Energy&Climate
INTELLIGENCE UNIT

LEVELLING UP OR LETTING DOWN?

Tackling poor quality homes in marginal constituencies could swing election success

February 2022

About

The Energy & Climate Intelligence Unit (ECIU) is a non-profit organisation supporting informed debate on energy and climate change issues in the UK. Britain faces important choices on energy and on responding to climate change, and we believe it is vital that debates on these issues are underpinned by evidence and set in their proper context.

Citation

Energy and Climate Intelligence Unit (2022): Levelling Up or Letting Down?

Contents

Table 1: fuel poverty and energy efficiency for constituencies with the smallest majorities at the 2019 General Election, ranked in order

Grey shading indicates constituencies where figures are below or above the England average (37 of 40 constituencies have lower than average Energy Performance Certificate (EPC) ratings, and 27 of 40 have higher than average fuel poverty). EPC is a cost-based measure of the home's energy performance –

The table also shows the percentage of homes below EPC C – the Government's target for 2035 – in each seat, along with the actual number of homes that fall below this level, as well as the percentage and actual number of homes living in fuel poverty.

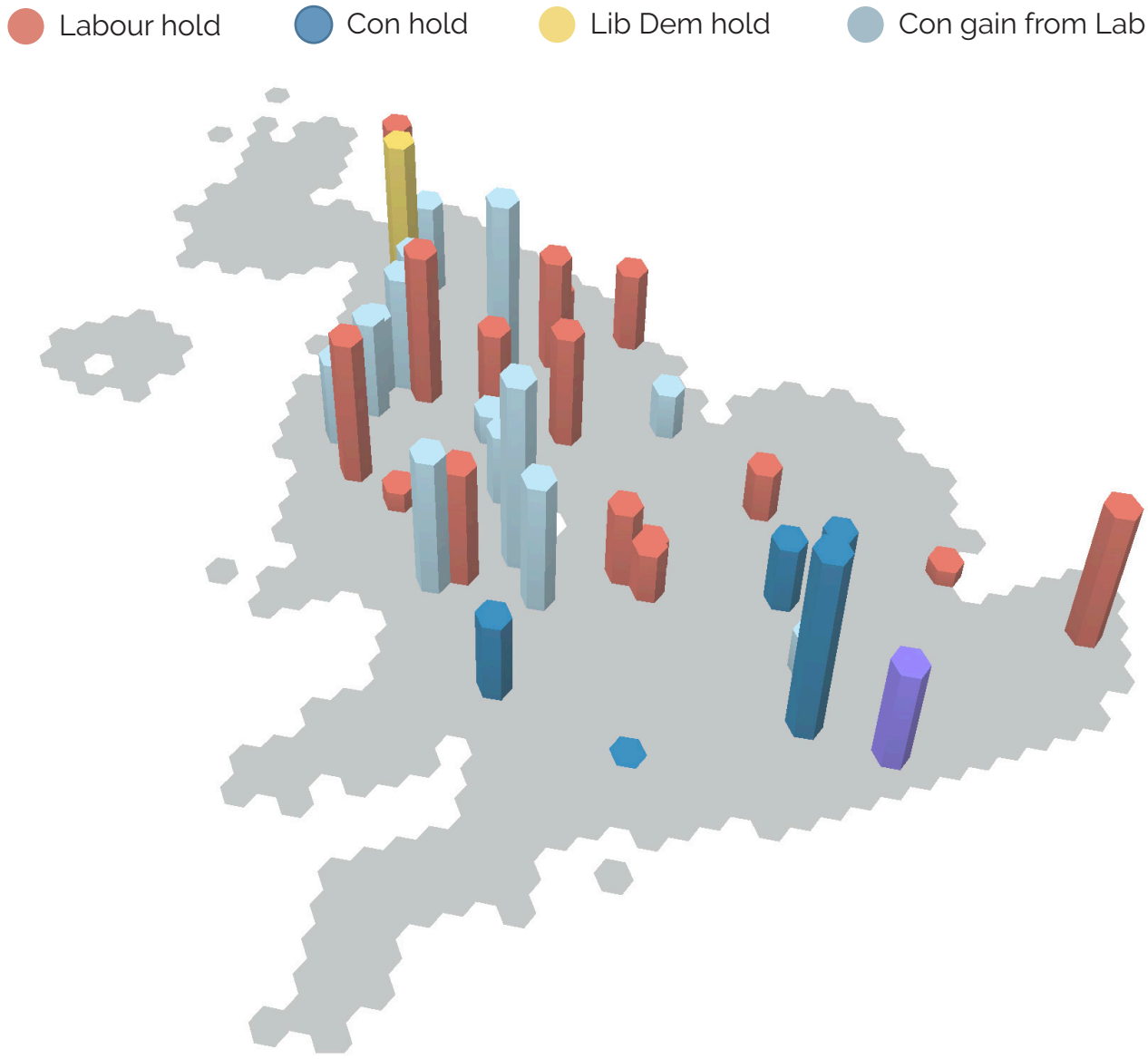
The total row shows that there are over 1.2 million homes that fall below EPC C in these constituencies and around 265,000 households living in fuel poverty, and the England average row shows the England average EPCs below C and fuel poverty. Sources:

Constituency	Region	2019 General Election result (majority votes)	No. homes rated EPC D or below (% of homes)	No. households living in fuel poverty (% of homes)
1. Bury North	North West	Con gain from Lab (105)	31,766 (73%)	3,254 (8%)
2. Bedford	East	Lab hold (145)	23,144 (67%)	4,759 (14%)
3. Kensington	London	Con gain from Lab (150)	27,193 (65%)	4,291 (10%)
4. Coventry North West	West Midlands	Lab hold (208)	32,183 (79%)	6,101 (15%)
5. Dagenham and Rainham	London	Lab hold (293)	32,048 (72%)	3,034 (7%)
6. Bolton North East	North West	Con gain from Lab (378)	28,192 (61%)	7,253 (16%)
7. Coventry South	West Midlands	Lab hold (401)	36,354 (74%)	3,769 (8%)
8. Bury South	North West	Con gain from Lab (402)	29,960 (73%)	6,234 (15%)
9. Weaver Vale	North West	Lab hold (562)	32,353 (70%)	3,257 (7%)
10. High Peak	East Midlands	Con gain from Lab (590)	36,408 (72%)	3,781 (7%)
11. Wimbledon	London	Con hold (628)	34,729 (72%)	11,580 (24%)
12. Carshalton and Wallington	London	Con gain from LD (629)	30,909 (77%)	7,384 (18%)
13. Heywood and Middleton	North West	Con gain from Lab (663)	24,598 (59%	8,158 (20%)
14. Stoke-On-Trent Central	West Midlands	Con gain from Lab Coop (670)	31,259 74%	5,884 (14%)

Constituency	Region	2019 General Election result (majority votes)	No. homes rated EPC D or below (% of homes)	No. households living in fuel poverty (% of homes)
15. Gedling	East Midlands	Con gain from Lab (679)	31,246 (78%)	4,592 (11%)
16. Blyth Valley	North East	Con gain from Lab (712)	29,507 (61%)	3,037 (6%)
17. Sheffield, Hallam	Yorkshire and The Humber	Lab hold (712)	38,074 (81%)	7,028 (15%)
18. Warwick and Leamington	West Midlands	Lab hold (789)	28,853 (69%)	4,806 (12%)
19. Wansbeck	North East	Lab hold (814)	30,585 (66%)	7,988 (17%)
20. Cheltenham	South West	Con hold (981)	35,161 (69%)	6,219 (12%)
21. Winchester	South East	Con hold (985)	30,156 (69%)	2,230 (5%)
22. Stockton North	North East	Lab hold (1,027)	23,005 (59%)	3,912 (10%)
23. North West Durham	North East	Con gain from Lab (1,144)	29,909 (67%)	6,907 (16%)
24. Hemsworth	Yorkshire and The Humber	Lab hold (1,180)	41,444 (71%)	7,982 (14%)
25. Chipping Barnet	London	Con hold (1,212)	25,576 (72%)	5,604 (16%)
26. Wolverhampton South East	West Midlands	Lab hold (1,235)	34,068 (66%)	8,227 (16%)
27. Kingston upon Hull East	Yorkshire and The Humber	Lab hold (1,239)	30,166 (66%)	6,273 (14%)
28. Chingford and Woodford Green	London	Con hold (1,262)	35,717 (74%)	3,799 (8%)
29. Normanton, Pontefract and Castleford	Yorkshire and The Humber	Lab hold (1,276)	26,292 (70%)	5,176 (14%)
30. Burnley	North West	Con gain from Lab (1,352)	32,578 (77%)	7,333 (17%)
31. Chesterfield	East Midlands	Lab hold (1,451)	25,628 (60%)	7,995 (19%)
32. Oldham East and Saddleworth	North West	Lab hold (1,499)	30,150 (69%)	10,006 (23%)
33. Warrington North	North West	Lab hold (1,509)	25,755 (61%)	9,550 (23%)
34. Dewsbury	Yorkshire and The Humber	Con gain from Lab (1,561	27,241 (64%)	11,575 (27%)
35. West Bromwich East	West Midlands	Con gain from Lab (1,593)	34,645 (68%)	11,770 (23%)
36. Birmingham, Northfield	West Midlands	Con gain from Lab (1,640)	33,607 (73%)	8,805 (19%)
37. Wolverhampton ~ South West	West Midlands	Con gain from Lab (1,661)	31,612 (78%)	9,248 (23%)

Constituency	Region	2019 General Election result (majority votes)	No. homes rated EPC D or below (% of homes)	No. households living in fuel poverty (% of homes)
38. Canterbury	South East	Lab hold (1,836)	30,533 (69%)	9,210 (21%)
39. Westmorland and Lonsdale	North West	LD hold (1,934)	34,992 (79%)	10,405 (24%)
40. Leigh	North West	Con gain from Lab Coop (1,965)	27,597 (67%)	6,579 (16%)
TOTAL			1,235,194	264,995
ENGLAND AVERAGE			60%	13%

Map 1: fuel poor households for constituencies with the smallest majorities at the 2019 General Election



View an interactive version of this map on the ECIU website.

Executive summary

The current cost of living crisis faced by many voters across the UK is likely to be a top issue ahead of local elections in May 2022.

Alongside inflation - which is rising at the fastest rate in 30 years - and hikes in taxes like National Insurance, gas bills in the UK are expected to surge by around £400 in April 2022 (when the energy bill price cap is raised) to £983 in total. This is roughly doubling from April 2021 levels.

Electricity bills are also rising, by £293 in the April price cap, as over a third of the UK's electricity is still generated from gas. This means that households finances and particularly energy bills are under considerable scrutiny from politicians, the media and the public alike.

Reflecting that wholesale prices of gas have quintupled within a year, rising bills alone are expected to push two million more homes into fuel poverty – those that are unable to afford to adequately heat their homes – to a total of 6.5 million in the UK.

This report shows how these households are disproportionately found in the North (one million homes) and Midlands of England (700,000 homes), which together make up 55% of all homes in fuel poverty in England.

Millions more at risk of fuel poverty

It is also likely that the gas crisis will push millions more to the brink of fuel poverty, particularly those with a low income who pay three times more proportionally on bills than those on a high income.

This surge in gas bills is due to several factors, including:

- **the current geopolitics** of state-owned Russian gas company Gazprom reducing gas flows into Europe amid wider tensions over Ukraine
- **global demand post-pandemic** driving up competition for supplies.

Poor quality housing worsening the situation

Worsening the impacts of gas price volatility, the UK is well known to have poor quality housing, especially in terms of energy performance. Energy efficiency, through measures such as insulation limits gas demand by reducing the amount of heat wasted, which in turn cuts bills.

The current gas crisis is putting inefficiency – as expensive fuel heating is simply leaking out of walls and roofs – into perspective for much of the public and this is likely to continue as the gas crisis endures for at least the next few months.

Energy efficiency was shown to be the top local infrastructure priority for voters before the 2019 General Election, with 33% of people choosing this ahead of improving local bus services and building new roads.

Mapping the marginal constituencies worst hit

New analysis of the 40 most marginal constituencies in the 2019 election shows that 37 of them fall below the England average for adequate EPC (Energy Performance Certificate) housing standards, a total of 1.2 million homes. Sheffield Hallam is top of the list with 81%, nearly 39,000, homes below the average.

In addition, 27 of these constituencies have higher than average incidences of fuel poverty, totalling around 265,000 households. This time Dewsbury comes top with over a quarter (27%)

or 11,575 fuel poor households. Constituents in these areas are being hit harder than most by the gas crisis.

This is no surprise given the state of the UK's homes. For example, 13.5 million homes in England do not have adequate wall energy efficiency and 17 million have below the recommended level of loft insulation. Nearly 5 million homes in the UK fail the Decent Homes Standard and around 60% in England will fall below EPC Band C, the Government's target for 2035.

However, these homes are not evenly spread across the country. The North and Midlands of England – prime targets for the Government's levelling up agenda – contain the highest proportion of non-decent homes, as well as highest proportion of homes below the Government's EPC target and highest rates of fuel poverty.

Renters and diasabled people disproportionately affected

In addition, people living in privately rented homes, who tend to be city-dwellers with lower incomes, are disproportionately affected by sub-standard housing. Similarly, the proportion of homes deemed to be 'excessively cold' rises with the age of the oldest occupant and people living with a long-term illness or disability are more often found in poor quality housing.

For example, nearly half of all non-decent homes in the North have at least one person with a long-term illness or disability.

Historic stop-start policy for insulating owner occupied homes, and a lack of incentives for private sector landlords has resulted in slow progress towards energy efficiency in these sectors to date.

Long-standing regulations and funding in social housing means this sector currently leads the way. Considering the owner occupied and private rented sectors historically have the worst levels of energy efficiency and non-decent homes, a lack of policy and financial support seemingly goes against governmental targets.

Impact of the Energy Company Obligation

One policy that has resulted in some progress in all sectors is the Energy Company Obligation (ECO), a scheme that supports energy efficiency upgrades for households with a low income or those living in fuel poverty. The scheme is due for a funding uplift from April 2022 to £1bn per annum.

This is expected to install energy saving measures into over 300,000 homes, saving on average £300 per home per year (to a total of nearly £100m in bill savings each year) and is

likely to be essential to limiting bills in these households.

What does this mean for levelling up?

The Government recently formed a new Department for Levelling Up, Housing and Communities, spear-headed by longstanding Cabinet Minister the Rt Hon. Michael Gove MP. The Department's first White Paper, defining levelling up and setting out how it will allocate its £4.8bn budget, was published in February 2022.

Jobs and local economic prosperity are thought to be an essential part of levelling up, and analysis has shown the energy efficiency industry is expected to support over 140,000 jobs across England by 2030 to meet existing efficiency targets.

These jobs are most likely to be found in areas where there is more inefficient housing to be upgraded, for example in Wolverhampton South, where more than three-quarters of housing falls below EPC band C and nearly a quarter of homes are living in fuel poverty. Across Wolverhampton, 1,370 jobs in housing retrofits are expected to be supported by 2030 as they deliver upgrades to sub-standard homes.

Poor thermal comfort and a lack of energy efficiency in homes means that millions of Britons are living in cold, damp and unhealthy homes that can create or worsen health issues like asthma, other respiratory and cardiovascular problems, and impact mental health and wellbeing.

In fact, this report reveals clear disparities in housing quality between richer and poorer parts of the country and that the elderly, the young and people with existing illnesses or disabilities are being hit the hardest. It also shows how the most electorally marginal constituencies would benefit greatly from a housing retrofit programme that reduces bills.

Introduction

The UK is facing a cost of living crisis. With inflation growing at the fastest rate in 30 years, taxes increasing after the economic impacts of coronavirus, and energy bills will rise to unprecedented levels (of £1,971 under the energy price cap) in April 2022, the British public – and their wallets – are likely to be facing a squeeze from many different angles over the coming years.

A key part of rising household costs, energy bills energy bills will almost double between April 2021 and October 2022, with the energy price cap rising from £1,277 in April 2021 to £1,971 in April 2022 and potentially to £2,400 in October 2022.

It is expected that this may push another 2 .5 million households (on top of the existing 4 million) into fuel poverty in the UK, where occupants are unable to afford to heat their home to a suitable level.

Gas prices across the globe have soared – rising by over 250% in the UK – following volatility as a result of several factors.

These include:

- **geopolitics as state-owned Russian gas company Gazprom has reduced gas flows** into Europe throughout 2021 and into 2022 amid wider tensions with Western Europe
- **global demand post-pandemic rocketing,** meaning that there is volatility in gas prices, a globally traded commodity.

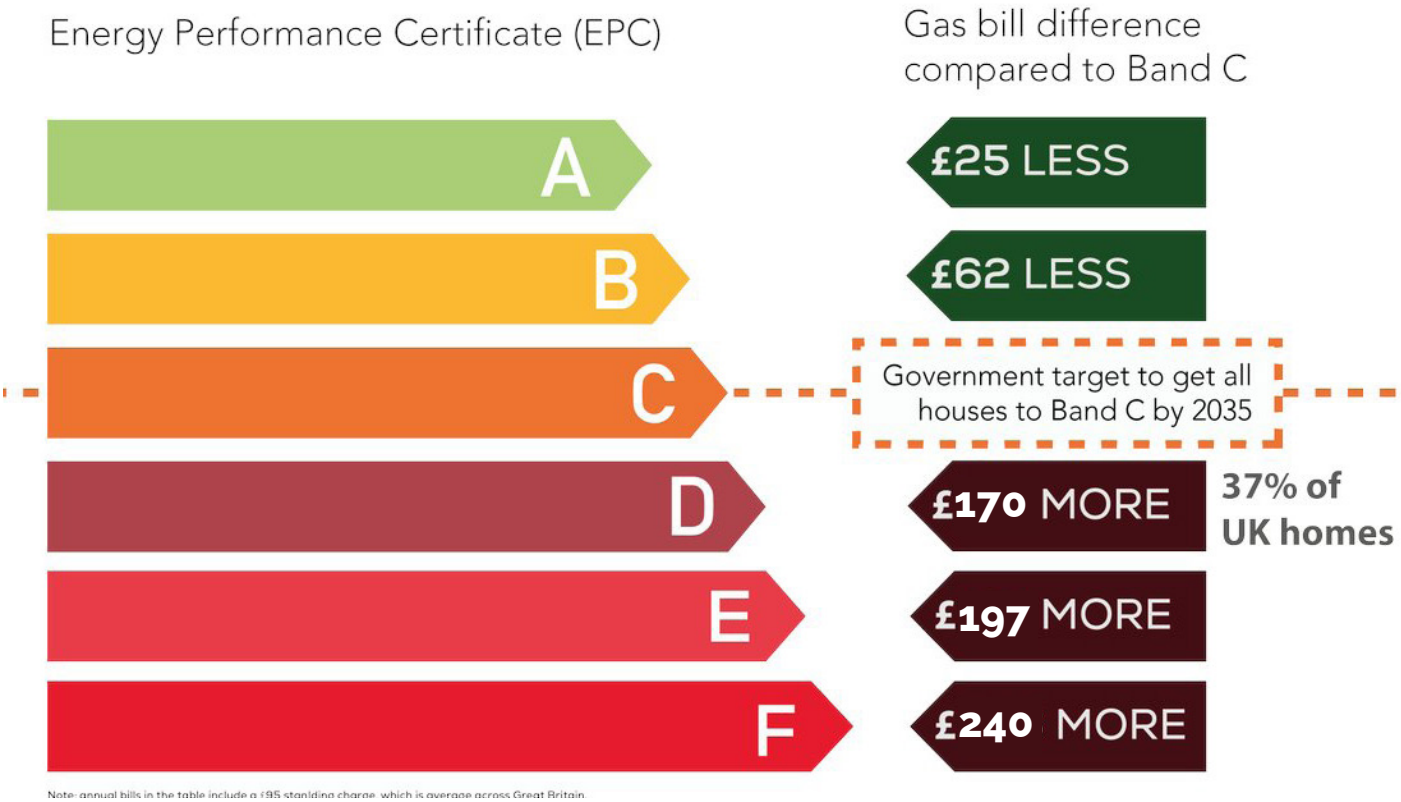
This has put the energy used in homes for heating, hot water and cooking under greater scrutiny for politicians, the media and the public alike. Many families up and down the country, and at all levels of income, are considering how they may be able to limit financial impacts of rising gas prices.

However, it is likely that the poorest in society will bear the brunt of gas price increases, as on average they pay three times more proportionally towards energy bills than those on higher incomes.

The UK's building stock is known to be some of the most energy inefficient in Europe, which inflates the gas demand of homes as heat leaks from walls and roofs.

As gas prices have rapidly increased, poor energy efficiency has had a huge knock-on effect on household bills. For example, previous analysis has shown has shown that homes with the worst energy efficiency levels (rated Energy Performance Certificate (EPC) band F) are set to pay £420 more towards their gas bill than a home rated EPC band C, the Government's target for 2035. Those at the UK average of band D are likely to pay £170 more than those at band C. than those at band C.

Figure 1: gas bill costs for households in different EPC bands



Health and wellbeing

Aside from finances, the buildings in which we live and work have a profound effect on many aspects of our lives, including health, wellbeing and productivity, and development. On average, Britons spend 22 hours a day (90%) inside.

However, during the coronavirus pandemic and subsequent transition to increasingly working from home, it is likely that time spent indoors - and energy used at home - increased, emphasising the importance of a healthy, affordable, and safe living environment.

Healthy indoors environments are defined by the Healthy Homes and Buildings APPG as 'not simply those where there is a lack of ill health' but as 'homes and buildings that maximise the occupants physical, mental and social wellbeing'.

Millions of homes across the UK currently do not meet this definition, with aspects of the home such as energy efficiency (namely insulation), heating and cooking source, ventilation and air quality all being inadequate and therefore impacting an occupant's health.

Substandard quality of any of these aspects of a home can increase the chances of developing a variety of physical health problems, such as respiratory problems like asthma and allergies; impaired cognition; impaired lung and cardiovascular development along with associated disease and many others. Mental health can also be highly impacted by living environments, as can children's development and education.

Air quality also has a significant impact on health, particularly respiratory issues. Burning natural gas in boilers and for cooking gives off air pollution, namely nitrogen oxides (NOx) and particulate matter (PM2.5 and PM10).

Air quality can be worsened in the home as exhaust fumes from transport and boilers enters through windows or doors and cooking with gas stoves also emits NOx and PM inside if there is inadequate ventilation.

In 2019/20, excess winter deaths in England and Wales increased by almost a fifth (19.6%), to 28,300 (excluding covid-19).[1] This shows the impact of illnesses like flu and pneumonia – which are exacerbated in cold, damp homes – and the true cost of poor housing, in terms of illness, quality of life, and lives lost.

Overheating is also becoming an increasing problem in the UK, as poorly designed homes with a lack of suitable insulation overheat in the summer yet are excessively cold in the winter.

There are obvious knock-on impacts of poor housing on health services, with the costs estimated to be £1.4bn per year, including £850m for excess cold – where there is a threat to health arising from sub-optimal indoor temperatures – and more than £38m due to dampness every year.

[1]Excess winter deaths are measured by comparing winter months (Dec-March) to the average of the four months before and after.

Aside from costs to the NHS, increased incidences of these types of health problems in children – 3.6m of whom live in poor quality housing – can result in impaired education and development. People that are vulnerable already, such as the elderly, are also susceptible to worsening existing conditions (such as arthritis) by living in sub-standard housing.

Moreover, there are simple improvements that can be made to homes to make them warmer, safer and healthier, as well as cheaper to run. Measures include improving insulation and energy efficiency to reduce excessive cold and dampness – the benefits of which would pay back in as little as 7 years in financial terms, and immediately improve health for many with quality of life benefits – as well as moving away from fossil fuels for heating and cooking to improve air quality.

State of play in the UK

One way to limit gas bill rises is to limit household demand for gas, through measures such as insulation. Yet despite having some of the worst energy efficiency in Europe for decades, successive governments have made only limited progress with upgrade schemes.

Moreover, analysis has shown that 9 million homes in the UK have missed out on energy efficiency measures since 2013 as installation rates dropped by 95% since 2012 from a peak of nearly 100,000 measures installed in February 2014 to around 15,000 in February 2019.

That being said, commitments on energy efficiency featured heavily in both the Conservative and Labour manifestos ahead of the 2019 General Election, showing a clear cross-party consensus for improving housing.

Insulation was also shown to be the top local infrastructure priority for voters ahead of the 2019 election. Thirty three per cent of people polled chose insulation, ahead of building more roads (12%).[2] The Government's manifesto promised £6.3bn of new public investment in home energy efficiency to 2030, of which £3.7bn was due by the halfway mark of 2024/25 – under the Social Housing Decarbonisation Fund and Home Upgrade Grant schemes. To date, in the wake of the Spending Review, the Government has committed and scheduled just over £2bn to these two schemes to 2024/25 since the election.

While there has been longstanding support for low income households (often living in fuel poverty) through schemes like the Energy Company Obligation (ECO), and some progress for this demographic, 13.9 million homes in the UK (50%) still have no wall insulation and 17 million have below the recommended level of loft insulation.

ECO has been running in some format since 2013 and has focussed entirely on fuel poverty since 2018. Recently it was confirmed that funding for ECO4 will be £1bn per year out to 2026, continuing to only cover fuel poor households.

However, in response to rising energy bills, some commentators have suggested cutting environmental and social levies, which pay for ECO and other schemes that support the elderly and vulnerable like the Warm Homes Discount. ECO4 is expected to cost just £36 on annual energy bills, while cutting it would have a short term effect on fuel poverty as 75,000 fuel poor homes would be denied energy efficiency upgrades, potentially meaning they miss out on £300 a year bill savings - which may be higher as gas bills are expected to rise in line with wholesale prices until at least 2023..

It has also been reported by industry that a four-month delay to ECO4 funding would result in 30,000 jobs being lost. The government has so far announced a £200 'rebate and claw back' scheme for every household to help with bills, and an additional £150 grant for homes that fall in Council Tax bands A-D. Local councils will also have a discretionary fund to help other households.

The Green Homes Grant scheme, which was open to all households unlike ECO, was announced as part of coronavirus recovery measures in early 2020. The £2bn scheme aimed to install energy efficiency measures like insulation, as well as low carbon heating, into 600,000 households.

However, it was scrapped after six months and is expected to have installed only around 40,000 measures in fewer than 10% of the target households despite receiving over 160,000 applications. Similar schemes in France have been much more successful (receiving over 550,000 applications in a year and a half), thought to be down to an easier and quicker application process and approvals system.

Socially rented homes contain a high proportion of people living in fuel poverty, but long standing stringent standards, combined with a culture of helping tenants that are struggling, have resulted in this sector leading the way on housing and energy efficiency quality. There are support schemes in place for homes owned by the local authority as well as social landlord

[2] Opinium poll for E3G, 2019.

organisations, such as the Social Housing Decarbonisation Fund, but their effectiveness has recently been questioned by local council leaders that do not believe they are delivering retrofits 'fast enough'.

The vast majority (85% or 23.5 million homes) also still rely on fossil fuels – mainly gas boilers – for heating. As gas prices increase, having such great reliance on fossil fuels for heating and hot water has prompted calls to move away from this source of energy in the home, with some suggesting that switching to cleaner heating, would insulate households from expensive hikes in gas costs.

In September 2021, the Heat and Buildings Strategy was published by the UK Government as it aims to decarbonise homes and heating by 2050. Despite containing some pledges for social and private rented homes, including increased standards on energy performance in the private sector, many noted the gap left around owner-occupier energy efficiency. This is the largest market sector and often dubbed the hardest to tackle, due to upgrades being the individual responsibility of the owner rather than a private or social sector landlord. An owner-occupier consultation is anticipated in the coming months.

'Levelling up' was also a key theme in the 2019 Conservative manifesto. Since then, it has featured heavily in Government messaging and other policy areas, particularly around jobs and recently the new Department for Levelling Up, Housing and Communities replaced the Ministry for Housing, Communities and Local Government, and is being led by long-standing Cabinet Minister Rt Hon. Michael Gove MP.

Although there is not yet an official definition for levelling up, this report considers the term to mean re-distributing economic prosperity and standards of living including schools, healthcare and housing so that all areas of the UK have equal opportunities and public investment. So far levelling up announcements have focussed on the North of England and the West Midlands.

Analysis

One proxy that could be used to measure the healthiness of British homes is whether they are classified as 'non-decent'.

In 2019, 4.7 million (17%) homes in the UK were classified as non-decent.

This means when any one of the following applies:

- it has insulation or heating that is not effective
- it does not meet the basic legal health and safety standards for housing
- it is not in a reasonable state of repair
- it does not have reasonably modern facilities and services.

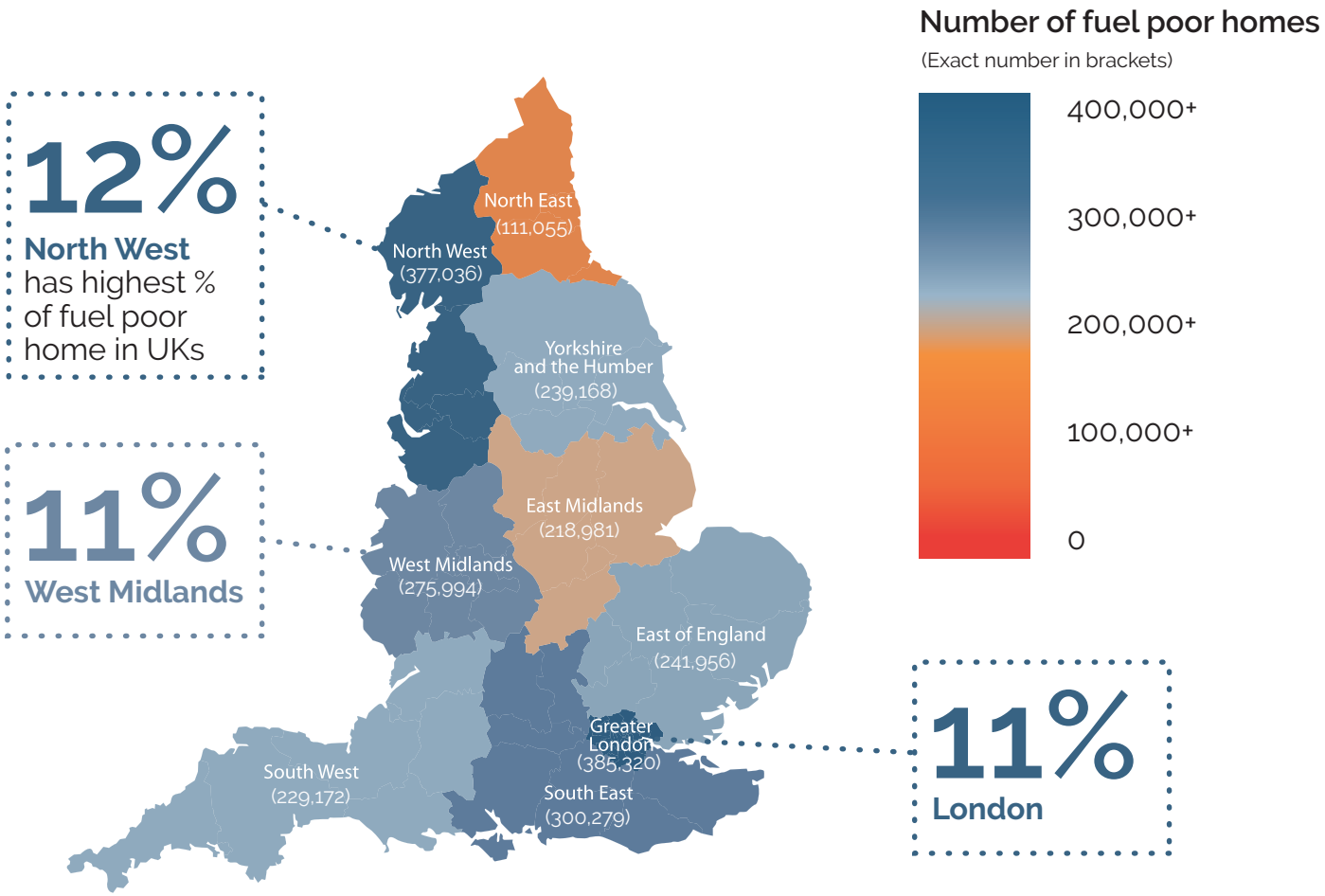
This report focuses on the first criterion listed above, which accounted for the failure of 1.7 million homes in 2019 - the second most common category under which homes fail the Decent Homes Standard. Other proxies for poor energy efficiency and inability to heat the home properly are also used, including Energy Performance Certificates and incidences of fuel poverty (where occupants are unable to affordably heat their homes to a suitable level); in England where low income households live in homes with an EPC rating below C.

Where is housing quality worst?

Statistics show that sub-standard housing disproportionately affects the most deprived areas – such as those ripe for levelling up in the North and Midlands.

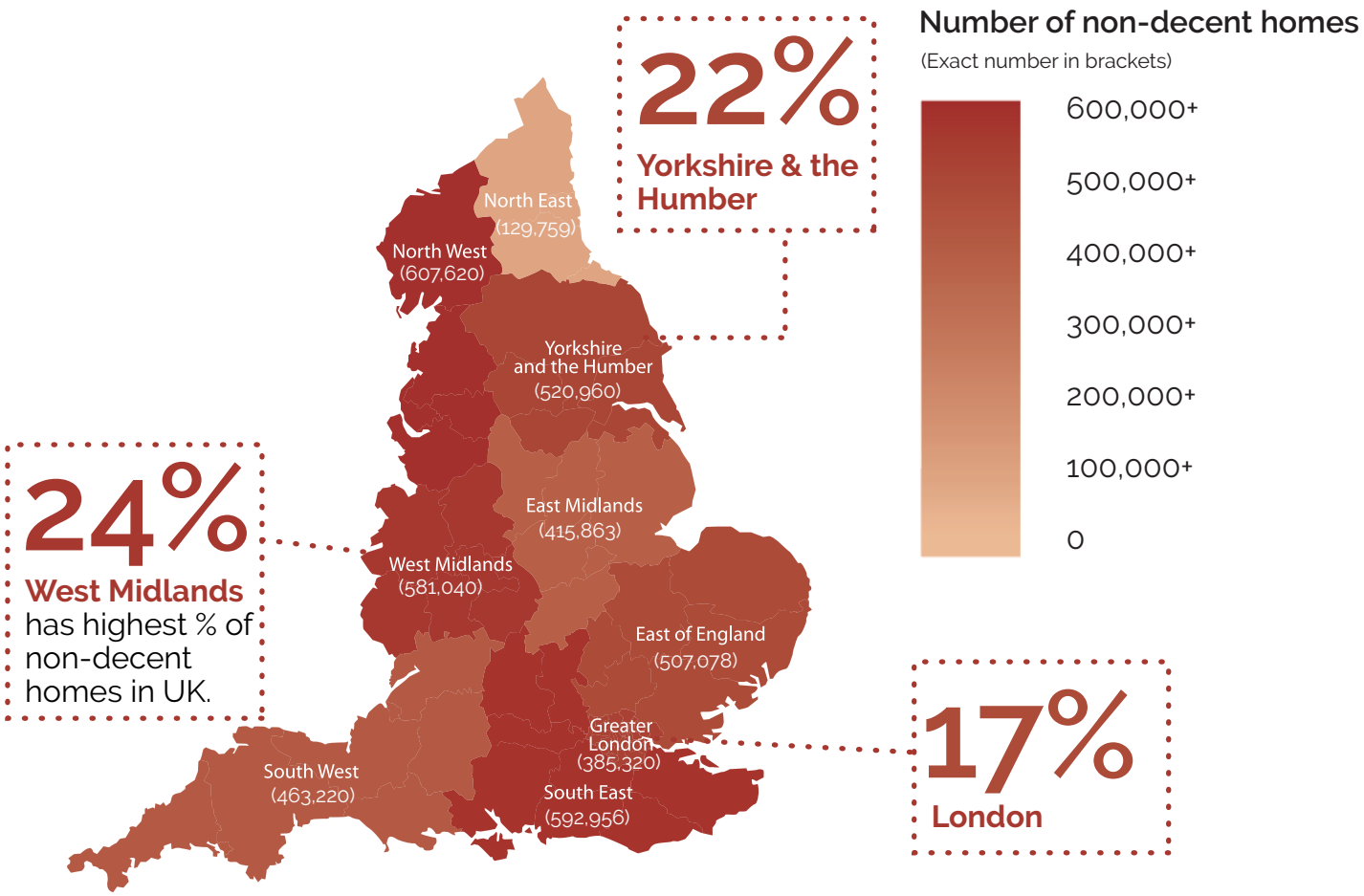
For example, the percentage of non-decent homes is highest in the West Midlands (24%) and Yorkshire and the Humber (22%). This is significantly higher than in London (17%) and the South East (16%).

Map 2: number of fuel poor homes in UK regions



Sources: English Housing Survey, Sub-regional Fuel Poverty Statistics and EPC live tables.

Map 3: number of non-decent homes in UK regions



Sources: English Housing Survey, Sub-regional Fuel Poverty Statistics and EPC live tables.

Linked to poor housing quality and primarily a lack of energy efficiency, the highest rates of fuel poverty are also in the North West (12%) and West Midlands (11%), although London is also 11%.

Combined, the proportion of non-decent homes and higher rates of fuel poverty indicate that homes across the North and West Midlands are below the standard found in more affluent parts of the country, like the South East.

This shows that there is an obvious opportunity to level up the quality of homes between the regions, while installing technology that can help to lower emissions in the residential sector where reductions have flatlined, and even risen, in recent years.

In addition, the West Midlands (64%) and Yorkshire and the Humber (66%), along with the North West (62%), have the highest proportion of homes that fail to meet Energy Performance Certificate (EPC) band C, which is the Government's target for all homes for 2035.

EPCs are calculated from energy bills, so often indicate homes that have poor energy efficiency and by extension quality (e.g. likely cold and damp) while being expensive to run. Therefore, the state of housing has a direct effect on the finances of a household, impacting mental wellbeing as well as physical health.

Levelling up the energy efficiency of homes across the regions would bring quantifiable financial benefits on top of improving health and quality of life. For example, the English Housing Survey 2019 estimated that over 14 million homes in the UK could save an average of £298 per year from improving their homes to an EPC band C (a total of £4.2 billion savings per year).

Savings will likely increase as the gas crisis continues and energy bills rise accordingly. In the current energy crisis with prices of fuels higher, people living with EPC bands E and F may see annual bills reach £726 and £776 respectively – saving almost £300 through energy efficiency would significantly decrease their fuel bills by around 40%.

Those who could be considered more vulnerable to the cold include people with a long-term illness or disability. Research has shown that vulnerable people may be placed more at risk depending on where they live. For example, nearly half of all non-decent homes in the North have at least one person with a long-term illness or disability living in them – well above the England average.

Constituency level data reveals swing seats feel pinch the most

Analysis of constituency level data has revealed that 37 of the 40 most marginal seats (where gaps between first and second place in the 2019 General Election were lowest, below 2,000 votes) have below average levels of homes that meet EPC band C.

This means that the most marginal seats are paying more than necessary for gas bills as heat escapes through un-insulated walls and roofs.

Moreover, 27 of the 40 most marginal seats also have above average levels of fuel poverty, including Dewsbury in West Yorkshire which had a buffer of 1,561 votes in 2019 when it was gained by the Conservatives (from Labour).

In this constituency over a quarter (27%) or 11,500 households are living in fuel poverty, the highest proportion found in the whole of England.

Fuel poverty is highly influenced by housing quality and levels of energy efficiency, with it being widely accepted that one of the best long term solutions to fuel poverty is increasing the fabric efficiency of the home to reduce the energy waste.

To this end, polling by Opinium ahead of the 2019 Election revealed that in key marginal seats , insulating older local homes to make them warmer in winter is the most popular infrastructure

priority (33%), ahead of improving local bus services (29%) and building more roads in the area (12%).

This highlights the electoral importance of housing quality and energy efficiency, and given the surging price of gas may prove even more popular with voters today as they look at ways to limit household bill increases.

Case Study – Wolverhampton South West

More than three-quarters (78% or 31,600) homes in the Wolverhampton South West constituency fall below Energy Performance Certificate C, which was a gain for the Conservatives in 2019.

Fuel poverty rates are also 10 percentage points higher than the England average, at almost a quarter (23%) of all homes, equating to around 9,000 households.

With a small margin of 1,661 votes, this former 'Red Wall' constituency is likely to be a target seat for Conservative and Labour parties.

Efforts to boost insulation would not only improve housing quality, but previous research has shown that by 2030, 1,370 jobs could be supported in the Wolverhampton Local Authority area from retrofitting homes for energy efficiency and low carbon heating.

However, it is important to note that there are also constituencies found outside of regions typically considered ripe for 'levelling up', such as Wimbledon, that would benefit from a widespread housing retrofit programme.

Wimbledon was held by the Conservatives against the Liberal Democrats in 2019 with a margin of just 628. Here, 72% (or nearly 35,000) homes fall below EPC band C and a quarter (24%) or approx. 11,500 households are living in fuel poverty.

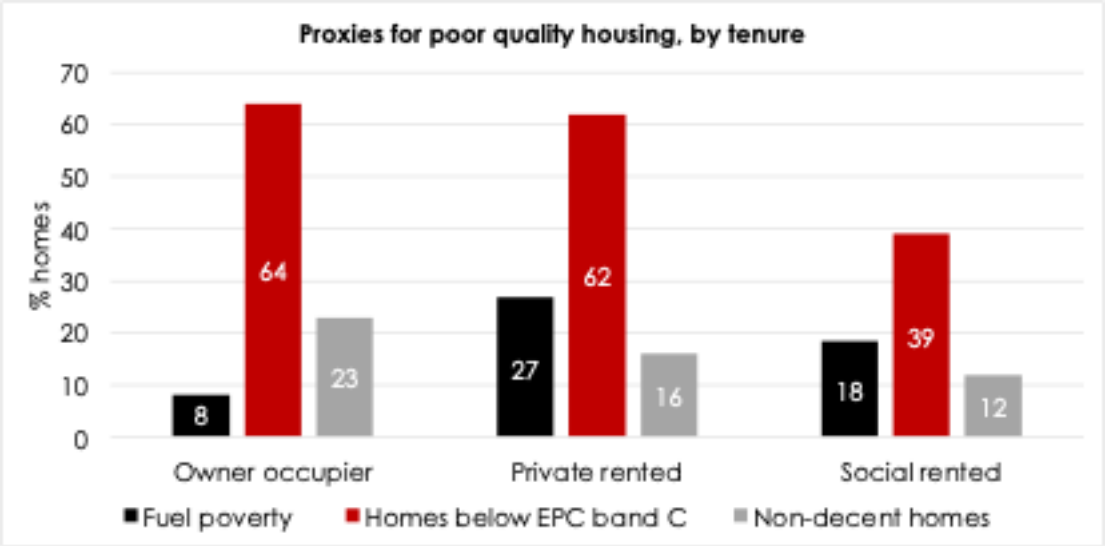
Who is most affected?

Private renters

There are certain demographics that are more likely to live in a non-decent home. For example, splits between different tenures show that private rented and owner-occupied homes are most likely to be non-decent (around 23% and 16% respectively), behind the social sector at 12%.

Of the 23% of privately rented homes that failed to meet the Decent Homes Standard, over 9% failed due to thermal comfort criteria, which is roughly double the proportion in the owner occupier (4.8%) and social housing sectors (4.5%).

Figure 2: Non-decent homes, homes in fuel poverty and homes below the target EPC band C (all %), by tenure.



Source: English Housing Survey (2019), Fuel Poverty Tables (2021) and EPC Live Tables.

Living in privately rented homes is more common in cities, for example 28% of people in London and 30% of households rent compared to an England-wide average of 18%.

Younger people are more likely to rent, as they have a lower income, with almost half (46%) of people aged 16-34 renting privately, compared to just 13% people aged 35 and over. This means that these groups are at greater risk of living in a non-decent homes as they are more likely to rent privately.

There are clear links between non-decent homes and poor energy efficiency by tenure. The private rented and owner occupied sectors have lowest levels of energy efficiency, as 62% and 64% fall below the EPC band C target respectively, compared to 39% of socially rented homes.

Again, this means that people living in privately rented homes are more likely to be living in sub-standard conditions, affecting their health.

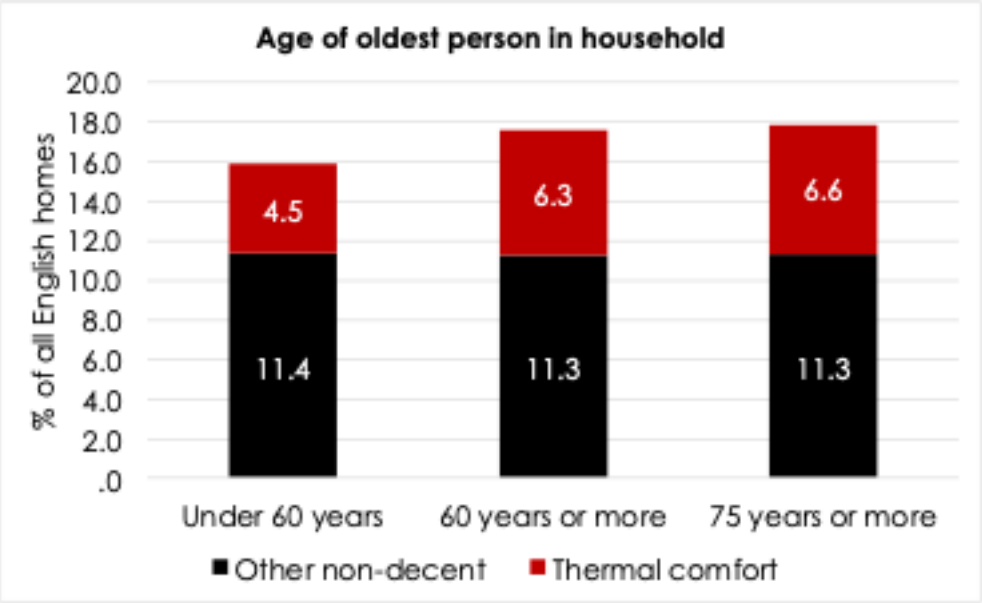
Older and younger people

Aside from tenure, households including individuals aged over 65 are more likely to live in a home with excess cold and households with one person over 60 are more likely to be in non-decent conditions (20%), compared to 14% of homes occupied by a couple with children.

Similarly in terms of energy efficiency, it has been noted that the proportion of homes failing to meet the Decent Homes Standard due to concerns around thermal comfort rises as the age of the oldest person increases (figure 3).

Data shows there is almost a 50% increase (500,000 more homes) failing due to thermal comfort in households where the oldest person is aged over 75 (6.6% or 1.8 million homes), compared to households where the oldest person is aged under 60 (4.5%, or 1.3 million homes).

Figure 3: the proportion of non-decent homes, and also the proportion of those failing to meet the standard due to thermal comfort, increases as the age of the oldest person in the house increases.



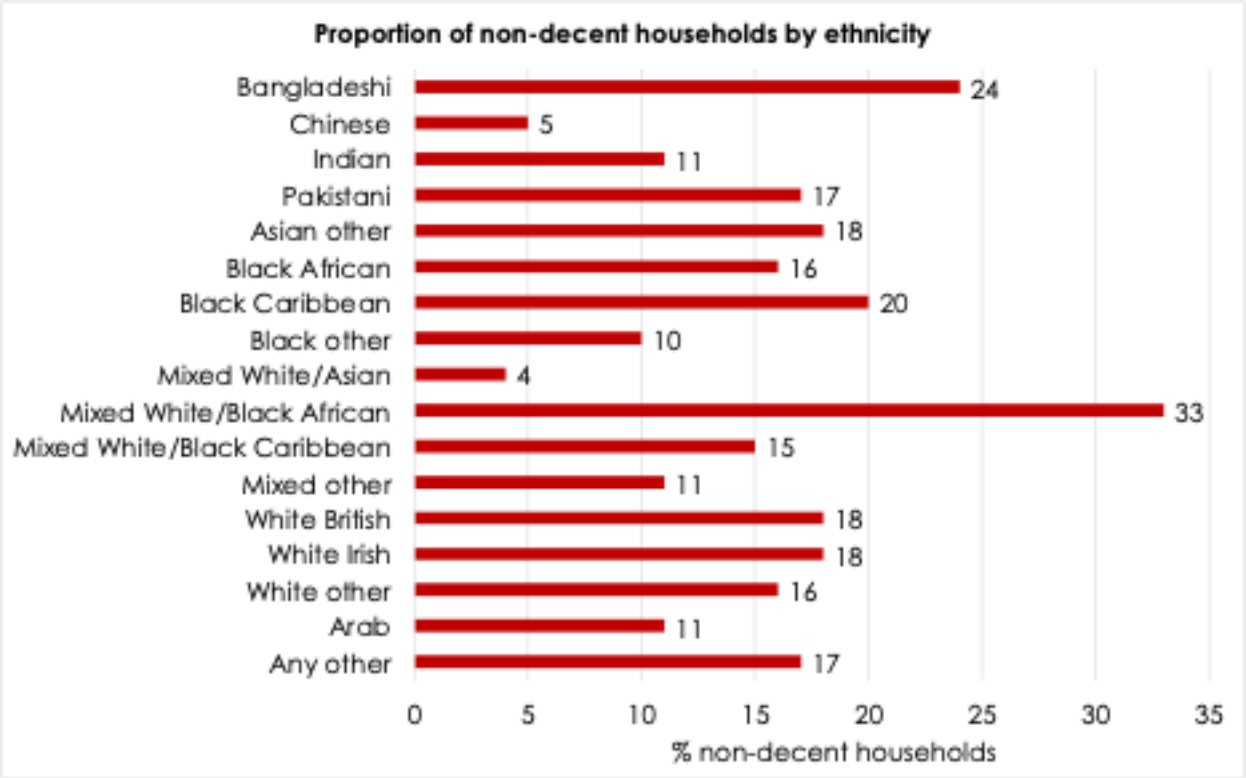
Source: English Housing Survey (2019).

On the other end of the age spectrum, households with children under 14 were also more likely to live in a home with higher-than-average risk of harm from dampness and mould and more than 1 in 4 adolescents living in cold homes are at risk of multiple mental health problems, compared to 1 in 20 in warm housing.

People from ethnic minority backgrounds

There are also splits amongst ethnicity of the household reference person (normally who pays the mortgage or bills); with 33% of mixed white/Black African and 24% Bangladeshi households living in non-decent homes (compared to an average of 17%).

Figure 4: proportion of non-decent households by ethnicity



Source: English Housing Survey.

This echoes findings on fuel poverty and ethnicity, where a fifth (19.8%) of households which have someone from an ethnic minority background as the main occupant live in fuel poverty, compared to just 13% of people who are white.

Solutions

Improving the energy efficiency of homes is one of the most effective methods of reducing gas demand.

Previous ECIU analysis has shown that installing energy efficiency and improving a home rated EPC band D (the average for England and Wales) to band C could cut over £170 from energy bills, with larger cuts (up to £400) from moving from more inefficient homes (band F) to band C.

As gas prices continue to rise, so will the bill savings from upgrading energy efficiency. Lowering gas demand, and therefore bills, would also help to reduce incidences of fuel poverty, as homes stay warmer while reducing the need to have the heating on. It also reduces carbon dioxide, as well as air pollution emissions, beneficial to health and for those with respiratory conditions including asthma.

In response to high gas bills some commentators and MPs have been calling for the removal of environmental and social levies on bills. While experts agree that help will be required for households when bills rise again in April, particularly for the most vulnerable people, levies make up just 3% of a gas bill and so removing them would make little difference.

Crucially, the funds raised in these levies are re-distributed to cover insulation installations in low income households and help the elderly pay their fuel bills, through schemes like the Energy Company Obligation (ECO) so are actually being used already to lower the bills of those that need it most.

Over the course of ECO4, which will run from 2022 to 2026, over 300,000 homes in Great Britain are expected to benefit from measures installed under the scheme. Given ECO's focus on low income and fuel poor households, 75,000 fuel poor homes are expected to be treated in England alone, going a long way to protect the most vulnerable from rising heating bill increases that could force families to choose between heating and eating.

Overall, these measures installed under ECO would deliver average bill savings of £300 per household per year, under 'normal' gas prices, totalling £91.5m every year. These savings will currently be increased as gas prices are higher.

The Social Housing Decarboinsation Fund is underway for the social sector, but there remains a significant gap in policy for the bulk of households in the UK which are privately rented or owner-occupied.

While Home Upgrades Grants will deliver some energy efficiency measures for households on a low income, and the Green Homes Grant Local Authority led scheme will continue for a similar market segment, there is an absence of policy for owner occupied homes that have middle to higher incomes. Delivering on manifesto commitments for energy efficiency funding will likely be important for this group of households.

In addition, it is thought that financial incentives will be key to creating a market for energy efficiency for owner occupiers, especially if regulations are brought in. Since the withdrawal of the Green Homes Grant in April 2021, there has been no funding planned for the sector, despite it performing the worst of all tenures in terms of EPCs.

Initiatives like flexing Stamp Duty around the energy performance of the home, or giving reduced rates if works are carried out within a year of moving in is one suggestion, as well as

zero interest loans for retrofits that have been successful in Germany and Scotland. Reducing VAT on energy efficiency measures is another incentive that has been proposed and is supported by around half of all MPs.

New regulations on energy efficiency in privately rented homes came into force in 2020. They gradually mandate the upgrading of homes to reach higher EPC standards each year, to a proposed maximum of EPC C by 2028.

Similar but more ambitious standards are in place for the social sector, however the owner occupier sector is not covered by regulations despite the Government setting a target to maximise the number of households, across all sectors, that reach EPC band C by 2035.

In addition, the indoor air quality of homes can be improved by moving away from fossil fuels – mainly gas, which is currently used to heat 85% of homes – for heating and cooking. Although domestic heating can account for a fifth of NOx emissions in large cities (second-highest contribution after transport), only one in four people know that boilers are a source of air pollution.

However, over half (55%) of people want to switch away from gas boilers once they are aware of their emissions, rising to 60% of families with children. Steps to minimise NOx indoors until the switch is made to clean sources of heating and cooking include ensuring that ventilation is adequate around the sources of pollution.

Aside from carbon emissions reductions and health benefits, analysis has shown that building up an energy efficiency industry across the UK could support 128,600 jobs, with 63,600 in the North and Midlands – weighted because of the poorer housing quality. Improving our homes, therefore, also provides a prime opportunity to 'level up' in terms of jobs and therefore economic potential.

Conclusions

New analysis of the most marginal 40 constituencies in England shows that 37 of them fall below the England average for EPC standards and 27 of them have higher than average incidences of fuel poverty.

It shows how former 'Red Wall' seats are part of these seats, as well as more typical Conservative seats that are likely to be hotly contested in the upcoming election.

Previous polling ahead of the 2019 Election has shown that insulating older homes to make them warmer in winter is the most popular local infrastructure priority with 33% of the vote, beating new roads on 12%.

In addition, this report shows that poorer quality homes are located disproportionately in the North and Midlands and in the private rented and owner-occupier sectors.

It also collates evidence that shows that older and younger people, people from an ethnic minority background as well as those living with a long-term illness or disability are more likely to live in fuel poverty, in homes that fall below energy efficiency standards, and/or in non-decent conditions.

These groups are therefore adversely affected by the health impacts of living in homes with little energy efficiency, making them colder, damper and more expensive to run.

Instead of protecting people who may be more vulnerable, such as elderly people or people living with a long-term illness or disability, their homes are more likely to be harmful, negatively affecting their health and wellbeing, and also costing them more than necessary to heat their homes during the current gas crisis.

Therefore, there are clear links between areas that are primed for levelling up, constituencies that are most at risk ahead of the May 2022 elections, and poor housing quality.

It is well evidenced that energy efficiency retrofits and upgrading heating systems would provide jobs all over the UK – and where there are more poor quality houses, there will be more need for a workforce able to deliver the retrofits required.

This establishes connections between housing retrofit and improved health, increased ability to cope with volatile gas prices, and more prosperous local jobs and economy, as well as saving the NHS nearly £900m in healthcare costs every year.