



# Electrifying the future: boosting the energy efficiency of UK homes

Barclays' action plan for UK homes: How can government and the private sector accelerate home energy upgrades and support the UK's net zero transition?

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November 2024



**BARCLAYS**

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## About this report

The intended audience for this report is public policymakers and other actors engaged in shaping public policy.

The report is general in nature and provided for information/educational purposes only. It does not take into account any specific investment objectives, the financial situation or particular needs of any particular person. It is not intended for distribution, publication, or use in any jurisdiction where such distribution, publication, or use would be unlawful, nor is it aimed at any person or entity to whom it would be unlawful for them to access.

# Foreword

The UK has an ambition to be net zero by 2050. Today, the country's 25 million homes contribute significantly to its carbon emissions. Improving home energy efficiency is not just a crucial step in achieving net zero targets, it is an opportunity to provide more comfortable, more affordable homes and greater energy security for millions of people.

Barclays is ambitious for the UK and its potential for growth. Decarbonising the country, including its housing stock, unlocks such opportunities and will require significant capital. We recognise the role Barclays has to play in facilitating finance, but also there is a need for a sector-wide approach. We have a deep understanding of the UK's consumer and retail landscape through serving our 20 million customers and clients, which include housing associations and housebuilders. We have a responsibility to support our customers and clients to transition for long-term energy security and affordability.

The time to focus on decarbonising UK homes is now. The Government's Warm Homes Plan offers clear ambition, but its success requires a concerted effort from government, the housing industry and financial services. In this report, we draw on our insight, experience and on lessons we can learn from history, to address the key obstacles to

improving home energy efficiency and we provide practical recommendations. Our intention is that these recommendations support the government's plans, enabling a systemic approach to decarbonising homes across the UK by engaging key industry players, driving action and motivating consumers.

Improving the efficiency of the country's housing stock can drive progress towards net zero targets and make a meaningful difference to the lives of millions of people. Every person in the UK deserves a warm and affordable home. Time is of the essence.



**Vim Maru,**  
Chief Executive of Barclays UK

**“**  
**The Government's Warm Homes Plan offers clear ambition, but its success requires concerted effort from government, the housing industry and financial services.”**





# Summary: A bold, collaborative approach to energy efficiency

The UK Government urgently needs to enable improved home energy efficiency in order to meet the 2035 target of an 81% reduction in carbon emissions compared with 1990 levels. British housing currently accounts for 15% of the country's emissions, but according to the Climate Change Committee, only a third of the UK's overall proposed emission reductions are covered by credible plans.<sup>1,2</sup> The market for green finance has consequently grown with retail banks offering a variety of products<sup>3</sup> to support customers with energy efficiency measures, in many cases these are complemented by education and advice materials. However, based on Barclays' experiences, we can see that the demand for these services remain in their relative infancy.

The Government has said it will deliver a Warm Homes Plan, providing a national programme to upgrade five million of the 16 million homes below EPC C by the end of the next parliament. This presents an exciting opportunity to accelerate progress towards greater home energy efficiency in-line with the government's aim to reduce consumers' energy bills and create green jobs. However, the successful delivery of widescale home upgrades will require clear policy choices; a coordinated effort to implement them across a broad range of actors including government, house builders, energy companies, heat-pump installers, and financial services; as well as driving consumer behaviour change. Barclays recognises the role finance will play as an enabler of investment in low-carbon heating systems as just one key tenet of a broader solution.

History demonstrates that bold policy choices and infrastructure decisions are instrumental to effectively delivering widescale energy transformation. In the 1970s, a new Labour government and industry joined forces to transform the nature of the country's gas supply within a 10 year period, turning the UK into a world leader in energy transition.<sup>4</sup> While the landscape may have changed, Barclays believes that collaboration and a systems-wide approach could again revolutionise the domestic energy model and boost the efficiency of the UK's housing stock.

To achieve similar success in today's context, once again it is an opportune moment for government to work lockstep with industry to deliver a systematic change to home energy

systems. Drawing on a broad range of insights and Barclays' own experiences with more than 20 million customers across the UK, this report explores the current barriers to improving home energy efficiency, and provides a plan for accelerated action, enhanced cross-sector collaboration and improved consumer engagement. As part of this, the report highlights the critical role for public policy to enable bolder initiatives from financial services and others. Importantly, this is not just about additional public spending commitments, rather providing sufficient policy clarity and confidence to build momentum across the wide range of actors and initiatives that will be involved in success.

## Key terms

An **Energy Performance Certificate (EPC)** is designed to show how energy efficient a property is, giving it a rating from A (very efficient) to G (inefficient). It also highlights areas of improvement and may even provide estimates of the savings that could be made when the suggested changes are implemented. EPCs are valid for 10 years from the date of issue.<sup>5</sup>

**Retrofitting** refers to the introduction of new materials, products and technologies not available at the time of construction into an existing building to reduce the energy needed to occupy it.<sup>6</sup> Electrification in this context refers to the generation of heat through low-carbon technologies in replacement of fossil fuel boilers.

## The UK's net zero commitment

The IPCC, the UN's climate body, has identified 197 countries, including the UK, which need to cut CO2 emissions by almost half by 2030 and reach net zero (meaning that the total emissions will be equal to emissions removed from the environment) by 2050 to limit global temperature rises to 1.5C by 2100. In 2019, the UK committed to reaching net zero by 2050 at the recommendation of the Climate Change Committee.<sup>7</sup>

<sup>1</sup>Climate Change Committee. [2022 Progress Report to Parliament](#), 2022.

<sup>2</sup>Climate Change Committee. [UK off track for Net Zero, say country's climate advisors](#), 2024.

<sup>3</sup>Green Finance Institute. [Green Mortgages](#).

<sup>4</sup>Dr Christopher Prior and Dr Charlotte Riley, University of Southampton. [A revolution in the UK's energy supply: From 'town gas' to natural gas](#) (p1).

<sup>5</sup>Energy Saving Trust. [Energy Performance Certificates explained](#).

<sup>6</sup>Barclays, Ipsos. [Retrofitting and Net Zero: A behaviour change dilemma](#) (p17).

<sup>7</sup>House of Commons. [The UK's Plans and Progress to Reach Net Zero by 2050](#), 2023 (p6).



# The home energy efficiency and electrification landscape

With 25.4 million homes in the UK, heating for homes and workspaces contributes to almost a third of all UK carbon emissions and has been a key area of focus in net zero transition plans for several years.<sup>8</sup> However, in spite of government incentive schemes, to date progress has been slow with limited customer demand for and uptake of initiatives such as low-carbon heating programmes.<sup>9</sup>

The new Labour government has already made clear its ambition to make 'Britain a clean energy superpower' and has committed an initial £3.4bn over the next three years towards upgrading homes.<sup>10</sup> The success of this, however, will depend on considerable behavioural change by homeowners, as well as addressing the broader structural challenges within the energy industry and retrofitting market to create the demand for change. We therefore recommend a bold, systematic approach, delivered in partnership with the public and private sectors.

## Barclays: a key player in the housing sector

As a UK-centred leader in global finance, Barclays has a deep understanding of the consumer and retail landscape across the UK and is uniquely placed to provide insights and expertise to the challenges facing the decarbonisation of the housing sector.

The bank's extensive range of products and services, combined with client insights provide an in-depth understanding of the levers and drivers that can be mobilised at both a consumer and broader industry level to effectively move the dial in accelerating energy efficiency, and have informed the view that a whole-systems approach will be critical to success.

### Boosting home energy efficiency: Barclays' products, services and partnerships

- **Barclays Green Home Mortgage:** This initiative offers lower mortgage rates on certain deals when customers are seeking to buy new build properties with an EPC rating of A or B.
- **Greener Home Reward:** This scheme offers a cash reward of up to £2,000 for eligible Barclays residential mortgage customers who install eligible energy efficiency-related measures (such as solar panels, insulation or a heat pump) in their homes using a registered TrustMark (the government-endorsed quality scheme) installer.
- **Generation partnership:** To help tackle skills shortages in the retrofitting space, Barclays has partnered with Generation - a global non-profit, specialising in helping those furthest away from the labour market to find work - to help adults start work as retrofit advisors.
- **Home Energy Tool:** This partnership with Energy Saving Trust provides a free service to enable consumers to understand how energy efficient their homes are, and how to make improvements.
- **Home Health Check:** In partnership with British Gas, residential mortgage customers can access a Home Health Check at a discounted price.
- **Hugo Pro free trial:** The Hugo Pro app provides personalised insights into home energy usage by using a customer's smart meter data, eligible Barclays residential mortgage customers are able to get an extended six-month free trial.
- **National Wealth Fund partnership:** Barclays has partnered with the National Wealth Fund to deliver £500m of mid-to-long duration loans to the social housing market.



<sup>8</sup>GOV.UK. [Net Zero Strategy: Build Back Greener](#). 2021 (p22).

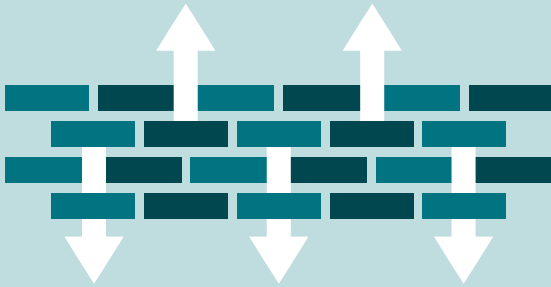
<sup>9</sup>GOV.UK. [Dwelling Stock Estimates, England: 31 March 2023](#), 2023.

<sup>10</sup>GOV.UK. [Autumn Budget 2024: Fixing the Foundations to Deliver Change](#), 2024 (p78).

## Case studies

### Supporting more sustainable housing through climate tech solutions

Barclays has a mandate to invest £500m into global climate tech start-ups by the end of 2027. One company Barclays has invested in is Airex – a fast-growing climate tech start-up that optimises airflow through smart air bricks to help reduce whole-house heat loss by 12% to 16%.



### Consumer: Barclays Greener Home Reward

Denis Bassom, a residential mortgage customer based in Ware, Hertfordshire, found out he was eligible for the Barclays Greener Home Reward through a retrofitting-focused social media group – and the reward prompted his decision to fit solar panels to his property in February 2023. After he paid the bill himself – the cost of the work was £9,400 – he received the £1,000 Greener Home Reward towards the installation of his solar panels.

“We moved to our current home in 1999 and plan to stay there at least another decade, in which time we are likely to move to a single pension income. Our ultimate aim is to make our home work as hard as possible for us financially. My research into retrofitting led me to the Barclays Greener Home Reward. This reward definitely contributed to my decision to install solar panels, as I got a lump sum paid to me following completion of the work. Since then, I’ve been overjoyed by the return I’ve seen on my energy bills.”

“**Our ultimate aim is to make our home work as hard as possible for us financially.”**

### Client: Hometree

[Hometree](#), the residential energy services company, secured a £250m asset-backed debt facility from Barclays, to help finance over 28,000 residential solar panel systems, batteries and heat pumps across the UK over the next two years.

The facility will bring Hometree’s highly innovative financing products to the UK residential renewable market, including zero-deposit leases and loans with low interest rates, as well as highly attractive terms of up to 25 years.

Simon Phelan, Founder and CEO of Hometree said: “The participation of the financial industry is fundamental to accelerating the enormous infrastructure upgrade our homes need to reduce their carbon emissions, and this transaction enables us to offer our customers a unique solution that otherwise would not be available in the UK market.”

This deal is part of Barclays’ commitment to facilitate \$1tn in sustainable and transition finance by 2030.

“**The participation of the financial industry is fundamental to accelerating the enormous infrastructure upgrade our homes need.”**



### Client: Orbit

Driving energy efficiency initiatives across social housing portfolios presents a different challenge to privately rented and/or homeowner properties.

The government has announced a commitment to bring all social homes to an EPC C target by 2030. With social housing making up just under 1 in 5 of the housing stock<sup>11</sup> in England and Wales, this presents a real opportunity to upgrade a significant proportion of the UK's housing market.

Decarbonising social housing can be complex, needing to balance commercial landlord and tenant relationships whilst also managing competing cashflow pressures to improve and maintain existing stock, and simultaneously building more properties to meet growing demand.

Barclays has supported social housing providers for over three decades and has expanded its range and diversity of product offerings to help these clients decarbonise. This has included providing sustainable financing solutions alongside flexible traditional lending to support clients' sustainability goals. Most recently, Barclays has partnered with the National Wealth Fund to deliver £500m of mid-to-long duration loans to the social housing market.

Orbit, a long-standing client of Barclays is a not-for-profit housing group that manages around 47,000 affordable homes in the Midlands, East and South East of England. Each year, the company builds and regenerates approximately 1,000 new affordable homes. Orbit's sustainability targets front ran the Government's recent commitment and include ensuring all its social rented homes are a minimum of EPC C by 2030.

Orbit has worked with its financing providers, including Barclays, to provide structures that can support its sustainability goals. This involved changing their covenants to facilitate Orbit's work to improve the energy efficiency of its homes for its customers, making them more affordable to heat, helping to protect vulnerable customers from fuel poverty.



**Each year, the company builds and regenerates approximately 1,000 new affordable homes."**



**47,000**

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**2030**

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<sup>11</sup>Population and household estimates, England and Wales: Census 2021, unrounded data (2022, November 2).

# Barriers

Despite the emergence of a range of specialist retrofitting products and services, anecdotal evidence from customers and clients, as well findings from the Barclays-Ipsos research, 'Retrofitting and NetZero: A behaviour change dilemma', show that consumers and businesses continue to find this topic confusing and complex, and that action feels risky and expensive. Barclays' research shows progress is hampered by two overarching factors:

## STRUCTURAL

including under-developed infrastructure, supply chain challenges and the cost of electricity.

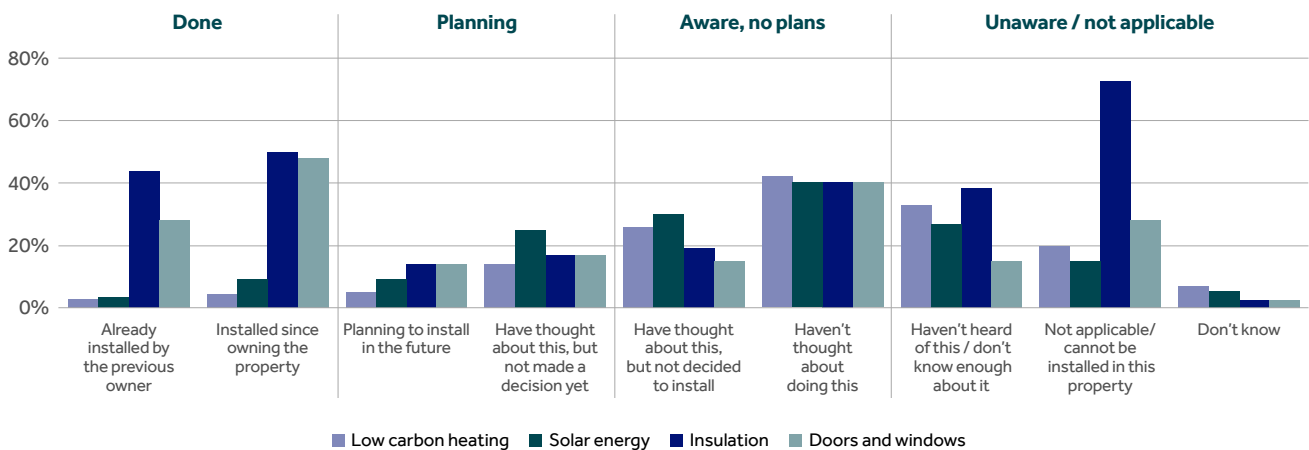
## BEHAVIOURAL

in particular, consumer perceptions around the costs and the risks and benefits of making energy efficiency improvements to homes.



We'd like you to think about different things people can do to make their home more energy efficient. For the following, please select the answer that best applies to your home.

### Retrofitting status by type



Base: 'Able to pay' homeowners n=2997.  
**Solar energy:** solar energy: Solar thermal, Solar electricity panels, Solar battery storage.  
**Insulation:** Loft and pitchroof insulation, Flat roof insulation, Cavity wall insulation, Room-in-roof insulation,

Underfloor insulation, Suspended wooden floor insulation.  
**Low carbon heating:** Air source heat pump, Ground source heat pump, Biomass boiler.  
**Doors and windows:** A-rated double/triple glazing, Secondary glazing, New insulated external doors.

Credit: Barclays-Ipsos



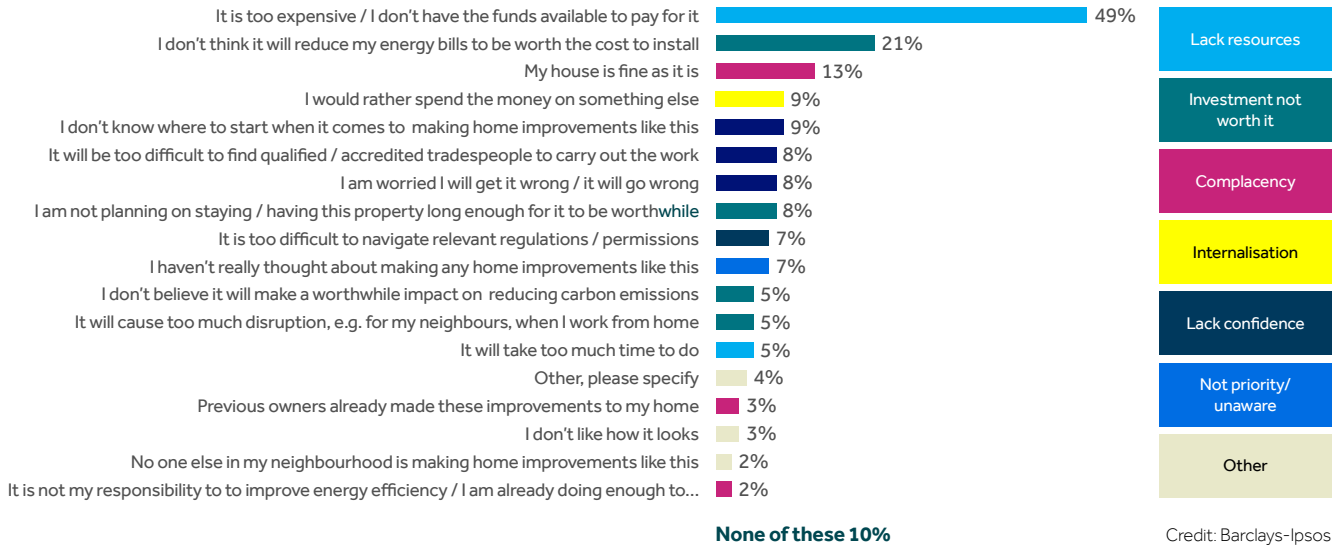




## What, if anything, keeps you from making home energy efficiency improvements to your home.

Please select any that apply. By home energy efficiency improvements we mean things like insulation, heat pumps, solar panels, double/triple glazing etc.  
 Base: 'Able to pay' homeowners n=2997.

### Barriers to home retrofitting



## In detail: structural barriers

The government's ambition to deliver cheaper bills and green jobs provides an opportunity to address structural barriers to retrofitting which may otherwise prevent consumers and businesses from taking action.

- **The 'Spark Gap':** Where electricity is more expensive than gas. If electricity was cheaper, the cost of running an electrified heating system would be significantly lower than gas, appealing to consumers and encouraging change. Research by [Electrify](#) shows that a much higher proportion of households aim to switch to a heat pump in France (53%) and Germany (50%) than in the UK (29%), partly driven by confidence that the cost of running a heat pump will be lower.<sup>12</sup> If this gap can be addressed, there will be higher perceived and realised benefits of heat pumps, ultimately helping to drive greater adoption.
- **The need for an EPC update:** EPC certification is subjective and based on an outdated methodology – a challenge highlighted by Barclays' customers, and requires reform. The government's recently renewed commitment to

update the standard and make it more user friendly is welcomed by the industry, but it must ensure it addresses the outdated methodology which penalises homes for installing heat pumps\*. Only then will financial services providers be able to effectively link green finance offers to the EPC standard as a more reliable reflection of energy performance improvements.

- **The skills gap and supply chain fragmentation:** Under-developed supply chains have a significant impact on how easy and appealing it is for consumers to access the services they need to improve the energy efficiency of their homes. Small and medium-sized enterprises, which make up a significant part of the UK retrofit supply chain, can face challenges due to their lack of experience, insight and resources when compared to larger businesses.<sup>13</sup>

<sup>12</sup>Home Electrification Trends Survey (HETS), June 2024.

\*Currently the key metric for EPC ratings is the cost of heating homes, rather than carbon emissions, which can result in a counterintuitive scenario with heat pumps reducing EPC ratings.

<sup>13</sup>UK Finance. [Net Zero homes: Time for a Reset](#), 2022 (p30, p36).



## In detail: behavioural barriers

Barclays-Ipsos research surveyed 3,000 “able to pay” homeowners with either a low or an unknown EPC rating – theoretically a prime market of those who would seek energy efficiency improvements. However, a number of trends emerged, emphasising the underlying behavioural issues to be addressed.

### 1 Misinformation: There are significant information gaps, particularly when it comes to low carbon heating.

A large proportion of homeowners believe that energy efficiency activities are not suitable for their property.<sup>14,15</sup> While 70% of homeowners would like their home to be more energy efficient, about one in three (35%) are dissuaded from making energy efficiency improvements because they don’t understand which options are right for their property.<sup>16</sup> Low-carbon heating, a particular focus for the government, was highlighted as one such example of this knowledge gap; 32% of respondents claimed not to know enough about it to understand its home energy efficiency potential. Of those who felt they had an understanding of it, 35% associated low carbon heating with expense, versus 12% who believed it would help lower their bills.<sup>17</sup>

### 2 Confusion around benefits: Homeowners seldom associated retrofitting interventions with personal benefits.<sup>18</sup>

When homeowners were asked which attributes they associate with energy efficiency improvements their responses were largely negative, for example associating low carbon heating and solar panels with expense. However, homeowners responded well to home energy improvements when the interventions were explicitly shown to be linked to personal benefits demonstrating the opportunity to overcome blockers with the right framing.<sup>19</sup>



### 3 Cost: Most customers are using their savings to undertake energy efficiency improvements.

Most ‘able to pay’ homeowners who have undertaken retrofitting activity are doing so ‘out of pocket’ and using their savings. Across all types of retrofitting 15% or fewer homeowners are planning to use a credit or loan product to fund their intervention.<sup>20</sup> It is clear, therefore that in the current economic climate homeowners do not want to take on debt, with almost one in five (19%) stating they would not want to take on debt in order to make home energy efficiency improvements.<sup>21</sup> Significantly, 69% of ‘able to pay’ customers say they would expect help from the government to fund such activity, reflected in the fact that after savings, government grants and schemes were highlighted as the second most popular funding option. While there are clear concerns about borrowing, they are not dominant, and if more work is done to reinforce the value of retrofitting, then it is reasonable to expect considerations of finance as a perceived barrier to decrease.<sup>22</sup>

5%

of homeowners are planning to install low-carbon heating

14%

are actively planning to install insulation

32%

of respondents say they don’t know enough about low-carbon heating

70%

of homeowners want their home to be more energy efficient

<sup>14</sup>The net results for respondents who answered that the named retrofitting measure was not suitable for their property are as follows: insulation: 73%, doors and windows: 28%, low-carbon heating: 20%, solar energy: 15%.

<sup>15</sup>Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p20).

<sup>16</sup>Barclays used Opinium to survey a nationally representative sample of 1,229 UK adults aged 18+ between 16 and 20 February 2024. Barclays. [Barclays extends partnership with British Gas to offer half price home energy efficiency checks. 2024.](#)

<sup>17, 18, 19</sup>Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p32, 24 and 26).

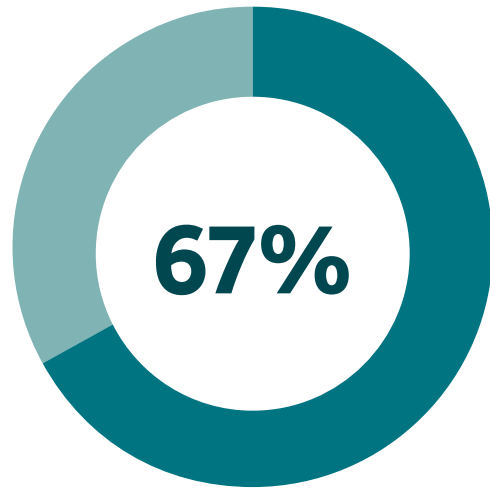
<sup>20, 21, 22</sup>Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p29 and p30).



**4 Guidance: Consumers have high expectations of help particularly from the government.**  
Homeowners do not view energy efficiency as their sole responsibility, as evidenced by the expectation around government funding. Just as importantly, they expect government to play a prominent role in enabling widescale action, as well as provision of support with practical changes.<sup>23</sup> When they were told, 'in the future, people might need to change how they heat or cool their home to help address climate change,' and then asked, 'when it comes to making this happen, who do you believe should be taking action?', 67% selected the government – the most chosen option ahead of energy providers (45%) and local authorities/local planning departments (43%).<sup>24</sup>

**5 Communications: Communication around home energy efficiency improvements needs greater attention.**  
Messages are showing some cut-through with 45% of homeowners recalling some form of retrofitting communications in the last 12 months.<sup>25</sup> However, there is an opportunity for greater impact with a more tactical and coordinated communications strategy, tailored to audience. For example, landlords are likely to be more concerned by costs; indeed in interviews with a subset of 493 landlords, more than half expressed no intention to understand measures to enhance the EPC ratings of their properties<sup>26</sup>, while other groups recognised broader forms of value such as home comfort.

**“ More than half [of landlords] expressed no intention to understand measures to enhance the EPC ratings of their properties.”**

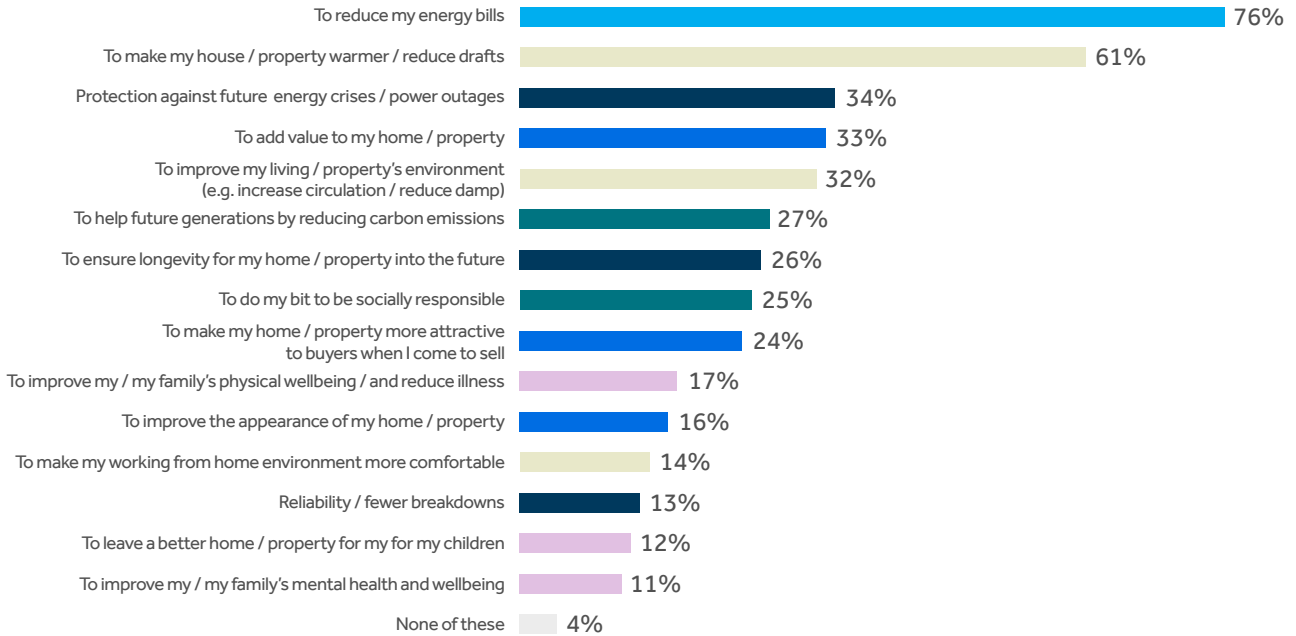


67% of respondents say the government is responsible for addressing homeowner's energy efficiency



<sup>23</sup> Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p31).  
<sup>24</sup> Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p30).  
<sup>25</sup> Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p34).  
<sup>26</sup> Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p41).

## Drivers of retrofitting behaviour



**It is expected that growing numbers of households will be expected to improve the energy efficiency of their homes. Thinking about your own home, which of the following, if any, best describe why you would make home energy efficiency improvements to your home?**

**Please select all that apply.**

|                                       | Any mention | Most important |
|---------------------------------------|-------------|----------------|
| Save money                            | 76%         | 50%            |
| Improve living/ environment condition | 69%         | 24%            |
| Protection                            | 50%         | 7%             |
| Add value                             | 46%         | 7%             |
| Right thing to do                     | 36%         | 7%             |
| Wellbeing                             | 27%         | 5%             |

Credit: Barclays-Ipsos

Base: 'Able to pay' homeowners n=2997. Source: Barclays-Ipsos Retrofitting and Net Zero: A behaviour change dilemma (p26).

\*Any of: Air source heat pump, Ground source heat pump, Biomass boiler, Solar thermal, Solar electricity panels, Solar battery storage, Solid wall insulation, Loft and pitch roof insulation, Flat roof insulation, Cavity wall insulation, Room-in-roof insulation, Underfloor insulation, Suspended wooden floor insulation, A-rated double/triple glazing, Secondary glazing, New insulated external doors

# 76%

**OF HOMEOWNERS WOULD MAKE HOME ENERGY EFFICIENCY IMPROVEMENTS TO SAVE MONEY**





Perceptions of retrofitting by category

|   | Low carbon heating  | Solar   | Insulation   | Doors and windows                                    |
|---|---|---|--|--|
| 1 | It is expensive <b>35%</b>                                      | It is expensive <b>37%</b>                                      | Best for reducing my energy bills <b>33%</b>         | Adds value to my property <b>35%</b>                 |
| 2 | A socially responsible option <b>15%</b>                        | Best for reducing my energy bills <b>25%</b>                    | Makes my home more comfortable to live in <b>24%</b> | It is expensive <b>35%</b>                           |
| 3 | Best for reducing carbon emissions <b>15%</b>                   | Low cost to run <b>22%</b>                                      | Low cost to run <b>22%</b>                           | Makes my home more comfortable to live in <b>30%</b> |
| 4 | Best for reducing energy bills <b>12%</b>                       | A socially responsible option <b>20%</b>                        | Easy to install <b>21%</b>                           | Enhances the appearance of my home <b>29%</b>        |
| 5 | Protects against future energy crisis/ power outages <b>11%</b> | Protects against future energy crisis/ power outages <b>19%</b> | Quick to install <b>19%</b>                          | Best for reducing my energy bills <b>27%</b>         |
| 6 | Don't know enough to say <b>32%</b>                             | Don't know enough to say <b>20%</b>                             | Don't know enough to say <b>15%</b>                  | Don't know enough to say <b>10%</b>                  |

Credit: Barclays-Ipsos



For each statement, please select the attribute you associate with the home energy efficiency improvements.

You may select as many attributes as you feel fit the home energy improvements.

Base: 'Able to pay' homeowners n=2997.

**35%**

OF HOMEOWNERS ARE DISSUADED FROM MAKING ENERGY EFFICIENCY IMPROVEMENTS BECAUSE THEY DON'T UNDERSTAND WHICH OPTIONS ARE RIGHT FOR THEIR PROPERTY



# Learning from history

While individual products or partnerships – such as the government’s Boiler Upgrade Scheme, Barclays’ Greener Home Reward or partnership with the nonprofit Generation – can attract consumers and help close the industry skills gap, this is an issue that needs to be collectively addressed to make transition possible on a larger scale. The government must lead the way with a compelling home energy efficiency action plan for industry players and consumers alike.

A number of parallels can be drawn with the challenges the government faced in the 1970s during the switch from ‘town’ to natural gas. This has been explored in research from the University of Southampton in association with Barclays. After the election in 1964, Harold Wilson’s government was keen to embrace scientific and

technological innovation, but faced significant fiscal challenges, including a substantial trade deficit.<sup>27</sup> Despite these limits, the switch was delivered under budget and on schedule – and its success positioned the country as a world leader in the field.<sup>28</sup> The government played a critical role with clear policy and communications, including a national PR campaign, as well as a centralised decision-making process around conversion that drove wider change across the country.<sup>29</sup>

However, during the gas transition, the energy industry was nationalised and well-placed to deliver a large-scale rollout.<sup>30</sup> In today’s landscape, a coordinated system, clear policy and creative thinking will be required to implement a nationwide movement that will result in substantial changes to housing energy efficiency.

## A revolution in the UK’s energy supply

Between 1967 and 1978, the government oversaw a significant energy switch in the UK from ‘town gas’ (generated by heating coal in gas plants) to natural gas. Despite public concerns and constrained financial resources – the scheme was delivered on time and on budget.<sup>31</sup>

A core factor in the success of the scheme was the prioritisation of a sustained marketing and communications campaign which helped to align the transition to modernity, energy security and resilience rather than high costs and inconvenience. The transition was associated with a clear vision for the future, in which Britain was positioned as embracing innovation and prioritising long-term political and financial benefits.<sup>32</sup> The government and energy industry also showed a strong alliance in the face of any criticism from the press.<sup>33</sup>

Communications with the public around the conversion process were prioritised and made a big difference to the success of the transition. For example, a pilot scheme in Burton-on-Trent involved sending three messages ahead of ‘conversion day’ – this proved effective with only 15 of the first 11,500 households cut off because of non-admittance. Following this, other gas boards adopted the approach.<sup>34</sup>

The Labour government has indicated an intention to “work with the private sector, including banks and building societies, to provide further private finance to accelerate home upgrades and low carbon heating”.<sup>35</sup> Success in today’s context will similarly require a clear plan, in order to create the confidence for banks to expand their green finance offerings to a wider range of technologies and circumstances.

Barclays believes that it is not just financing that is required, but a clear, holistic and industries-wide approach. By involving all relevant parties, from industry bodies to financial services, the government can address the broad range of structural and behavioural barriers that limit the uptake of home energy efficiency improvements across the UK – and make material progress.



<sup>27-34</sup> Dr Christopher Prior and Dr Charlotte Riley, University of Southampton. A revolution in the UK’s energy supply: From ‘town gas’ to natural gas (p1-13).

<sup>35</sup> Labour. [Make Britain a clean energy superpower](#), 2024.

# Time for a reset

With 2030 just over five years away, the government must take bold action to accelerate progress towards more energy efficient homes through public policy, acting as the central source of strategy across industries. Importantly, this is not about additional public spending commitments, rather about increasing confidence and momentum, while reducing risks associated with retrofitting. The recommendations detailed are designed to address the structural and behavioural challenges set out in this report, enabling a coherent set of activities from the private sector to ultimately advance the Government's objectives.

**“ Overall, increased policy certainty will guide key actors – industry, the private sector and consumers – and provide context for further strategic activities to support the improvement of home energy efficiency, while also encouraging continued industry collaboration.”**

## Recommendations

**1 Roadmap:** Delivery of the Government's target for heat-pump adoption and improved efficiency demands a detailed, time-bound plan setting out milestones and an investment timeline to guide key actors in the energy transition. This should also clarify the role for tax breaks and incentives, such as Stamp Duty reform, as part of the agreed public financing envelope in addition to increased availability of private financing options.

**2 Collaboration:** To facilitate systematic action, Government should convene a Retrofitting Delivery Authority to address the implementation challenges of retrofitting, allowing the public and private sector to work together strategically.

**3 Data:** To help consumers and businesses commit to adopting energy efficiency measures, including installing heat-pumps, the Government should complete EPC reform including methodology updates to capture smart meter data as well as steps to increase their utility.

**4 Safety:** Government should incentivise a consistent consumer protection standard for key energy efficiency installations to reduce installation risks for consumers and increase uptake.

**5 Education:** Building homeowner support for greater energy efficiency requires a commitment to a bold, systematic public engagement approach that tackles the lack of awareness and builds support for home retrofitting by promoting the consumer benefits of energy efficiency.



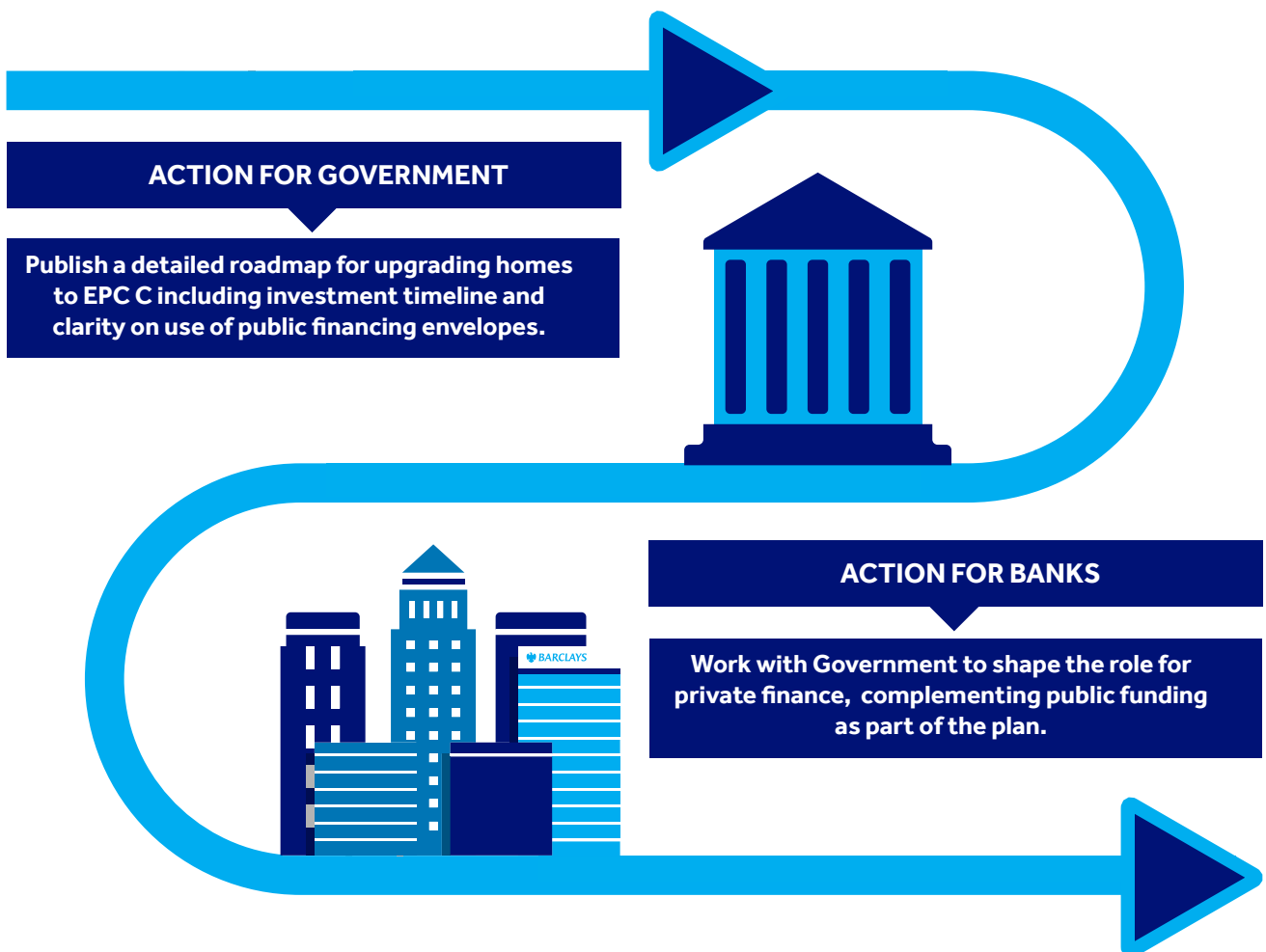
## Roadmap

The Government has promised to deliver a Warm Homes Plan to upgrade homes on a national scale.<sup>36</sup> It is vital that this offers credible long-term vision – with certainty around the policy levers needed to enhance consumer and business confidence, reduce behavioural barriers and increase overall demand for heat-pumps. From an industry perspective, this will also enable the market to evolve in line with government-set requirements. For example, in the financial services sector, it will allow banks to develop the right financing models to support their customers with these changes.

This plan should include clear aims for the different types of households that will be upgraded – from social housing to owner-occupied homes – building on the commitment to upgrade all rental homes by 2030. It should also outline the details of required technologies and offer consideration of consumer engagement and advice standards.

Clear expectations should be set around the role for public and private financing linked to these timelines, providing a sense of the scale of resources required to meet targets. This must include clarifying the role that tax breaks and government incentives, such as grants and stamp duty reform<sup>37</sup>, will play in supporting homeowners' investments in energy efficiency following the commitment to an additional £6.6bn of public finance.

Overall, increased policy certainty will guide key actors – industry, the private sector and consumers – and provide context for further strategic activities to support the improvement of home energy efficiency, while also encouraging continued industry collaboration.



<sup>36</sup>Labour, [Make Britain a Clean Energy Superpower](#).

<sup>37</sup>The UK Green Building Council has provided a detailed proposal for a Stamp Duty incentive that prioritises [tackling climate change](#).



# Collaboration

## ACTION FOR GOVERNMENT

Convene a Retrofitting Delivery Authority bringing together expertise from key sectors to enable coordinated delivery.

## ACTION FOR BANKS

Participate in this initiative to enable the development of retrofitting financing models at scale.

In many areas of the UK, a fragmented approach to – or lack of – retrofitting solutions has resulted in complexity and confusion for consumers. It is essential that cooperation is encouraged to ensure that a UK-wide strategy works at scale and makes things as simple as possible for homeowners.

Barclays believes that a common approach led by a Delivery Authority can unlock greater investment and innovation across the industry to deliver home retrofits. The goals for this group must target areas where the Government’s policy objectives, as envisaged by the Warm Homes Plan, require support from across the private sector, including energy, construction and finance.

Co-chaired by an independent figure and supported by the Energy and Housing Ministers accountable for the Warm Homes policy, the Delivery Authority would leverage firms’ customer insights and commercial expertise to address barriers such as skills, advice and supply chain fragmentation to reduce friction for consumers.

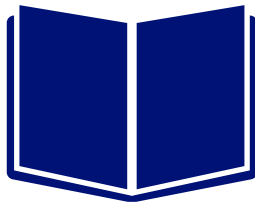
Specific areas the **Retrofitting Delivery Authority** should work to address:

- Address barriers to **private financing solutions for ‘able to pay’ homeowners**. Firm’s regulatory obligations may hinder the growth of retail lending products for retrofits due to the uncertain benefits associated with low-carbon technologies. There may also be customers who are ineligible for government support who are also unable to borrow in-line with lenders’ credit risk appetite. Solutions to this could include a role for government guarantees which could be a cost-effective way to increase the availability of financing options for key climate technologies by sharing risk.
- Sequenced retrofitting customer journey with integrated finance, advice and installation services. This could include a scalable one-stop-shop model or similar to reduce complexity and choice for homeowners planning to make home upgrades. In addition to this should include forming a cross-sector view on a phased implementation plan for groups and regions in the UK to create momentum.
- Consumer segmentation to inform effective public engagement using insights from the private sector. Barclays-Ipsos research identified a number of awareness and understanding barriers to retrofitting action, which could be surmounted by implementing behaviourally - informed communications. Banks, energy companies and more can leverage their customer insights to inform a common, tailored approach.

**“ It is essential that cooperation is encouraged to ensure that a UK-wide strategy works at scale and makes things as simple as possible for homeowners.”**



## Data



### ACTION FOR GOVERNMENT

**Implement EPC reform and smart metering without delay.**

### ACTION FOR BANKS

**Leverage updated models to pursue bolder green finance strategies and customer communications.**

## Safety



### ACTION FOR GOVERNMENT

**Incentivise a common standard for energy efficiency upgrades.**

### ACTION FOR BANKS

**Integrate a common standard within customer products and communications.**

It is well established that the EPC system requires updating, therefore the Government’s renewed commitment to this reform is welcomed. It must resolve the current incompatibility with heat pumps to reduce confusion and provide greater clarity on the impact of retrofitting at a household level. Further, an updated EPC would unlock opportunities for firms to offer more targeted green finance incentives for retrofitting. For example, a robust data set underpinning the methodology could potentially allow discount schemes to be attached to improvements in EPCs.

In addition to EPC reform, there are wider data enhancements which could boost incentives for improving energy efficiency. Relying on metered energy usage, whether from smart or logged meter reads, would offer a more transparent reflection of emissions in the housing sector. This would be preferable to a reliance on current EPCs, which have a weaker correlation to energy usage and therefore operational emissions.<sup>38</sup> Smart metering, in particular, would be a faster, less onerous intervention for customers.

A wider energy efficiency strategy focused on accelerating the implementation of smart metering across the UK would enable consumers to benefit from tariff innovations that reward users for shifting energy load from peak to off-peak. This rollout would also help households gain a better understanding of their own energy usage and help monitor and inform their consumption.

If tradespeople want to demonstrate that they meet certain standards – such as the PAS 2035 Standard, the official UK framework for whole-home retrofit – there are currently several options for accreditations. These accreditations include the government-endorsed quality scheme for work in and around homes, TrustMark.<sup>39</sup>

These schemes are important in supporting consumer confidence and ensuring work is carried out to the required standards. To reduce risks for consumers, the Barclays Greener Home Reward specifies that work should be carried out by a TrustMark accredited installer. However, this can be difficult for consumers: some Barclays Greener Home Reward applicants have reported challenges in being able to access accredited local installers or find that installers may have different forms of accreditation.

While TrustMark is an effective quality mark, consumers can be confused by the range of standards available. Time-poor, smaller-scale installers are also less motivated to adopt these standards, while a perceived lack of consumer demand for energy efficiency measures can also prevent tradespeople from obtaining this accreditation.

To tackle gaps in coverage, a single, widely adopted standard could be implemented to ensure a clearer consumer protection process. In addition, an initial incentive scheme for small-scale installers may help to address a lack of uptake among tradespeople.



<sup>38</sup>B4NZ. [Why is EPC reform needed and why does it matter for the finance industry?](#)  
<sup>39</sup>TrustMark. [Who is TrustMark?](#)

# Education

## ACTION FOR GOVERNMENT

Coordinate and resource a sustained public engagement approach to drive consumer awareness and behaviour change.

## ACTION FOR BANKS

Support a bold, comprehensive approach by informing and delivering key messages leveraging customer insights and touchpoints.

Barclays-Ipsos research found that homeowner awareness of specific energy efficiency interventions is low, and that they are often associated with negative characteristics such as high costs and complexity. This demonstrates the critical role that effective communications will play in mobilising consumer support for the Government’s Warm Homes Plan. There are a number of key conclusions from Barclays-Ipsos work which can help inform the design of a compelling marketing and communications strategy. While there are already significant efforts underway to educate consumers about energy efficiency, adherence to a common approach could increase impact and reduce inconsistency across different sectors and actors involved in spreading the message.

**Mass-market approaches are needed for wider awareness.** At a macro-level, investment is needed to create awareness and draw attention to this issue. A co-ordinated campaign should combine familiar channels such as TV advertising and social media, as well as more targeted, local messengers to disrupt the status quo and increase consideration of retrofitting more widely. Collaboration with the private sector on this may also help distribute key messages and reduce the risk of misinformation.

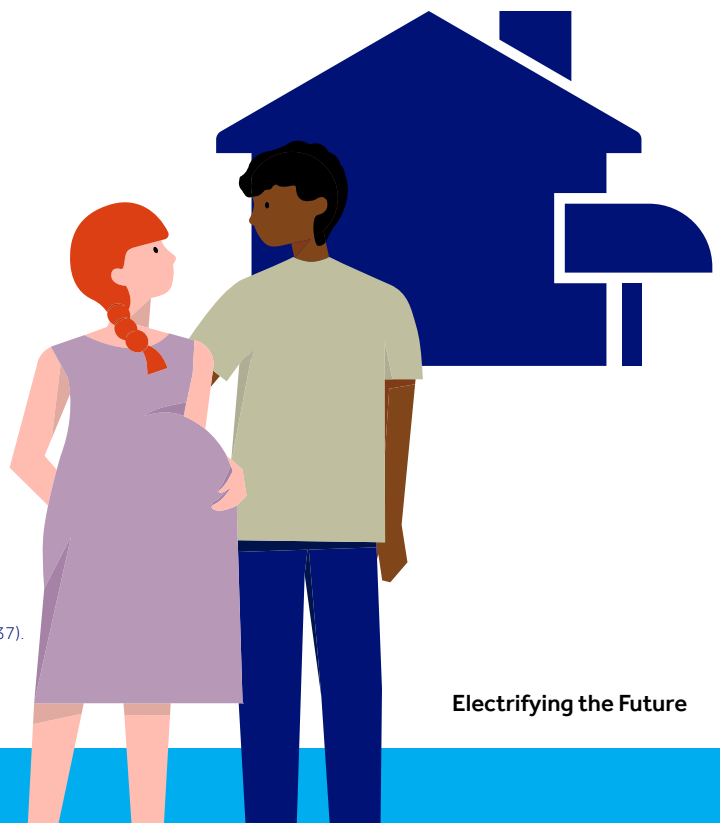
“**Research suggests that consumers are more likely to feel personally responsible for retrofitting if they hear from the government on this issue.**”

**Government should be prominent in driving the campaign.** Research suggests that consumers are more likely to feel personally responsible for retrofitting if they hear from the government on this issue.<sup>40</sup> Historical case studies in this space, such as the energy switch to natural gas in the 1970s and the COVID-19 vaccination programme campaign, demonstrate the impact of successful efforts to engage and motivate the public when led by the government.

**Messages should focus on personal forms of value.** Messages should move from a reliance on cost saving to a wide form of personal benefits for homeowners. Without a stronger story around the personal value of retrofitting,<sup>41</sup> it is likely to be difficult to motivate consumer engagement. As such, consumers should be signposted to the relevance of these measures to their daily lives. Messages related to saving money and increasing comfort have the broadest appeal<sup>42</sup>.

**Communications will also play a role in overcoming practical, as well as emotional barriers.** When it comes to taking retrofitting action, consumers need more guidance to understand who to go to for what.<sup>43</sup> There is a role for an independent, objective provider of information to complement government-led messaging.

**Tailoring of message will best support a phased implementation.** Communications should be tailored to different groups of consumers, but they should be broad-reaching – and go beyond targeting consumers who might already be thinking about home improvements.<sup>44</sup>



<sup>40</sup>Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p31).  
<sup>41</sup>Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p36).  
<sup>42</sup>Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p36-37).  
<sup>43</sup>Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p32).  
<sup>44</sup>Barclays, Ipsos. Retrofitting and Net Zero: A behaviour change dilemma (p45).

### **About Barclays' research in partnership with Ipsos**

- With thanks to our research partners Ipsos Mori, in particular Colin Strong, Jessica Long and Katie Hawkins; and Southampton University, in particular Dr Christopher Prior, Dr Charlotte Riley and Dr Christopher Fuller, for their contributions to this work.
- Primary research was conducted by Ipsos on behalf of Barclays. A total of 2,997 interviews were completed among homeowners. All homeowners were aged 18+. All own their property either outright or with a mortgage and own a property built 10+ years ago. The survey was carried out among those thought to be more able to pay for energy efficient home improvements and excluded those currently unemployed or on Universal Credit/Jobseeker's Allowance. The research also included a sub-set of 493 interviews among amateur landlords aged 18+. All own between one and three buy-to-let properties (built 10+ years ago) either outright or with a mortgage. Data collection was conducted online across the UK, between 21st April and 18th May 2023.
- Quota sampling was employed with weighting applied to the homeowner sample for an even distribution on gender and tenure (i.e., own their property outright or own with a mortgage).

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Electrifying the future: boosting the energy efficiency of UK homes  
November 2024

Barclays currently provides support to sectors that significantly contribute to global greenhouse gas emissions, including the oil and gas sector. Barclays is working to reduce the emissions it finances; for more information on our strategy, visit [home.barclays/netzero](https://home.barclays/netzero).



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