LOCALIS

Lagging behind

ENERGY EFFICIENCY IN LOW-VIABILITY PROPERTIES

By Zayn Qureshi

About Localis

Who we are

We are a leading, independent think tank that was established in 2001. Our work promotes neo-localist ideas through research, events and commentary, covering a range of local and national domestic policy issues.

Neo-localism

Our research and policy programme is guided by the concept of neo-localism. Neo-localism is about giving places and people more control over the effects of globalisation. It is positive about promoting economic prosperity, but also enhancing other aspects of people's lives such as family and culture. It is not anti-globalisation, but wants to bend the mainstream of social and economic policy so that place is put at the centre of political thinking.

In particular our work is focused on four areas:

- **Decentralising political economy.** Developing and differentiating regional economies and an accompanying devolution of democratic leadership.
- **Empowering local leadership.** Elevating the role and responsibilities of local leaders in shaping and directing their place.
- **Extending local civil capacity.** The mission of the strategic authority as a convener of civil society; from private to charity sector, household to community.
- **Reforming public services.** Ideas to help save the public services and institutions upon which many in society depend.

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We publish research throughout the year, from extensive reports to shorter pamphlets, on a diverse range of policy areas. We run a broad events programme, including roundtable discussions, panel events and an extensive party conference programme. We also run a membership network of local authorities and corporate fellows.

Contents

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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.

CHAPTER ONE

Identifying the scale of the issue

Government action on climate change has encompassed a number of strategies and targets to tackle the growing crisis. In November 2008, the Climate Change Act was passed in parliament, representing the first legally binding climate change mitigation target set by any nation in the world[12].

The Act initially pledged to reduce greenhouse gas emissions by 80 percent by 2050 compared to 1990. This target was superseded in 2019 when the UK committed to a net zero target, which entails ending all emission contributions to global warming by 2050. Pushing to net zero, the government published its 'Ten Point Plan for a Green Industrial Revolution'[13] in November 2020, specifying the need for 'greener buildings' and making the nation's homes more energy efficient.

12 LSE, Grantham Research Institute on Climate Change and the Environment (2020) – What is the 2008 Climate Change Act?

13 Prime Ministers Office, BEIS (2020) – The Ten Point Plan for a Green Industrial Revolution

1.1 Net zero targets and energy efficiency

Measures announced to the end of greener buildings included extending the Green Homes Grant for another year to improve energy efficiency in homes and replace fossil fuel heating. To stimulate investment and manufacturing in the UK, an aim for 600,000 heat pump installations per year by 2028 has been set. It was also announced that there would be a 'strengthen[ing] [of] energy efficiency requirements for private sector landlords' thereby bringing benefit to private renters too. According to government, the policy impacts of its green home finance initiatives could help improve the energy efficiency of 2.8m homes and upgrading 1.5m homes to EPC C standard by 2030[14].

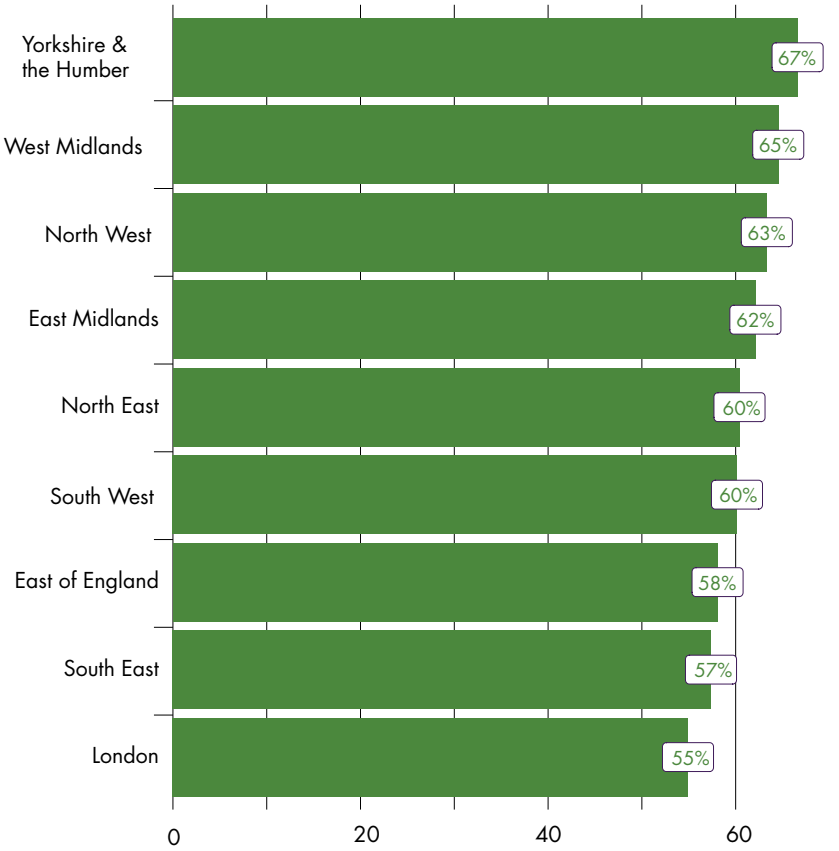
The net zero target is also encompassed within the Plan for Growth[15], standing as one of the three "people's priorities" toward which growth will be directed. It lays out how government will deliver the Ten Point Plan by leveraging private sector investment and supporting up to 250,000 high-skilled jobs. Most recently the government enshrined a new target in law which committed to slashing emissions by 78 percent by 2035[16], with the aim of bringing the UK three-quarters of the way closer to net zero by 2050. Meeting these net zero targets and fully decarbonising will require focusing on improving the energy efficiency in a number of areas, including the nation's housing.

The two main options for improving energy efficiency in homes include constructing new builds that are net zero and retrofitting existing housing stock. Regarding the former, government has announced new energy efficiency standards aimed at all new homes being zero carbon ready by 2025[17]. Existing homes will also be subject to these higher standards, particularly on the requirement for replacement and repairs to be more energy efficient. 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[18]. 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[19]. This exemplifies the scale of the challenge in reaching net zero through retrofitting

14 Prime Ministers Office, BEIS (2020) – The Ten Point Plan for a Green Industrial Revolution
15 HM Treasury (2021) – Building Back Better: our plan for growth
16 BEIS (2021) – UK enshrines new target in law to slash emissions by 78% by 2035
17 MHCLG (2021) – Rigorous new targets for green building revolution
18 Climate Change Committee (2020) – Sixth Carbon Budget
19 BEIS (2020) – The Energy White Paper: Powering our Net Zero Future

the existing housing stock.

Figure 1. Retrofit demand in England's regions
Percentage of Energy Performance Certificates lodged below Grade C, 2011-2021



Source: DLUHC

1.2 The costs and benefits of retrofit

1.2.1 The environmental and social benefits of retrofitting

Domestic energy use accounts for 14 percent of overall UK emissions[20] and 90 percent 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. Achieving the

20 Climate Change Committee (2019) – UK housing: Fit for the future?

carbon savings recommended for the next ten to fifteen years will therefore require a huge roll-out of retrofit programmes that include replacing gas boilers, installing heat pumps, loft insulation, and wall insulation. Encouragingly, in 2018, 85 percent of homes in England had full double glazing, which is an increase of 71 percent from 2008[21]. Furthermore, almost half have had wall insulation installed. However, it has been noted that a lot of the easier measures to enact, that result in lower levels of disruption, have already been achieved. Going forward, measures for deeper retrofitting will be required, entailing higher costs and greater logistical challenges.

The UK housing stock is older on average than that of continental Europe[22], presenting a significant challenge in terms of retrofitting energy efficiency measures. It is against the backdrop of these logistical challenges that government targets for retrofit have been set. Nevertheless, recent analysis highlights how government are failing to meet these targets. 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[23]. 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.

The views of occupants will continue to play a significant role in the success of retrofitting – a challenge in this area includes the readiness of homeowners and landlords to go through the process in the first place. Whatever the benefits of retrofit are in the long term, many people would be concerned with the more immediate and medium-term impacts on their lives. Results from Climate Assembly UK's findings into public perceptions of retrofitting homes showed that, in addition to the costs involved, major concern lay with the scale of disruption they would experience throughout the process[24]. 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.

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 cost of a Band

21 House of Commons Environmental Audit Committee (2021) – Energy Efficiency of Existing Homes

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

23 IPPR (2021) – On the Home Front

24 House of Commons Environmental Audit Committee (2021) – Energy Efficiency of Existing Homes

C rated home are £270 lower than the average Band D and £650 less than the average Band E'[25]. There are also health benefits to be had from improving energy efficiency in homes. Well-insulated and effectively heated homes can combat respiratory and related illnesses. In 2011, the cost of cold and damp homes was estimated to cost the NHS approximately £760m per year[26]. In terms of wider socio-economic benefits, it has been argued that accelerated energy efficiency targets, backed by appropriate public investment, could help tackle rising unemployment through the creation of new green jobs[27]. 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.

1.2.2 The cost of retrofitting

The cost of retrofitting and the investment needed to improve the ratings of all homes to EPC Grade C or above vary. This is in part related to the different components involved. Including, on the one hand, retrofitting the building fabric such as improving wall, window, and loft insulation, and on the other, installing low carbon heating sources such as heat pumps. According to BEIS estimates, the overall figure rests at between £35bn to £65bn across the UK up till 2035[28]. Elsewhere, the Climate Change Committee have estimated that upgrading the energy efficiency of existing properties and installing low carbon heating mechanisms will cost £250bn to 2050. While the Northern House Consortium estimate that on a modest level the cost to retrofit would be an average of £24,300, including £5,000 for installing heat pumps.

The estimates from BEIS would break down to be between £1800 and £3400 per household, taking into account the 19 million households across the UK[29] in need of retrofitting. Significantly, this estimate does not take into consideration the cost of installing heat pumps. Separate analysis[30] carried out for BEIS in 2018 estimates this to range from £2,400 to £27,350 depending on the type and size of the heat pump as well as the property itself. Elsewhere, in 2019 the Climate Change Committee[31]

25 BEIS (2017) – The Clean Growth Strategy: Leading the way for a low carbon future
26 BRE – The cost of poor housing to the NHS
27 House of Commons Environmental Audit Committee (2021) – Energy Efficiency of Existing Homes
28 Parliament.uk - Government response to BEIS Select Committee's recommendations
29 17 million in England
30 DELTA (2018) – The Cost of Installing Heating Measures in Domestic Properties
31 Currie & Brown (2019) – A report for the Committee on Climate Change: The costs and benefits of tighter standards for new buildings

has estimated the cost of retrofitting a heat pump to be approximately £9,000 and recent analysis by Greenpeace[32] has assumed the cost to start at £11,855.

Adding to this, evidence presented to the Environmental Audit Committee suggests that in the North of England, particularly in Leeds, the costs involved, and the investment required to upgrade all homes to EPC level high C, including the installation of heat pumps, is significantly higher at £23,900[33]. While an affordability limit of £10,000 is currently under consultation at BEIS, the Committee express concern that the homes forming part of their estimates would not meet government affordability criteria. Further stating that '[there are] a significant number of households who will be left behind without energy efficient homes'[34]. This has led to the conclusion that the overall cost to meet net zero through retrofitting could be a lot higher than government predictions.

1.3 Challenges of geography and tenure

While private capital will deliver most of the investment for energy efficiency improvements for financially strong households, public capital and government investment will play a significant role in enabling retrofitting for those on low income or experiencing fuel poverty[35]. Therefore, it will be extremely important to establish how the government plans to support the funding of the vast retrofit challenge that lays 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.

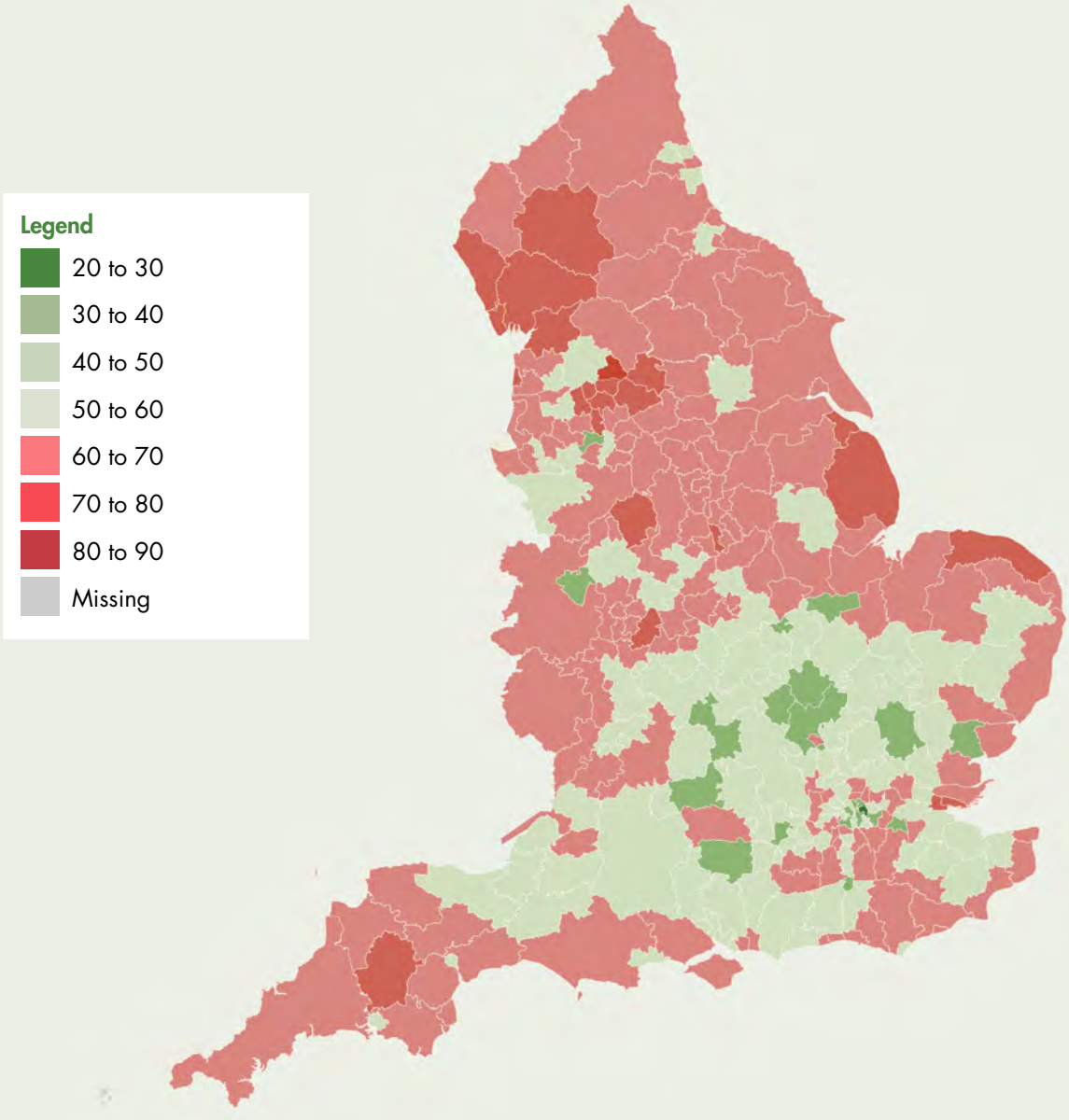
32 Greenpeace (2021) – Green homes revolution could create 138,000 new jobs and inject £9.8bn into economy, report finds

33 House of Commons Environmental Audit Committee (2021) – Energy Efficiency of Existing Homes

34 House of Commons Environmental Audit Committee (2021) – Energy Efficiency of Existing Homes

35 Green Finance Institute (2020) – Financing energy efficient buildings: the path to retrofit at scale

Figure 2: Percentage of EPC lodgements rated C-F



Source: MHCLG

1.3.1 Retrofitting in the private rental sector

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 set at EPC Grade C by 2025 for new tenancies and 2028 for all tenancies. Already this has caused a backlash amongst landlords who are claiming that these government ambitions will fail to materialise unless backed by realistic financial and practical support[36]. 94 percent of private landlords are individuals, with more than half owning just one property. The private rented sector experiences the highest incidence of fuel poverty in England, with 900,000 households experiencing some form of it.

In profiling the market for the decarbonisation of private rented homes, the Green Finance Institute[37] highlight several commercial incentives for landlords to meet Minimum Energy Efficiency Standards[38] and ensure rented homes meet a minimum EPC Grade E. Over the years this has included the Renewable Heat Incentive, Green Buy to Let Mortgages and Bridge to Let Loans. At the same time, a number of barriers to retrofit exist that stand in the way of landlords tackling the challenge on their own.

In terms of financial barriers, 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. Adding to this are the high upfront costs, which significantly impacts those landlords owning properties with lower value. 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. Taken together, the GFI note that the landlord community require long term clarity on the technologies and timelines for energy efficiency improvements[39]. This is in addition to long term and sustainable financial support.

36 Landlord Zone (2021) – BREAKING: Upgrading rented homes to EPC band C by 2030 is 'pipedream', warn landlords

37 Green Finance Institute (2020) – Financing energy efficient buildings: the path to retrofit at scale

38 BEIS (2020) – Domestic private rented property: minimum energy efficiency standard – landlord guidance

39 Green Finance Institute (2020) – Financing energy efficient buildings: the path to retrofit at scale

1.3.2 Regional variation in viability

Figure 3a: Median house price (£)

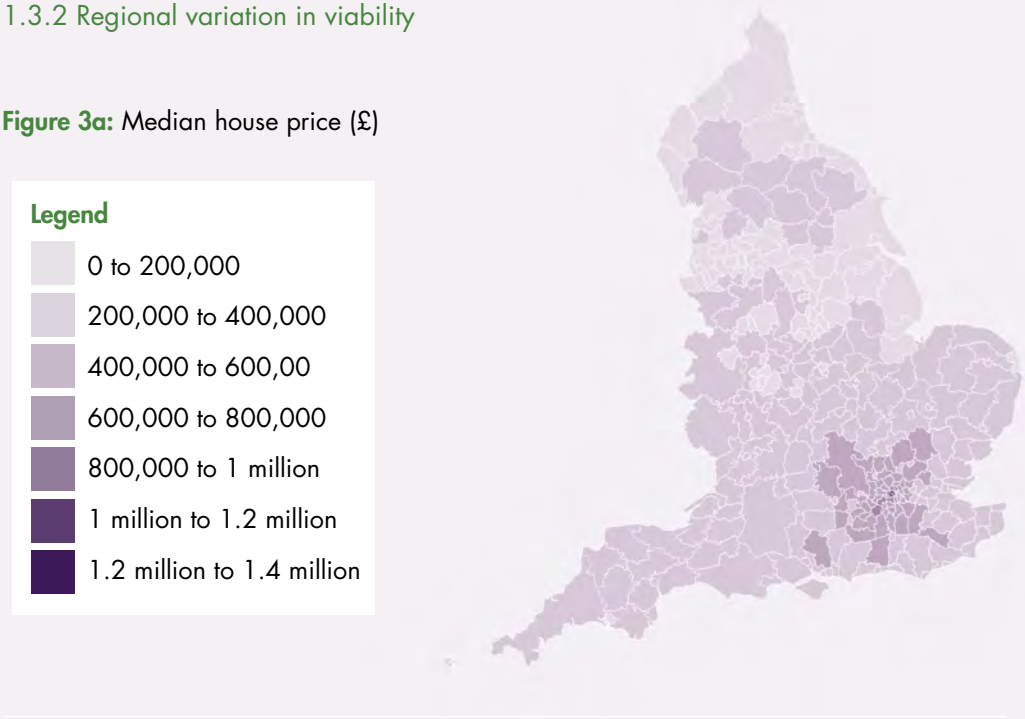
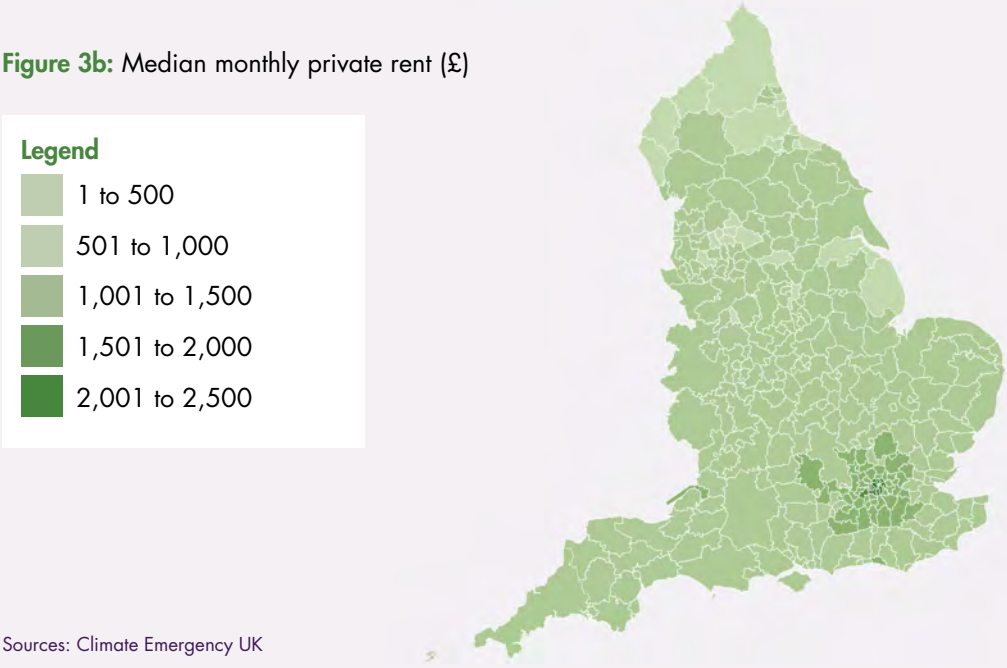


Figure 3b: Median monthly private rent (£)



Sources: Climate Emergency UK

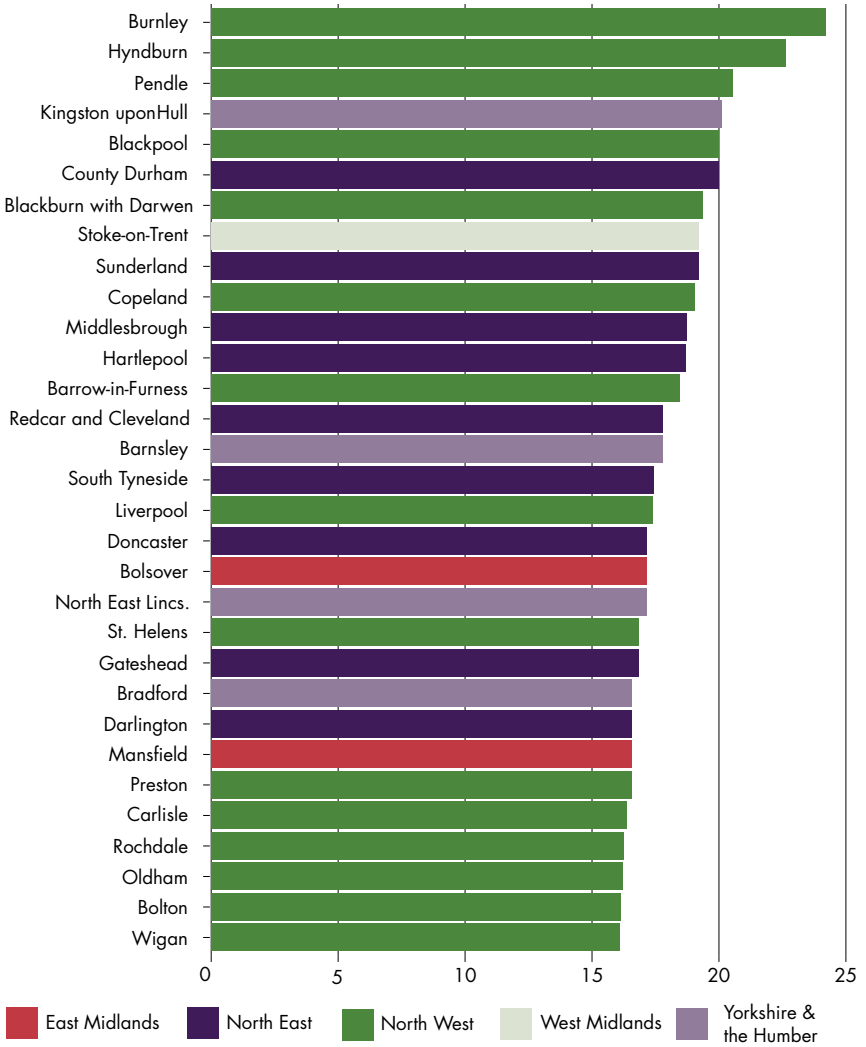
This issue of regional variability in house prices and dwelling stock warrants serious consideration. Analysis undertaken by Localis shows a vast difference between areas that require retrofitting and the local area's median house price. For example, in Burnley, Lancashire 78 percent of lodgements placed over the last 10 years require retrofitting to EPC C. However, the median house price is £99,225. If the cost of retrofitting is to be £24,000[40], this represents almost 25 percent of the overall value of the property itself. At the other end of the spectrum, in Kensington and Chelsea 57 percent of lodgements placed over the last 10 years require retrofitting to EPC C. The median house price is £1,317,500, meaning that the cost of retrofitting represents 1.8 percent of the overall property value.

This stark inequity in the cost of reaching net zero, and how it impacts individuals, threatens to create a divide between those who can afford to act on the climate agenda through retrofitting and those who cannot. It risks relegating retrofitting to being for those who can afford it, potentially alienating vast swathes of homeowners and landlords who are essential to the success of retrofitting and reaching net zero targets. Compounding this, 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.

The situation 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 as a result of continued reliance on inefficient methods of gas and fossil fuel heating.

40 Based on estimates presented above

Figure 4. Retrofit cost as percentage of average house price
Top 10% of local authority districts



Source: MHCLG/Valuations Office Agency, Assuming retrofit cost of £24,000

1.4 Fuel poverty

Fuel poverty is closely linked to energy efficiency, with the likelihood of falling into poverty increasing depending on the efficiency of one's home. As of 2021, fuel

poverty in England is measured using the Low-Income Low Energy Efficiency (LILEE) indicator. This considers a household to be fuel poor if it lives in a property with an energy efficiency rating below band C, and its disposable income is below the poverty line[41]. For this reason, the Climate Change Committee have argued that through addressing energy efficiency, fuel poverty can also be addressed in a manner where 'decarbonisation takes places as part of a "just transition"'[42].

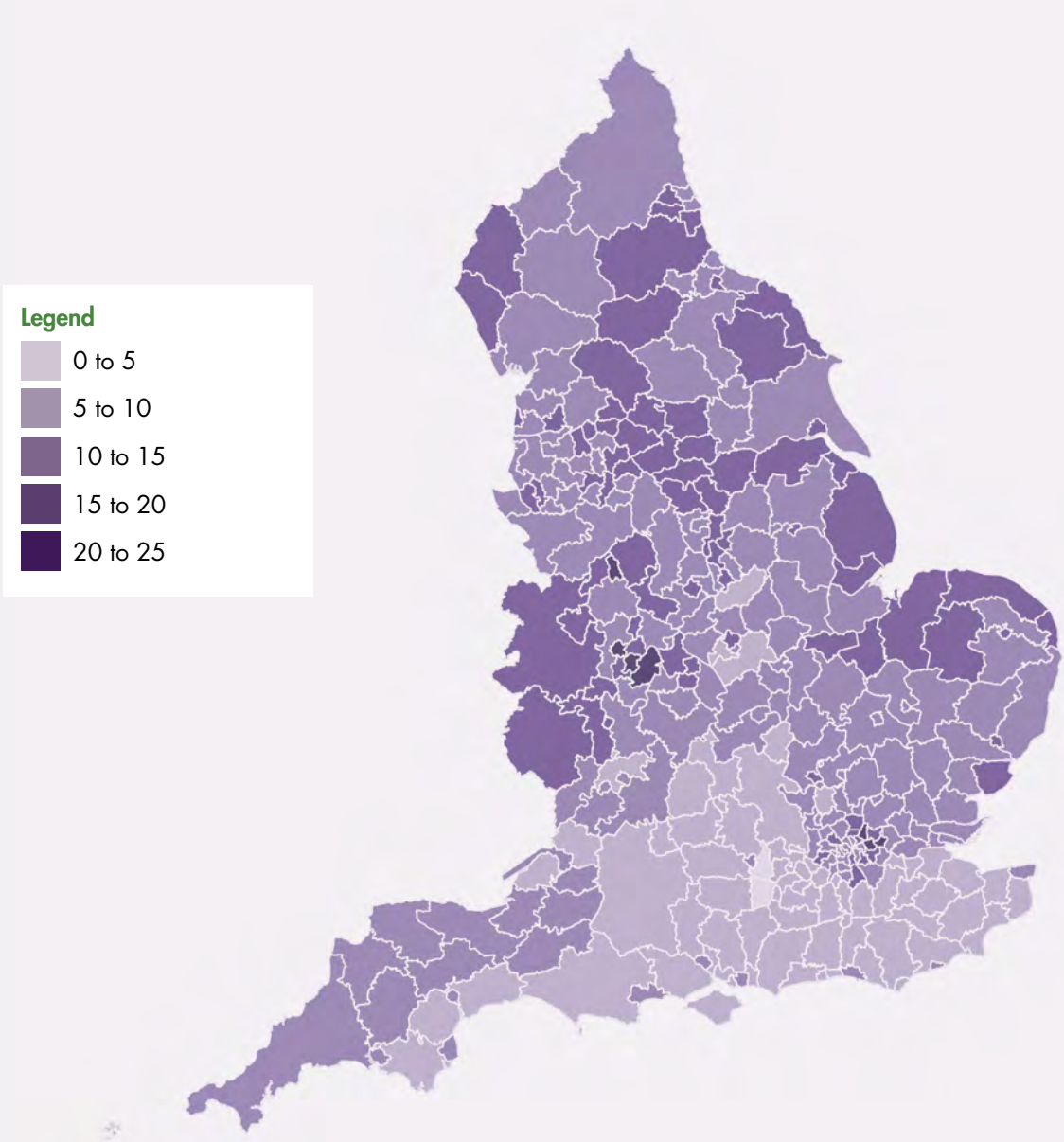
As of 2019, there are approximately 3.2m people classified as fuel poor. Improving energy efficiency in homes across England will continue to benefit them and potentially lift them out of fuel poverty. While 13.4 percent of households are fuel poor, it has been noted that over the past ten years fuel poverty rates have declined from 22 percent in 2010[43].

In early 2021, the government released their fuel poverty strategy[44]. It sets out the government's approach to meeting its fuel poverty target of ensuring 'that as many fuel poor homes … achieve a minimum energy efficiency rating of Band C by 2030'. As a part of this, it sets out a number of plans to achieve the target. These include directing £10bn in investment in energy efficiency in the Private Rented Sector, expand the Energy Company Obligation (ECO), and invest a further £60m to retrofit social housing amongst other initiatives.

The government view improving energy efficiency of homes in line with commitments made within the Clean Growth Strategy, the Energy White Paper, and elsewhere as the way forward in further alleviating fuel poverty across the country. There is a recognition that along with reducing the cost of bills for households, retrofitting fuel poor homes will continue to reduce carbon emissions. While many of the initiatives sound promising, having a place-based approach to tackling the issue would better target those areas in need of help the most.

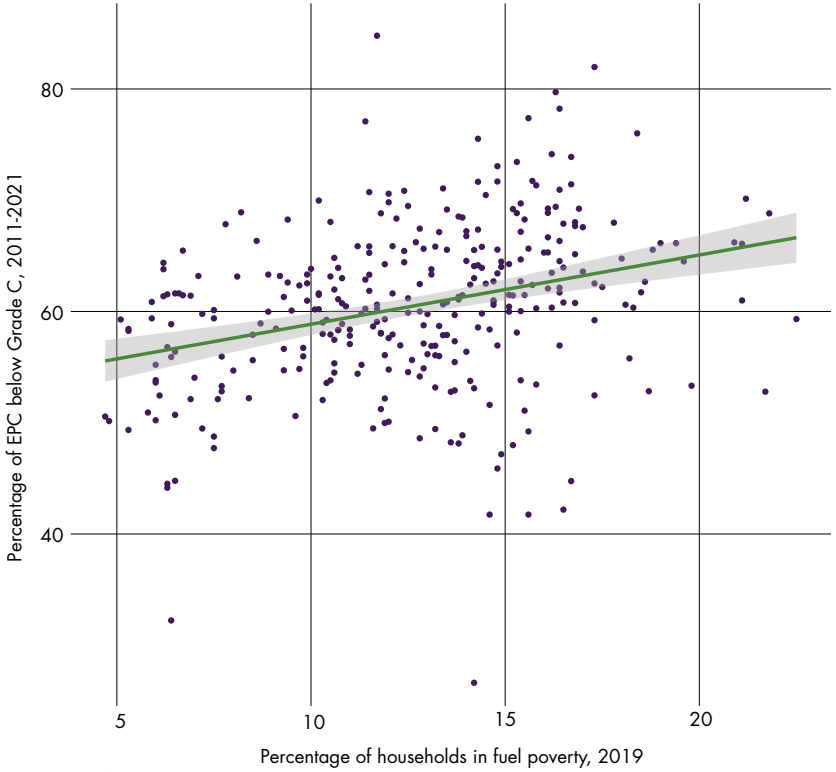
41 BEIS (2021) – Annual fuel poverty statistics in England, 2021 (2019 data)
42 Hinson and Bolton (2021) – House of Commons Library: Fuel Poverty
43 Hinson and Bolton (2021) – House of Commons Library: Fuel Poverty
44 BEIS (2021) – Sustainable Warmth: Protecting Vulnerable Households in England

Figure 5: Percentage of households in fuel poverty



Source: BEIS

Figure 6. Retrofit demand and fuel poverty



Source: DLUHC/BEIS

CHAPTER TWO

Retrofitting: the policy landscape

Central government's policy direction regarding decarbonising homes has been set by a number of strategies and plans, some of which are yet to be published. The current Johnson administration's overall intention and direction has been set by the Ten Point Plan[45] detailing the core pillars of a Green Industrial Revolution and the £12bn in government investment as well as 250,000 jobs expected to come as a result by 2030.

However, the scrapping of the Green Homes Grant, the only major green stimulus policy yet announced by the government[46], and with it the expected tens of thousands of green jobs, is a serious blow and leaves the UK without a plan[47] for tackling one of the biggest sources of greenhouse gas emissions. Regulatory interventions, economic incentives, and upskilling will still be required to ensure that homes are decarbonised in a timely way. However, the prime minister's commitment to a "taskforce net zero" is promising in ensuring the simultaneous transformation of homes, upgrading of the power system, and electrification of transport.

45 Prime Ministers Office, BEIS (2020) – The Ten Point Plan for a Green Industrial Revolution
46 The Guardian (2020) – Environmental experts dismayed by details of Johnson's 'New Deal'
47 The Guardian (2021) – Boris Johnson failing on UK plan to reach net zero, says MPs

2.1 Evaluating the current approach

The Plan for Growth[48] outlines plans for bringing forward 600,000 heat pump installations per year by 2028 whilst simultaneously creating an incentive framework for low carbon heating. But concern has been expressed that it lacks clear direction or methods to measure its success, with many ambitious but disparate policies. The plan does not instil hope for the long-term consistency and clarity that is necessary to drive change[49]. Building on the Ten Point Plan, the Energy White Paper[50] sets out the government's vision of how the transition to clean energy by 2050 is to occur. Both work toward meeting the sixth Carbon Budget.

There are signals in the Energy White Paper that government will seek primary powers to create a long-term regulatory framework to improve the energy performance of homes. On the challenge of upgrading all homes to at least EPC Grade C by 2035, the white paper acknowledges the requirement for £100bn to be mobilised across homes, businesses, and the public sector over the next decade alone. The paper also recognises the need for increasing the size of the market for green finance products, indicating that this investment "must come principally from businesses and homeowners".

The Energy Performance Certificates Action Plan[51], launched in September 2020, aims to develop an EPC system that produces accurate, reliable, and trusted certificates. According to the white paper, the Action Plan will support policies that strengthen regulatory compliance and ensure that the data infrastructure of EPCs is fit for purpose. Much of the detail is yet to be filled in but the clear targets in the paper are welcome and demonstrate a recognition of the role buildings play in carbon emissions[52]. Combined with a legally binding commitment to net-zero and increasing climate litigation against governments, there should be greater assurance and certainty in the fulfilment of these targets.

Other strategies are expected to be released in due course, including the cross-government Net Zero Strategy ahead of COP26, perhaps the most important single document the government will publish this year[53]. It is expected to detail plans for decarbonisation across key sectors of the economy and the required

48 HM Treasury (2021) – Building Back Better: our plan for growth
49 Financial Times (2021) – MPs criticise UK government plan for economic recovery
50 BEIS (2020) – Energy white paper: Powering our net zero future
51 BEIS, MHCLG (2020) – Energy Performance Certificates for buildings: Action Plan
52 Clyde&Co (2021) – UK Energy White Paper Review: Buildings
53 Tony Blair Institute for Global Change (2021) – The UK's Net Zero Strategy: The 11 questions it must answer

pace of this transition means that the strategy must be a clear plan, with a focus on delivery. Alongside this, the Heat and Buildings Strategy will sit alongside existing decarbonisation strategies, aiming to help homeowners make the transition to low carbon heating. Expected to act as a roadmap to execute the Ten Point Plan, it has been speculated[54][55] that the strategy will include targets for how to increase heat pump installations, an end date for the banning of gas and oil boilers, as well as bringing in new incentives to enable people to increase energy efficiency in their homes. Essentially making it more affordable for homeowners. Many questions surrounding the content of this strategy remain but whatever happens, it will be instrumental as the first opportunity for the government to start controlling the narrative on net zero homes.

2.1.3 Additional policy levers

Aside from the flagship strategies, there are existing policy levers available to garner action towards decarbonising the housing stock and improving energy efficiency. The Energy Company Obligations (ECO)[56], extended to 2026, is an obligation on the largest energy suppliers to help low income or vulnerable households install energy improvements including heating improvements and insulation. The measure is designed to help people out of fuel poverty; however, it has often proved contentious. The Energy Audit Committee have raised concern over the regressive nature of the ECO policy – particularly given that it is funded by energy bill payers, meaning that the poorest households pay the most to benefit from the scheme. Additionally, recently announced plans to use the ECO scheme to install 20,000 new gas boilers has been met with fierce criticism[57].

The Social Housing Decarbonisation Fund Demonstrator (SHDF Demonstrator) is a fund aimed at supporting social landlords in retrofitting social housing at scale, functioning as a competitive bid open to applications from local authorities. It has been recommended that the full £3.8bn of funding pledged should be brought forward to deliver cost-savings at scale. Moreover, it should be frontloaded in order to reap benefits of cumulative emission savings toward net zero, and housing associations should lead bids to ensure funding is used effectively.

The Green Homes Grant was aimed at allowing homeowners to make energy improvements to their own homes. Applications for the grant closed early in

54 Greenmatch (2021) – Heat and Buildings Strategy in 2021- Decarbonising the future of heating

55 Homebuilding & Renovating (2021) – Heat and Buildings Strategy due this month: what can homeowners expect?

56 Simple Energy Advice - Energy Company Obligation

57 The Guardian (2021) – Experts condemn plan to install thousands of gas boilers across UK

March 2021, but those who applied for their voucher before the cut off date are still eligible for help. The grant is valued at £2bn and is split between the £1.5bn voucher scheme and £500m Local Authority Delivery[58] scheme. The GHG voucher covers two-thirds of the cost of a chosen improvement with a maximum contribution of £5,000. The voucher can be used for insulation, low carbon heating, draught proofing, and heating insulation. The decision to close the scheme early caused a lot of frustration for landlords[59] hoping to use it to improve the efficiency of their homes. It has been stated that closing the scheme has slashed landlords ability to make efficiency improvements in their homes. Elsewhere it has been claimed[60] that the scheme was 'botched' due to government mishandling and failure to take into the account industry perspective.

2.2 Local government policy

2.2.1 Local delivery of net-zero strategies

Local government has a unique role to play in helping achieve national targets for net zero. As the custodians of place, they are best positioned to translate national ambition into realistic local action plans. Councils are often landowners and are in many cases responsible for a significant amount of building stock, including commercial buildings. This ought to be beneficial in developing a localised solution to the vast challenge of retrofitting and upgrading energy efficiency in the nations building stock.

Recognising the unique potential of councils in combatting the climate crisis, the Local Government Association (LGA) have set out their vision for a local path to net zero[61]. Through their role as place shapers, purchasers, problem solvers, asset owners, and convenors it is argued that councils are fundamental to 'transitioning our places and empowering our communities … to a net zero future'. As the LGA state 'community capacity and cohesion issues will arise in the transition to net zero and it is only at the local level that these can be addressed'[62].

The Green Homes Grant Local Authority Delivery scheme[63] is an example of how national retrofit ambition is being actioned by local government at the level of

58 BEIS (2021) – Green Homes Grant Local Authority Delivery scheme, Phase 2: funding allocated to Local Energy Hubs
59 Landlord Zone (2021) – End to Green Homes Grant scheme is 'fiasco' says leading landlord
60 The Guardian (2021) – Audit office blames UK government for botched £1.5bn green homes scheme
61 LGA – A local path to net zero
62 LGA – A local path to net zero: our offer to government
63 BEIS (2021) – Green Homes Grant Local Authority Delivery scheme, Phase 2: funding allocated to Local Energy Hubs

place, highlighting the importance of councils to on-the-ground delivery of decarbonisation strategy. The scheme is aimed at raising the efficiency of low income and low EPC rated homes, specifically those below Band E. It is now in its second phase, with the £300m funding of this cycle made available through Local Energy Hubs who work with local authorities to target funding for local households most in need. Importantly, eligible homeowners can receive up to £10,000 while private landlords can apply to receive £5000.

The role that strategic planning at the local level can play in embedding energy efficiency in low-viability properties should not be underestimated. This is something recognised by prominent stakeholders including the RTPI who have called for Green Growth Boards[64] aimed at delivering joined up strategies on the local and regional level for climate action, housing provision, and infrastructure amongst other things. Strategic planning and joint working can help address closely aligned agendas to retrofitting such as clean growth skills provision and boosting local labour markets. This is something that cannot be dictated from Westminster and requires the local state in its entirety to take ownership in delivering on.

Collaborative working at the subregional level will be particularly important in delivering meaningful results, especially given the complexity and costs involved depending on a variety of factors such as type of tenure. The importance of robust networks for local governance and collaboration is set to only increase as the Government have signalled their intent[65] to fund a new Heat Network Transformation Programme of £122m and implement local authority zoning by 2025.

2.2.2 Climate emergencies

There has been a significant amount of coverage in the past couple of years on the declaration of climate emergencies by local authorities. This is something that has been occurring with increased frequency and should ideally help to drive forward local action in tackling the climate crisis, particularly in significant areas such as domestic retrofit. As of February 2021, 74 percent of all local authorities and combined authorities have declared one[66].

It has been argued that while declaring a climate emergency on the local level has the benefit of applying pressure on national governments to take the climate crisis

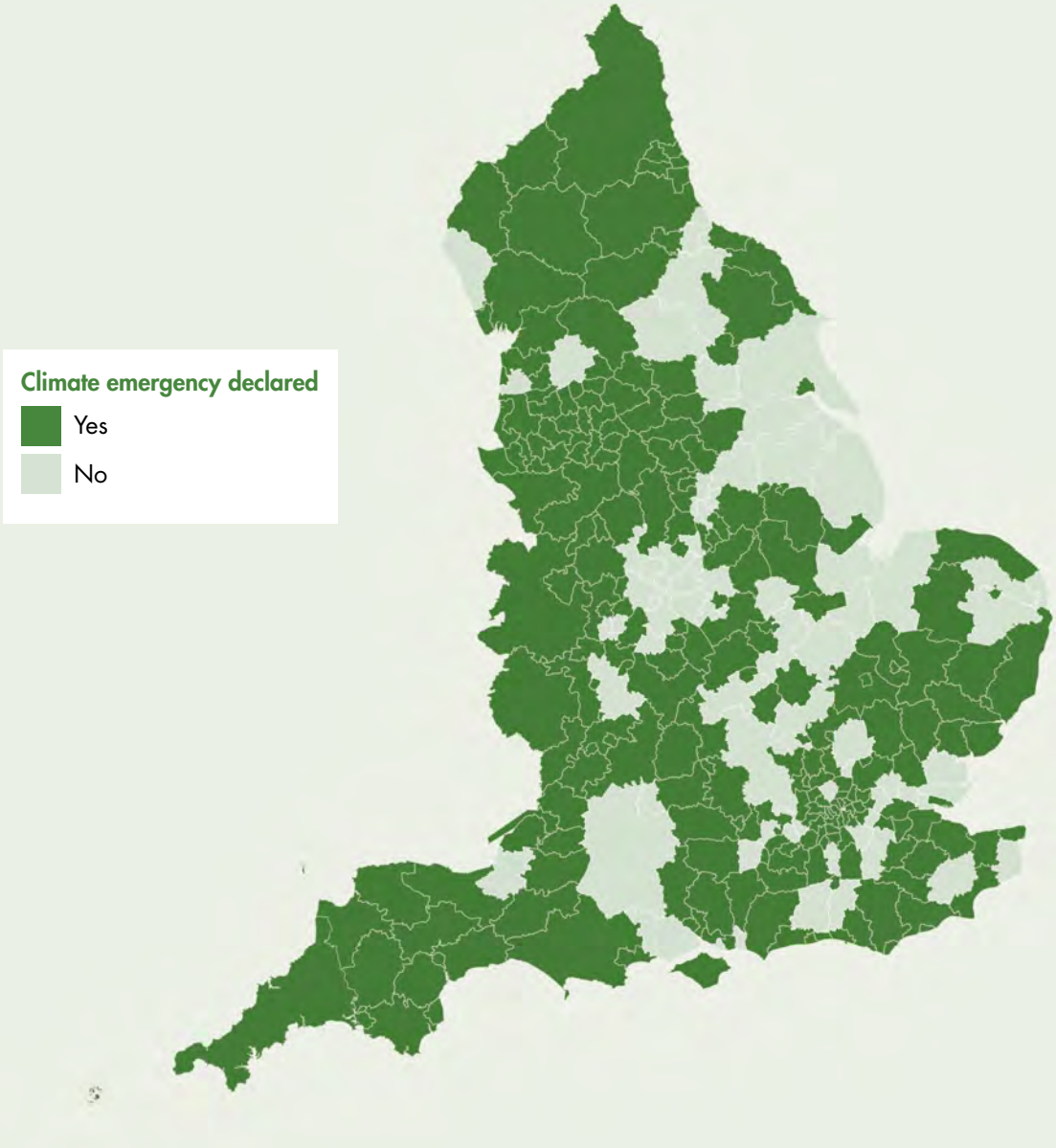
64 RTPI (2020) – RTPI calls for Green Growth Boards to oversee planning reforms
65 Adcock & Hinson (2021) – House of Commons Library: District heat networks
66 Climate Emergency UK (2021) – List of councils who have declared a climate emergency

more seriously, the subsequent effect of these declarations has led to a mixed bag of results[67]. 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. Looking at an international example, Miami[68] has been highlighted as a case of the latter, where no actionable plans have formulated following its declaration.

In the context of English local authorities, by the end of 2020, only 62 percent of authorities had followed up their declaration with updated climate action plans. Reasons for this have been cited[69] as including a lack of or poor availability of local data on council level emissions and their sources, as well as platforms for best practice and knowledge sharing still being relatively new. This is in addition to wider challenges facing local government such as funding capacity problems and complexities arising in areas like local transport and housing.

67 The World Mind (2021) – The effectiveness of declaring a climate emergency
68 The World Mind (2021) – The effectiveness of declaring a climate emergency
69 PCAN (2021) – Trends in local climate action in the UK

Figure 7: Climate emergencies declared in England's districts



Source: Climate Emergency UK

In light of the significant amount of authorities who have declared an emergency, it has been announced[70] that Climate Emergency UK is in the process of creating an online database of UK wide climate and ecological emergency declarations that is expected to go live in January 2022. The aim behind this initiative is to develop a credible league table that will ascertain the tangible steps and actions being taken following the decision to make a declaration.

Case study: Bolton Council

Bolton Council[71] is one of those who have used a declaration of climate emergency as a way to galvanise action around retrofit. The council's Private Housing Assistance Policy is a leading example of a local authority working at pace to meet its climate emergency targets as well as retrofit needs. The policy includes a Better Behaving Boiler grant programme that provides grants which help replace boilers for eligible households. This is being done alongside many other local schemes and within the context of its wider housing strategy that acknowledges challenges to local decarbonisation while equally improving the health and wellbeing of residents.

According to the analysis carried out by Localis, Bolton ranks amongst the areas facing the biggest risk of being left behind by current retrofit policies and schemes. 66 percent of lodgements placed over the last ten years are in need of retrofitting, while average house prices are £148,796. Equally, because of the policy levers on the local level and the proactiveness of the council, it ranks as one of the councils that is leading the way nationally on domestic retrofit. This is indicative of the power and innovative potential of local government in facing the challenge, and the need for joint working together on the central and local level to meet retrofit targets.

70 LGC (2021) – League table launched to rank effectiveness of climate plans
71 The Bolton News (2019) – Bolton Council declare climate emergency

CHAPTER THREE

Local labour markets and place prosperity

The current state of the skills system coupled with the evolving needs of the national economy has created a skills mismatch. Localis has previously highlighted[72] that not only will this result in stunted economic growth, but will impact 'left behind' areas, defined by low levels of social mobility and skills, the most.

The vast challenge of retrofitting and improving the energy efficiency of almost 20 million homes across the UK must therefore be seen as an opportunity to train a new generation of workers who are equipped with the skills needed for a net zero economy.

72 Localis (2021) – A plan for local growth: A localist analysis of the UK government's plan for growth

3.1 Locally-led solutions to the skills mismatch

The interlink between our transition to a net zero economy and the skills agenda is already well understood and recognised by government. The Plan for Growth acknowledges how the UK skills system lags behind internationally on basic adult skills. This is something that will be compounded by the transition to net zero unless active steps are taken to incentivise people to train for green jobs. The plan 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.

Accordingly, targeted measures for place are needed that reflect the unique circumstance of localities. However, steps taken to address the mismatch, as laid out in the Plan for Growth and Skills for Jobs, largely miss a local lens. This is particularly unfortunate given the government's recognition that a difference in skills levels is core to why there is regional variation in terms of economic output and wages. As a result, in order to build future-proof labour markets that are ready for new economic needs, a holistic understanding of the extent of skills and training requirements in key emerging low carbon industries such as retrofitting needs to be had at the local level. With such an understanding, the local state would be better able to direct green economic growth suited for local circumstance resulting in overall place prosperity.

The local state is best placed to tailor the provision of needed skills to 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. For example, according to Localis analysis, Blackpool is an area that faces a significant challenge around retrofitting privately owned and rented homes. 80 percent of lodgements placed over the last 10 years require retrofitting. Equally, the city has faced one of the highest rates of unemployment in the UK, which has been made worse by the pandemic[73]. Here, there is vast potential for the local state to lead in providing re-training opportunities in retrofit tailored to match the challenge while helping people back into employment. Achieving this requires a long-term strategy, cross-sectoral and multi-institutional coordination and, crucially, capacity funding which recognises the key role of the local state.

Understanding the potential of local government in creating opportunities for

73 The Guardian (2020) – Hull and Blackpool have highest jobless rates in UK

green skills and jobs in their areas, the LGA have launched the 'Action Learning Sets: housing retrofit skills' initiative[74]. Its aim is to provide local authorities with the support needed in creating housing retrofit skills and jobs and is being led in partnership with key stakeholders including Sustainability West Midlands, Sustainable Housing Action Partnership, and Contented and Low Carbon Homes. The initiative will run from November 2021 to February 2022 and will bring together one group of local government housing, climate change, and economic officers from across the country as well as another mixed group of members to share experiences and inform practice and policy development in building the skills and jobs capacity needed for retrofit on the local level.

3.2 Green jobs

Continued investment in the skills and green jobs component of the transition to net zero, as well as allowing the local state to lead in its provision, will be key to helping hard to reach properties retrofit. Across the UK, it has been estimated that 200,000 jobs could be created[75] in the energy efficiency and retrofit sector by 2030 given the current demand. Other estimates suggest that close to 450,000 jobs could be created[76] across the property and construction sectors with adequate government funding.

Importantly, according to the latter estimates, over 50,300 jobs could be created in the North West and 42,900 in the East of England. Again, directing this at the local level can provide a key opportunity to tackle the high levels of unemployment across the country brought about as a result of the pandemic. This is particularly true for those areas identified by Localis as facing significant challenges relating to retrofit. For example, Bradford has experienced a significant impact on its labour market during the pandemic, with claimant counts rising by 3.8 percent[77] from 5.2 percent in March 2020 to 8.9 percent as of August 2021. Equally, its retrofit challenge is significant, with 76 percent of lodgements placed in the last 10 years requiring retrofitting.

There is an urgent need for green jobs created through retrofit demand to be targeted at those who have lost their jobs as a result of the pandemic, especially as a lot of job losses occurred in low-income regions[78]. On a wider level, the

74 LGA (2021) – ALS: housing retrofit skills

75 i news (2021) – Massive retrofitting of UK homes and buildings would create 200,000 green jobs, government told

76 Edie (2020) – Green recovery: 'Retrofit revolution' could create half a million UK jobs

77 Centre for Cities (2021) – UK unemployment tracker

78 BBC News (2020) – Coronavirus job losses may deepen regional inequality – Labour

government has been highlighting the potential that the transition to net zero can have for job creation in low carbon industries. The Ten Point Plan was developed in the context of mobilising £12bn in government and three times this amount in private investment to support the creation of 250,000 green jobs by 2030.

To actualise this, the Green Jobs Taskforce[79] was set up with the intention of working across government, businesses, skill providers, and related stakeholders to develop a job plan for the transition to net zero. The report, published in July 2021, highlights the need to develop a holistic view of the green jobs and skills challenge. The three areas of focus for the success of the green jobs revolution include driving investment to support their growth, building pathways to transition into green careers, and ensuring a just transition for people employed in the high carbon economy.

The taskforce prioritises the retrofit sector where change is required to meet net zero targets. It is expected to grow in the short to medium term with a pressing need to recruit and train as many people as possible to meet demand. Specifically, this will require 12,000 workers to be trained every year over the next four years and 30,000 a year from 2025-30. Additionally, the taskforce calls on government to continue in its allocation of strategic development funding in order to help local areas expand their provision of green skills through close collaboration with FE colleges and other skill providers. Central to the success of this will be ensuring local FE colleges are able to act as regional hubs of expertise on net zero related skills with a focus on upskilling and retraining in line with the needs of the local labour market.

3.3 The role of the housing industry

Stakeholders in the housebuilding and related sectors also have a significant role to play in meeting the retrofit challenge, especially in those areas at risk of being left behind. Government-backed schemes and incentives for retrofit also provide opportunity for the local economy to engage in and grow from the creation of green local supply chains and green jobs that can lead to long lasting place prosperity. For this to succeed, a localist approach capable of accounting for place-based circumstances and nuances is necessary.

Recognising the unique role of the sector, RICS released a net zero position paper that explored retrofitting to decarbonise the existing housing stock[80]. The paper highlights the centrality of the surveying profession and wider housing industry

79 BEIS (2021) – Green Jobs Taskforce

80 RICS (2020) - Retrofitting to decarbonise UK existing housing stock: RICS net zero policy position paper

in achieving government retrofit targets. In advancing this further, RICS called for government to work more closely with sector stakeholders to publish a defined road map to achieving the retrofit targets within all existing housing stock.

Regarding the local labour markets, it has been recommended that government must support the industry in addressing the skills gap by making it mandatory for all construction related apprenticeships and T-levels to assess the apprentices understanding of sustainability and the mitigation of environmental impacts in their work. Elsewhere, the paper notes that a 5% VAT rate for home improvements would act as a welcome boost to SMEs within the construction sector.

The role of the housing industry, particularly in construction and building, will require clear and consistent government policy to work with. The absence of such guidance, coupled with low demand from houseowners and a lack of skills, has been cited[81] as a major barrier in effectively reaching retrofit targets. Therefore, a central ask of the industry and sector stakeholders is for the Government to work with them in creating a long-term strategy for retrofit that they can deliver[82].

This has been led by the Construction Leadership Council, who have set out a strategy for effective retrofitting that would potentially save households more than £400 a year on their bills and alleviate the plight of those suffering from fuel poverty[83]. The long-term strategy proposed by the CLC would require a holistic approach, with policies including green mortgages, reduced VAT on home improvement works, and crucially loans to landlords to improve their properties.

81 Connected Places Catapult (2021) – Tackling the housing deep retrofit challenge
82 CLC (2021) – Greening our existing homes: National retrofit strategy
83 The Guardian (2021) – Retrofitting leaky homes would cost £5bn over next four years, UK ministers told

CHAPTER FOUR

Achieving retrofit in harder-to-reach areas

To meet the vast retrofit challenge on the local level, multiple stakeholders have been advocating for how local authorities can drive a home retrofit revolution[84]. In the absence of a localised and targeted approach to the issue, the government are at risk of falling behind on its ambitious target to retrofit the nation's housing stock by 2035. This will most severely impact 'left behind' areas with the highest levels of low property value that are hard to reach. Thereby imperilling the wider objective of levelling up the UK.

For this reason, it is vital that local government assumes 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.

84 LGC (2021) – Jo Wheeler: Local authorities can drive a home retrofit revolution

In the context of local government funding cuts that have impacted authorities across many parts of the North, it is especially important that local authorities use existing strategic powers to work together on developing retrofit frameworks from the bottom up. Working at the subregional level will allow for a clearer picture of the aggregated requirements for retrofitting housing stock, including how to incentivise landlords and use the existing potential of the local labour market. Having such a framework will position local authorities at risk of lagging behind to understand the steps they can currently take to act at pace, whilst also highlighting where targeted government intervention is needed most.

4.1 Pooling resources for retrofit

The areas identified by Localis as facing particular challenges from retrofitting face the double-edged sword of having to retrofit whilst at the same time ensuring their local labour markets recover from significant levels of unemployment endured during the pandemic and that they are trained with the skills needed for a net zero economy.

Therefore, retrofit frameworks developed in these areas will have to address how to tackle both at the same time. Ensuring landlords have a clear understanding of the need and benefit of retrofit, as well as the sustainable financing options available, whilst also delivering on much-needed green jobs to pump start local economic growth and place prosperity.

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.

Neighbouring authorities who have declared climate emergencies should work on the subregional level and pool their strategic planning powers create ‘one stop shops’ at the subregional level.

4.1.1 ‘One stop shops’ at the subregional level

Councils should develop ‘one stop shops’ to engage with landlords to find suitable methods to facilitate retrofit at pace. They should act to provide homeowners with all the information and services needed to implement retrofit projects in one place. Working together, local authorities should assume responsibility in coordinating to bring related stakeholders together – including retrofit service providers and

homeowners. A key focus in developing one stop shops must be in understanding how to financially support landlords taking on retrofit projects.

Recognising the varying socio-economic and fiscal circumstances of each local authority area, one stop shops should be developed on a model that is appropriate for each subregional context. Innovate[85] has set out several business models through which to operate them. These include shops acting in a facilitatory role, where they raise awareness of the benefits of retrofit, a coordination role, where they coordinate existing suppliers with homeowners, or an all-inclusive role where they offer full renovation packages to homeowners.

Retrofit Works are a UK-based organisation already working with local authorities to provide one stop shop services. Focusing on technical support, they advise on whole house retrofit plans that are overseen by a retrofit coordinator from start to finish. Additionally, they operate as an all-inclusive one stop shop, which means that they provide full retrofit packages. Under this model, a benefit for homeowners who are on low incomes is that the one stop shop may provide financial products or assistance to fund the work.

As this report has shown, the challenge for retrofit varies greatly across the country, with local authorities in the North and Midlands in particular facing multiple factors which complicate the process. In such areas, neighbouring authorities should work to establish one stop shops as a joint venture, with the shop sitting independently of each constituent authority. This would have the benefit of providing a formal structure, whilst also allowing authorities facing resourcing issues the ability to act on a collective basis with pooled resources. Through an independent and formal structure, local authorities would also be able to act on retrofitting at an aggregated scale.

In the Netherlands, local authorities have the ability to form independent Inter-Municipal Cooperations for the purpose of carrying out the coordinated execution of municipal tasks, such as tax levying. While the context of fiscal freedom might be different in England with regards to levying taxes, the Dutch IMC model provides an international example of how joint ventures may work in areas of shared municipal interest. In the case of English local authorities, this model can serve as an example for how to develop one stop shops aimed at accelerating the pace of retrofit on the local level.

Joint ventures as alternative delivery models have gained prominence within English local government as a way to deliver financial and community benefit. The

85 Innovate (2020) – How to set up a one-stop shop for integrated home energy renovation?

Coventry City Council and Solihull MBC Waste Partnership is a leading example of local authorities entering a joint venture around energy, where the main aim is to extract heat and electrical power from municipal and commercial waste.

Setting up one stop shops as joint ventures would allow authorities to collect and analyse aggregated data regarding housing stock requiring retrofit and design bespoke solutions to accomplish this. Importantly, 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.

4.1.2 Parallel skills strategies

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 sub-regional level should develop local retrofit jobs strategies. Aligning closely with one stop shops, these strategies should aim to understand the aggregated skills gap in delivering the retrofit demand of an area and identify opportunities to fill this working alongside stakeholders including but not limited to local SME's, further education providers, and Local Enterprise Partnerships.

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. Furthermore, working with education and apprenticeship providers in identifying the opportunities for training and just transitioning into retrofit jobs would aid in setting a focused picture of where and how investment should be directed on the local level to support the creation of green jobs. This would help government ambitions of creating 250,000 green jobs by 2030.

There are a number of tools available for local authorities to use in helping develop these strategies. UKGBC[86] and Local Partnerships[87] have developed comprehensive domestic retrofit guides to direct action on the local level in tackling the retrofit challenge. Additionally, the LGA has released an interactive map[88] on the projection of direct local green jobs by 2030 and 2050 on a local authority level. 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.

86 UKGBC (2020) – Accelerator Cities Retrofit Playbook Summary
87 Local Partnerships (2021) – Local authority domestic retrofit handbook
88 LGA (2021) – Local green jobs – accelerating a sustainable economic recovery

Recommendations

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.

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