BUILDING CLIMATE JUSTICE

A SUSTAINABLE APPROACH TO THE DELIVERY OF SOCIAL RENT HOMES IN ENGLAND

Kiln Place. ©Millie Harvey/Shelter

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INTRODUCTION

'Climate change intersects with multiple dimensions of disadvantage. It acts as a multiplier of exclusion [...] anywhere that people experience marginalisation, climate change is likely to make it worse".[i]

- Writer and climate activist Jeremy Williams

Climate justice is often seen through a global lens: focused on the responsibility of superpowers and needs of developing nations. The prevailing view is that wealthier states who have contributed the most towards the climate emergency should bear the cost and take greater responsibility for reducing carbon emissions. However, climate justice must also be seen through a national and hyper-local lens to understand how the climate emergency exacerbates social inequalities and affects lower income households and other disadvantaged and underserved communities *within* countries. For example, ecological and natural disasters like Hurricane Katrina in New Orleans or Hurricane Maria in Puerto Rico disproportionately affected specific communities and low-income people.

England's broken housing system is another powerful example of what Williams describes. There is a veritable emergency today: with 1.3 million households on social housing waitlists and over 165,000 children experiencing homelessness in insecure temporary accommodation.[ii] Private rents are at their highest levels since records began and many parents are forced to choose between feeding their families and paying their rent.[iii] The Private Rented Sector (home to some of the poorest-quality homes)[iv] is increasingly aging and many people will spend their lives renting.[v]

Meanwhile, the housing system is full of aging homes that are poorly insulated and/or energy inefficient, exacerbating climate conditions. Many families are struggling with homes riddled with damp and mould, trapped in flats that are scorching hot in the summer and bitter cold in the winter. Others are stuck living in flood plains or coastal towns vulnerable to climate change, unable to move because they can't afford to live elsewhere. The climate emergency and the housing emergency interact, and we cannot solve one without solving the other.

Climate justice must be at the forefront of any net zero transition and housing strategy — ensuring that lower-income households and Black and other communities of colour are not left behind. Everyone deserves an affordable, safe, and future-ready home, and delivering more social rent housing is key to making this a reality.

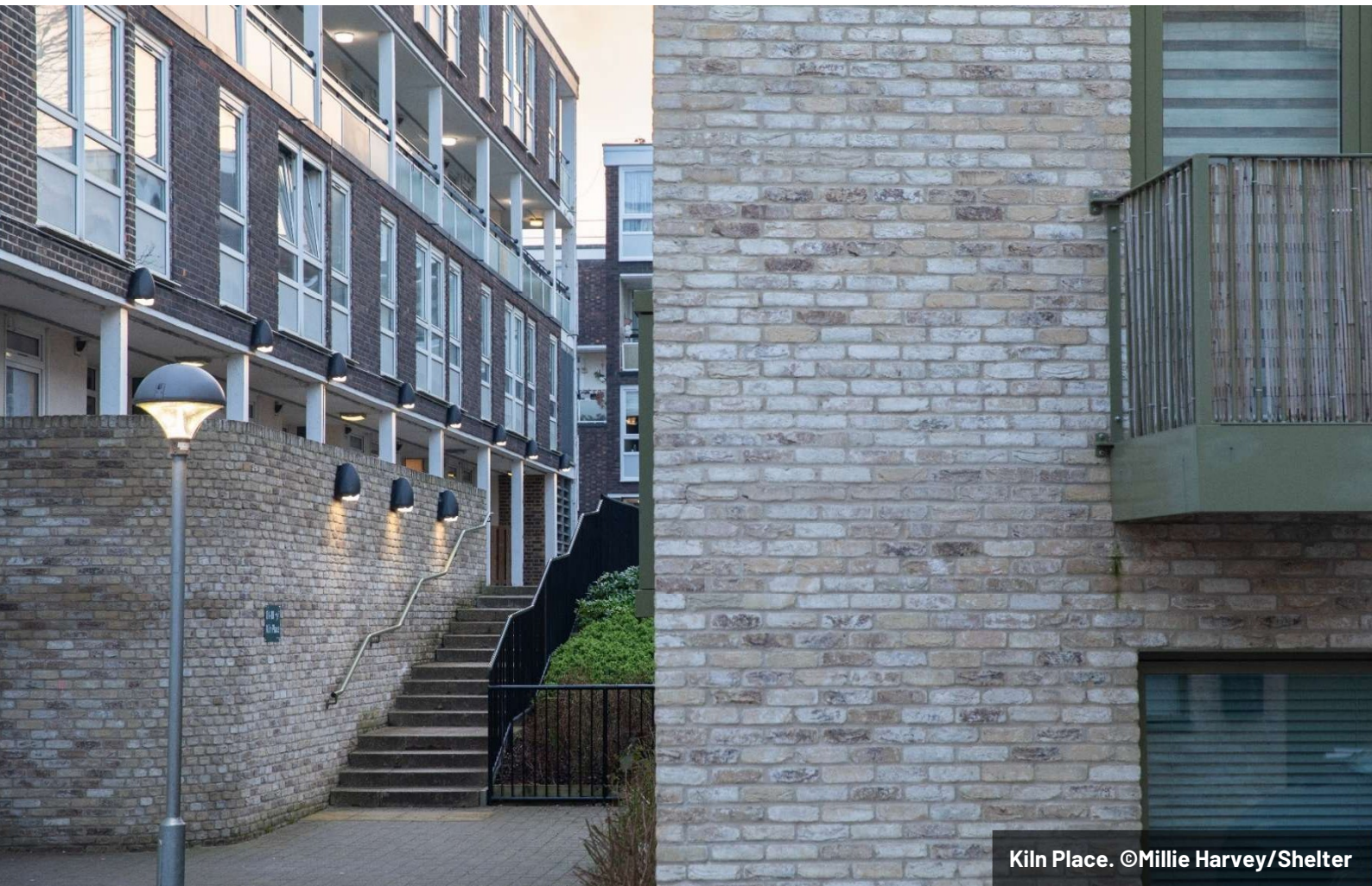
While the government has pledged to build 1.5 million new homes and said that at least 60% of the homes built through the new Social and Affordable Homes Programme (SAHP) will be for social rent, there are no overall national targets currently for social rent. This is problematic because history has shown that this overall target cannot be met and we cannot end homelessness without a substantial increase social rent homes.

We have, however, seen a promising statement of intent at the June Spending Review with the government committing £39 billion over 10 years to social and affordable housing grants. While not enough to solve the housing emergency for good, this is a significant investment – a game changing moment that signals the start of a journey towards fixing our broken housing system. We now need a clear target for social rent within this cash and a clear plan for delivery.[vi]

The question is now not **whether these social homes should be delivered, but how.** Rather than pitting the climate and housing agendas against one another, we must use the lens of climate justice to deliver homes that are fit for the future, that protect communities from the effects of climate change, and which seek to neutralise or offset the potential negative impacts of housing on climate. We must build better to help close equality gaps and start making significant gains towards our climate goals.

National and local governments have pledged to meet net zero and other climate goals by 2030 and 2050. However, uncertainty and resistance to upcoming regulations—such as the Future Homes and Buildings Standards—threaten progress. While funding and skills shortages are major concerns, some argue current efforts still fall short. Planning policy remains contentious: the national government pushes to meet housing targets, while local authorities feel constrained when trying to enforce stricter net zero requirements in new developments.

Arup and Shelter's partnership champions the opportunities that a sustainable and net zero delivery approach[vii] can bring, including new build social rent homes, retrofit and high-quality responsible conversions supported by the planning system.



Kiln Place. ©Millie Harvey/Shelter

[i] Jeremy Williams, "Climate Change is Racist: Race, Privilege and the Struggle for Climate Justice." (London: Icon Books Ltd, 2021), p54-55

[ii] MHCLG, Live tables on rents, lettings and tenancies, Table 600, Available at: https://www.gov.uk/government/statistical-data-sets/live-tables-on-rents-lettings-and-tenancies MHCLG, Live tables on homelessness, Statutory homelessness live tables, TA1, Available at: https://www.gov.uk/government/statistical-data-sets/live-tables-on-homelessness#statutory-homelessness-live-tables

[iii] ONS, Private rent and house prices, UK: June 2025, Price Index of Private Rents, UK: monthly price statistics, Available at: https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/privaterentandhousepricesuk/june2025/relateddata 17% of private renters have skipped meals or cut back on food in the last month to keep up with rent payments. Shelter/YouGov, survey of 2,023 adults, 4th – 25th February 2025, online, weighted to be representative of private renters in England.

[iv] 21% of private rented homes fail the Decent Homes Standard. This is higher than owner occupied homes (14%) and social homes (10%). MHCLG, English Housing Survey 2023 to 2024: headline findings on housing quality and energy efficiency, Annex Table 1.4. Available at: https://www.gov.uk/government/collections/english-housing-survey-2023-to-2024-headline-findings-on-housing-quality-and-energy-efficiency#annex-tables

[v] In the last 20 years (2003/04-2023/24) the number of private renters aged 65 or over has almost doubled (increased by 97%). This compares to a 46% increase of people aged 65+ overall. MHCLG, English Housing Survey 2023 to 2024: headline findings on demographics and household resilience, Annex Table 1.4. Available at: https://www.gov.uk/government/statistics/annex-tables-for-english-housing-survey-2023-to-2024-headline-findings-on-demographics-and-household-resilience

[vi] 'Delivery' refers to anything that promotes the provision or availability of homes. Delivery encompasses new builds, acquisition and retrofit of long-term empty homes and high-quality change of use/conversion of commercial property

[vii] The UK Green Buildings Council (UKGBC)1 defines net zero in the construction of new buildings and major renovations of buildings as 'when the amount of carbon emissions associated with a building's product and construction stages up to practical completion is zero or negative, through the use of offsets or the net export of on-site renewable energy.' A 2022 report by the Environmental Audit Committee (EAC) has highlighted that achieving net zero in housing requires consideration of both the construction and operation phases of a new home.

I: THE CLIMATE CASE FOR SOCIAL HOMES

Shelter and other organisations that support a significant increase in social housing delivery know that building new housing impacts the environment. The housing sector is currently the second highest emitting sector in the UK economy (after domestic transport).[viii] And the vast proportion of this is from the operation of existing homes[ix]. The current condition of our housing stock, combined with the effects of the climate crisis on people's lives and wellbeing, hinders progress toward both climate and socio-economic goals.

Extremes of viewpoints in the housing debate can lead to a view that either requiring sustainability in housing is a brake on development, or that providing more housing supply cannot be done sustainably. We need to adopt an entirely new lens to deliver homes that are fit for the needs of different communities and which mitigate against any harmful environmental impact; embracing the notion that sustainability can be achieved by doing more with less.

The lack of nuance in this debate has led to misconceptions about the Green Belt, resulting in wider anti-building sentiment. Originally conceived to limit 'urban sprawl', much of the land is not in fact green or arable and is not identified as nationally protected areas like designated heritage sites, national parks or irreplaceable habitats.

Historically, the concept of 'urban sprawl' has been used as a narrative which contributes to preventing housebuilding in urban/rural areas – even areas with high levels of hidden homelessness. Residential buildings only account for 0.3% of green belt land[x] and although described as countryside in the National Planning Policy Framework, most green belt land is privately owned, and very little is open to public access.[xi]

Similarly, our broken housing system has led to homes communities can't afford, with limited consideration of environmental impact. At the same time, communities are concerned by the de-prioritisation of infrastructure for sewage,[xii] electrical grids and renewable energy, or even the means to provide clean water in advance of the scheme's completion. Homes cannot be built without the proper social and critical infrastructure. We need thriving sustainable communities.

A more balanced mix of delivery mechanisms including a stronger role for non-market and public provision is necessary to address the full range of housing needs. Aside from the public delivery of homes, another alternative to speculative development is the

Community Land Trust (CLT) model. Recent analysis by the CLT Network suggests that CLTs could scale up to deliver thousands of homes annually within five years. Public delivery, CLTs and other alternative forms of delivery would also offer a route to revitalise local supply chains particularly small and medium sized housebuilders (SMEs), who once delivered nearly 40% of new homes but now account for just 10%. [xiii]

Just as the building and construction sector must come to terms with their role and responsibilities in fighting climate change - by providing homes fit for the future, and not solely for profit - so too must green activists make the case for new social homes and an end to homelessness.

Fortunately, more and more people across different sectors now recognise that we can't treat the housing crisis and the climate crisis as competing priorities—they must be addressed together. Organisations and companies like Shelter, Arup, the Manchester Social Housing Commission, JRF, Laudes, the Urban Land Institute, CPRE and the Wildlife Trust are some of the stakeholders navigating this space.

Many are advocating that if homes are built, social homes should be prioritised. Others are also calling for alternative methods of delivery like the use of long-term empty homes to meet the demand of social homes at pace. There are also calls for responsible conversions of commercial spaces through the planning system to ensure that good quality and safe homes are being created from the existing built environment. Part of this demand[xiv] is to ensure that developers meet affordable housing thresholds set by local authorities when planning permission is granted. Building will remain a crucial part of the puzzle in solving the housing emergency, but it does matter what we build and how.

The economic case for sustainable social housing delivery

The case for investment in social homes is clear. Research commissioned by Shelter and the National Housing Federation shows that one set of the 90,000 social homes we need a year, for ten years, can contribute £51.2 billion to the economy over 30 years.[xv] It would also provide savings to the NHS and the education system, as well as reduce the cost of temporary accommodation, currently at £2.3 billion.[xvi]

By delivering a new generation of social homes, the government can improve the economy and boost investment in green construction technologies – creating a pipeline for new green jobs and boosting STEM industries. Effectively, this would be government money spent on a public asset, which could make good on the return of investment.

In Shelter's publication 'Safe as Houses: Why Investment in Social Housing is Great for Us and Our Economy', Professor Mariana Mazzucato argued that public housing (i.e. social housing) "**provides the public sector with 'green procurement' possibilities**" and that "**Mission led procurement can play a role in…creating demand for new products and services, widening the ecosystem of companies able to access government contracts and increase the local economic multiplier**."[xvii] This would strengthen public–private partnerships, ensuring that public benefit remains the main focus. Beyond job

creation and workforce development, an investment in social homes would help alleviate public expenditure related to homelessness and housing benefits.

Investing now in a large-scale social housing programme would support the government in achieving its housing, climate, and economic objectives. This would involve delivering the highest number of social homes in a generation, stimulating economic growth, and laying the groundwork for future new towns and urban extensions – ultimately benefiting communities that have long been overlooked.

[viii] Climate Change Committee Seventh Carbon budget: The Seventh Carbon Budget - Climate Change Committee

[ix] A home for all within planetary boundaries: Pathways for meeting England's housing needs without transgressing national climate and biodiversity goals. Available here: A home for all within planetary boundaries: Pathways for meeting England's housing needs without transgressing national climate and biodiversity goals - ScienceDirect

[x] As of 31 March 2024. MHCLG, Local authority green belt: England 2023-24 - statistical release. Available at: https://www.gov.uk/government/statistics/local-authority-green-belt-statistics-for-england-2023-to-2024

[xi] Ibid

[xii] See for example, Crowley, J., May 2025, 'Battle begins over new homes approved in historic village without sewage capacity', available at: https://www.bbc.co.uk/news/articles/cn055462jy1o

[xiii] Brien, P., and Ward, M. (2023) Future of small and medium-sized housebuilders. House of Commons Debate Pack. 5 May 2023. Number CDP-0100 (2023). Available here: CDP-2023-0100.pdf

[xiv] See, for example, Social Homes 4 Manchester, 'Our Six Key Proposals', available at: https://www.socialhomes4mcr.org.uk/aboutus

[xv] CEBR. "The Economic Impact of Building Social Housing". Feb 2024. https://assets.ctfassets.net/6sxvmndnpn0s/5nQCiTlJiqFDyFCWkvZSYP/9700aa188cc52c49212f0b0c0af23668/Cebr_report.pdf

[xvi] In 2023/24 councils spent £2.28 billion on temporary accommodation. This is an increase from £1.77 billion in 2022/23 (the figure Cebr used in their analysis). MHCLG, Local authority revenue expenditure and financing, Revenue outturn housing services (RO4), Available at: https://www.gov.uk/government/collections/local-authority-revenue-expenditure-and-financing

[xvii] Mariana Mazzucato, 'Rights-based, Mission-oriented Housing for the Common Good.', *Safe as Houses: Why Investment in Social Housing is Great for Us and Our Economy*, (Shelter, 2025) https://england.shelter.org.uk/professional_resources/policy_and_research/policy_library/safe_as_houses_why_investment_in_social_housing_is_great_for_us_and_our_economy

II: INTERSECTING CHALLENGES

The fight for home is a fight for equality, including environmental and climate justice. To tackle the climate emergency, it is critical to ensure that communities who are most likely to be affected by climate change are protected, and can share in the benefits of a fast, safe and just transition to net zero.[xviii]

This means that the government's housing strategy must ensure that lower income individuals and families, and communities of colour are given access to green space; their homes are properly built, insulated and protected, and households' energy costs reduced. Just as the determinants of good health and a promising education are tied to housing, so too are the calls to action on climate change and future housing delivery.

The social and financial cost of a net zero transition in our housing system can't be pushed onto already disadvantaged communities and low-income families who are more likely to be bearing the brunt of the impacts of climate change because they do not have the financial security/assets to escape these impacts.

How do the climate and housing emergencies intersect?

There are three prime examples:

1. Climate related events, such as flooding and heatwaves;
2. Poor energy efficient homes; and
3. Access to green space, or lack thereof.

1. Climate related displacement and pressures on the housing system

Increasing climate related events like flooding and heatwaves are already affecting communities today,[1] which could eventually lead to displacement. This would cause additional pressures on the housing system, specifically the availability of genuinely affordable and secure homes. Wealthier households will have more options to relocate or rebuild, where lower income households and other underserved communities will have less choices and a more difficult time finding a suitable home in a location that works for them and their families.

Currently, the government's National Flood Risk Assessment (NaFRA) estimates that there are 6.3million properties, including homes and businesses in England, that are in areas at risk of flooding.[xix] The Environment Agency predicts that by 2050, this number

[1] Environment Agency Corporate Report, 08 July 2025, 'Environment Agency: EA2030 change for a better environment', available at: https://www.gov.uk/government/publications/environment-agency-ea2030-change-for-a-better-environment/environment-agency-ea2030-change-for-a-better-environment

will increase to 1 in 4 properties or 8 million.[xx] Given that climate change is likely to result in more unpredictable weather - including increased risk of flooding related events - this is a ticking economic and social timebomb. Households whose homes are no longer suitable are likely to end up homeless and in need of support from their council and will further drive up the already spiraling cost of temporary accommodation if there are no affordable and suitable homes available.

In 2022, a report published by the Environment Agency on 'Social deprivation and the likelihood of flooding' found that although flood defence spending had reduced flood risk exposure and inequalities related to it, there were still significant impacts on inequalities.[xxi] This was particularly true of coastal and rural communities in high and medium flood risk areas.[xxii]

There are studies aimed at understanding social and economic impact of climate change on lower income or underserved households in relation to flooding and heatwaves. A few were published by the Joseph Roundtree Foundation.[xxiii] Recommendations from these reports point to the need for an approach that integrates social and economic factors into policy decisions and climate and environmental mitigations, as certain communities and populations are more affected.

Without a comprehensive commitment from the government to invest in the delivery of sustainable social homes needed, the housing emergency will worsen. Existing research shows that climate related events or emergencies can lead to high rents, supply issues and delays in rebuilding and development,[xxiv] as well as loss of belongings, high insurance costs, and the displacement of households affected.[xxv]

In short, climate change is already burdening marginalised communities such as lower income families, communities of colour, people with disabilities, and those at the sharpest end of the housing emergency.

2. An aging housing stock and poorly built and conditioned homes are exacerbating the impacts of the climate emergency and contributing to fuel poverty.

Box 1: In England, there are two indicators used in assessing fuel poverty:

- **Fuel poverty** - a household is in fuel poverty if they live in a property with a D-G energy efficiency rating **and** their disposable income falls below the poverty line after paying for housing and energy costs.
- **Fuel poverty gap** - this is related to the fuel poverty definition. It measures the cost reduction needed for a household not to be in fuel poverty.

Neither directly takes into account affordability, ability to pay or debt related to energy use.

Government data shows in 2024, there were an estimated 11% of households (2.73 million) in fuel poverty in England.[xxvi] The government's definition of fuel poverty is limited, in that it tracks progress year to year, and not the fundamental issues such as energy affordability or difficulty paying. This is problematic as this definition partially informs the government's policies and programmes on energy relief and assistance.

Some organisations, like National Energy Action and the End Fuel Poverty Coalition, have estimated this number to be higher due to the wider definition of fuel poverty that they use. This is defined as a household that needs to spend 10% of its income to sufficiently heat their home[xxvii] or 10% of their income on domestic energy after housing costs.[xxviii] The End Fuel Poverty Coalition estimates that in 2024, this equated to 8.91 million households. [xxix]

Given the bad state of many homes, particularly in the private rental sector where homes are twice as likely to be in poor condition (21%) than social homes (10%),[xxx] this definition likely does not include many who are affected by energy costs and debt (particularly in the private rented sector).

Commentary in the English Housing Survey highlights the age and types of dwellings in the private sector as a factor of high energy costs. However, it also mentions a strength in social housing by saying "The social sector contains a higher proportion of purpose-built flats compared to the private sector, which have less exposed surface area (external walls and roofs) through which heat can be lost."[xxxi]

Social homes have a higher energy efficiency rating compared to private rented and owner-occupied homes.[xxxii] Government investment in the delivery of sustainable and good quality social homes would help millions with the cost of energy, as well as usage, which is better for the planet.

Innovation and new technology will be crucial to fighting climate change, however, there are existing approaches, that where appropriate, and done well, can help with new development and avoid creating new problems elsewhere, such as higher bills. We also

In June 2025 Arup and Shelter held an event to discuss the interim findings of this report. Photograph ©Paul Carstairs/Arup

know that poor insulation plagues many cold homes, contributing to dangerous mould and damp conditions. This makes tenants, including children, sick as these conditions cause or worsen respiratory illnesses.

On the other hand, rising temperatures is also an issue for the country's housing stock. When discussing the urban island heat effect, Dr. Jelen Beddow says, "UK cities weren't built with the consequences of the urban island effect in mind. Compared to other hot countries, UK buildings were designed to keep heat in and rarely have air conditioning."[xxxiii] Similarly, as the COVID-19 lockdown showed, too many people – many from disadvantaged communities – do not have access to green space to escape scorching temperatures in their flats.

All of this has significant health impacts. Recent figures by Cebr calculated savings to the NHS of £5.2billion if a single set of 90,000 social rent homes were delivered.[xxxiv]

3. The importance of access to green space in a just transition and housing justice for our rural communities

As noted above, the COVID-19 pandemic brought issues of overcrowded living conditions to the forefront of the housing emergency, and the impact that a lack of open space had on physical and mental health. Overcrowded homes damaged families' health, which particularly affected groups like lower income households, larger families with children and older persons, and communities of colour. For example, access to green space and gardens proved essential to many families' wellbeing during lockdown, but too many people did not have any such space.

In a survey conducted by the People and Nature Survey for England, 43% of people felt that "visiting local green and natural spaces had been more important to their well-being since the coronavirus restrictions began".[xxxv] Yet, one in eight households (12%) in Great Britain had no access to a private or shared garden during this time.[xxxvi] Today, in England, Black persons are nearly four times as likely as White persons to have no access to outdoor space at home (37% compared with 10%).[xxxvii]

A safe, secure and good quality home with access to green space and the countryside, should be accessible to all. Across the country, including in rural areas, there is a need for genuinely affordable social homes that provide access to green space.

Yet, housing is not just an urban issue. Many rural areas face significant affordability issues driving people into homelessness and pushing people out of their communities. A 2023 report by the CPRE, the countryside charity, highlighted the devastating effects on people forced out of their rural communities due to lack of homes they could afford – a problem exacerbated by landlords entering the short-term and holiday lets market resulting in fewer properties available for rent.[xxxviii] As CPRE note, "the countryside, where levels of homelessness have leapt 40% in just five years, is being drained of skills, economic activity and vital public services."[xxxix]

Delivering more social homes through an integrated approach can support, rather than hinder, climate and environmental goals in cities, countryside and coastal communities.

[xviii] Galarza, V., Rich, H., Trew, C., Bloomer, S., Berry, C., Matthews, W., Shelter 2024, 'Brick by Brick: A plan to deliver the social homes we need', available at https://england.shelter.org.uk/professional_resources/policy_and_research/policy_library/brick_by_brick
[xix] Environment Agency, "National assessment of flood and coastal erosion risk in England 2024" National assessment of flood and coastal erosion risk in England 2024 - GOV.UK
[xx] Ibid
[xxi] Environment Agency, "Social deprivation and the likelihood of flooding" (Bristol, April 2022). https://assets.publishing.service.gov.uk/media/6270fe448fa8f57a3cdbbeb9/Social_deprivation_and_the_likelihood_of_flooding_-_report_2.1.pdf
[xxii] Ibid
[xxiii] Sarah Lindley et al, "Climate chance, justice and vulnerability", Joseph Rountree Foundation (November 2022) https://www.jrf.org.uk/climate-change/climate-change-justice-and-vulnerability. And Daren Baxter, "Net zero: A just transition is necessary, and is key for maintaining public support" (November 2021) https://www.jrf.org.uk/climate-change/net-zero-a-just-transition-is-necessary-and-is-key-for-maintaining-public-support
[xxiv] While the US housing system/financial assistance is different than the UK, it serves as a warning of the consequences effects of climate change and its impact on rents, affordability and access to genuinely affordable homes without government intervention. See Mark Brennan, Tanaya Srini and Justin Steil, "High and Dry: Rental Markets after Flooding Disasters", High and Dry: Rental Markets After Flooding Disasters. *Urban Affairs Review*, *60*(6), 1806 1838. https://doi.org/10.1177/10780874241243355 (2024) And cited references
[xxv] According to the Resolution Foundation's Housing Outlook for Q2-2022, "Poorer households are under-insured in the event of a flood". Lindsay Judge and Jonathan Marshall, "The Resolution Foundation Housing Outlook Q2 2022", (April 2024) https://www.resolutionfoundation.org/app/uploads/2022/04/Housing-Outlook-Q2-2022.pdf
[xxvi] Department for Energy Security and Net Zero, Annual fuel poverty statistics report: 2025 (2024 data), Available at: https://assets.publishing.service.gov.uk/media/67e51e2cbb6002588a90d5d5/annual-fuel-poverty-statistics-report-2025.pdf
[xxvii] National Energy Action. "What is Fuel Poverty?" Accessed May 2025. https://www.nea.org.uk/what-is-fuel-poverty/
[xxviii] End Fuel Poverty Coalition. "About Fuel Poverty" July 2024. https://www.endfuelpoverty.org.uk/about-fuel-poverty/
[xxix] Ibid
[xxx] MHCLG, English Housing Survey 2023 to 2024: headline findings on housing quality and energy efficiency, Annex Table 1.4. Available at: https://www.gov.uk/government/collections/english-housing-survey-2023-to-2024-headline-findings-on-housing-quality-and-energy-efficiency#annex-tables
[xxxi] MHCLG, English Housing Survey, 2022-2023 Chapter 5- Energy Efficiency. https://www.gov.uk/government/statistics/chapters-for-english-housing-survey-2022-to-2023-headline-report/chapter-5-energy-efficiency
[xxxii] Ibid.
[xxxiii] Helen Beddow, 2022, "How the urban heat island effect makes cities vulnerable to climate change", https://ukgbc.org/news/how-the-urban-heat-island-effect-makes-cities-vulnerable-to-climate-change/
[xxxiv] CEBR. "The Economic Impact of Building Social Housing". Feb 2024. https://assets.ctfassets.net/6sxvmndnpn0s/5nQCiTlJiqFDyFCWkvZSYP/9700aa188cc52c49212f0b0c0af23668/Cebr_report.pdf
[xxxv] Natural England, The People and Nature Survey for England: Data and publications from Adults survey year 1 (April 2020 - March 2021) (Official Statistics) main findings - GOV.UK. https://www.gov.uk/government/statistics/the-people-and-nature-survey-for-england-data-and-publications-from-adults-survey-year-1-april-2020-march-2021-official-statistics/the-people-and-nature-survey-for-england-data-and-publications-from-adults-survey-year-1-april-2020-march-2021-official-statistics-main-finding
[xxxvi] ONS analysis of Ordnance Survey (OS) map data. Available at: https://www.ons.gov.uk/economy/environmentalaccounts/articles/oneineightbritishhouseholdshasnogarden/2020-05-14
[xxxvii] Survey data from Natural England. Available at: https://www.ons.gov.uk/economy/environmentalaccounts/articles/oneineightbritishhouseholdshasnogarden/2020-05-14
[xxxviii] CPRE, State of Rural Affordable Housing. November 2023. https://www.cpre.org.uk/wp-content/uploads/2023/11/State-of-Rural-Affordable-Housing.pdf
[xxxix] Ibid.

III: AN INTEGRATED APPROACH

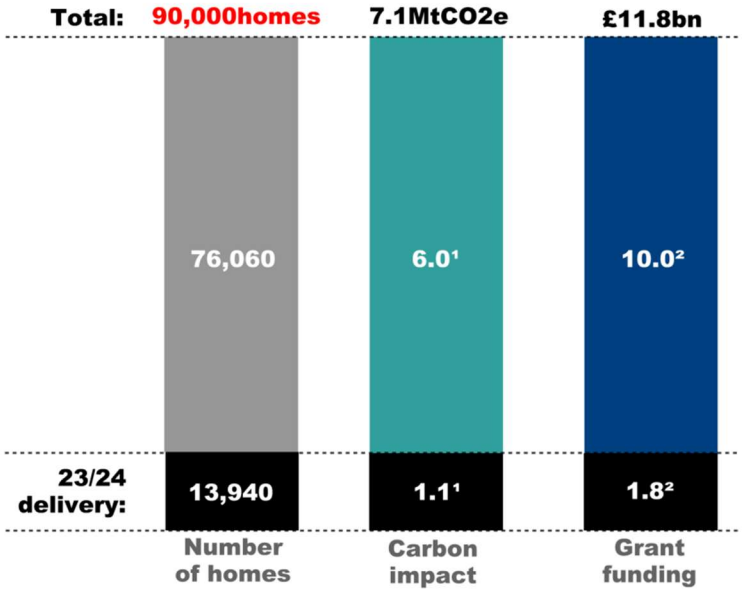
Our paper explores how delivering the first set of 90,000 social rent homes the country needs can help meet community needs and the government's housing and climate targets. **By leveraging the existing built environment, our integrated approach combines new construction, retrofitting empty homes, and high-quality, responsible conversions of commercial properties through the planning system.**

Arup's modelling of the integrated approach, on behalf of Shelter, demonstrates the possibilities of what a renewed commitment of government grant, high-quality conversions, and retrofitting can do for both the environment as well as the housing emergency. These are not new solutions in housing delivery, but the potential impact of a trajectory of annual delivery through the new Affordable Homes Programme, and the planning system, at scale and at pace, to reduce homelessness and the social housing waitlist has not been presented through this lens before.

Two Approaches

Figure 1 shows carbon emissions and the grant funding needed to deliver an at-scale programme of 90,000 energy efficient new build social homes, compared to current delivery rates. For example, this would not incorporate retrofitting of empty homes or change of use of empty commercial buildings. The benefits of energy efficient new builds would help replenish an aging stock and provide the social homes communities need that are fit for the future as a more volatile climate is expected.

Figure 1: Scaled delivery via energy efficient new build only[xl]



There are meaningful benefits to households who would live in new build social homes. For example, Goldsmith Street in Norwich – which predominantly built homes for social rent and to Passivhaus Standards – provided genuinely affordable and secure homes to families while also curbing their needed energy use and associated costs. Similarly, Octopus' Zero-Bills Homes scheme (see chapter IV) shows that households can benefit significantly from schemes designed with the right vision.

However, the vision and principles of Goldsmith Street are unfortunately not widely adopted and the changes needed to build more in this way are not happening at scale or pace. This is why it is critical that the upcoming Housing Strategy sets a clear vision which puts good quality, affordable net zero social rent homes at the heart – and that government creates policy that supports this vision.

Figure 2 shows how the integrated approach to social housing delivery can promote sustainability and a reduction in carbon emissions, while also maximising the use of government grant to deliver homes.

Figure 2: An Integrated Approach to Social Homes[xli]

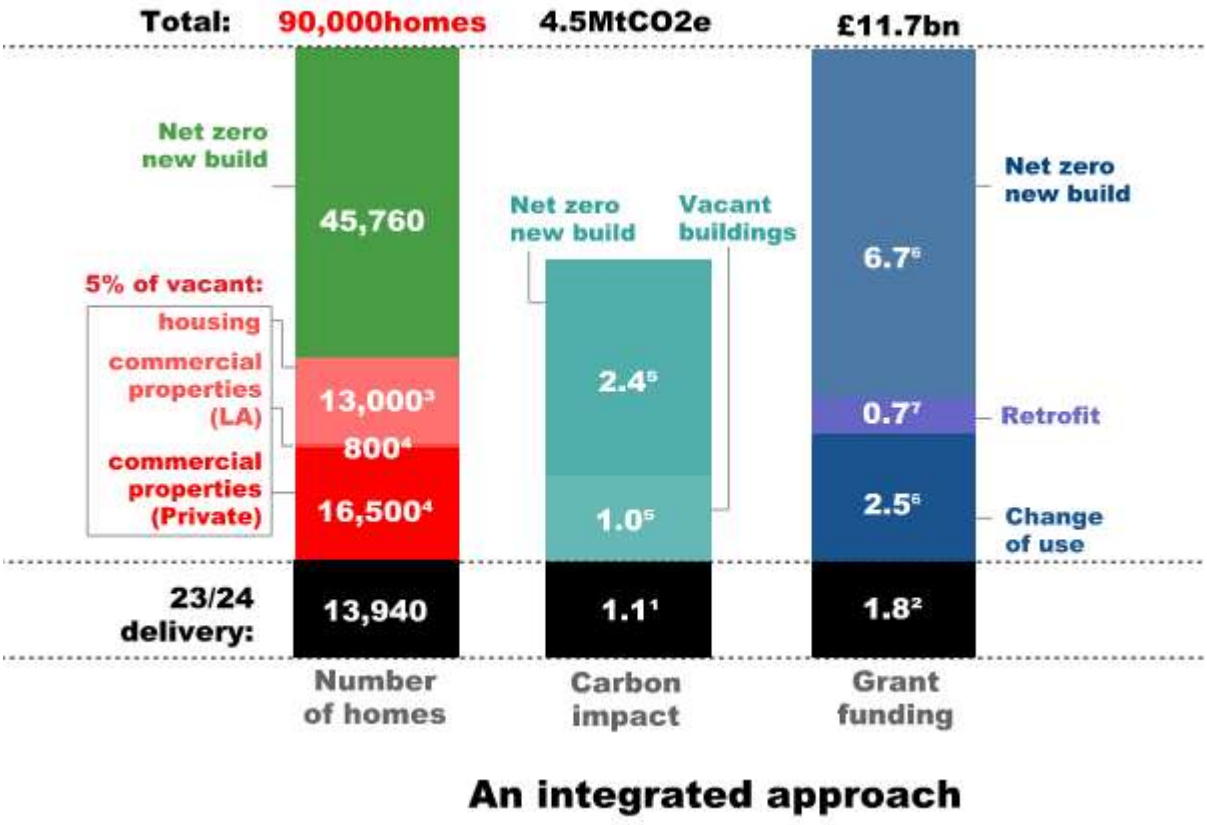
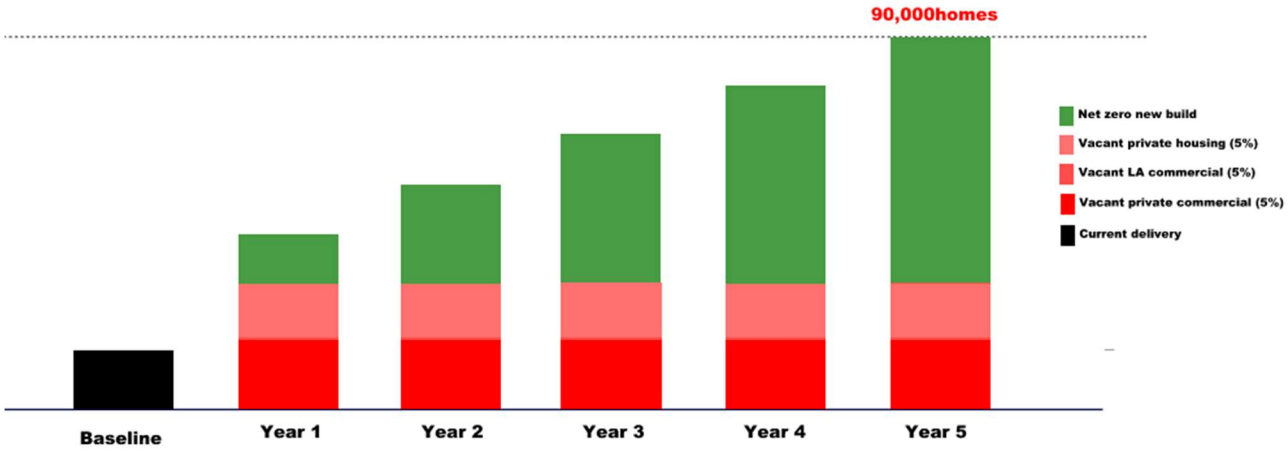


Figure 3 takes the integrated approach and demonstrates the impact of unlocking 5% of vacant buildings each year alongside the ramp up of net zero new build – reaching that target of 90,000 homes within 5 years.

Figure 3: Trajectory



Methodology for the Integrated Approach

The integrated approach combines new build, long term empty homes and high-quality change of use of both private and local authority owned commercial stock, all as social rent homes.

Alongside the current rate of social housing delivery of 13,940 homes per year,[xlii] the integrated approach assumes that the proportion of the 90,000 new social homes is formed from:

- Retrofit of 5% of the approximated 260,000 properties which have currently been vacant for more than six months.[xliii]
- High quality change of use of 5% of the 7,000 commercial and business properties owned by Local Authorities and 5% of the 165,000 commercial properties owned by the private sector.[xliv] One commercial property conversion has been assumed to result in 2.5 residential units gained.[xlv]
- The remainder constitutes 'net zero' new build homes (45,760).

The 5% or 1 in 20 benchmark has been chosen as it represents an average stock turn over per year (using market sale benchmarks)[xlvi], and a reasonable expectation of vacant buildings given the current challenges with data, location and access to these potential homes.

To assess high-level carbon emissions, scaled delivery via energy efficient new build assumes that the benchmark values from the London Plan Whole Life Carbon (WLC) Assessment Guidance are applied uniformly across the 90,000 target nationally. For the integrated approach, the aspirational values from the London Plan Guidance have been used for the net zero new build.

Retrofit and change of use also follow the aspirational values for new homes and conservatively consider that only the sub- and super-structure are reused. The same size of social home has been assumed in all cases.[xlvii]

There are also costs relating to vacant property purchase and land are too complex for this level of analysis (some of which is outlined in Shelter's Home Again report).[xlviii] There are also opportunities for reform, like the removal of hope value, as set out in the Levelling Up and Regeneration Act 2023, in the benefit of public interest. The analysis also uses grant funding as a comparative metric between delivery models. Shelter's baseline number of £11.8bn[xlix] has been divided equally across 90,000 units to assume an average grant funding requirement per home. While Shelter's 2025 Spending Review Representation lays out a trajectory to reach 90,000 social homes, by the end of this parliament and assumes two-thirds would receive grant funding, the modelling here, assumes there would be some level of grant funding for each of these homes. This provides an alternative model of funding which could have the same effect of reaching 90,000 social homes.

For the integrated approach, a 10% uplift has been applied to the grant funding required to represent a net zero cost increase.[l] While change of use assumes the same grant funding requirements as a net zero new build home.

Grant funding for retrofit of vacant properties has conservatively been assumed to be £57,000 per home.[li]

Findings

- **The grant funding needed for the 'integrated approach' would be similar to current methods and estimations, but the overall carbon impact would be about 40% lower.**
- **By combining these delivery approaches, we can maximise funding as we ramp up to 90,000 social homes a year, strengthen the supply chain, and align previously conflicting priorities. This approach not only reduces emissions but also boosts the delivery of much-needed social homes to reduce homelessness and social housing waitlists and diversifies delivery methods by capitalising on opportunities from existing building stock.**

[xl] Figure 1 and Figure 2 references:
WLC emission benchmark(residential), London Plan Guidance (A-C, excluding B6 & B7). Available here; The economic impact of building social housing, A Cebr report for Shelter and the NHF. Available here; Vacant Dwellings by Local Authority District: England, from 2004. Available here; Repurposing Empty Spaces to Help Address the Housing Crisis Across England, Scotland and Wales, Habitat for Humanity. Available here; WLC aspirational benchmark (residential), London Plan Guidance (A-C, excluding B6 & B7) Available here; The cost and premium for new eco-homes, Savills. Available here; Whole House Retrofit (WHR) and Social Housing Decarbonisation Fund Demonstrator (SHDF(D)), DESNZ. Available here

[xli] As above.

[xlii] In 2023/24, there were 13,946 new social rent homes. The majority of new delivery is new build and acquisitions (9,866) but conversions and change of use are also included. MHCLG, Live tables on affordable housing supply, Table 1006C, MHCLG, Local authority housing statistics, Section K, RSH, Private registered provider social housing stock and rents in England 2022 to 2023, Stock Details and Table 3.13

[xliii] Vacant Dwellings by Local Authority District: England, DLUHC. Available here
[xliv] Repurposing Empty Spaces, Habitat for Humanity. Available here.
[xlv] PDR Conversions Research Study, London Borough of Enfield. Available here.
[xlvi] Housing market turnover charts. Available here: Housing Market Charts – BuiltPlace
[xlvii] English Housing Survey 2018-2019, DHCLG. Available here.
[xlviii] Bloomer, S., Matthews, W., Galarza-Mullins, V. and Trew, C., Home Again: A 10-City Plan to rapidly convert empty homes into social rent homes, Shelter, April 2024, available at: https://england.shelter.org.uk/professional_resources/policy_and_research/policy_library/empty_homes_10-city_plan
[xlix] Cebr calculated that it would require £11.8 billion to deliver 90,000 social rent homes. This is based on the assumption that two-thirds of the homes would be grant funded with a third funded through developer contributions. Available here
[l] The cost and premium for new eco-homes, Savills. Available here
[li] Whole House Retrofit (WHR) and Social Housing Decarbonisation Fund Demonstrator (SHDF(D)), DESNZ. Available here

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IV: ADDRESSING BARRIERS: SKILLS & RESOURCES

While each part of the integrated approach faces unique challenges, there are also common barriers across all delivery methods. This report highlights several key areas that must be addressed to advance sustainable social housing and meet net zero goals.

Funding

While carbon emissions from existing and new homes must be minimised, the reality of poor conditions, rising rents, and homelessness is such that we also need new genuinely affordable social homes to end the housing emergency. Social housing providers, including housing associations and local authorities, maintain that both are difficult or near impossible to do without significant grant funding, with increasing debt and challenges with implementing regulatory changes. The decision at the 2025 Spending Review to provide £39 billion of funding for the Affordable Homes Programme and

surrounding funding announcements will go some way, but it is likely that more funding will be needed to reach the levels of social homes needed.

Priority congestion

Social housing providers are often met with 'priority congestion' as they navigate competing demands. Providers need to consider the cost of retrofitting existing homes to improve energy efficiency and reduce carbon emissions, whilst addressing issues relating to quality, damp and mould, and safety standards. Building new homes to net zero standards is seen by them as a further challenge, as there are often higher costs.

Social housing providers continue to call for more support in meeting climate change goals and net zero targets, as well as incoming regulations. Many housing associations and councils are apprehensive about current stock and the impact on new supply. UCL research showed that 53% of Local Authorities are facing challenges with delivering new homes due to the increased costs of retrofitting.[lii] It is critical that the new Affordable Homes programme, surrounding net zero funding and Housing Strategy are designed to ensure that homes are delivered with climate justice at the front of mind.

Skills shortage

New supply, retrofit and maintenance of current homes, are also riddled with labour skill shortages and capacity issues. The implementation of low carbon technologies requires specialist skills at a level that can't currently be provided by the UK workforce. There are significant skills gaps in the energy efficiency and retrofit sectors and in the measurement of embodied and whole-life carbon assessments.[liii]

A report from the Green Jobs Taskforce[liv] identifies a need for around 7,500 to 15,000 heat pump installers to be trained by 2028 to meet demand, and around 30,000 workers to be recruited into the retrofit industry every year between 2025 and 2030 to deliver works required to existing buildings nationwide. It notes that training in the industry remains focused on traditional building techniques rather than emphasising low carbon systems or modern methods of construction (MMC) which will be required to meet forthcoming regulatory requirements and avoid the need for retrofitting in the future.

Research by the West of England Combined Authority into the retrofit skills gap in the Southwest of England found that there were only 40 FTE insulation jobs and 95 low carbon heating TrustMark registered installers in the region (being TrustMark registered was a requirement to participate in the Government's Green Homes Grant).[lv]

In response, various Committees have also called for the 'front-loading' of funding rather than a trickling out to ensure that there are skills within the wider industry and supply chain,[lvi] and for the publication of a retrofit and up-skilling programme for construction to meet the needs of net zero and accessible training in undertaking whole-life carbon assessments.[lvii] Additionally, the Welsh Government published a Net Zero Skills Action Plan, which details the actions needed to grow a skilled net zero workforce and strengthen the 'skills system' so as to meet growing demand for net zero skills.[lviii]

Local Government faces significant skills shortages in delivering net zero and social housing initiatives, reflecting a broader need for increased capacity and resources across the entire planning system. These challenges extend beyond housing to include spatial planning, transport, local energy systems, and waste management.

To reduce carbon emissions during the construction phase of new housing, a whole-life carbon assessment is recommended to be a regulatory requirement.[lix] The EAC report highlights that such approaches have been applied successfully in other countries, setting a national or standardised methodology for doing so. Such assessment has driven changes in industry behaviour and construction supply chains to reduce embodied carbon emissions. In the UK, in addition to mandating such assessment, investment is required in upskilling the construction industry to undertake them.[lx]

Previous governments have attempted to assist councils with skill development and in house expertise. In August 2023, the former Department for Levelling Up, Housing, and Communities established a £24 million fund, and later an additional £5 million, which provided a modest £100,000 per council, specifically to hire more planning officers to clear planning application backlogs and address skill gaps in planning departments. While the fund allowed local authorities to specify which area they required skills support, councils anecdotally have said that language did not include specific reference to net zero or retrofitting.

The primary focus was on a 'super squad' of planners and other experts to unblock major housing delivery. While some councils have benefited from additional planners to address backlog, other in-house expertise, such as that for retrofitting or delivering net

Agar Gardens. ©Millie Harvey/Shelter

zero homes was given less priority. Additionally, housing associations, which are currently delivering most of the below market homes we have today, are also struggling without this expertise.

While the current government has committed to 300 planners, there are specific challenges with expertise, within the social housing sector, including recruitment and retention, that need to be specifically addressed and properly supported.

Unfortunately, this gap in labour skills and lack of capacity in-house within councils, housing associations and the general workforce will not only slow down social housing delivery but also the government's ambitious target of 1.5million new homes.

Unclear cross-governmental responsibility coordination

Currently, no single government department is solely responsible for the policies and legislation related to building new homes and retrofitting existing ones. For example, the Ministry of Housing, Communities and Local Government—along with Homes England—oversees new housing delivery, while retrofitting is managed by the Department for Energy Security and Net Zero (DESNZ). Past initiatives like the Social Housing Decarbonisation Fund were also administered by DESNZ.

This fragmented approach can be mirrored at the local level, making it difficult to coordinate efforts and realise the opportunity existing buildings play in the delivery of new homes. As a result, national and local strategies to address both the housing and climate crises remain disjointed.

The previous government's 2021 Net Zero Strategy acknowledged the need for better coordination between national and local stakeholders. Yet, little progress has been made, and the system remains fragmented. It is now in the government's power to ensure there is a committed framework to get the job done.

Conversions through Permitted Development Rights (PDR)

Commercial properties that are converted to homes through PDR (without the need to go through the full planning process) are typically of lower quality, are less likely to meet space standards and are exempt from section 106 requirements.[lxi] Instead, Shelter advocates that responsible change of use should be incentivised through the planning system to ensure sustainable, high quality homes, for example with requirements to make Whole Life Carbon Assessments or Circular Economy Statements. Government should regularly assess and gather data on the quality of conversions over their lifecycle.

Opportunities in Alternative Delivery Methods and Private-Public Partnerships

While many in the private sector fear the costs, and real or perceived risks of building the social homes that communities need, the Modern Methods of Construction industry are seeking innovative ways to deliver homes at pace.

Shelter does not explicitly endorse specific MMC schemes as ideal examples, nor believe there is a one size fits all approach. However, it is vital to learn from existing MMC developments to understand the potential for the industry in this sector.

In 2024, a new exhibition opened called "New Homes in New Ways- Collaboration and Innovation through Modern Methods of Construction'. This 4-month exhibition focused on how the MMC industry could deliver homes that are high quality, energy efficient and sustainable. Just as important was the focus on "delivering the social rent housing needed at pace amidst the current housing emergency". The exhibition showcased case studies demonstrating how MMC unlocked sites for affordable and social rent homes, that were energy efficient and good quality, while also building faster than traditional construction. All while delivering social, economic and environmental benefits. Some of these can now be viewed virtually on the Building Centre's website.[lxii]

This exhibition was also accompanied with a conference in February 2025, which hosted conversations by industry leaders, engineers, academics and developers to share lessons and gauge what was needed from each other and the government. The consensus was a public led initiative to drive success.

Octopus Energy Zero Bills Homes

In 2022, Octopus Energy launched Octopus Zero Bills. This was an energy saving tariff which included zero energy bills for five years, for new homes, with certain energy specification and use of an Octopus energy platform to help with cost of low carbon technology and energy use.

They work with developers to agree on heating and water consumption specifications, which the housebuilder must build. The homes were marginally more expensive to build but were then able to be marketed with an increased sales price. One partnership was with Ilke Homes (MMC company that collapsed due to low demand) which showed a slightly higher build cost that was more than made up for by increased sale price.

While not a social rent scheme, this is a good example of a development that focused on the use of low carbon technology by housebuilders. **The government can partner with energy companies and other industries to create demand and a pipeline for low carbon or energy efficient homes to deal with the lack of expertise that resides within local governments, while also investing in a public asset like social housing.**

[lii] Janice Morphet and Ben Clifford, (January 2024), "Local authority Direct Provision of housing: Fourth Research Report", The Barlett School of Planning, University College of London, available at: https://www.ucl.ac.uk/bartlett/sites/bartlett/files/local_authority_direct_provision_of_housing_iv_report.pdf

[liii] Building to net zero: costing carbon in construction (First Report of Session 2022-23), available at: https://publications.parliament.uk/pa/cm5803/cmselect/cmenvaud/103/report.html#heading-5

[liv] Green Jobs Taskforce (2021), 'Green Jobs Taskforce: Report to the Government, Industry and Skills Sector', available at: https://assets.publishing.service.gov.uk/media/650466aadec5be000dc35f85/green-jobs-taskforce-report-2021.pdf

[lv] West of England Combined Authority (2021) Retrofit Skills Market Analysis. Available from: https://www.westofengland-ca.gov.uk/wp-content/uploads/2021/07/WECA_Green-Jobs-and-Skills_Retrofit_Report-1_Final_01_06_2021.pdf

[lvi] Environmental Audit Committee, Fourth Report of Session 2019–21, Energy Efficiency of Existing Homes, HC346, para 86; Q61 (Brian Robson, Northern Housing Consortium); Northern Housing Consortium; The District Councils' Network; Royal Institute of British Architects

[lvii] Building to net zero: costing carbon in construction (First Report of Session 2022-23) https://publications.parliament.uk/pa/cm5803/cmselect/cmenvaud/103/report.html#heading-5

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[lix] Environmental Audit Committee (2022), Building to net zero: costing carbon in construction. Available from: https://publications.parliament.uk/pa/cm5803/cmselect/cmenvaud/103/report.html#heading-0
[lx] Environmental Audit Committee (2022), Building to net zero: costing carbon in construction. Available from: https://publications.parliament.uk/pa/cm5803/cmselect/cmenvaud/103/report.html#heading-0
[lxi] Clifford, B., Canelas, P., Ferm, J., Livingston, N., UCL & University of Liverpool, 2020, 'Research into the quality standard of homes delivered through change of use permitted development Rights' available at: https://assets.publishing.service.gov.uk/media/5f159de5e90e075e90a720dc/Research_report_quality_PDR_homes.pdf and Local Government Association, September 2023, 'Consultation on Permitted Development Rights', available at: https://www.local.gov.uk/parliament/briefings-and-responses/consultation-permitted-development-rights
[lxii] Building Centre Exhibition 2024-2025, 'New Homes in New Ways - Collaboration and Innovation through Modern Methods of Construction', https://www.buildingcentre.co.uk/whats_on/exhibitions/new-homes-in-new-ways-modern-methods-of-construction

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CONCLUSION & RECOMMENDATIONS

To effectively tackle both the housing crisis and the climate emergency, we must take **an integrated approach** that considers environmental impact, housing quality, and delivery methods as interconnected priorities. By aligning these goals, we can reduce emissions while accelerating the delivery of much-needed social homes.

This means diversifying how we deliver housing, combining new net-zero builds with the strategic reuse of existing buildings. Unlocking the potential of the right vacant properties in the right locations can reduce both direct and indirect climate impacts that are increasingly affecting our communities. Simultaneously, we must upgrade our aging housing stock to meet modern standards for health, energy efficiency, and quality of life.

It is vital that any environmental or net zero policy is scrutinised through a lens of justice. Doing so helps us to better understand and mitigate the impact of climate change on lower income and underserved communities. Lower income households already at the sharp end of the housing emergency suffer with poor housing conditions, overcrowding and poor insulation and ventilation leading to damp and mouldy conditions. We need to both reduce homelessness and tackle the climate emergency: ensuring everyone has an affordable, safe and secure home while meeting net zero objectives.

Policy Recommendations

1. Design the new **Social and Affordable Homes Programme** to focus on social rent and ensure flexibility of grant to support a range of environmentally friendly and potentially faster delivery options such as retrofit and repurposing of vacant buildings and invest further to deliver 90,000 social rented homes a year.

2. **Consistent grant funding programmes** for retrofit specifically for social housing providers, to mitigate carbon footprint of existing homes, protect supply and improve energy efficiency enshrined in **a national and local retrofit strategy.**
3. **Flexibility of grant conditions** to unlock the use of vacant buildings for social rent.
4. **Use the National Planning Policy Framework (NPPF) or Planning and Infrastructure Bill 2025 to encourage responsible change of use through the planning system,** e.g. conversion of commercial properties and empty homes into social rent. Change of use needs to have parameters for delivering sustainable social homes that are high-quality safe and healthy.
5. **A social rent target for all green belt land** that is released for housing development, defined in the National Planning Policy Framework.
6. **Government should support councils, housing associations and CLTs to acquire and convert well-located empty homes into social rent homes** as described in Shelter's 'Home Again' report.
7. **Government supported training and recruitment drive in STEM** and construction industries, including Modern Methods of Construction.
8. **Support local authorities and housing associations build and retain in-house expertise** in net zero and green technology. Create a **pooling of resources and local authority framework for councils to learn from each other** and share expertise and procurement power to reduce costs in achieving net zero or low carbon delivery of social homes.
9. A **government commission to set out a long-term strategy for climate change**, net zero, the effects on under-served communities and the impact of existing and new social homes.
10. **National or local planning policies that require new developments to aim to achieve net zero in construction and/or operation**. **This means submitting an energy statement or assessment with planning applications.** If a developer says it is not viable, then evidence would need to be provided. For example: Cornwall Council's adoption of Climate Emergency Development Plan Document.
11. **Increased coordination between government departments, particularly the Ministry of Housing, Communities and Local Government and the Department for Energy Security, and Net Zero**, e.g. through a combined function responsible for ensuring join-up on housing, energy and climate change policies nationally and locally.
12. **Requirement for energy suppliers to install energy and heating efficiency measures in low income and social homes** (which should not be funded by electricity levies). This should be regulated by Ofgem with collaboration and support from Ministry of Housing, Communities and Local Government and Department of Energy Security and Net Zero.

Shelter exists to defend the right to a safe home and fight the devastating impact the housing emergency has on people and society.

We do this with campaigns, advice and support – and we never give up. We believe that home is everything.

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