willingness to take on debt were more favourable about this option than others, feeling that additional mortgage borrowing feels less daunting than other options.

Among landlords, those with larger portfolios felt more confident that they could increase their rental incomes enough over the five years at 0% interest to cover the principal of the loan. This made this option something they would consider. This group felt that the secured green borrowing would be useful if they were planning on expanding their portfolio, as they could access a large amount of funding to make multiple upgrades at once. Landlords with relatively higher value properties, particularly in London/South East, were especially convinced of this. Amateur landlords were generally less keen on using any green finance scheme, limiting the appeal of this option.

"You're going to save money if you're going to get the work done anyway. But, at the end of the day...we're all in this to make money...it's still costing us money to get it done and all these things are then not essential. So [upgrades are] luxuries, and we're not provided tenants with luxuries really." (Phase 2, Large portfolio Landlord, 25-34, Average EPC D)

"My main question if it was going to be more financially beneficial. I would consider it." (Phase 2, Small portfolio Landlord, 55-64, Average EPC C)

Unsecured Personal Green loans

Definition

Personal green loans are unsecured loans that are issued based on the borrower's credit history and income which can be used to fund energy-efficient appliances, insulation, or renewable energy installations. These will be through a government-backed partnership with lenders and so they might have lower interest rates than a commercial loan.

Overall appeal

Overall, the appeal of personal green loans was mixed, and almost entirely contingent on the potential interest rates available for this product. Homeowners often assumed that government-backed personal loans would be able to offer 0% or low interest rates when first presented with this option in the first phase of research. With this assumption, unsecured personal loans were generally appealing, although homeowners generally still preferred to finance home upgrades without debt at all if possible. The section below contains more detail on the appeal of personal loans with higher interest rates.

Unsecured personal loans were typically seen as more suitable for smaller home upgrades and therefore smaller total amounts, which lenders would be happy to provide without using the property as collateral. Homeowners also expected this option to be more flexible, and potentially faster and easier to arrange, than other options so home upgrades could be made sooner than participants would otherwise be able to afford. They also felt that this flexibility would ideally allow them to make overpayments to reduce loan terms more easily than other products with fixed repayments (as some felt would be typical with a commercially available loan or credit card).

Questions and potential barriers

In phase 1 interviews, moderators did not give participants example interest rates, but example rates (3% interest, with a comparison of 5% example rate for a commercial loan) and repayment terms were shown in phase 2. The 3% interest rate considerably reduced the appeal of personal loans (compared to when no interest rate was given) and was felt to be surprisingly high, limiting the appeal of this option to 'emergencies' and for those with no other option to undertake essential home upgrades. Homeowners noted that paying an interest rate this high would lead them to pay significantly more for upgrades than using other means, particularly for upgrades where they were uncertain if energy savings would allow them to

recoup the cost. Repayment terms were a barrier for many, particularly if they had seen options with lower interest rates already (stimulus was rotated across groups to identify order effects). Some also questioned if the government should be providing loans at this price to consumers who struggle to save the necessary amounts.

"I think you're going to be making a loss if anything goes wrong." (Phase 2, Comfortable and open, 25-34, EPC B)

The example shown in phase 2 included options for repayment terms for a hypothetical loan for £8,500: one for 10 years and one for 15 years. While homeowners appreciated that shorter terms would likely be available, seeing example repayment terms lasting this long also considerably reduced the appeal. Those who could imagine themselves moving home within this timeframe felt that they would lose out on the benefits from making this upgrade.

"I don't like it...It doesn't sound like it's worthwhile. I think the repayment is too much for the benefit and the reduction on the energy bills." (Phase 2, Comfortable but cautious, 45-54, EPC E)

"Also, I feel like you'd want to be living at that property for over the 10 or 15 years repayment to reap the benefits of having done it. Which I don't think is really common any more, especially with younger people." (Phase 2, Comfortable but cautious, 25-34, EPC D)

Variations by typology group

When shown example rates and repayment terms, responses were generally consistent across owner-occupier groups. Some owner-occupiers in the Constrained but open group were more interested in using unsecured loans compared to other groups. However, others in this group were not interested in this specific product, partly because some assumed they would be able to access better interest rates through funding upgrades by other means (such as using some savings to partially fund upgrades and using 0% balance transfer cards to manage remaining debt).

Owner-occupiers also acknowledged the appeal of this product would vary considerably by amount borrowed, noting that funding a relatively cheaper upgrade at 3% interest will accrue much less interest overall than more expensive upgrades, and could therefore be tolerated in such cases. Owner-occupiers were also more likely than landlords to raise the prospect of additional guarantees or consumer protections from using a government-backed loan, in some cases making an analogy with additional fraud protection offered when using credit cards.

"I think both options [AGB and PGL] need to be available so people can make their own choices on personal circumstances. But logically for me, the personal loan should be for the smaller bits and the secured loan should be for the bigger bits." (Phase 2, Comfortable and open, 45-54, EPC C)

Landlords raised the additional concern that personal loans could be complicated or unavailable to access if using LLCs, or could prevent them setting one up in the future (for example, if intending to increase the size of their portfolio).

"Based on income and credit history, what kind of income is that? Are they talking about earned income or are they talking about property income? Because there's a big difference if people are landlords and property income is their main income, you wouldn't get a loan based on earned income." (Phase 2, Large portfolio Landlord, 55-64, Average EPC C)

Point of sale finance

Definition

Point of sale finance is finance offered at the moment of purchase which can be used to fund a green home improvement through delayed payment. This involves retailers or service providers partnering with lenders to offer financing tied to a specific government in a government backed scheme which means they can offer lower interest rates than otherwise commercially available.

Overall appeal

Point of sale finance was initially presented as one of the options within unsecured green lending in phase one interviews, and then shown in more detail including example interest rates in the focus groups. Homeowners generally expected 0% or very low interest rates to be available, basing this on their experience of using finance for home upgrades including windows, flooring, or large purchases such as furniture. Some did reflect that the cost of any commercial 0% finance product must ultimately be passed on to consumers somehow, but described it as feeling like 'free money'. Other expected benefits of point of sale finance were potentially being simpler and more flexible than other finance options to arrange.

Questions and potential barriers

As with personal loans, seeing the example interest rates (5%) in phase 2 stimulus significantly reduced the appeal of this option. Homeowners were consistently surprised that a government-backed scheme would carry such a high interest rate and expressed that they would much prefer to fund upgrades by other means. Having seen example rates and repayment terms, none considered this to be an appealing or worthwhile product.

Variations by typology group

Aside from the negative reaction to interest rates, some groups also had negative associations with point of sale finance. Both owner-occupier groups with lower willingness to use finance had strong negative associations with this type of finance, associating it with pushy sales tactics and encouraging unaffordable purchases. This led some to question if the government should be supporting this.

"It feels like the kind of thing where you get dodgy salespeople... It's something you would do if you're really desperate." (Phase 2, Comfortable and open. High Ability, 45-54, EPC D)

Landlords were open to the idea of point of sale finance to make upgrades that were seen as unavoidable, if interest rates were lower. They expected the flexibility could be useful to time upgrading around tenancies, rather than needing to save up to make upgrades by setting aside rental income. Point of sale finance was also seen as potentially less complicated to access for those managing properties through an LLC than personal loans or additional green mortgage borrowing would be.

Heat as a service

Definition

Heat as a Service involves a provider installing a product such as a heat pump and offering maintenance services for a monthly subscription, which can be transferred to a new owner when the property is sold. The provider retains ownership of the technology throughout the length of the subscription contract meaning there are no upfront costs for the homeowner.

Overall appeal

Unlike other green finance products, heat as a service was unfamiliar to homeowners in this research and was not something any had considered before. Broadly, homeowners were open to this option, although there were generally more questions and concerns as they were given incrementally more detail throughout the research.

Homeowners saw consistent advantages to this model. They saw regular and predictable costs and having providers be responsible for maintenance as appealing aspects of the model. Avoiding an upfront cost and instead leasing technology was felt by some participants to reduce the 'risk' in trying a new technology, which some likened to leasing electric cars.

"This sounds really good, because it's being spread across a monthly payment instead of having to pay these upfront fees. I like the fact that the provider covers the maintenance costs" – (Phase 1, Landlord, 35-44, Average EPC C)

Homeowners were shown an example of a separate heat as a service option which only covered the technology and maintenance, and not energy costs. In the discussions, they were also informed about comprehensive models which included the energy cost as well. Preferences were divided: some preferred the comprehensive model for the simplicity of having one cost together, and felt that a major energy supplier would be less likely to go out of business mid-contract (a concern discussed in the section below). Others were more cautious about being locked into a contract with an energy supplier and preferred to keep the two contracts separate. These preferences were predominantly driven by sentiment towards energy suppliers and did not vary between typology groups.

Questions and potential barriers

Some homeowners found the idea of not owning the technology in the home inherently unappealing and were not open at all to this model. Beyond this, appeal of heat as a service was closely linked to overall openness to heat pumps, and this option was seen as potentially able to address concerns about the upfront cost of installing heat pumps. Homeowners also questioned:

- Whether the Boiler Upgrade Scheme (BUS) discount would still be available with this model: homeowners expected it would be and, if not, this would significantly reduce appeal as they would miss out on a significant saving
- What protections are in place if a provider goes out of business mid-contract (an issue two owner-occupiers had experienced with solar panels on their homes)
- Whether the technology would be retrieved by the energy company in the event of non-payment or contract disputes
- What choice of providers would be available
- What protections would be in place for consumers if providers fail to complete their maintenance obligations
- Whether payments are fixed for the full term of the subscription or increased with inflation after an introductory period

Generally, the appeal of this model was reduced when homeowners were shown example repayment terms in the focus groups. However, this was partly attributed to the example shown being a major upgrade to the home (including a heat pump, solar, and battery storage) costing £25,600 in total, which some found daunting and difficult to relate to, despite the fact that participants were aware that these technologies could work together to save money. This suggests that using relatively simpler examples (i.e., installing a heat pump only) alongside more comprehensive ones to illustrate this model might be more appealing for homeowners learning about this product for the first time who may need more time to familiarise themselves before considering what option makes most sense for them.

Variations by typology group

The questions and concerns detailed above were generally consistent across groups. Overall, heat as a service was more appealing to both groups with relatively lower ability to make repayments. These groups emphasised the benefits of avoiding upfront costs and avoiding sudden, unexpected costs in the event of the heating system breaking down. For some of these participants, replacing the current heat source was a major concern both as a significant potential strain on finances but also in relation to causing them stress and worry not knowing when this may be needed. Some owner-occupiers in the Constrained and cautious group also noted that this option did not ‘feel like’ debt (even if technically this is the case) as the other options do, for instance expecting this would not affect a homeowner’s credit score.

Landlords were generally interested in this option, although as with other groups the example shown significantly reduced appeal, given that this was a more significant change than any of

them would make to their property, and too expensive. Landlords were generally interested if they felt able to pass on some or all of the cost of the contract to tenants through rent increases, but not if the monthly payment would simply reduce their rental profits. Those with long-term tenants they wished to keep in place were also concerned about needing to end tenancies to have a heat pump installed.

Salary sacrifice

Definition

A workplace benefit where employees can allocate a portion of their salary over a longer period toward green home improvements. Employees can reduce how much of their income is taxed, while unlocking funding for energy-efficient upgrades. This model is inspired by similar salary sacrifice schemes for electric cars, bicycles and pensions.

Overall appeal

The salary sacrifice option was only shown as high-level detail to homeowners in interviews, with no example amounts or payment terms. Homeowners were consistently familiar with this model through other workplace schemes and pensions. While not relevant to all (discussed in more detail **below**), this option was consistently perceived as being a good idea and was the clearly preferred option for some homeowners. Paying for upgrades pre-tax was seen as both a good deal and a strong encouragement: some reflected that not taking advantage of this scheme if available would feel like ‘wasting money’, which was not the case for any other product shown. Homeowners also reflected that allowing people to pay pre-tax felt more efficient than other options for a government scheme, rather than the government partially subsidising loans or other finance options.

"I love that, as a 40% taxpayer... It shifts the whole dynamic in my mind. It can encourage people to make bigger investments." – Phase 1, Owner- occupier, 35-44, EPC D)

"Feels much more common sense that I just don't pay tax like a pension. Rather than take the money in tax, then give part of that to a lender, so they give me a better interest rate and I get into debt. It's clean and simple." – Phase 1, Owner-occupier, 35-44, EPC C

Questions and potential barriers

Homeowners who did not find this option appealing either tended to acknowledge it would not be relevant to them (e.g., were already retired), or felt unable to reduce their monthly salary if finances were already stretched. They tended to feel that this option is a good idea but that barriers in their own situations would prevent them from using it.

The main questions about this option were:

- Repayment term length: homeowners were keen to see flexibility here, so they could find a balance between a manageable monthly amount and an acceptable timeframe

- Implications for changing or losing a job with this option halfway through the term
- Whether this would be available to self-employed owner-occupiers
- Which companies would be able to offer this: some noted that any employee receives tax relief on pensions, but other sacrifice schemes might only be available at larger employers, which could lead to unfairness if only some of the eligible population is able to use this benefit

These considerations meant that salary sacrifice was typically more appealing for smaller home upgrades. Some felt that larger and more expensive upgrades would either significantly reduce their take-home pay or require long repayment terms, potentially complicating changing jobs.

Variations in appeal

As this option was not included in phase 2 of the research, there was no direct comparison of the appeal between different consumer typologies. In the first phase, this option appealed more strongly to high earners, both due to the higher rates of income tax and their ability to reduce tax home pay to take advantage of this benefit. Retirees and lower earners saw this option as less relevant to them, while self-employed owner-occupiers were uncertain if they would be able to use this benefit.

Landlords generally assumed this option would not be relevant to them, although some were working full-time. Landlords suggested that an equivalent scheme to reduce tax on rental income would be welcome (this was not specifically shown but raised spontaneously in some interviews) for similar reasons to the expected benefits of salary sacrifice described **above**.

Green savings account

Definition

Savings accounts which offer additional benefits to savers who commit to use the funds for green home improvements in the future.

These additional benefits could be:

- Improved interest rates
- An additional bonus paid when the account is used to purchase energy efficiency measures.

Overall appeal

The government-backed green savings account option was also only shown as high-level detail in phase one interviews, with no example amounts or payment terms. This detail included two potential options: an increased interest rate and/or an additional bonus paid when the account is used to purchase eligible upgrades. Homeowners generally found this idea appealing in principle, with the caveat that this would be entirely dependent on the interest rate and/or bonus available.

This option was generally seen as more relevant for smaller, non-time sensitive upgrades that homeowners would expect to save up for rather than needing finance. As well as the financial benefit, some felt that keeping a separate savings account for upgrades would be a helpful tool for managing personal finances. They also appreciated the flexibility of changing how much they could allocate to a savings each month, rather than making a consistent debt repayment.

"It's a good idea to separate your savings for that specific use. The bonus would be a good idea to go ahead with." (Phase 1, Owner-occupier, 35-44, EPC B)

Questions and potential barriers

The most important questions were the level of interest and bonus to be repaid. Homeowners did not have clear expectations here but, as with other options, expected that government involvement would mean a better interest rate than a commercial savings product. Some drew parallels with the 20% government bonus paid in Help to Buy savings products but were unsure if this option would offer an incentive as high as that. There were also questions about:

- Whether interest rates would be fixed for a term or variable
- Potential exit fees or penalties if savers decided against using the money for home upgrades
- How much choice the saver would have around which installer to use this bonus with (with homeowners generally assuming this would be limited to a pre-approved government list of providers)
- Would interest be taxed and, if so, at what rate

Variations by typology group

As this option was not included in phase 2 of the research, there was no direct comparison of the appeal between different consumer typologies. This product was consistently appealing across homeowners, particularly those already saving up to make upgrades. The flexibility to vary contributions month to month was particularly appreciated by owner-occupiers on lower incomes or self-employed people. Landlords were also interested in this option if interest rates or the bonus paid were high enough.

Overall preferences

Of the options shown in detail including interest rates and repayment terms, secured green borrowing emerged as a clear preference across the sample. Responses from each typology group are summarised [below](#). Homeowners also acknowledged that different options would be more suited to specific contexts and individual consumer preferences, and appreciated the idea of a government scheme offering a range of green finance products to suit this would be appropriate, if feasible.

Table 4: summary of responses to each model by typology group

	Secured Green Borrowing	Personal Green Loan	Point of Sale Finance	Heat as a Service
Comfortable and open	First preference, this option was felt to provide opportunity to save/make money due to 0% interest for five years	Sounded sensible to fund the installation of one upgrade, if rates were lower	Mistrust installers and wanted them separate from finance	Concerned about not owning the technology leading to potential issues when selling house
Comfortable but cautious	First preference, 0% interest for five years felt to be only option better than using savings for upgrades	Good for smaller upgrades but concerned about protections and warranties	Intuitive for the smallest upgrades, however repayment terms felt unrealistic	Concerned about not owning the technology and reliance on a provider who could go bust
Constrained but Open	First preference, concerned about costs but feel like repayment terms make this manageable	Repayment period felt too long, did not want to feel trapped in property long term	Rates too high, felt to be associated with bad decisions or cheap goods	Lack of upfront cost was liked
Constrained and cautious	First preference, connection to house via a mortgage felt intuitive	Rates too high	Repayment rates too high to justify cost	Lack of upfront cost was liked
Small-portfolio landlords (no preference indicated overall)	Sceptical and felt this would cost them extra in the long run	Did not see any benefit to the landlord, only extra costs	Concerned about link between seller and financier, wanted more choice	Lack of upfront cost liked but disliked extra monthly cost
Large-portfolio Landlords	First preference, confident rents would rise enough to cover costs	Concerned about how personal loans interact with LLC	Concerned about how personal loans interact with LLC	Lack of upfront cost liked but would only pick if they could increase rents

4.6 Roles of government, installers, and lenders in delivering green finance products

This section discusses what participants felt the roles of government, installers and lenders should be in delivering green finance products and advice on these products. Needs around information and communications from each of these actors are then discussed in section .

Key findings:

1. While personal experiences of green home upgrades were generally positive, participants lacked trust in providers and were keen for the government to provide reassurance on this.
2. Lenders were perceived as having the primary role in delivery and participants expected them to be their main point of contact.
3. However, participants were nervous about lenders restricting their choice of provider.

Lack of trust in green home upgrades

Homeowners' views on green home upgrades and finance for these options were influenced by a lack of trust in installers, energy companies and other providers of green home upgrades. While homeowners generally had positive experiences and were confident in their ability to choose a trustworthy supplier for future upgrades, they consistently referred to news stories, friends or family who had very negative experiences. For some, the variation between installers in quotes for the same work and a lack of consistent and clear information had also contributed to this lack of trust.

Role of government in delivering green finance products

Scheme design and encouraging take up

Although they were keen to see details of the scheme, participants were consistently positive about the idea of a government-backed green finance scheme and could see clear advantages to this. Participants' awareness of the government's net zero targets varied. While this awareness was not explored in detail in the research, it arose spontaneously in many of the sessions and participants were broadly aware of the government ambitions to reach net zero and felt that providing financial assistance to help households reduce their emissions is an essential part of this.

As detailed in section , homeowners saw the role of government as crucial in delivering a green finance scheme that would allow people to pay less for green home upgrades than relying on commercial loans, potentially allowing them to make upgrades they could not otherwise afford. If appealing enough, homeowners felt that this incentive could induce them

(and others in similar situations) to 'take advantage' of a green finance offer and potentially tip the balance in deciding whether to make a green home upgrade or not.

Installers were particularly positive about a government-backed scheme. They acknowledged a gap around support for households who do not qualify for support such as the Warm Homes Grant or Energy Company Obligation schemes, but still could not afford green home upgrades out of pocket, and hoped this scheme would address this.

Instead of directly delivering the scheme, government was seen as having more of a role in co-ordinating the activities of lenders and installers and providing a subsidy, for example to reduce interest rates. Another important role of government was in providing a trustworthy central source of information about green finance products, although specific details of products would be more suitable from other sources (information discussed in more detail in section).

The role of local government was not explored in detail in this research, but was raised by some participants. Installers in particular noted that Local Authorities (LAs) have experience of delivering grants and schemes and will have a more detailed understanding of both the local population's needs and housing stock, which could be beneficial when delivering advice. Some owner-occupiers had been offered green finance from their own LA (in partnership with a lender) through a local scheme, but none had used these due to the high interest rates offered.

Regulation

Government was also seen as having an important role in regulating installers and lenders as part of any green finance scheme, and providing clear information to consumers about this regulation to support trust. Some participants raised concerns that loans could be mis-sold or arranged for participants without the ability to repay.

"There needs to be some sort of protection so that you're not just mis-sold it, otherwise we'll end up with another PPI thing in five years' time and everybody claiming against the government." (Phase 2, Comfortable but cautious, 45-54, EPC E)

As discussed **above**, some homeowners had concerns about having green home upgrades made due to a perceived lack of trust in providers of home upgrades. Homeowners consistently felt that while the government has a responsibility to regulate providers already, this is even more important if a delivering a green finance scheme to encourage customers to use these providers. Opinions were divided on whether the government should provide a list of approved providers and require any green finance to be spent through them. Some preferred this, feeling it would increase trust and confidence. On the other hand, others felt this could restrict choice and lead approved providers to increase prices, knowing that others could not take advantage of the government subsidy. Homeowners were also keen to know if a government-backed finance scheme would give consumers more protection or rights to compensation for poor quality installations.

Role of lenders

Lenders were perceived as having the primary role in the delivery of green finance products, and homeowners generally expected most of the arrangements for finance would take place between themselves and the lender (with the government playing a background role). Homeowners expected lenders to have some oversight of the work being done, but would not want lenders to restrict their choice of provider or to have control over technical decisions made about green home finance. There was also a need for lenders to provide detailed and clear information about terms and conditions at every stage of the process of arranging finance, which is discussed in section . For the secured green borrowing option, they wanted the ability to be able to arrange this through independent mortgage advisors or directly through lenders.

"I trust my mortgage advisor completely, so if they're coming to me and saying this is what's available, this is what you can do, I'll tend to listen to them because I know they've got the information, they've looked into it and they've got my best interests there as well" – (Phase 2, Constrained but open, 35-44, EPC D)

Role of installers

Installers were seen as important advisors at each stage of the process of green home upgrades, from initial feasibility of upgrades through to aftercare after installation. Homeowners did have some concerns about installers or sales representatives pushing finance options, in some cases due to bad experiences with aggressive salespeople or cold callers. Some remarked that a centralised way to compare offers from providers would be highly preferable to hearing from each provider individually, both to save time and to minimise being pursued by providers. While not sure what this should look like in practice, some referred to price comparison websites for other financial products as an example.

"I'm just sick [of it]. Keep saying: this is a private number and hanging up because as soon as something comes out, you just get call after call. And I don't like cold calls like that anyway, so I wouldn't want anybody just phoning me or I'd want to research it myself." (Phase 2, Constrained but open, 35-44, EPC D)

Homeowners were keen to have reassurances on what will happen if a provider ceases operating over the term of a green finance product. Two homeowners in this sample had solar panels installed by a provider that had since gone out of business, and were nervous about complications from this when they come to sell the property.

4.7 Messaging and information around green finance products

This section contains details of what information consumers wanted about green finance products, who they wanted this from, and how they would like this to be provided.

Key findings:

1. The key pieces of information participants wanted were financial.
2. All participants wanted the government to publicise the scheme and highlight environmental benefits.
3. Homeowners trusted financial institutions with which they had longstanding relationships.
4. Homeowners were cautious of installers and energy companies providing information.

Information needs

In phase 1 interviews, homeowners consistently stated that they would prioritise finding information on interest rates and some mentioned wanting to know about the instalment schedule, the overall cost, potential savings and if they would be eligible for any other schemes. These were perceived as standard for any financial product or housing-related contract.

"The same as if you're signing up to any contract... As long as I'm equipped with all the facts and there are no hidden things." (Phase 2, Constrained and cautious, 45-54, EPC D)

Once more detailed examples were given in phase 2, these questions became less relevant. Information needs did not vary significantly by typology. Homeowners were interested in finding out about the non-financial benefits of green home upgrades, particularly those related to comfort and environmental benefits, and how these related to traditional measures (such as gas central heating). Some indicated that they wanted to know how they would be contributing to Net Zero targets, although this was not the case for all.

"I want to know why the heat pump is better for my heating than a gas boiler." (Phase 1, Owner-occupier, 35-44, EPC C)

Particularly with heat pumps, there was a sense that most people did not know much about them and only heard negative stories and so there was appetite for some myth-busting from the government. Homeowners often wanted to know about the lifespan of the upgrades themselves. Some also wished to be made aware of alternative financial products when making their decision.

"All of the options obviously... If they're going to offer you the green mortgage, then they should also offer, also at least not offer but suggest or point out that, there are other options." (Phase 2, Comfortable but cautious, 45-54, EPC E)

"[Government needs to] Dispel some myths and give us the absolute facts." (Phase 1, Owner-occupier, 45-54, EPC D)

Preferred messengers and channels

Homeowners wanted to hear from both the government and the financial institutions that would be providing the financial products. There was little variation between typologies on this. There was a desire for the government to raise awareness around the scheme and benefits of the technology, although participants were divided on whether this should have government branding on it or be owned by an independent but government-backed body that could provide impartial advice.

"If the government were to pay the independent body to send out literature, that would be a good use of government money." (Phase 1, Owner-occupier, 45-54, EPC B)

Some homeowners felt their LA was a useful body to be disseminating information on the scheme. There were also suggestions of an online comparison website or database, which would allow consumers to identify all the options available so they could make an informed choice. There was no consensus over whether this website or database should be hosted by the government or an independent third party. Overall, they believed it was appropriate for financial institutions to focus on providing information on their financial products, with only a few thinking it was important to hear about the environmental benefits from lenders. These homeowners tended to feel that their mortgage provider would be the most trusted entity to provide them with information.

"I fully believe mortgage lenders should be involved in making your property green." Phase 2, Comfortable and open, 45-54, EPC D)

In addition to the above, landlords also mentioned that there were other professionals involved with their property who it could be useful to hear from, such as letting agents and mortgage advisors.

"I do get updates from my letting agent and, from time to time, on changes that the government are bringing in." (Phase 2, Large portfolio Landlord, 55-64, Average EPC C)

Homeowners mentioned that they thought installers and energy companies should provide some information, particularly around the upgrades themselves, and were often open to hearing about financial products from them. However, there were concerns that installers had a vested interest in getting a sale, and that there could be a surge in unsolicited contact from installers looking to capitalise on a new scheme.

"A blanket ban on door to door [sales methods] I think." (Phase 2, Constrained but open, 45-54, EPC B)

5. Conclusions

Overall, responses showed a consistently high level of openness to a new government-backed green finance scheme. If details of the scheme are appealing enough, most notably if the scheme involves low enough interest rates, owner-occupiers felt it would encourage them to make green home upgrades that they might not otherwise make. Landlords were generally more circumspect, but could see circumstances where they might use a scheme. Installers were also positive about the prospect of this scheme, noting that this could provide support to households that in their experience do not qualify for grants but would be unlikely to prioritise paying for green home upgrades without assistance such as this.

This research involved a multi-phase approach, conducted while options for a new scheme were in development. The approach highlighted differences in how homeowners responded to ideas when given just a general overview, and how these responses differed when given more detail about example terms and rates. Homeowners were generally open to most ideas from high-level descriptions, but were much more selective when shown the detail.

Homeowners raised a number of barriers that could prevent them from using a green finance scheme. Firstly, some had a strong aversion to any kind of debt and would, if possible, avoid this, which was a significant factor reducing the appeal of all options shown to some extent (noting that heat as a service and salary sacrifice were interpreted differently). Secondly, lack of trust in providers was also a barrier, with references in most groups to stories in the news or their personal networks about poor quality installations. The perception of persistent or aggressive sales tactics from providers, particularly towards participants who had inquired about heat pumps, also undermined trust. To address this barrier, homeowners were keen to see the government overseeing and providing a list of approved suppliers who could access green finance, as long as this list was not too restrictive. Finally, some options were also expected to make selling the home within the terms of a loan or agreement more complicated, and homeowners worried this would put off potential buyers if they planned to sell. This was true both for those with plans to move imminently and those with no immediate plans to do so but did not rule it out in the future. Some potential users of this scheme are likely to need reassurance on this issue, including clear information on the implications of selling the home, possibly supported by illustrative examples.

Of the options shown in detail, secured green borrowing was the most appealing option across groups. This was predominantly due to more attractive interest rates, but also due to feeling more secure and intuitive as a concept compared to other options shown. Salary sacrifice and savings account schemes were also appealing when shown as high-level concepts, but were not chosen to develop further and take into phase 2 of the research. Homeowners were positive about the scheme offering a range of options for different types of household and different home upgrade settings, and could see themselves opting for different products in different contexts. If feasible, a green finance scheme offering multiple finance products might therefore have broader appeal.

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