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No country for cold homes

Key considerations for the Warm Homes Plan

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Summary

The Warm Homes Plan is the Government's flagship policy to cut energy bills and decarbonise England's housing stock. It aims to upgrade homes so that they are easier to keep warm, generate more electricity from solar panels, and are heated by electric heat pumps instead of gas boilers. This ambition is backed by £13.2 billion of allocated capital spending over the next five years.

Given the wide remit of the Warm Homes Plan, success requires ministers to be clear about what it will achieve and who it will benefit. Despite significant resources, the Government will not be able to overhaul all the nation's homes. So, policy makers must balance reducing energy bills – especially for the one-in-three English households (37 per cent) in fuel stress – with spending to accelerate the woefully low rate of heat pump installations, which need to increase more than four-fold (98,000 to 450,000) by 2030 to meet national carbon targets.

In this context, it is important to bear in mind that the lowest-income households are twice as exposed to energy costs than their richer counterparts. Ensuring that funds allocated to the Warm Homes Plan flow to poorer families will maximise its impact on the cost of living as well as contributing to lower carbon emissions. The most effective way to bring down bills will depend on the type of property a family lives in, with some measures delivering considerable bang for buck. For example, loft insulation is ten-times more cost effective at bringing down bills than a heat pump.

And focussing on cutting bills for vulnerable households will pay dividends, locking in permanent savings of £230 per year, on average, for those in badly-insulated (EPC D-rated or worse) homes, equivalent to 14 per cent of spending on energy bills or 2 per cent of disposable incomes for the lowest-income families.

But heat pumps are the best way to cut emissions from homes. So while it makes sense to prioritise insulation that can both brings down bills and reduce carbon emissions, this doesn't mean giving up on decarbonising home heating. Instead, ministers should be bolder with regulations that compel manufacturers to sell more heat pumps and housebuilders to install them – before eventually regulating consumers so heat pumps are the only option to replace a broken boiler.

The Plan's limited resources means policy should be highly targeted to groups who will benefit most –particularly those unlikely to be able to afford large outlays without government support. Here there is another trade off: some programmes are better able to effectively target support (such as those based on incomes) and some have a greater track record of deliverability (such as those employing benefit passporting or schemes based on area).

Policy makers need to be switched on to the advantages of a more complicated scheme that hones in on those with the greatest levels of need. This means an approach in which eligibility is predicated by income (or to go even further, a combination of household income and non-pension wealth, as we have previously recommended). Determining eligibility with an earnings limit of £36,000 would see 97 per cent of the poorest homeowners eligible, compared to 30 per cent if based on the welfare system and just 27 per cent through an area-based approach. Further, policy makers should think hard before apportioning funding to properties in which action can be spurred on by regulation – such as homes covered by efficiency standards in the private rented sector. Grants should be concentrated on poorer homeowners instead.

This targeting trade off can be eased by financing policy measures in a way that allows the Government to do more. That is exactly what is envisaged under the plan's £5 billion of spending in the form of 'financial transactions' – loans rather than grants which must be repaid (and so push more of the burden onto families). These are effectively excluded from the Government's fiscal rules, allowing the capacity of this scheme to double without falling foul of the Chancellor's constraints. Loans can be effective in helping higher-income families bridge credit constraints that would prevent the adoption of technologies that should deliver substantial longer-term savings – for example, insulation and solar panels.

The next phase of the UK's journey to net zero will have a significant impact on families. The key to managing this change is to use government policy to ensure that the costs and benefits are shared fairly. The Warm Homes Plan is a key event in this context, giving the Government the opportunity to drive meaningful reductions in bills and move the country closer to our net zero goals. But limited resources mean grappling with difficult trade offs. The answer here is to prioritise capital spending on reducing bills and to employ other, more creative, policy measures to ensure progress is made on heating decarbonisation. This means using regulation to drive the decarbonisation of home heating and lending schemes that to broaden adoption of energy efficiency measures beyond those for whom they are affordable without grant funding.

Lower-income households have the most to gain from the Warm Homes Plan

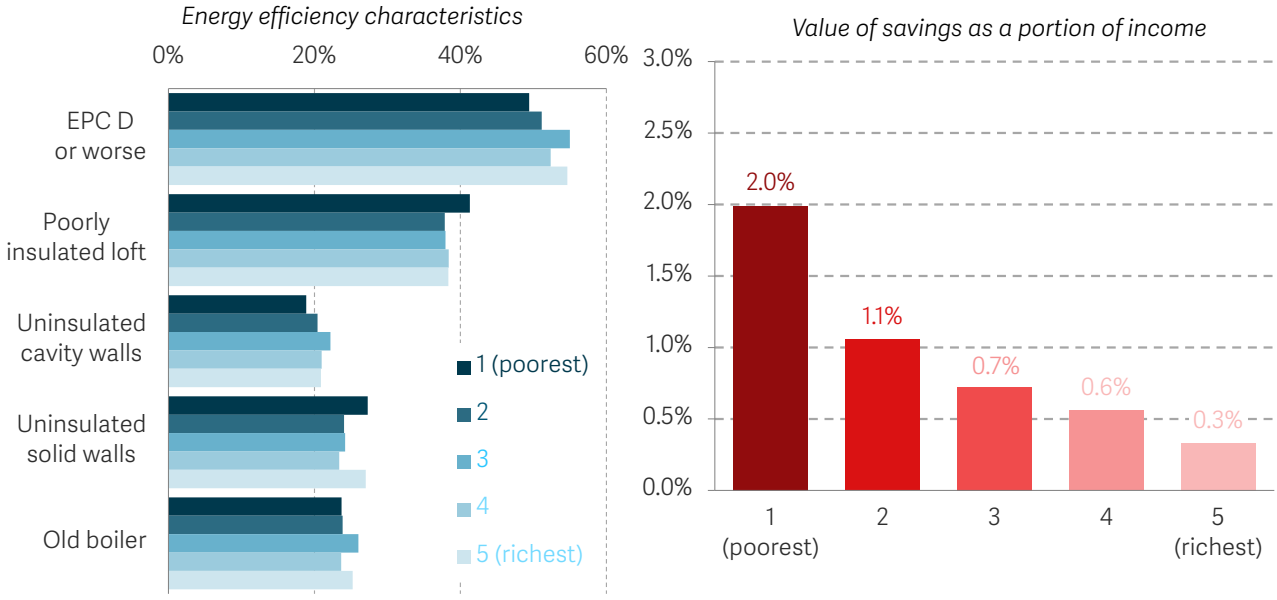
The Warm Homes Plan is the Government's flagship policy to overhaul England's housing stock. With a vision of upgrading five million homes over five years, the Government wants it to help people to "save money on energy bills and deliver warmer, cleaner to heat homes".[1] The importance of this goal is reflected in its financial backing: the 2025 Spending Review confirmed that £13.2 billion will be spent by the end of this decade.[2] With the plan expected to be released in the autumn of 2025, this note details how it can be shaped in a way that works in the best interests of low-to-middle income families.

Energy affordability is a major issue, particularly for those on lower incomes. Even though prices have eased from their 2022 highs, energy spending still accounts for around a tenth of family budgets for households in the poorest income quintile, twice that of those in the richest (10 per cent and 5 per cent respectively).[3] Unsurprisingly, it is these households that have the most to gain from improving the efficiency of their homes. Figure 1 shows that, while the prevalence of living in homes with different forms of energy efficiency characteristics is broadly even across the income distribution (and therefore the potential for bill savings is comparable), the benefits from making improvements account for a much larger share of incomes for those who are poorer: upgrading lofts and walls in the leaky homes of the poorest fifth of English households would generate permanent annual bill savings of around £230, equivalent to 14 per cent of expenditure on energy bills and 2 per cent of disposable incomes.

1 DESNZ, Help to save households money and deliver cleaner heat to homes, November 2024.
2 HMT, Spending Review 2025, June 2025.
3 Source: RF analysis of ONS, Living Cost and Food Survey.

FIGURE 1: **The potential for energy efficiency savings is comparable across the income distribution, but they are worth more to poorer households**

Proportion of households living in homes with selected energy efficiency characteristics (left panel), and average saving from insulating substandard lofts and walls as a proportion of after housing costs income, by equivalised household income quintiles (right panel): England, 2023-24



NOTES: Poorly insulated lofts are defined as having less than 150mm of insulation and excludes properties without lofts (i.e. flats), old boilers are defined as being 12 or more years old. Potential savings are based on regression analysis of modelled energy demand for properties with different insulation characteristics and shown as an average (mean) of after housing costs income for households with EPC D or worse in each income quintile. Incomes are uprated to 2023-24 values. Energy prices are uprated to unit and standing charges as set in the Q3 2025 Ofgem Price Cap. Insulation statistics are from 2020-21 English Housing Survey microdata. Properties of all tenures are included.
SOURCE: RF analysis of MHCLG, English Housing Survey; Ofgem Price Cap data.

But while lower-income households have the most to gain, there are significant barriers that prevent those in that group reducing their bills.

First is tenure: seven-in-ten (70 per cent) of the poorest fifth of households rent their home, compared to just over one-in-ten (12 per cent) of the richest, so have little incentive to invest in property improvements, instead remaining at the whim of their landlords.[4] Second is that those that do own their home have fewer savings from which improvements can be funded than higher-income households: 42 per cent of homeowners in the lowest income quintile don't have £6,000 in liquid savings to cover, say, the costs of a rooftop solar installation, compared to just 12 per cent of the richest fifth.[5]

4 Source: RF analysis of ONS, Wealth and Asset Survey.
5 Source: RF analysis of ONS, Wealth and Asset Survey.

As such, the Warm Homes Plan is an opportunity for the Government to make a big difference to the lives of poorer families. So, in the rest of this briefing note we set out some key questions that the Government must grapple with when designing policy: how should the trade offs between bill and carbon savings be navigated; where should grant funding be used and where can progress be delivered by regulation instead; how can schemes be effectively targeted; and how can 'financial transactions' be used to ease these trade offs?

The Warm Homes Plan can't do everything – ministers will need to prioritise

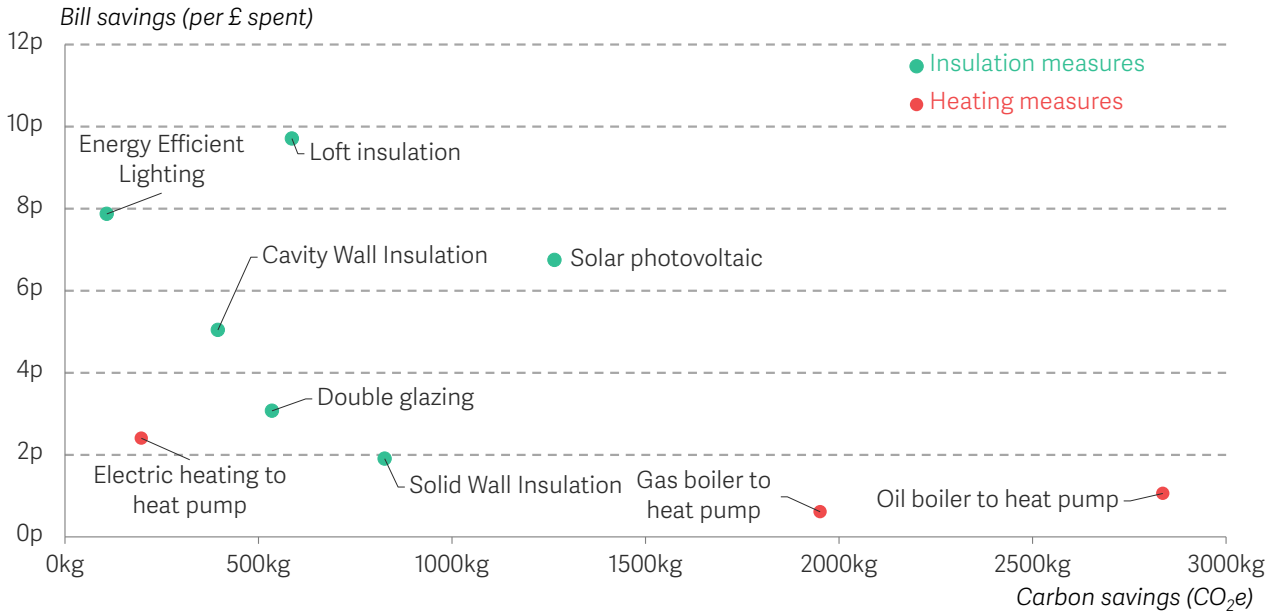
The Warm Homes Plan has a wide scope, setting out policies to increase the uptake of insulation, small-scale generation and clean heating (among other things). This extensive remit reflects the scale of the overhaul needed to the nation's housing stock (where 44 per cent of homes remain energy 'inefficient', according to the EPC scale).[6]

Fundamentally, its goals come down to two things: cutting energy bills and cutting carbon emissions. But there is a trade off between achieving these goals: some measures are better at reducing bills (which will address concerns about the cost of living and reduce fuel poverty), while others are needed to cut carbon at the pace required by UK legislation. Figure 2 shows the results of regression analysis of the impacts of different measures on energy spending, detailing that installing loft insulation is a more cost-effective way of delivering reduced energy spending than, say, solid wall insulation; but replacing oil or gas boilers with a heat pump are the best ways to curb carbon emissions.

6 'Inefficient' refers to homes with an EPC rating of D or worse. Source: ONS, Energy efficiency of housing, England and Wales, five years rolling, October 2024.

FIGURE 2: **There is a trade off between reducing bills and saving carbon**

Bill savings (pence per year per pound spent) and carbon savings (kgCO^2e per year) of selected insulation and clean heat measures: England, 2024-25



NOTES: Calculations of bill savings are based on 2024-25 electricity and gas prices but based on housing stock data from the 2020-21 MHCLG English Housing Survey. The impact of installing insulation was calculated through a regression of energy spending on installation of insulation measures, controlling for other physical characteristics. For more on the different measures, including prevalence among households, see: Z Leather, Sunny day savings, Resolution Foundation, February 2025.
SOURCE: Measure costs based on average cost of installations in the Local Authority Delivery scheme or Checkatrade. Bill savings for insulation measures are based on MHCLG, English Housing Survey. Carbon savings are based on Forest Research, Carbon emissions of different fuels data.

Energy-saving measures alone will not deliver full decarbonisation of the housing stock, however. This is because any residual demand will – in most cases – still be met by carbon-emitting heat sources.[7] Likewise, it's unrealistic to expect that heat pumps will solve longstanding issues of high energy bills: the high cost of electricity in Britain means that replacing an old boiler with a heat pump will see a household save just £80 a year, on average (this is discussed further in Box 1).[8]

7 Further, those living in cold homes are like to put the heating on more with better insulation, taking savings as additional comfort.
8 The UK has one of the highest ratios of electricity to gas prices in Europe. Source: Nesta, How the UK compares to the rest of Europe on heat pump uptake, August 2023.

BOX 1 : The Government should assess options to make heat pumps cheaper to run

High electricity prices act as a disincentivise to households from consuming it, but greater electrification – especially of home heating and transport – will underpin the UK's net zero transition. Indeed, running costs are an important consideration for the uptake of clean heating: families will not opt into significant capital outlay without an economic payback.

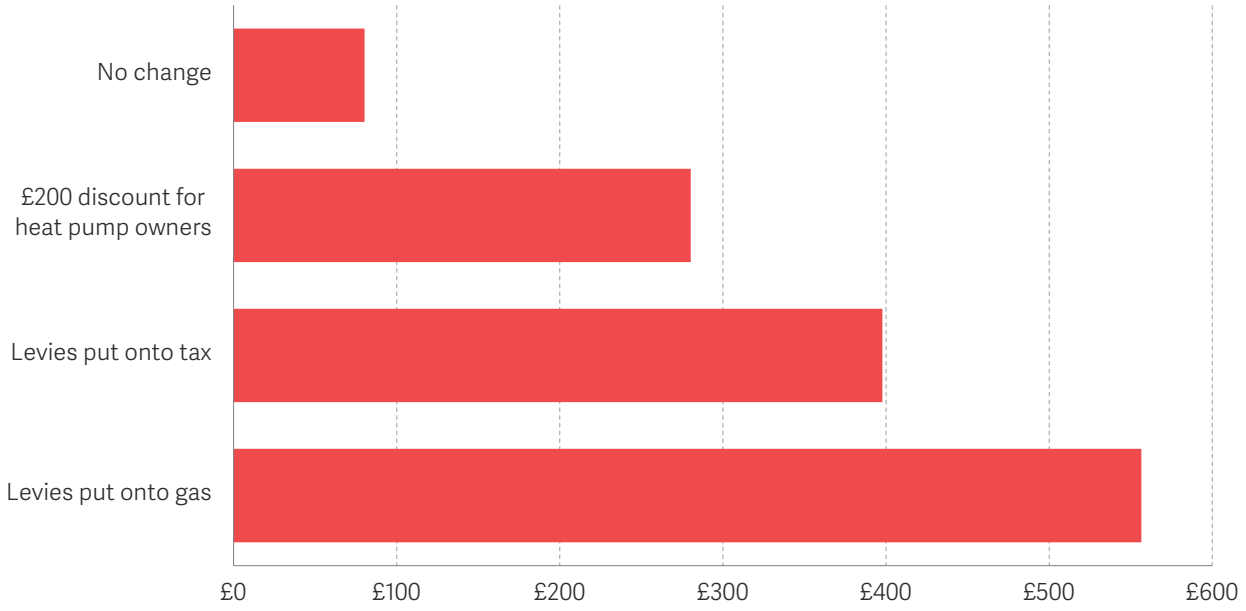
As such, making electricity cheaper is a key policy goal.[9] This autumn the Government is expected to release a consultation on one of the major drivers of the price disparity between electricity and gas: that the former bears a disproportionate share of costs that fund social and environmental policy goals.[10] Recouping these costs differently could increase the incentive to move from a gas boiler to a heat pump. There are several mooted options, which we quantify in Figure 3. We find that the biggest incentive is created by putting levies onto gas, which would make installing a heat pump almost as cost effective as cavity wall insulation at reducing bills. [11]

Recent media reports suggest that the Government might be minded to carve out policy costs for heat pump users alone, with their discounts cross-subsidised by other consumers.[12] This move would improve the economics of clean heating, creating a similar incentive for a household to get a heat pump than if levies were funded by general taxation. This is a start. But there are significant downsides: energy bills for non-heat pump owners would increase (including the heating bills of those with other kinds of low-carbon heating) and higher electricity bills would even discourage electrification in other areas, for example electric cars. Ministers should therefore be more ambitious when grappling with relative fuel prices, aiming for upsides that extend beyond the clean heating transition alone.

9 For more, see: E Fry and J Marshall, Electric Dreams, Resolution Foundation, April 2024.
10 For more, see: Z Leather and J Marshall, Turning up the heat, Resolution Foundation, April 2025.
11 This approach is not without risks, especially for poorer families in gas-heated homes that would see their annual energy spending increase. But these risks can be mitigated, such as through a social tariff scheme. For more, see: Z Leather and J Marshall, Turning up the heat, Resolution Foundation, April 2025.
12 M Kendix, Households with heat pumps could get £200 off energy bills, The Times, July 2025.

FIGURE 3: **Rebalancing levies onto gas provides the biggest incentives to move to a heat pump**

Average annual savings when moving to a heat pump from agas boiler, by rebalancing policy option: England, 2025-26



NOTES: The £200 discount for heat pump owners assumes a flat annual payment for all heat pump owners, regardless of energy use. Levies put onto tax is a reasonable proxy for the effects of exempting only heat pump owners from levies, as cross subsidy from other billpayers would be small while heat pump take up is low.
SOURCE: RF analysis of MHCLG, English Housing Survey Fuel Poverty dataset.

High energy costs mean there is a case for the Warm Homes Plan focussing on bringing down bills. The best approach for each home will depend on individual property characteristics – for some it will be loft insulation, for others solar PV or cavity wall insulation. But, while these measures will also help to reduce carbon emissions, they will not do so anywhere near as much as replacing a gas boiler with a heat pump (see Figure 1). So acting to reduce bills means there will be less spending available in the Warm Homes Plan to support the rollout of heat pumps.

This is important because, to put it mildly, the UK's heat pump rollout is not going to plan. Brits installed 98,000 heat pumps in 2024 – well short of the 450,000 by 2030 that the Climate Change Committee envisions in its central pathway to net zero emissions.[13] Here, Warm Homes Plan funding could certainly be used to close this gap, but doing so would come at a cost of fewer insulated homes. But even if constrained finances means focus shifting from heat pumps, this doesn't mean giving up on low carbon heating.

Indeed, the Government has other options to boost heat pump uptake while keeping the cost of grant schemes down. Ministers have been less willing to use regulation to both

13 Z Leather and J Marshall, Turning up the heat, Resolution Foundation, April 2025.

stoke demand for clean heat and to direct costs away from the Exchequer and onto firms, housebuilders and, to some extent, consumers. For example, regulations that force manufacturers to sell a growing number of heat pumps each year would help shift the market for this form of heating, spreading the burden of its cost onto either company profits or cross subsidisation by purchasers of other heating systems (such as gas boilers). While such an approach appears to have been successful in the context of the transition to electric vehicles, similar plans on heating have been rebuffed.[14] More positively, regulation can ensure that new homes are fitted with heat pumps, shifting the costs of their installation on to housebuilders or – depending on the level of pricing power – to families buying houses. Finally, the Government could set a date after which carbon-emitting heating sources cannot be installed in homes, pushing costs further from the state and towards consumers and manufacturers instead.

In principle, the tax system could also be used to shape consumer choices. But, it is worth remembering that such measures generally skew support towards better off families. For example, insulation materials, solar panels and heat pumps are already zero-rated for VAT, but the main beneficiaries of these policies will be those with the means to afford said upgrades themselves (making little impact on those that rent or receive grant funding).

Some have suggested offering stamp duty rebates to home movers that undergo qualifying improvements.[15] But these rebates would also be skewed towards higher-income families: Stamp Duty is proportional to house values – giving those purchasing more expensive properties more to save. A property would need to be worth £400,000 to incur £10,000 of Stamp Duty. Almost half (47 per cent) of all homes worth at least £400,000 are owned by families in the highest income quintile, while a fifth (21 per cent) of the poorest quintile of homeowners live in homes that wouldn't be liable for stamp duty at all.

A mixed approach – less reliant on grant funding and more on regulations – would allow heating-specific targets to be met at a lower cost to the Treasury, freeing up funds for insulation and its greater benefits to fuel-poor and lower-income households.[16]

Spending needs to be well targeted

As well as what to spend money on, Government also needs to decide which households will benefit. Of the plan's £13.2bn budget, £8.2bn is grant funding: a sizeable outlay that

14 N Gutteridge, Labour to cut 'boiler tax' after industry backlash, The Telegraph, November 2024.
15 UK Green Buildings Council, Warm Homes Stamp Duty Incentive, accessed 31 July 2025
16 Many of these regulations are 'oven ready'. The previous Government devised a 'Clean Heat Market Mechanism' that required heating system manufacturers to sell an ever-increasing number of heat pumps per year and set end dates after which gas and oil boilers could no longer be installed. But both have been watered down by the current Government. Also, the soon-to-be-delivered Future Homes Standard will ensure that new homes are no longer fitted with gas boilers.

shows the priority the Government places on upgrading the housing stock.[17] It could, for example, fully fund the insulation of over 3 million cavity walls,[18] but it won't be enough to upgrade all of the 12.6 million English homes that have an EPC of D or worse.[19]

So, some households will need to be prioritised, and this requires well-designed targeting. Good targeting will depend on the goal – where the primary aim is to reduce bill savings, we should be focusing funds on those struggling with the cost of living and without the means to pay for upgrades. That logic may not apply to all heat pump grants, which at present are mainly there to stoke demand – but means tested grants will be needed for clean heat too if heat pumps are to be accessible to lower-income households as they reach mass market.[20]

The best way to target limited funds for home upgrades is to means test for both assets and incomes. [21] As grants will predominantly benefit home owners and their assets, it is worth thinking seriously about how to exclude wealthier households. Income targeting alone won't achieve this – 19 per cent of the lowest-income households have at least £500,000 in wealth (including property equity) to borrow against to fund home upgrades.[22]

Though asset and income targeting remains rare, most energy efficiency schemes do already determine eligibility based on a combination of household income, property energy efficiency and whether a household is in receipt of benefits.[23] Though this doesn't exclude wealthier homeowners, it is a broadly sensible way to capture those most in need of support.

But, recently, Government guidance has shifted towards allowing area-based approaches, which define eligible postcodes rather than eligible individuals.[24] Figure 4 shows that this will be less effective than other targeting methods the Government uses at targeting lower-income families (defined here as the three lowest-income deciles, using after housing costs equivalised income).[25] By definition, income targeting performs well, extending eligibility to the vast majority (97 per cent) of lower-income households,

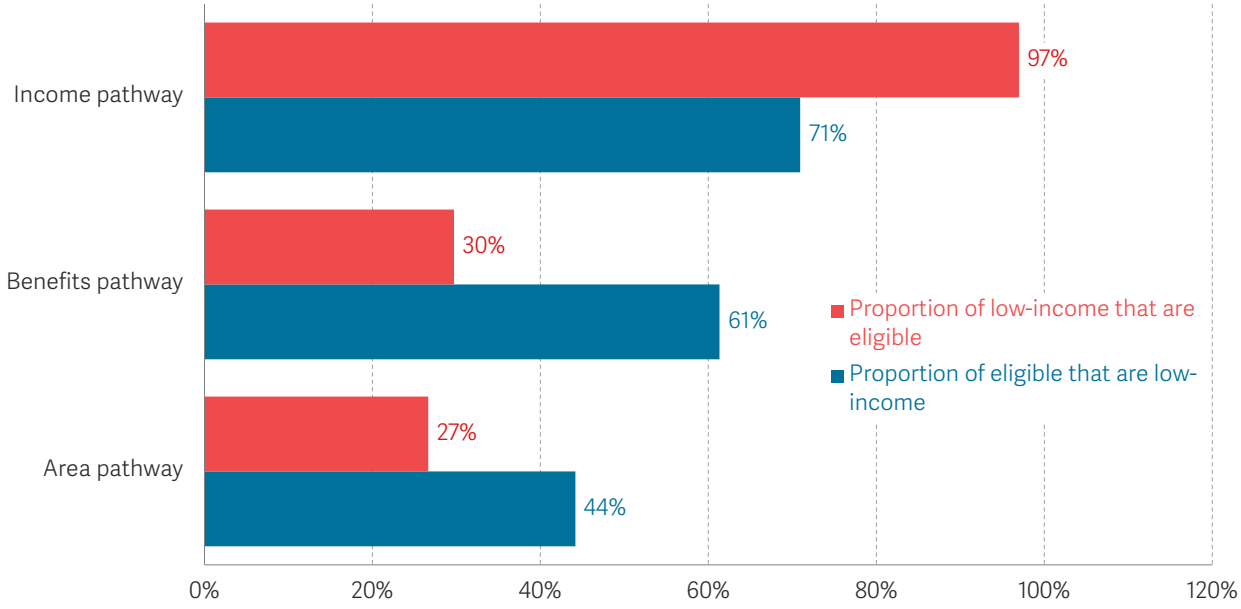
17 HMT, Spending Review 2025, June 2025
18 RF analysis of DESNZ, Local Authority Delivery scheme statistics.
19 RF analysis of MHCLG, English Housing Survey.
20 Z Leather and J Marshall, Turning up the heat, Resolution Foundation, April 2025.
21 Asset testing is particularly appropriate as upgrades would increase the value of an individual's home. For more on how incomes and assets should be assessed for home upgrades, see A Anis-Alavi et al., Hitting a brick wall, The Resolution Foundation, December 2022 and Z Leather and J Marshall, Turning up the heat, Resolution Foundation, April 2025.
22 Figure refers to the lowest after housing costs income quintile. Source: Z Leather and J Marshall, Turning up the heat, Resolution Foundation, April 2025.
23 For example, both the Energy Company Obligation and Local Authority Delivery scheme have detailed guidance on who is eligible based on household and home characteristics.
24 In its latest guidance for the upcoming Warm Homes: Local Grant scheme, Local Authorities are now permitted to grant funds to any home that lives in one of the poorest fifth of lower super output areas. This is intended to reduce the search costs of identifying eligible households and make delivery more efficient. Source: DESNZ, Warm Homes: Local Grant Guidance, July 2025.
25 The IMD pathway is based on overall deprivation, due to unavailability of data covering income deprivation alone. Using income deprivation by LSOA would improving targeting by income but not substantially – around half of those in the fifth of LSOAs with the lowest income have higher incomes than the national 30th percentile. Source: ONS, Income estimates for small areas, October 2023.

with relatively few richer households included (seven-in-ten of those eligible would have low incomes).[26] Passporting benefits would have lower coverage, with just 30 per cent of low-income households covered by the welfare system.

But one based on area performs the worst, with just 27 per cent of low-income households eligible. Poor places are not exclusively comprised of poor households, and so the distributional merit of this approach is contestable: less than a half (44 per cent) of those in the most deprived fifth of postcodes have a household income in the bottom 30 per cent.

FIGURE 4: **Targeting by regional deprivation is much less effective than income targeting at capturing poorer households and excluding rich ones**

Proportion of low-income households that meet various eligibility criteria, and proportion of households eligible that have a low income after housing costs: UK, 2022-23



NOTES: Uses the latest Local Authority Delivery scheme guidance for eligibility across pathways. Income eligibility is based on gross household income less than £36,000, with separate eligibility through low after housing costs income based on housing type. Benefits pathway includes those on Universal Credit, Job's Seeker's Allowance, Employment Support or Pension Credit.
SOURCE: RF analysis of University of Essex, Understanding Society data.

Here the trade off is between tight eligibility and deliverability. It is inherently easier to target households based on where they live or if they are known to the benefits system than by assessing individual families' incomes and assets. But the downside of a simpler approach is a reduced focus on poorer families.

26 This form of income targeting doesn't perfectly capture 'low income' households in this analysis as eligibility is defined by gross income while low-income status is defined by the after housing costs equivalised income.

Another important consideration is tenure. Even though poorer households are over-represented in the private rented sector, landlords are – generally – in better financial shape than low-income homeowners to shoulder upfront costs.[27] Indeed, the upcoming introduction of strong regulations for the social and private rented sectors means policy should look again at how private landlords are treated by targeted schemes.

Currently, it's common for landlords to receive thousands of pounds in grants (in some cases requiring contributions of 50 per cent of total costs) for home upgrades when their tenants are low earners.[28] But increased Minimum Energy Efficiency Standards, which by 2030 will mandate landlords to improve their homes to EPC C (up from EPC E at present) before letting them out, will drive the same action without Government support.[29] As such, grants will have a greater impact if used for other purposes.

Some support will come in the form of loans – we should be mindful of how best to use them

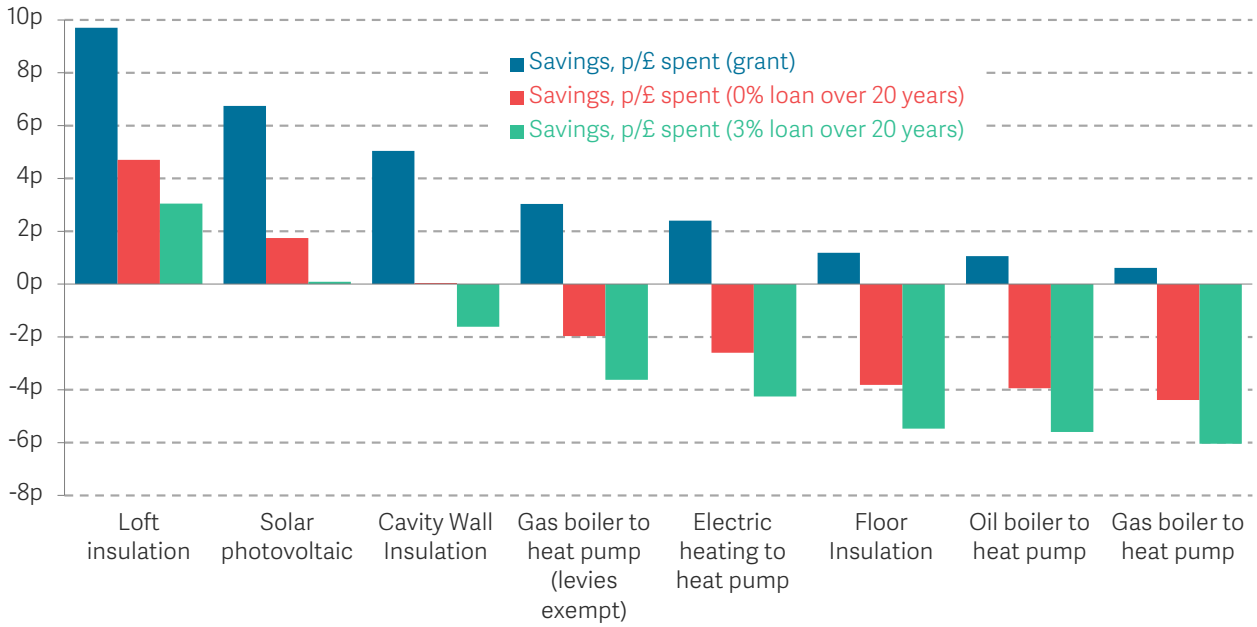
Grant schemes aren't the only way the Warm Homes Plan proposes to spend money. The other £5 billion of the £13.2 billion pledged is for 'financial transactions', which, in this instance, means loans.[30] These must be paid back to the Government by the individuals or companies that receive them, and should thus be used where credit constraints are the main barrier to action.[31] As such, they are very different from grant funding and it's worth thinking how best to use them.

The cost of repaying loans means they are less appropriate for very low-income households, who may be unwilling – or unable – to take on extra monthly outgoings with uncertain payouts.[32] Indeed, As Figure 5 shows, only the most efficient measures would still see households with more bill savings than loan repayments on average, even if that loan is given at zero interest. So for low-income households struggling with the cost of living, loan schemes shouldn't be seen as a clear replacement for grant funding.[33]

27 Nine-in-ten landlords would not be eligible for the means-tested heat pump subsidy we previously recommended. Source: Z Leather & J Marshall, Turning up the heat, Resolution Foundation, April 2025.
28 This system will be used for the Warm Homes: Local Grant scheme.
29 DESNZ, Home upgrade revolution as renters set for warmer homes and cheaper bills, September 2024
30 C Aref-Adib et al., A healthy state?, Resolution Foundation, June 2025.
31 It is not yet clear what form these loans will take, but the two main options are direct lending to households, likely at discounted interest rates, to allow investment costs to be amortised. The other is lending to companies that already deliver efficiency schemes, such as energy suppliers, so that existing frameworks can be rapidly expanded.
32 The Government could consider alternative repayment mechanisms – such as loans that are only repaid once a home is sold – to minimize the pressure loans put on a household's day to day finances.
33 This is perhaps why loan schemes have a history of underperforming: the most notable instance is the Green Deal. That policy, which provided loans for insulation measures in the early 2010s, to be repaid through bills, had a 'golden rule' under which savings must exceed loan repayments – but the difficulty of achieving this meant it improved just 4,000 homes. Source: A Anis-Alavi et al, Hitting a brick wall, The Resolution Foundation, December 2022

FIGURE 5: **Funding improvements through loans rather than grants makes them much less effective at reducing energy spending**

Bill savings per pound spent from various home upgrades; under grant funding, a 0% interest loan scheme and a 3% interest loan scheme.



NOTES: Calculation of measure costs is explained further in the notes for Figure 2. The loans are assumed to be repaid over 20 years. A shorter repayment period would result in repayments representing a higher proportion of energy bill savings.
SOURCE: Measure costs based on average cost of installations in the Local Authority Delivery scheme, or Checkatrade where not available. Bill savings for insulation measures are based on the English Housing Survey.

This makes loans more appropriate for middle-income households, who will typically be excluded from tightly targeted grant schemes but may still suffer credit constraints that prevent them from undertaking home upgrades.[34]

Alternatively, the Government could look to issue these loans to companies instead. For example, loans to companies may support the delivery of schemes like the Energy Company Obligation, which mandates that energy companies install insulation and clean heat measures in low-income homes, repaid by bills.[35] But this route is unlikely to achieve much. First, unlike individuals, most large companies already have good access to credit markets. This makes the rationale for intervention weak: if companies require finance to meet expanded energy efficiency obligations, the private market can already fill in. Second, the costs of repaying these loans will still be recouped from households – most likely through levies on energy bills, which would hit the incomes of poorer households six times more than the richest.[36]

34 Blended finance – under which some households are given a partial subsidy, with the rest covered by a loan – could be a way to provide tiered support to middle-income families that are ineligible for full grants.
35 Ofgem, Energy Company Obligation, accessed 1 August 2025.
36 Source: RF analysis of MHCLG, English Housing Survey; DWP, Households Below Average Incomes data.

Finally, the Government may be interested in how loans can accelerate the heat pump rollout. Loans aren't the silver bullet for the heating transition – as Figure 5 shows there's little payback from installing a heat pump, and the main problem remains that heat pumps are over three-times more expensive to buy than gas boilers. Even cheap credit can't fix that.[37] But combined with other efforts to stoke demand, like lower running costs or regulations, a loan scheme would support those who want to participate but struggle with the upfront costs.[38]

Maximising the Warm Homes Plan's impact means managing tough trade offs

The Warm Homes Plan offers an opportunity to improve living standards as well as cutting carbon. With energy spending accounting for twice as much of poorer families' budgets, achieving that goal means focusing limited funds on improving the homes of low-income families most likely to be struggling with their bills. That means navigating some tough trade offs. Prioritising the measures that are most effective at reducing bills is best for addressing widely held cost of living concerns, but would only make a smaller contribution to reducing carbon emissions, so other measures to accelerate the heat pump rollout are also required. Improving the way we target funds towards poorer households (and avoiding area-based eligibility) would better reach those most in need, albeit at the expense of somewhat more complexity. And there's more than just grant funding: loans, regulations and tax-changes should all be designed with living standards in mind.

37 Z Leather and J Marshall, Turning up the heat, Resolution Foundation, April 2025.
38 Z Leather and J Marshall, Turning up the heat, Resolution Foundation, April 2025.

Annex 1 – include full data citations for microdata

Data citations

Understanding Society:

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Resolution Foundation

The Resolution Foundation is an independent research and policy organisation. Our goal is to improve the lives of people with low to middle incomes by delivering change in areas where they are currently disadvantaged.

We do this by undertaking research and analysis to understand the challenges facing people on a low to middle income, developing practical and effective policy proposals; and engaging with policy makers and stakeholders to influence decision-making and bring about change.

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