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How to combine action on housing retrofit with tackling health inequalities (and other injustices)

Briefing paper

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About the author

Dr Annika Hjelmskog is a Research Associate at the MRC/CSO Social and Public Health Sciences Unit, based at the University of Glasgow. Her work is focussed on the health and wellbeing of both people and the planet, and is currently working on a collaborative City Portrait for Glasgow that applies Doughnut Economics at the city level. This transdisciplinary project is being undertaken with partners in multiple sectors, and will capture a multi-dimensional, pluralistic understanding of what 'thriving' means in the context of Glasgow.

Annika completed her PhD in Planning and Environmental Management at the University of Manchester in 2021, writing the thesis: 'Assessing the role of housing association activity in tackling health inequalities in Greater Manchester'. While at the University of Manchester she worked as a Teaching Assistant on several planning modules, and as a researcher at the Inclusive Growth Analysis Unit.

Outside academia, Annika has held public health roles in population health and health inequalities, at both regional and national organisations.

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Background

Housing retrofit is an essential part of the UK's Net Zero ambition. While we need to stop using fossil fuel energy in favour of renewable sources, improving the energy efficiency of housing can lower our consumption of energy overall. Reducing demand by both using less fuel, and extensively insulating to improve efficiency, are the first priorities of the '[Energy Hierarchy](#)': a commitment of several devolved and regional administrations in the UK, including [Glasgow City Council](#), the [Mayor of London](#) and the [Welsh Government](#). This briefing paper highlights the interconnected policy priorities that retrofitting homes can contribute to and takes a Whole Systems Approach to retrofitting as a public health issue. This public health dimension complements work already underway in the UK Collaborative Centre for housing Evidence (CaCHE) and plans for Phase 2 around housing retrofit.

The issue

Decarbonising our housing provides a parallel opportunity to improve health and wellbeing outcomes too. Energy costs are rising sharply, combining with the UK's old, cold and leaky [housing stock](#) to create a public health crisis. The [health problems](#) (physical and mental) caused by cold, damp, poorly ventilated or insulated housing are a major concern for public health. [The Energy Saving Trust](#) estimates that each year 10,000 people die as a result of poor health caused by living in a cold home.

The issue of equitable retrofit is particularly timely, as the impacts of [spiralling energy costs](#) are about to be felt disproportionately by both those who live in poorly insulated or energy inefficient housing, as well as those with low incomes. Energy poverty is itself closely linked to [worse health outcomes](#), and growing numbers of people in the UK are facing [impossible choices](#) between essentials.

National Energy Action estimates that since the April 2022 price increase, [800,000 more people with health conditions and/or disabilities are in fuel poverty](#). The need for a warm home is particularly acute for those with respiratory conditions, and some people with severe health problems need to power a lot of electric medical equipment from home.

We are witnessing a perfect storm of injustice for poor households, but these intersecting crises could be seized as an opportunity for policymakers to address health inequalities, energy poverty and the climate crisis through holistic retrofit action in the right places.

We have good evidence on what causes health inequalities. Over the years, several landmark UK reports (see [Black](#), [Acheson](#), [Marmot](#)) have consistently recommended increased, joined-up policy action on what are known as the '[social determinants of health](#)'. To reduce inequalities, we need to focus on the unequal social conditions that drive unequal health outcomes, with an emphasis of support for people who have the most to gain. This is known as '[Proportionate Universalism](#)', which means resourcing and delivering universal services at a scale and intensity proportionate to the degree of need.

The UK Government has a chance to show it is serious about '[Levelling Up Health](#)' by applying health equity principles to the energy crisis. If we take a [Health In All Policies](#) approach to housing retrofit, we can tackle the issue as a public health challenge, offer targeted support to those who are most exposed, and incorporate justice, equity and sustainability into our long-term (but urgent) response.

The current policy landscape

The UK's 2021 [Heat and Buildings Strategy](#) demonstrated a welcome growth in its decarbonisation ambition, but [independent assessment](#) from the UK Climate Change Committee (CCC) lists the need to 'fill policy gaps including on home energy efficiency' as its first priority. These gaps are most notable in the private rented sector, but there are inequalities in the support on offer to owner-occupiers and social renters too. The Scottish Government has its own [Heat in Buildings Strategy](#), which reaffirms retrofit as a priority, but suggests it will prioritise action for social housing rather than the private rented sector. Concerns have been raised by the [Zero Emissions Social Housing Taskforce](#) (ZEST) that the financial burden of this activity could therefore fall disproportionately on poorer tenants and their communities.

Most of the support available for retrofit is only on offer to the owners of homes (owner-occupiers and landlords). Yet the largely unregulated private rented sector (particularly at the lower end) is home to the highest proportion of [fuel poor households](#). Improving these privately rented homes is particularly challenging, because it requires voluntary action from landlords who will not ultimately feel the benefit of more comfortable housing, lower energy costs, and better health. Current legislation states that homes with an EPC rating as low as 'E' are suitable for renting to private tenants, and EPCs are themselves a very limited measure in terms of net zero, [PassivHaus](#), or [EnerPHit](#) considerations. Households with fewest resources, lowest incomes and the poorest health outcomes will be the households who have the least choice when it comes to finding a home.

Social landlords/registered providers have been able to apply for retrofit [funding](#) (with some successful demonstration projects now on record, such as in this [Glasgow example](#) of retrofitting a pre-1919 tenement block to net zero EnerPHit standard), but this has typically been on a competitive basis (such as the [Sustainable Warmth](#) competition, now closed). [Social housing providers](#) have identified barriers created by time consuming and costly application processes, and argue that smaller landlords don't have the resources or the expertise to access this funding. These barriers create additional variation and inequality of access even within the same tenure.

Attempts to boost or accelerate energy efficiency measures in homes have often been either extremely short lived or scrapped before they could achieve their goals. Installation of insulation in lofts and cavity walls has plummeted since 2012, when grant support for households via the Green Deal was [scrapped under Prime Minister David Cameron](#). Similarly, the Green Homes Grant scheme in England was only open 2020-2021 and was described as a '[slam dunk fail](#)' by the Public Accounts Committee. Ambitious but short-term targets that fail to consider operational constraints, such as the time needed to train installation specialists, lead to significant waste of funds and underperformance.

The financial support that is available for retrofit and energy efficiency also varies hugely in its comprehensiveness. Even for households eligible for the partial refunds (up to £5k or £6k) via the Home Upgrade Grant or the [Boiler Upgrade Scheme](#) – a large gap is likely to remain between the total cost of efficiency measures, and the amount households are entitled to. In Scotland, [Home Energy Scotland offers zero interest loans](#) for energy efficiency measures to eligible households. Even interest-free loans require a level of commitment from homeowners for the investment, and a recent [Behavioural Insights survey](#) suggests that cost is the number one reason why homeowners would choose not to install a heat pump.

Full retrofit, i.e. [energy efficiency measures \(insulation\) and switch to renewable heating supply \(heat pumps\) is expensive](#). A recently announced [cut in VAT](#) does not change this, and makes little difference to the overall cost. Schemes such as the [Clean Heat Grant](#) are only available (and only useful) for homes that have no recommendation for insulation, and many fuel poor households will not be able to jump through that first hoop.

Different housing types also require different kinds of insulation, depending on whether you have solid or cavity walls. Victorian housing stock is most likely to be solid wall, which has no cavity and requires either internal or external wall insulation. According to estimates from the [Energy Saving Trust](#), the average cost for cavity wall insulation (based on a 3 bedroom semi) is £475, but the cost for insulating a 3-bed solid wall property is £8,200 - £10,000. These Victorian properties are the most energy inefficient in the UK, expensive to heat and hazardous to health – but they cost the most to insulate – the financial support from the government needs to rise in proportion to the scale of the task. For many households, these costs are out of the question.

The short-term, reactive response to entrenched issues is the antithesis to a public health approach, which would argue that [prevention is better than cure](#). As with recent [‘sticking plaster’](#) responses to the rising energy prices, offering one-off emergency vouchers or loans cannot deal with the root causes of the issue (neoliberal energy markets, poverty and inequality) nor the long-term problems that make these worse (historically poor housing quality, old housing stock).

Right now, the current policy response to housing retrofit is not sufficiently targeted towards those who need it the most. There are gaps and oversights in the existing strategies, which exclude certain groups, as well as significant fragmentation and access barriers to the support that is available. Together, these features pose an active risk to health equity.

Actions needed

For housing retrofit to take a health equity approach, it should be implemented with the following principles in mind:

- Universality (or ‘proportionate universalism’): Benefits of retrofit need to be available to everyone, but with targeted additional support to those who need it the most. Support should also not be allocated competitively, which creates winners and losers.
- Ease of access: A unified service/single point of contact is needed to reduce the fragmentation of services and the amount of effort/agency required. Our current system requires time, energy, and different forms of capital, disadvantaging particular groups.
- Empowering: provide the right tools (e.g., nationally set targets but with resources devolved to the same degree as responsibility) to enable people to act, in ways that they can determine for themselves. Delivery is needed at all levels, local authorities and community organisations are essential players in this, but they need national support to enable and equip (including with finance) them to fulfil their role.
- Affordability: current measures do not support households living the private rented sector, even those on low incomes, whose landlords are not prepared to make a significant contribution to the costs of the improvements. Better use of means testing and progressive funding, combined with universal obligations for property owners to meet insulation standards could address some of this gap.
- Holistic/joined-up thinking – this policy issue needs to be understood in terms of the wider system it sits within – it won’t be enough to simply retrofit the homes of those who can afford it, and we could lose the opportunity of creating co-benefits (such as the green, sustainable, good quality jobs needed for a [Just Transition](#)) that are also vital components for Levelling Up health.

Additional co-benefits

Jobs with decent pay and working conditions offer their own [health benefits](#). A growing green retrofit industry has the potential to support a green economic recovery from the COVID pandemic, with [existing analysis](#) for Glasgow City Region making a strong business case for public investment in this area. As part of a just transition, we have an opportunity to create an employment and training pipeline for people who currently work in the fossil fuel or construction industries into green work. This may avoid some of the damage caused to the health and social outcomes in communities who suffered disproportionately during the last big [deindustrialisation](#).

A strategic approach to skills and training, to ensure there are enough skilled workers to carry out the necessary retrofit across the social gradient, leaving nobody behind. These efforts should complement the employment objectives of a [Just Transition](#), to ensure the health and wellbeing benefits of good work and good pay are felt by those who need them. A booming housing retrofit industry could create many thousands of sustainable, skilled jobs. However there is currently a huge gap between the minimum [19 million homes](#) the UK needs to retrofit to reach net zero, and the size of the workforce with the skills to carry this work out.

In the short and medium term, we need to insulate as many homes as possible, quickly – but the huge escalations in fuel poor households (and more to come in October) mean we absolutely MUST target this activity and the households with the lowest incomes and least efficient homes first. Where these groups intersect (particularly urgent for poor households in the private rented sector) we will need to significantly scale up our efforts.

Our long-term view needs to focus on prevention: the urgency of acting now is so important, and some places have set targets way ahead of the UK's national net zero (Glasgow 2030, Scotland 2045) – but these homes need to be sustainable, and fit for the future well beyond the next couple of decades.

Housing retrofit is an investment in both public health and planetary health. We can improve the wellbeing of our population while stopping our depletion of nature's resources. It should be a win-win strategy, but it will only be so if done fairly.