LOCALIS

Lagging behind

ENERGY EFFICIENCY IN LOW-VIABILITY PROPERTIES

By Zayn Qureshi

Executive summary

Ahead of COP 26, government departments have been commissioned across Whitehall to inform the cross-government Net Zero Strategy that, amongst other things, will detail plans for decarbonisation across key sectors of the economy. One of the most significant challenges in reaching net zero is the need to retrofit the nation's housing stock and increase energy efficiency. Looking at the varying costs involved in retrofitting building fabric and heating systems, 'Build Back Better' risks remaining an empty slogan if the challenge of retrofitting the existing housing stock in left behind parts of England is not addressed.

Retrofitting, and the prices involved in doing so, remain the same regardless of geography. However, what does not is the value of property. Putting this into perspective, the same energy efficiencies demanded by the transition to a Net Zero economy, including wall insulations and heat pump fittings, will need to be undertaken to an equal extent in a terrace house located in Barking with an average cost of £400,647 as one in Burnley with an average price of £77,293. Given the costs of retrofitting being in the tens of thousands, if the challenge of how to effectively support retrofit properties in low value areas is not met, a divide risks being created.

The scale of the retrofit issue

The net zero target is encompassed within the Plan for Growth[1], standing as one of the three "people's priorities" toward which growth will be directed. Meeting the targets and fully decarbonising will require focusing on improving the energy efficiency in a number of areas, including the nation's housing. Domestic energy use accounts for 14 percent of overall UK emissions[2] and 90% of homes in England currently use fossil fuels. Additionally, in 2050 people will still be living in 80 percent of the homes that exist today. The two main options for improving energy efficiency in homes include constructing new builds that are net zero and retrofitting existing housing stock.

Currently, the energy efficiency of buildings is based on Energy Performance Certificates that are graded from A (most efficient) to G (least efficient). It has been recommended to government that, in order to achieve its net zero targets, all buildings must achieve a minimum of EPC C or above over the next fifteen years[3].

1 HM Treasury (2021) – Building Back Better: our plan for growth
2 Climate Change Committee (2019) – UK housing: Fit for the future?
3 Climate Change Committee (2020) – Sixth Carbon Budget

This is something that has been incorporated as a target by the government, yet, according to their own data, two-thirds of the housing stock in England has an EPC rating of D or lower[4]. UK housing stock is older on average than that of continental Europe[5], presenting a significant challenge in terms of retrofitting energy efficiency measures.

Despite ambitious rhetoric, in 2020 the UK installed only six percent of the annual installation target of 600,000 heat pumps per year by 2028[6]. This is in addition to only installing nine percent of cavity wall insulations needed, less than 3 percent of loft insulation and two percent of solid wall insulation. Turning this around will require significant government investment and a coherent strategy that sets out localised and targeted measures for retrofitting housing stock. Any such attempt must also consider the views of occupants, which play a significant role in the success of retrofitting. A central part of enabling a retrofit revolution on the path to net zero will be adequately conveying the wider benefits to homeowners and landlords – particularly as the upfront costs can be significant. The cost of retrofitting and the investment needed to improve the EPC ratings of all homes to EPC Grade C or above vary. BEIS estimates break down to be anything between £1,800 and £3,400 per household, considering the 19 million households across the UK[7] in need of retrofitting. The Northern House Consortium estimates that, on a modest level, the cost to retrofit would be an average of £24,300, including £5,000 for installing heat pumps. The Climate Change Committee[8] has estimated the cost of retrofitting a heat pump to be approximately £9,000 and recent analysis by Greenpeace[9] has assumed the cost to start at £11,855.

The benefits, however, go beyond the obvious need to avert mounting climate catastrophe. Aside from helping tackle the climate crisis, benefits of improving the energy efficiency of the nation's housing stock include the cost savings on household bills. The Clean Growth Strategy highlights how 'the annual running costs of a Band C rated home are £270 lower than the average Band D and £650 less than the average Band E'[10]. Well-insulated and effectively heated

4 BEIS (2020) – The Energy White Paper: Powering our Net Zero Future

5 EeMAP – Creating an Energy Efficient Mortgage for Europe, Building Assessment Briefing: United Kingdom

6 IPPR (2021) – On the Home Front

7 17 million in England

8 Currie & Brown (2019) – A report for the Committee on Climate Change: The costs and benefits of tighter standards for new buildings

9 Greenpeace (2021) – Green homes revolution could create 138,000 new jobs and inject £9.8bn into economy, report finds

10 BEIS (2017) – The Clean Growth Strategy: Leading the way for a low carbon future

homes can combat against respiratory and related illnesses. In 2011, the costs of cold and damp homes to the NHS were estimated to run to approximately £760m per year. In terms of wider socio-economic benefits, accelerated energy efficiency targets, backed by appropriate public investment, could help tackle rising unemployment through the creation of new green jobs. This is something recognised by the government itself, with the Ten Point Plan acknowledging action on green buildings potentially providing an opportunity to develop the UK's heat pump manufacturing base and support up to 50,000 jobs by the end of the decade.

Dynamics of the challenge

It will be extremely important to establish how the government plans to support the funding of the vast retrofit challenge that lies ahead. The challenge of incentivising homeowners and landlords to retrofit their properties will be made more difficult if the costs involved prove to be too much, especially in areas with low property values. The two key differentials in retrofit policy are the type of property tenure – homeowner or private-rented being the major split – and, most crucially, differences of geography which lead to widely varying property values and subsequent feasibility of paying up-front retrofit costs.

Government retrofit targets vary depending on the tenure type. For owner occupiers and socially-rented homes, the ambition is to upgrade properties to be EPC Grade C or above by 2035. On the other hand, for privately-rented homes current targets are being consulted on, with the targets potentially set at EPC Grade C by 2025 for new tenancies and 2028 for all tenancies. There appears to be a split incentive in that because landlords do not pay energy bills themselves, they do not benefit directly from the energy savings that would justify undertaking the task of retrofitting. Regarding non-financial barriers, there appears to be low awareness of current and past retrofit targets, as well as a lack of clear and concise information on how to meet these targets and the support available in doing so. Clearer incentives and long-term clarity on timelines are required to ensure retrofitting in the private rental sectors.

This issue of regional variability in house prices and dwelling stock warrants serious consideration. In some local authorities, particularly in the North and Midlands, the estimated cost of retrofit is over 15 percent of the property value – as opposed to as low as two percent in many Southern districts. Without a tailored and localised approach that considers the varying housing economics of each locality, a 'one size fits all' approach to the funding of retrofitting threatens to deepen regional inequality and counter efforts to level up. Fuel poverty is closely linked to energy efficiency, with the likelihood of falling into poverty increasing

depending on the efficiency of one's home. A universalist approach risks creating a local divide between those who can and cannot upgrade to Net Zero energy and heating standards. With the consequences for those in the latter category manifesting in deepening fuel poverty because of continued reliance on inefficient methods of gas and fossil fuel heating.

The role of local government

There has been a significant amount of coverage in the past couple of years on the declaration of climate emergencies by local authorities. While it is an important step forward in giving place-specific context to the issue, the impact of declarations will depend on whether the decision to do so is based on a genuine desire to enact change or a result of political pressure. Pressing ahead with local action to facilitate retrofitting should be seen as part-and-parcel with declaring a state of emergency due to climate change. Local government has a unique role to play in helping achieve national targets for net zero, particularly where retrofit is concerned. As the custodians of place, they are best positioned to translate national ambition into realistic local action plans.

The Green Homes Grant Local Authority Delivery scheme[11] is an example of how national retrofit ambition is being actioned by local government at the level of place, highlighting the importance of councils to on-the-ground delivery of decarbonisation strategy. Beyond such national policy, however, the role that strategic local planning and collaboration can play in embedding energy efficiency in low-viability properties should not be underestimated. This is something that cannot be dictated from Westminster and requires the local state in its entirety to take ownership for delivery. Collaborative working at the subregional level will be particularly important in delivering meaningful results, especially given the complexity and costs involved depend upon on a variety of factors such as type of tenure.

Working collaboratively on retrofit at the local level must extend to skills provision. The connection between our transition to a net zero economy and the skills agenda is already well understood and recognised by government. The Plan for Growth recognises that the net impact of the transition to net zero on local labour markets will depend on their flexibility to match vacancies with required skills. Furthermore, the circumstances of each labour market will vary across the regions of England. The local state is best placed to tailor the provision of needed skills to

11 BEIS (2021) – Green Homes Grant Local Authority Delivery scheme, Phase 2: funding allocated to Local Energy Hubs

school leavers in place. However, key to this will be extending and supporting the capacity for collaboration at the level of the local state. Particularly in developing a shared understanding of the need for bolstering the supply of local skills in low carbon sectors between local further education institutions, local authorities, businesses, industries, and LEPs.

Recommendations: achieving retrofit in harder-to-reach areas

It is vital that local government takes leadership, working alongside core stakeholders of the local state in developing robust frameworks for retrofit. It is equally imperative for those local authorities with the highest levels of low property value to develop frameworks that target the challenge through a prism of affordability and local economic growth. In the context of local government funding cuts which combine with lower wage levels and associated material factors to impact retrofit viability in authorities across many parts of the North, local authorities must use existing strategic powers to work together in developing retrofit frameworks from the bottom up.

In areas with low-viability properties the greatest challenge is with incentivising landlords and homeowners to take up the task of retrofitting their properties. Parallel to this is the second challenge of boosting local economic growth and place prosperity through providing opportunities for high-skilled green jobs as well as boosting local SME involvement in retrofit. Within this context, local authorities in areas with low-viability properties must develop frameworks for retrofit that tie these two elements together.

Recommendations for local government

- In particularly challenging areas, where property values are low and incentives underfunded, neighbouring authorities should work to establish subregional 'one stop shops' as a joint venture sitting independently of each constituent authority.
  - Developing 'one stop shops' to engage with landlords to find suitable methods to facilitate retrofit at pace has been recommended by stakeholders such as the Local Government Association.
  - Through an independent and formal subregional structure, local authorities would also be able to act on retrofitting at an aggregated scale.
  - Setting up one stop shops as joint ventures would allow authorities to collect and analyse aggregated data regarding housing stock requiring retrofit and designing bespoke solutions on how to accomplish this.

  - One stop shops would allow local authorities to better understand the personal circumstances of landlords in the area and better tailor engagement and awareness raising on retrofitting.

- In keeping with the government's skills and further education agenda, as laid out in the Skills for Jobs white paper, **local authorities working collaboratively at a subregional level should develop local retrofit jobs strategies.**
  - Developing robust strategies that detail the local retrofit context around skills and supply chain opportunities would go on to inform the green skills aspect of wider Local Skills Improvement Plans, announced as part of the Skills for Jobs white paper
  - There are a number of tools available for local authorities to use in helping develop these strategies. These tools should be a starting point for neighbouring authorities with the highest proportion of low value properties to develop actionable retrofit frameworks that would entail one stop shops as well as skills and jobs strategies.

Recommendations for central government

- The forthcoming *Heat and Buildings Strategy* will aim to help homeowners make the transition to low carbon heating. In order to properly address the retrofit challenge this paper must:
  - Provide details of a **localised funding mechanism for retrofit** to help authorities in areas with low-viability housing achieve targets.
  - Provide **clearer incentives and long-term clarity on timelines** to ensure retrofitting can be achieved in the private rental sector.
  - The strategy must be **coordinated with the planning reforms** and part of a joined-up approach to the nation's housing stock.
- The Social Housing Decarbonisation Fund Demonstrator is a fund aimed at supporting social landlords in retrofitting social housing at scale.
  - To ensure broad take-up and to begin reaping the benefits of cumulative emissions savings towards the net zero target, **the full £3.8bn of funding pledged should be brought forward and frontloaded**. This would also help deliver cost savings through enabling acting at scale.

Introduction

There is a lot riding for the government on its 'Build Back Better' agenda as an all-encompassing mantra, promising to equally level up the UK and support the transition to a net zero economy. Ambition in meeting the latter is high, with government setting the target to reduce emissions by 78 percent by 2035 compared to 1990 levels as part of its sixth carbon budget. Ahead of COP 26, government departments have been commissioned across Whitehall to inform the cross-government net zero strategy that, amongst other things, will detail plans for decarbonisation across key sectors of the economy.

These announcements, coupled with already published strategies and plans, make for great pronouncements on actualising the journey to attaining net zero status by 2050. Yet, there are key issues that must be gotten right at this stage if the UK is to realise this goal. In the short and medium term, government announcements on retrofit to improve energy efficiency by upgrading EPC ratings to a minimum of C will be the immediate priority. In the private rented sector, BEIS has called for this goal to be reached by 2025 for new tenancies and 2028 for existing ones. Along with this, another priority will be the need to replace inefficient heating and cooling systems that use more than half of a building's energy.

Looking at the varying costs involved in retrofitting building fabric and heating systems, 'Build Back Better' risks remaining an empty slogan if the challenge of retrofitting the existing housing stock in left behind parts of England is not addressed. Particularly given the greater need to improve, renovate, and futureproof what exists and finding effective financial and other support mechanisms to enable property owners to embark on this journey.

Retrofitting, and the prices involved in doing so, remain the same regardless of geography. However, what does not is the value of property. Putting this into perspective, the same energy efficiencies demanded by the transition to a net zero economy, including wall insulations and heat pump fittings, will need to equally be undertaken in a terrace house located in Barking with an average cost of £400,647 as one in Burnley with an average price of £77,293. Given the costs of retrofitting being in the tens of thousands, if the challenge of how to effectively support retrofit properties in low-value areas is not met, a divide risks being created. Especially between private rented and private owned homes, with those living in energy inefficient homes facing the real prospect of deepened fuel poverty.

Overall, a localised approach to tackling the retrofit challenge in left behind areas with low property value is a key way forward. In light of the need for a strong

recovery from COVID-19, this localised approach also provides an occasion to reinvigorate place prosperity and kick start local economic growth. Especially through developing a place specific understanding of the requirement for retrofit and identifying opportunities to upskill and retrain the local labour market to enter this market and emerging low carbon markets that will be a cornerstone of the net zero economy.

Localis
Vox Studios, V.311
1-45 Durham St
London, SE11 5JH

0870 448 1530
info@localis.org.uk

localis.org.uk

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