Institute for Public Policy Research



MORE THAN MONEY

MOVING TOWARDS A RELATIONAL APPROACH TO RETROFITTING

Joshua Emden September 2023

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ABOUT THIS REPORT

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SUMMARY

The UK has a mountain to climb when it comes to home retrofitting. By 2028 the UK will need to reach a peak of installing nearly two million energy efficiency measures like loft and wall insulation and over 600,000 heat pumps. However, despite the urgent need for a massive scale up in retrofitting, policy design at the moment is not up to the task.

In this briefing, we discuss new research from a team based at the Universities of Leeds, Strathclyde and Sussex, funded by the UK Energy Research Centre, to offer a new explanation for why retrofitting policies are failing to stimulate the market and attract more interest.

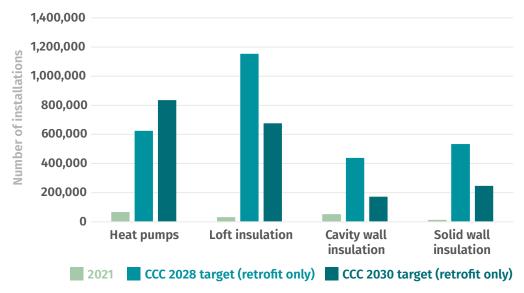
The research finds that when policymakers design support for home retrofitting they typically think about the idea of a 'customer journey' but assume a person will only embark on this journey and engage with a government scheme if it makes sound financial sense. However, while costs are certainly a factor, 'social relations' – who you know, who you know well, which communities you belong to, when and where you interact with them, where you live and what your background is – play a major role in influencing people's decisions to renovate or retrofit their home.

Developing a greater understanding of the social relations influencing household decisions at each stage in the customer journey can help policymakers determine the right life moments and trigger points to introduce policy support, and to design them in a way that harmonises with households' existing social networks and backgrounds, not based on the idea of the purely rational economic man. Indeed, there are so many relational factors to consider that the very idea of an 'able-to-pay' consumer is no longer a helpful term precisely because it presumes money is the main factor hindering the ability to proceed with retrofitting. Instead, policymakers should consider all relational factors to assess whether or not someone is 'able-to-do'.

1. THE POLICY CONTEXT

The UK has a mountain to climb when it comes to home retrofitting. By 2028 the UK will need to reach a peak of nearly two million energy efficiency measures like loft and wall insulation being installed and over 600,000 heat pumps. Last year the UK installed just 50,000 heat pumps and this year the installation figures for the government's flagship energy efficiency scheme, the Energy Company Obligation (ECO), have fallen to their lowest level since the programme was introduced (figure 1.1).

FIGURE 1.1: THE UK IS BEHIND THE PACE NEEDED TO KEEP TRACK WITH NET ZERO TARGETS Installations in 2021 by technology compared to annual installation targets for 2028 and 2030



Sources: HPA 2021, CCC 2022 [adapted by IPPR]

This glacial pace can be partly explained by a number of high-profile policy failures, most notably with the Green Deal and Green Homes Grant, both of which were scrapped soon after they were introduced due to lack of interest and poor design respectively. More recently, the introduction of the Boiler Upgrade Scheme has seen relatively poor uptake (Orso and Sissons 2023), failing to meet even the fairly unambitious target of installing 30,000 heat pumps per year through the scheme. In short, despite the urgent need for a massive scale up in retrofitting, policy design at the moment is not up to the task.

In this briefing, we discuss new research from a team based at the Universities of Leeds, Strathclyde and Sussex, funded by the UK Energy Research Centre, to offer an explanation for why retrofitting policies are failing to stimulate the market and attract more interest. With a focus on the able-to-pay market, the research highlights in particular the need to understand the social relations that influence people's decision-making over whether or not to retrofit their home.

2. HOW CURRENT ASSUMPTIONS UNDERPINNING POLICY DESIGN ARE FLAWED

When energy policy is designed to support the uptake of a low-carbon technology, such as a heat pump or energy efficiency measures, it is often assumed that a person will only engage with a government scheme if it makes sound financial sense. Typical examples include if the subsidy being offered is large enough or the payback period is attractive enough. This is typified in box 2.1 below which presents a vignette from academic research that describes how policymakers think of people as rational actors. This is then compared and contrasted to a 'relational' vignette presented in chapter 3.

BOX 2.1: THE 'TWO SUES' - SUZANNE

Suzanne is an energy consumer. This consumer's energy bill is £1,400 per year. If this consumer wants to save money on their energy bill, the consumer can pay £12,000 to insulate the home and install a heat pump. The consumer will save £500 per year as a result, and a further £50 if she switches to a flexible energy tariff. The consumer can apply to the government for £4,196 of the initial £12,000. The consumer will then pay £7,804. The investment will pay back in 14 years without calculating the additional value of the home. The consumer will have to manage this project individually, assume all risk, and negotiate directly with all necessary tradespeople.

The conception of consumers as rational exemplified here is also frequently conceived of as a 'customer journey'. This framework itself is sound – it seeks to highlight all the key steps involved in someone deciding to retrofit their home and what policy interventions are needed to support them along the way. As table 2.1 shows however, at every stage of the journey, as with box 2.1 above, policymakers assume largely cost-motivated behaviour from households. For example, policymakers assume that a key motivation for adopting energy efficiency is to save money on energy bills and that a household will need to see a swift payback period to be motivated to engage with whatever government scheme is being offered.

Assumptions made by policymakers	Entry/ trigger point	Advice/ audit	Specification and budgeting	Contractor procurement	Funding and finance	Installation and quality assurance
Description of each stage of the customer journey	Websites and marketing for energy retrofit scheme	Basic internet information leading to EPC/ Home Energy Audit	Development of costed retrofit plan	Contractors chosen by competitive tender (ie three quotes)	Grant or debt finance used to pay for up-front cost of measures	Quality assurance through compliance standard
Stakeholders involved	Retrofit scheme providers (energy companies, councils, delivery agent)	Specialist DEA or Retrofit Coordinator	Client and specialist DEA or Retrofit Coordinator	Contractors chosen from an accredited list	Public provider, bank, or other financial institution	Professional surveyor or Retrofit Coordinator
Household's assumed motivations and priorities	Households want to save money on bills	Households understand costs and benefits of retrofitting their home	Measures are chosen based on cost effective- ness/ payback period	Contractors are selected based on lowest price	Financing provides cost savings after payback period	Contractors must be regulated to avoid moral hazard

TABLE 2.1: POLICYMAKERS ASSUME HOUSEHOLDS ARE COST-MOTIVATED AT EACH STAGE IN THE CUSTOMER JOURNEY

Source: Authors' analysis

While cost is clearly part of the picture, particularly for low-income households, for the able-to-pay market new academic research suggests that there is another important factor that feeds into people's decision-making on spending money. Social relations – such as who you know, who you know well, which communities you belong to, when and where you interact with them, where you live and what your background is – play a major role in influencing the way people spend money on their homes and their relations to government policies that are on offer (Bookbinder 2023, Bolton et al 2023).

Crucially, the research shows how many households are not reluctant to spend money on their homes. As this upcoming research highlights, UK homeowners were prepared to spend ten times more on renovations in early 2020 than the government was prepared to commit to its flagship domestic retrofit programmes. Instead, new evidence shows how decisions about spending money are shaped by social relations. For example, quantitative analysis of who applies for energy-related grants shows how certain demographic groups are much more likely to apply than others (Owen et al 2023). In particular, this work reveals that Asian ethnicity households on low incomes living in terraced houses were up to 12 times more likely to apply for ECO funding for energy efficiency insulation than many other social groups. When these findings were followed up, it was clear that social relations within specific, local communities were a key factor in motivating uptake of grants beyond perceptions around cost-benefit alone (ibid).

In summary, while costs are certainly a consideration for some people and particularly for low-income households, for many, accessing finance is not the only barrier to undertaking retrofitting. There is something else going on behind the scenes which policy design is not currently capturing.

3. DEVELOPING A NEW FRAMEWORK FOR POLICY DESIGN BASED ON SOCIAL RELATIONS

For policy design to become more nuanced and persuasive to households, policymakers need to have a better understanding of how social relations influence a person's decision to retrofit their home. To demonstrate the difference between these two approaches, the research team conducted 40 in-depth interviews with building owners – both owner occupiers and landlords – to better understand people's interactions with government schemes, reveal underlying social relations, and show how decisions are made based on more than just pure 'rational behaviour' alone.

In box 3.1 below, we present a second vignette – Sue – to show the relational approach understands people's engagement with retrofitting, showing how their background, knowledge, social networks, motivations, previous experiences and interactions with government schemes shape retrofit choices. This vignette is an extract of upcoming academic research and represents some of the most common findings from interviews.

BOX 3.1: THE 'TWO SUES' - SUE

Sue is a small business owner who lives in a 19th Century stone built threebed semi in Otley, on the outskirts of Leeds. Sue works from home, so must use heating during cold days, and her home is collateral on her business. She has two children, aged seven and nine. Sue wants a new family bathroom but doesn't have the time to organise it and is worried she will hire a dishonest builder like her neighbour ended up with for their kitchen, costing them lots to 'make good'. The boiler in Sue's house is OK. Maybe she will get three more years out of it. Sue heard from her friend Emma, who is a plumber, that there is a new scheme that Leeds City Council is running in Otley. Emma says the Council have assessed all the properties in Otley and can offer Sue a low-interest loan to cover everything: the new bathroom, some cavity wall insulation suitable for her house, and new windows so the back bedroom of seven year-old Alex isn't always cold. They will switch the boiler for an airsourced heat pump, with the council taking responsibility for managing the project. Emma says the council have a stall explaining the scheme at the local market, so Sue is going along on Saturday to learn more.

COMPARING THE 'TWO SUES'

Sue and Suzanne could be the same person, but these 'two Sues' are viewed very differently from a rational and relational perspective. Suzanne typifies how the current energy policy framework treats homeowners: as an individual consumer,

guided by 'rational actor' incentives of financial optimisation and investment utility. Sue, however, is understood relationally as a mother, neighbour, bill payer and citizen situated within a local web of place-based affiliations representing both strong and weak ties. As the building owner, Sue makes the decision when to renovate the building but not in perfect isolation. Rather, her decisions are shaped by a network of social relations, taking cues from family and friends, and the wider community. While finance is important, there are relational and non-economic dynamics to the decision-making process that are shaped by other actors in Sue's life, problematising the claim that Sue is best positioned as an individual 'rational actor'.

USING THE SOCIAL RELATIONS APPROACH TO BETTER UNDERSTAND THE CUSTOMER JOURNEY

This vignette helps to crystallise the differences between the 'rational actor' approach presently favoured by policymakers, and the 'relational' approach being advocated. While thinking about the notion of a 'customer journey' is still a useful concept, the research shows how each stage of the journey must take social relations into account. Below we provide further insights from in-depth interviews of social relations in action, using the same customer journey framework set out in chapter 2. We summarise these findings in table 3.1 below, which reveals how a social relations approach refines assumptions about a 'rational actor' described in table 2.1 above.

ENTRY POINTS

For many people interviewed, the main trigger for undertaking retrofitting was not to address high energy bills but rather because they were already undertaking major renovation, had just moved house or because of an emergency such as a broken boiler. While prominent additional motivations included becoming more energy efficient, only one respondent cited bill savings as their only motivation with many instead focusing on the importance of comfort.

SEEKING ADVICE

None of the households interviewed had undertaken energy efficiency audits and instead relied on advice from a range of local relations such as friends, neighbours, contractors, family, or in some cases, simply their own research. In many cases, seeking advice extended beyond just consultation around the kind of work that may be undertaken. As we discuss in each part of the customer journey below, households were constantly drawing on advice from those with whom they have close relations, and seeking new relations and interactions with contractors and available information online.

BUDGETING

For most people being interviewed, there was very little cognitive distinction between renovation and retrofitting with most people undertaking retrofitting at the same time as renovation work such as getting a new gas boiler, redecorating bathrooms or kitchens or getting a new extension to the home. However, while advice was more commonly sought from friends, family and neighbours, deciding on budget more commonly involved referring to the internet and contractors who were perceived to have more technical knowledge.

CONTRACTING

Most households chose selected contractors by comparing multiple quotes or relying on local recommendations, with some undertaking the work themselves. Trust in existing relations played a major role here with friends and neighbours playing a key role in offering word-of-mouth recommendations, with an overarching perception among many interviewed that finding a trusted tradesperson can be very difficult. Indeed, of those interviewed, 45 per cent reported a negative experience with contractors due to lack of trust as well as several female respondents detailing instances of sexism with some contractors being disrespectful, dishonest and unreliable.

FUNDING

A major finding from the interviews was that many people were reluctant to take out any kind of loan to finance retrofitting work, whether they could afford to or not, as there was a strong resistance to the thought of being in debt in any way. Instead of financing retrofits or renovations through loans, work was often undertaken with money that had been saved and earmarked or received through inheritance, as this was deemed a 'worthy' way of spending the money. In these examples, clearly social relations plays a major role in decisions around spending money. Firstly, regardless of background findings suggested a shared societal resistance to the idea of being in debt. Secondly, socioeconomic background plays a role in determining whether or not someone has anything to inherit or the ability to save money at all. Secondly, the idea of retrofitting as an 'appropriate' target for spending hints at underlying social relations and backgrounds that shape people's ideas of what is valuable. Lastly, it suggests that 'able to pay' is not the same thing as 'always able to pay' as many households were undertaking renovations at certain 'life moments', such as receiving an inheritance.

QUALITY ASSURANCE

Very few respondents adopted a formal quality assurance process and often relied on relationships with others such as family and friends, their own judgement, and maintaining close working relationships with the contractor to ensure successful installation. In addition, previous experiences of renovation played an important role in shaping many households' expectations and behaviours when conducting new work.

SUMMARISING HOW SOCIAL RELATIONS CHANGE THE CUSTOMER JOURNEY

A fuller list of insights found by the research are described in table 3.1 below. Ultimately this research is intended to demonstrate how important it is for policymakers to ask the kinds of questions that enable them to uncover people's existing social relations and better inform policy: how did you decide to do the work? where did you find the money? who did you hire? how did you find the process? were you happy with the results? All these questions can help to reveal the social relations between people undertaking retrofitting and need to be asked more frequently when designing policy.

TABLE 3.1: CONSIDERING SOCIAL RELATIONS AT EACH STAGE IN THE CUSTOMER JOURNEY SHOWS THE MANY DIFFERENT FACTORS THAT GO INTO A HOUSEHOLD'S DECISION-MAKING BEYOND COST ALONE

How research refines assumptions	Entry/trigger point	Advice/audit	Specification and budgeting	Contractor procurement	Funding and finance	Installation and quality assurance
Evidence-based description of each stage of customer journey	Major renovations, moving house, stress purchases (eg broken boiler), major family and life events	Informal advice, relying on anecdotes and experiential evidence	Ad hoc development of specification where energy and aesthetic/ amenity measures are considered together	Search usually involves local networks and multiple quotes. However, cost only one factor in decision-making	Savings and inheritance are dominant funding forms. Debt often viewed as "inappropriate"	Households tend to rely on informal quality assurance, although are often dissatisfied with standards of work.
Stakeholders involved based on social relations	Collective decision making by household members, but influenced by peer network	Friends, family, neighbours, and contractors, occasionally other professionals	Generally done by households themselves, although occasional use of professionals (contractors, architects, engineers etc)	Friends, family and social network/ social media heavily relied on. Where local networks are weak, trade directories and brand recognition important	Household and family dynamics may affect how money is managed and allocated. Concerns in involving lending community.	Where issues cannot be resolved by household, recourse to expertise in social network before more formal redress is sought
More complete representation of motivations and priorities	Aesthetic improvements, energy efficiency and comfort, increased amenity and functionality, changing needs of household members	Trusted social networks seen as best form of advice	Seeking to meet multiple goals, and household needs with only some financial	Existing trusted relationships and personal referral's seen as most reliable methods.	Households use earmarking to delineate different forms of income, savings, and investment. Past encounters and social and cultural norms may shape views on financial institutions and products.	Low levels of trust pervade the RMI construction industry, households therefore seek to develop ongoing relationships with contractors rather than rely on accreditation standards and frameworks.

Source: Authors' analysis

Lastly, the examples above are drawn from only a handful of areas across the country – from Glasgow, Leeds, and Brighton. While some of the overarching insights may not be place-specific, many of the social relations underpinning decision-making are inherently local. Consequently, a one-size fits all approach to policymaking is likely to be less effective than local, placed-based strategies because, as this research demonstrates, demographics and community play such an important role in how people interact with grant schemes and home retrofitting. As we discuss in chapter 4, this strongly suggests that policymaking needs to have a much greater focus on enabling local delivery by local networks that have a better understanding of, and indeed are already part of, people's everyday social relations.

4. IMPLICATIONS FOR POLICYMAKING

Looking at the social relations that underpin people's decision to retrofit their home has important implications for how policy should be redesigned. In this chapter, we draw on some of the key insights around social relations discussed in chapter 3 and discuss how policies throughout the customer journey for ableto-pay households could be made more effective.

ALIGNING POLICY MEASURES WITH THE TRIGGER POINTS FOR UNDERTAKING RETROFITTING

Given this research shows how retrofitting is often considered during renovations or in certain life moments, policy measures to incentivise retrofitting should seek to identify these 'trigger points' and offer support at the most appropriate moments for people undertaking the work. In particular, as many institutions including the Green Finance Institute have called for before, partial tax credits on measures like stamp duty, VAT and inheritance tax could be offered on renovations if the work was paired with, or inheritance received was spent on, home retrofitting.

These incentives could also have the added benefit of incentivising installers to up-sell renovations to include retrofitting. Given how the research shows people seek contractor expertise as part of their engagement with retrofitting, having contractors as advocates for the technology could help to promote uptake, provided the installers in question were highly trained and trusted.

DEVELOPING LOCAL ADVICE SERVICES THAT INTERACT WITH PEOPLE'S DAILY SOCIAL RELATIONS

Currently in the UK, there is no coordinated UK-wide advice service to help people navigate government schemes to retrofit their homes. Some schemes do exist such as Scotland's Home Energy Advice Service, Wales' Nest Programme and England's online Energy Advice Service.

However, as this paper discusses, a national one size fits all advice service may not reflect how people actually engage with retrofitting schemes anyway, as it is less likely to be aware of the local nuances and relations that exist within a community and influence decision-making for undertaking home retrofitting. Indeed, while common national messaging and awareness raising is important, as IPPR has previously recommended more effective policy design could look to introduce one-stop shops that are embedded in local communities and high streets (Emden and Murphy 2023).

With social relations in mind, these one-stop shops would perform two key roles. First, they would act as a trusted source of retrofitting advice tailored to a household's specific needs and highlight the most relevant local or national schemes on offer. This advice would also extend to tailored support for specific local communities, such as offering translators and support for filling in English language forms. Second, they would tap into, and seek to extend, social networks by developing cross-referral programmes whereby trusted community actors that are already part of many people's daily social relations and interactions – such as GPs, religious community leaders, debt advice services, corner shops and, as we discuss below, contractors themselves – could become part of a local network of advice on retrofitting.

By taking this approach, messaging introduced nationally but coordinated and delivered locally would be more effectively embedded within the social networks and relations that people use in their everyday lives and would help to build trust in related government policies.

ENSURING THAT CONTRACTORS BECOME TRUSTED SOURCES OF INFORMATION AND EXPERTISE

To achieve the scale up in retrofitting required to meet net zero targets, a huge number of installers will need to be newly trained or retrain across the country. Given the importance of the installer/contractor's role in the social relations influencing uptake of retrofitting – both as providers of expert advice but also at times the cause of negative experiences – the importance of this interaction is going to be critical in determining whether UK homes decarbonise quickly enough.

Get it right and installers can become a trusted source of information that people are comfortable with using as a key part of their journey to undertaking home retrofitting. At the same time, national messaging about the benefits of retrofitting could be embedded within training courses so that installers could play a key role in communicating the benefits of measures like insulation and heat pumps.

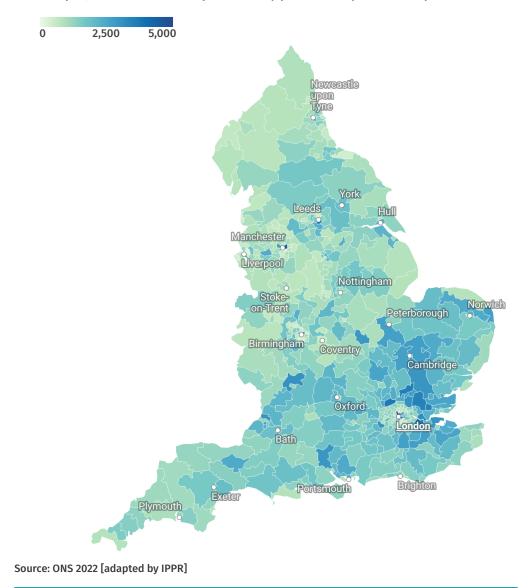
Get it wrong however, and negative experiences of installers will erode trust in any government scheme and will shape the expectations and dampen the enthusiasm of households in future. Indeed, it has been suggested that one of the reasons for the low take-up of grants from the Boiler Upgrade Scheme is that both households and tradespeople alike had been scarred by the poor design and premature scrapping of the Green Homes Grant only a year earlier.

In this context, 'getting it right' must mean ensuring that high-quality training and funding support is available to installers, particularly SMEs and micro-businesses who often cannot take the time off to spend on training without a clear business case. In addition, it is also important that retrofits are undertaken by local installers since relational approaches show how local peer networks are key to finding trusted installers.

This also highlights the need for training installers locally. Indeed, IPPR has previously shown (figure 4.1) that while retrofits are needed across the country, the number of installers tends to be concentrated towards the South East and East of England (Emden 2022). Lastly, as well as a pre-existing industry-wide need to diversify the retrofit workforce, some of the negative experiences of contractors detailed in chapter 3 highlight the relational importance of training schemes that reach out to more women and minority ethnic groups in order to create greater trust between contractors and households.

FIGURE 4.1: THE CURRENT RMI WORKFORCE DOES NOT MATCH WELL WITH THE PARTS OF THE COUNTRY WHERE RETROFITTING DEMAND IS HIGHEST

Jobs in repair, maintenance and improvement by parliamentary constituency in 2020



TAILORING FINANCIAL SUPPORT TO THE WAY PEOPLE THINK ABOUT MONEY

In addition to the fiscal policy measures mentioned above, as chapter 3 highlights, evidence from social relations research demonstrates how people are generally reluctant to take on debt to finance retrofitting, even at zero-interest. This is especially true for fuel poor homes who are unlikely to be able to afford any initial outlay and are most vulnerable to taking on debt; but is also evidenced by interviews with able-to-pay households. Instead, as IPPR has previously called for, support for households should come through more generous grants including full grants – for both energy efficiency measure and heat pumps – for those in fuel poverty.

5. CONCLUSION

As we state throughout this briefing, money is not the main motivator for many in the able-to-pay market but it is still *a* motivator, and certainly plays an important role in decision-making of low-income households. Consequently, rather than focusing solely on costs and cost savings, developing a greater understanding of the social relations influencing household decisions can help policymakers determine the right life moments and trigger points to introduce policy support, and to design them (ie grants not loans) in a way that appeals to households' existing social networks and backgrounds, not based on the idea of the purely rational economic man. Indeed, there are so many relational factors to consider that the very idea of an 'able-to-pay' consumer is no longer a helpful term precisely because it presumes money is the main factor hindering the ability to proceed with retrofitting. Instead, policymakers should consider all relational factors to assess whether or not someone is 'able-to-do'.

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